# MINUTES

# 672nd MEETING

# STATE LEVEL ENVIRONMENT IMPACT ASSESSMENT AUTHORITY-TAMIL NADU

Date: 14.11.2023

# MINUTES OF THE 672<sup>nd</sup> MEETING OF THE STATE LEVEL ENVIRONMENT IMPACT ASSESSMENT AUTHORITY HELD ON 14.11.2023.

Agenda No	Description	File No.	Minutes
a)	Confirmation of the minutes of the 671st meeting of the Authority held on 07.11.2023.		The minutes of the 671st meeting of the Authority held on 07.11.2023 was confirmed.
b)	The Action taken on the decisions of the 671st meeting of the Authority held on 07.11.2023.		The Member Secretary informed that 671 <sup>st</sup> Minutes uploaded in Parivesh website and action taken report will be putup ensuing meeting.
1.	Proposed Expansion of Steel Melting Shop & Steel Rolling Mill in the existing unit at S.F.No. 15/1A, 15/3A, 15/2,1 5/4, 15/6, 15/7, 15/9, 15/8, 15/5, 15/1B, 15/3B, 14/4, 14/3, 14/2, 14/1A, 12/2 of Periyapuliyur Village, Gummidipoondi Taluk, Tiruvallur District, Tamil Nadu by M/s. Pashupati Metallics - For Terms of Reference.  (SIA/TN/IND1/437200/2023)	10370	The authority noted that this proposal was placed for appraisal in 418th meeting of SEAC held on 19.10.2023. The SEAC noted that the project proponent has not attended the meeting. Hence the subject was not taken up for discussion and the project proponent shall furnish the reason for his absence.  In view of the above, the authority decided to request the Member Secretary, SEIAA to communicate the SEAC minutes to the project proponent held on 19.10.2023.
2.	The Existing Hospital Building with Doctor's Quarters & Medical Store with a Built-up Area of 33560.86 sq.m (Under Violation) at S.F.No. 3/6(P),3/7(P),3/8,3/9,3/11, 6/1,6/7A and 6/7B Ward No:K (11) Block No:1 Mettupalayam Road, Sanganur Village, Coimbatore Corporation, Coimbatore North Taluk, Coimbatore District, Tamil Nadu by	10377	The authority noted that this proposal was placed for appraisal in 418th meeting of SEAC held on 19.10.2023. The SEAC noted that the project proponent has not attended the meeting. Hence the subject was not taken up for discussion and the project proponent shall furnish the reason for his absence.  In view of the above, the authority decided to request the Member Secretary, SEIAA to communicate the SEAC minutes to the project proponent held on

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	M/s. Ganga Medical Centre and Hospital Private Limited - For Terms of Reference Under Violation. (SIA/TN/INFRA2/441986/2023)	19,10,2023.
3.	Expansion of high-rise residential building at S.F.Nos.108B/2, 109/1, 109/2, 109/4A3, 109/4A4, 111/1CIA, 111/1CIB, 112/1, 112/2, 112/4, 112/5, 113/1, 113/2, 113/3, 114/2, 114/3A, 114/3B, 114/3C, 114/4, 114/5, 114/6, 114/7, 115/1, 115/2, 115/3, 115/4, 116, 117/1, 117/2, 117/3, 117/4, 117/5, 117/6, 120/1, 121/2, 122/1A, 122/1B, 122/2, 123/1, 123/2, 123/3, 123/4, 123/5, 123/6, 123/7 124/2, 124/3, 124/4, 124/5, 125/1A, 125/1B, 125/2A, 125/2B, 126, 127/1, 127/2, 127/3A, 127/3B, 128/1, 128/2, 128/3, 128/4, 128/5, 129/1, 129/2, 130/1, 130/2A, 130/2B1, 130/2B2, 130/3, 130/4, 131, 132/2A, 132/2B, 133/1, 133/2, 134/1, 134/2A, 134/2B, 134/2C, 136/1 & 136/2 of Melakottaiyur Village, Vandalur Taluk, Chengalpet District, Tamil Nadu by M/s. Casagrand Magnum Private Limited - For Environmental Clearance. (SIA/TN/INFRA2/443505/2023)	The authority noted that this proposal was placed for appraisal in 418th meeting of SEAC held on 19.10.2023. The SEAC noted that the project proponent has requested to defer the proposal. Hence the subject was not taken up for discussion and the committee deferred the proposal. In view of the above, the authority decided to request the Member Secretary, SEIAA to communicate the SEAC minutes to the project proponent held on 19.10.2023.

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Proposed Expansion of TATA 9738 Electronics Private Limited (Manufacturing & Assembly of metal case for mobile phones - 3 Lakh No's/Day) with total built-up area of 5,57,470 Sq. m located at SF. Nos: 312/1E, 312/2A, 324/1A, 324/2D, 324/2B, 324/2C, 312/2D2, 323/3, 326/1A, 327/1C, 326/1C, 311/IB, 311/IC, 312/IC, 312/2D1, 313/3F, 312/1A, 312/1B, 312/1d, 313/4A, 322/2B, 313/1E, 313/3C, 313/3D, 313/1C, 313/3B, 313/1C, 322/3A, 322/3C, 313/1A, 313/3A, 313/1B, 313/3E, 313/1F, 322/1A, 322/1B, 322/2A, 313/3G, 313/4B, 322/1D, 320/1, 320/3C, 321/1C, 320/3A, 321/1A, 322/2E, 324/2C, 320/3B, 321/1B, 320/A, 321/3, 323/1, 322/2C, 322/2D, 322/3B, 322/3E, 322/3F, 324/2A, 322/3G, 324/2B, 323/2, 324/3, 325/1A, 325/1B, 325/2, 313/1D, 326/1B, 327/1F, 326/1D, 326/1E, 327/1E, 309/2D, 316/1D, 314/3A3, 314/1B, 314/1A ,314/3A1, 315/5, 308/1A, 308/1C, 319/1B, 308/1B, 308/2, 309/1A, 309/1B, 309/2B, 309/2A, 311/1E, 314/3A2, 309/2C, 311/1D, 309/2E, 310/1A, 310/1B, 310/1C, 310/2, 311/1A, 311/1F, 311/3B, 311/3A, 311/3C, 314/3B, 317/1D, 317/1E, 315/3,315/1A, 315/1D,

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The authority noted that this proposal was placed for appraisal in 418th meeting of SEAC held on 19.10.2023. The SEAC noted that the EIA Coordinator has not attended the meeting. Hence the subject was not taken up for discussion and the committee has deferred the proposal.

In view of the above, the authority decided to request the Member Secretary, SEIAA to communicate the SEAC minutes to the project proponent held on 19.10.2023.

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315/4A, 315/4B, 316/1E, 316/2B, 316/2C, 316/2D, 316/31, 316/3B, 316/3C, 316/3F, 317/1C, 317/2A1, 317/2A3, 317/2B,319/1A, 315/1B, 315/IC, 316/1A, 316/1B, 316/2A, 316/3G, 318/1A, 318/1B, 318/1C, 318/2, 318/3A, 318/3B, 315/1E, 315/4C, 316/1F, 316/3D, 317/1B, 315/4D, 316/1C, 317/1A, 317/2A2, 317/2A4, 317/2A5, 314/1B1, 13/4A1(P), 13/5A1, 13/5A2(P), 14/1A, 14/1B, 141/1C(P), 14/2A, 14/2B, 14/2C, 14/2D, 14/3A, 14/3B, 14/3C(P), 14/3D(P), 15/1A(P), 16/7A(P), 16/7B(P), 16/8(P), 17/2, 17/3A(P), 17/3B, 18/1, 18/2B, 20, 324/1B, 326/2, 327/1A, 327/1B, 327/1D, 328/2, 332/4, 21/1A, 21/1B, 21/IC, 21/ID, 21/IE, 21/IF, 21/1G1, 21/2A, 327/3, 332/2, 328/3, 328/1, 328/4, 15/6B, 13/1B, 15/5, 15/6A1, 311/2, 313/2, 314/2, 315/2, 319/2, 320/2, 321/2, 326/3, 327/2, 328/5, 332/1, 332/5 of Thimjepalli Village, 143/2A, 143/1A, 143/1B, 143/1C, 148/4A, 148/4B, 141/6, 141/4C, 141/5C, 143/2B, 143/3, 144/1, 147/1B, 147/1A, 148/3, 134/1A, 134/1B, 134/2, 135/1, 135/2, 136/1C, 136/3B, 136/3C, 136/3D, 136/4A, 136/4B, 136/4C, 141/1B, 141/1C, 141/1D, 141/4A, 141/4B, 141/5A, 141/5B, 142/1A,

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142/1B, 142/1C, 142/2, 142/3, 142/4, 141/7, 148/1, 148/3A, 161/1A, 161/1B, 161/1C, 161/3, 161/4A, 161/4B, 161/5A(P), 161/5B, 161/6A, 161/6B, 161/7, 161/8, 162/1, 162/2, 170/1A, 170/1B, 171/2A1, 171/2A2, 171/2A3, 171/2A4, 171/2A5, 172/1A, 172/1B, 171/1A, 172/1C, 172/1E, 172/3, 172/5A, 173/1, 173/3, 174/1A(P), 174/1B, 174/1C, 174/1D, 174/1E, 1741/1F, 174/1G, 174/2(P), 174/3, 175/1, 180/2A, 180/2B, 180/3, 181/2A, 181/2B, 183/1, 183/2, 183/3, 183/4, 100/1B, 100/1C, 100/2A1B, 100/2A2A, 98/3, 98/4, 99/2, 112/2A, 112/2B, 112/3A, 112/3B, 113/1, 113/2, 113/3, 113/4, 114/2, 114/3A, 114/3B, 137/2A,137/2B, 137/3, 137/4A, 137/4B, 138/1, 138/2, 138/4A, 138/4B, 138/5, 138/6, 139/2, 139/3, 139/5, 139/6, 139/9, 140/2, 140/4, 144/3, 144/4, 146/2A, 146/2B, 146/3, 146/4, 150/6A, 150/6B, 151/1,152/1, 152/2, 152/4, 155/1, 155/2, 155/3, 156/1, 156/2, 157/1, 157/2, 157/3A, 157/3B, 157/3C, 157/3D, 157/3E, 158/2B2, 138/1, 137/7, 140/3, 180/4, 137/5, 139/10, 137/6, 140/7, 139/7, 172/1D, 172/2(P), 172/4A2(P), 172/4A1, 172/5B, 172/4A3, 172/6,

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172/2(P), 172/4A2(P), 172/4B,
136/2, 141/2, 146/1, 144/2, 147/2,
148/2, 150/2, 137/1, 138/3, 140/1,
149/1, 151/2, 151/3, 152/3, 172/7,
174/4, 174/5, 175/2, 180/5, 181/1,
139/1, 150/4, 150/5, 140/5, 136/1A,
136/1B, 140/6, 141/3, 141/1A,
136/3A, 139/4, 139/8, 149/2, 149/3,
150/1, 149/4A, 149/4B, 150/3 of
Udedurgam Village,
1241/1B,1241/1C, 1241/2B1,
1241/2B2, 1242/2B(P),
1242/3A2(P), 1238/1B2, 1238/1D,
1238/3A, 1238/3B, 1238/3C,
242/3A2(P), 124/3B2, 1246/6B,
1248/2 of Ayyaranpalli Village.
Denkanikottai Taluk, Krishnagiri
District, Tamil Nadu M/s. TATA
Electronics Private Limited- For
Environmental Clearance.
(SIA/TN/INFRA2/444004/2023)
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Proposed expansion of foundry unit

Kaniyur Village, Sulur Taluk,

Coimbatore District, Tamil Nadu by

M/s. V.R. Foundries - Unit II - For

of

(SIA/TN/IND1/440138/2023)

5.

New at S.F. Nos. 478/1 & 478/2 of File No. 10371 Old file 7050

Reference.

The authority noted that this proposal was placed for appraisal in 418th SEAC meeting held on 19.10.2023. SEAC decided to grant Terms of Reference under violation category along with Public hearing to the proposal, subject to the TORs stated therein, in addition to the standard terms of reference for EIA study and details issued by the MOEF & CC (Annexure III) to be included in the EIA/EMP report along with assessment of ecological and natural damage, remediation plan community resource augmentation plan and it shall

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be prepared as an independent chapter by the accredited consultants. Terms of Reference issued are subject to the outcome of the final orders of the Hon'ble High Court of Madras in the matter of W.P.(MD) No. 11757 of 2021.

After detailed discussions, the Authority accepts the recommendation of SEAC and decided to grant Terms of Reference (ToR) under violation category along with Public Hearing for undertaking EIA study followed by the EMP report along with assessment of ecological damage, remediation plan and natural and community resource augmentation plan and it shall be prepared as an independent chapter by the accredited consultants subject to the conditions recommended by SEAC & normal/standard conditions stipulated by MoEF&CC in addition to the following conditions:

- The Member Secretary, SEIAA TN is requested to address the State Government / TNPCB for initiating action against the PP under section 19 of the Environment (Protection) Act, 1986 as per the EIA Notification dated: 14.03.2017 and amended 08.03.2018.
- The proponent shall submit life cycle assessment & Ecological risk assessment.
- The proponent shall submit impact on vegetation biodiversity, terrestrial / agricultural ecosystem, water table due to the proposed project activity. Also furnish details on Material flow analysis, cost benefit analysis & community health around the proposed industries.

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- Technologies for reduction in coal to control carbon emission.
- The proponent shall submit the green technologies deployed in the production to reduce carbon footprint, Green House Gas (GHG), CO<sub>2</sub> and rise in temperature.
- Details regarding strategies adopted for occupational health safety and energy efficiency standards shall be submitted.
- The proponent shall submit detailed report regarding temperature rise and climate change impacts due to the proposed project and control measures.
- The PP shall study fugitive emissions and regular emission monitoring strategies to prevent their escape into the environment.
- Details regarding the transparency and accountability system in place during the operation period of the project.
- Details regarding the In-House environmental performance and evolution tools to evaluate the impacts of the project on the environment.
- Detailed study is to be made on material flow analysis and Life Cycle Assessment (LCA) in the process of production and the report shall be submitted.
- 12. Through a chart Illustration, clarify the cradle-tograve approach for anticipated emissions and environmental threats in every stage, and the mitigation strategy at every stage shall be submitted.
- If the project activity includes disposal of waste/rejects into landfill, the proponent shall

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- furnish details on the strategies adopted to manage the same.
- The proponent shall study the ways of improving recycling efficiency.
- The proponent shall furnish the details about the radioactive contaminations related to the project.
- The proponent shall furnish details about the management of quenching water.
- Project Proponent shall submit the action plan to study the impacts on human health viz respiratory impacts, toxicity impacts and radiation impacts.
- 18. The proponent shall submit a detailed study report regarding the chemical exposures and risks anticipated to environment and human health.
- The proponent shall strictly adhere to the mitigation measures as committed regarding the emission of Green House Gas (GHG) and other gas emissions.
- The proponent shall submit a detailed study report regarding the terrestrial and aquatic toxicity due to the proposed project.
- The green belt area should be not less than 33% of the total land area of the project.
- The proponent shall furnish details on the green practices adopted so as to support the circular economy.
- 23. The proponent shall conduct a study and furnish details on the impact of the project on the communities in and around the project area.
- 24. The proponent shall furnish details on the impact on employee health due to the project activities.

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6.	Proposed Construction of Residential Building Complex at Block 0031, Old T.S. No. 3, New S.Nos. 6/1, 6/2 & 6/3 Venkatapuram Village, Guindy Taluk, Chennai District, Tamil Nadu by the PP M/s DLF 1T Offices Chennai Private Limited- For Environmental Clearance.  (SIA/TN/INFRA2/438071/2023)	The authority noted that the subject was appraised in the 418th SEAC meeting held on 19.10.2023. SEAC has furnished its recommendations to the authority for granting environmental clearance subject to the conditions stated therein.  After detailed discussions, the Authority decided to refer back the proposal to SEAC and to seek additional particulars as follows  i) The project proponent shall furnish traffic report for the impact on road traffic.  ii) The project proponent shall furnish revised layout with earmark OSR area with entry and exit for public access.
7.	Proposed Construction of Residential Building Complex at S.F. Nos. 387/1A1A1, 388, 389/2 & 390/1B of Padappai Village, Kundrathur Taluk, Kanchipuram District, Tamil Nadu. by the PP M/s. Ruby Builders & Promoters - For Environmental Clearance.  (SIA/TN/INFRA2/442227/2023)	The authority noted that the subject was appraised in the 418th SEAC meeting held on 19.10,2023. SEAC has furnished its recommendations to the authority for granting environmental clearance subject to the conditions stated therein.  After detailed discussions, the Authority accepts the recommendation of SEAC and decided to grant Environmental Clearance subject to the conditions as recommended by SEAC & normal/standard conditions stipulated by MoEF&CC and the conditions in Annexure 'C' of this minutes.  i) The project proponent shall earmark and provide adequate kids play area within the proposed site before obtaining CTO from TNPCB.  ii) The project proponent shall earmark and provide adequate entry and exit gate for OSR

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			area for public access within the proposed site before obtaining CTO from TNPCB.
8,	Proposed Construction of Group Development – Residential cum Club House Building in Old Survey No: 40/1 & 40/2, New TSLR No. 129 in Block 13, Ward A Issa Pallavaram Village & Old S. No. 396/5 (As per TSLR Old S.No. 396/1, 396/2 & 396/3 Part), New TSLR No. ½ Part in Block 1, Ward E Zamin Pallavaram Village, Pallavaram Taluk, Chengalpattu District within the Limit of Tambaram Corporation, Tamil Nadu by the PP M/s Casagrand Builder Private Limited- For Environmental Clearance. (SIA/TN/INFRA2/443239/2023)	10400	The authority noted that the subject was appraised in the 418th SEAC meeting held on 19.10.2023. SEAC has decided to obtain the following details,  1. The PP shall submit fresh water supply commitment letter and disposal of excess treated water from the Competent Authority. In view of the above, the authority noted the 418th SEAC meeting held on 19.10.2023.
9.	Proposed Construction of Mall & Residential Building at Survey Nos.: 638/1, 2 & 3, 639/1, 639/2, 639/3, 644/1, T.S.No:1/10, Block No: 176 of Velachery Village, Guindy-Mambalam Taluk, Chennai District, Tamil Nadu by M/s. Esthell Homes - For Environmental Clearance. (SIA/TN/INFRA2/440434/2023)	10345	The Authority noted that the subject was appraised in the 418th SEAC meeting held on 19.10.2023. Based on the documents furnished and the presentation made by the proponent, the SEAC, after detailed deliberations, decided to obtain the following details,  1. The project proponent shall submit a Certified Compliance Report for the existing EC and appropriate mitigating measures for the non-compliance items, if any.  2. The PP shall submit fresh water supply commitment letter and disposal of excess treated water from the Competent Authority.  3. The PP shall furnish revised CER details.

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			On receipt of the above, further deliberations will be carried out. Hence, the Proponent is advised to submit the additional documents/information as sought above within the period of 30 days failing which your proposal will automatically get delisted from the PARIVESH portal.  In view of the above, the Authority decided to request the Member Secretary, SEIAA to communicate the SEAC minutes to the project proponent held on 19.10.2023.
10.	Proposed Expansion of Non-High Rise Residential Group Development at Survey Nos.:240/13 & 240/15 of Kalavakkam Village, Thiruporur Taluk, Chengalpet District, Tamil Nadu by M/s. Casa Grande Grace Private Limited - For Environmental Clearance. (SIA/TN/INFRA2/445025/2023)	10422	The Authority noted that the subject was appraised in the 418th SEAC meeting held on 19.10.2023. Based on the documents furnished and the presentation made by the proponent, the SEAC, after detailed deliberations, decided to obtain the following details,  1. The project proponent shall submit a Certified Compliance Report for the existing EC and appropriate mitigating measures for the non-compliance items, if any.  2. The PP shall submit fresh water supply commitment letter and disposal of excess treated water from the Competent Authority.  On receipt of the above, further deliberations will be carried out. Hence, the Proponent is advised to submit the additional documents/information as sought above within the period of 30 days failing which your proposal will automatically get delisted from the PARIVESH portal.  In view of the above, the Authority decided to request the Member Secretary, SEIAA to communicate the SEAC minutes to the project proponent held on 19.10.2023.

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11. Proposed Construction of Vellore 10360 Wholesale Merchants Estate at Melmonavur Village, Vellore Taluk & District, Tamil Nadu by M/s. Vellore Wholesale Merchants Estate For Environmental Clearance. (SIA/TN/INFRA2/439038/2023)

The Authority noted that the subject was appraised in 418th meeting of SEAC held on 19.10.2023 and the SEAC has furnished its recommendations for the grant of Environmental Clearance to the project subject to the conditions stated therein.

The Authority, after detailed discussions, decided to refer the subject to SEAC on receipt of the following additional particulars from the PP:

- 1. The PP shall furnish the dimensions of the individual shops to be constructed In each Block
- 2. The PP shall show on the site plan, the shops/ blocks allocated for each type of the product on sale (vegetables/ fruits/groceries and so on)
- 3. The PP shall submit a study report on the Impact of the proposed activity on the Reserve Forest located near the project site.
- 4. Energy profile depicting the consumption of energy for room heating, air conditioners, lighting and so on.
- 5. Report on anticipated carbon-dioxide and other greenhouse emissions from the proposed activity and means and methods of prevention/reduction of the impact.
- 6. Details of transport regulation within the market, light & heavy-duty vehicles to be handled per day and their warming potential
- 7. Sanitation facilities to be provided for the vendors & public and action to decarbonise the area.

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		8. Technologies to be adopted to support material handling, storage, shop space and pallet space management.  9. Fire safety management, risk assessment and evacuation emergency plan shall be submitted.  10. Detailed report on anticipated quantity of perishable goods, groceries. florists, vegetable wastes and spoilage and other solid wastes management.  11. Protection from free ranging animals, and action to be taken to prevent zoonosis.  12. Report on health care system to be provided for workers.  13. Details of workers' rest room and safety.
12. Proposed Construction of High-Figure Group Development Buildings S.No:406/79A(part) 406/80A(part) of Okkiy Thoraipakkam Villa Sholinganallur Taluk, Cher District, Tamil Nadu by Baashyaam Reality Private Lim - For Term of Refere (SIA/TN/INFRA2/443872/2023)	at and vam age, nnai M/s ited	The Authority noted that the subject was appraised in 418th meeting of SEAC held on 19.10.2023 and the SEAC has furnished its recommendations for the grant of Terms of Reference for the EIA study subject to the conditions stated therein.  After detailed discussions, the Authority accepted the recommendation of SEAC and decided to grant Terms of Reference (TOR) based on studies, assessments and records to be produced as sought by the SEAC and SEIAA for undertaking the Environment Impact Assessment Study and preparation of Environment Management Plan subject to the conditions as recommended by SEAC & normal conditions, following condition and conditions in Annexure 'D' of this minutes.  • KML file reveal that the project site is located at a distance of 73m from the Buckingham

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			Canal on landward side. Hence the PP shall obtain and submit the copy of CRZ clearance.
13.	Proposed construction of Dormitory buildings of the Industrial units for the Manufacture of Electronic Hardware by M/s. Delta Electronics India Private Limited at Plot No.3, S.F.Nos. 16-1B2B (Part), 16-3 (Part), SIPCOT Industrial Park, of Kurubarapalli Village, Krishnagiri Taluk, Krishnagiri District, Tamil Nadu - For Environmental Clearance. (SIA/TN/INFRA2/444094/2023)	10403	The authority noted that the subject was placed in 418th SEAC meeting held on 19,10,2023.  The SEAC noted that the EIA Co-ordinator has not attended the meeting. Hence the subject was not taken up for discussion and the committee deferred the proposal.  In the view of the above, SEIAA accepts the decision of SEAC and decided to request Member Secretary to communicate the minutes of 418th SEAC Meeting held on 19,10,2023 to the project proponent.
14.	Proposed Expansion of Commercial Tower in the Existing Mall at T.S.Nos. 5/2, 5/3, 6/2 & 6/3 of Velachery Village, Guindy-Mambalam Taluk, Chennai District, Tamil Nadu by M/s. Classic Mall Development Company Limited, M/s. Classic Housing Projects Pvt. Ltd & M/s. Starboards Hotel Private Ltd - For Environmental Clearance (SIA/TN/INFRA2/446179/2023)	9583	The authority noted that the subject was appraised in the 418th SEAC meeting held on 19.10.2023. Based on the presentation and details furnished by the project proponent, the Committee decided to call for the following additional details from the project proponent to decide further on the proposal:  i) The proponent shall explore the possibilities of increasing the greenbelt from 8.7% to 15% as indicated in the ToR dated.05.06.2023.  ii) The proponent shall furnish the revised water balance chart.  iii) The proponent shall furnish the details of CER activities carried out as indicated in the earlier ECs dated.20.09.2010, 09.10.2017 & 23.08.2021 in tabular form. Noncompliances, if any, should be indicated.

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		iv) The proponent shall explore the possibilities of providing plants in pots in the parking areas provided in the basement.  v) The proponent shall keep Environment Awareness Boards within the mall to create awareness to the public.  vi) The proponent shall take necessary steps to make the entire mall premises plastic free zone and shall keep 'Plastic Free Mall' Boards within the premises.  vii) As a part of CER activity, the proponent shall take steps to provide a dedicated hyacinth removal machine for the cleaning of Velachery Eri situated near the proposed project site and maintain the same, in consultation with GCC.  viii) The proponent shall explore the possibilities of providing Manjappai to customers while they shop at mall stores, either for free or by charging appropriate amounts.  ix) The proponent shall renovate the existing STP and shall furnish photographic proofs for the same.  The Authority noted the minutes of SEAC.
15. Proposed Expansion of Residential Apartment at R.S.No. 273/48(p), & 274/49(p) Block- No. 17, Purasaiwakkam Village, Purasaiwakkam- Perambur Taluk, Chennai District, Tamil Nadu by M/s. Sanklecha Infra projects Private Limited- For Environmental	8556	The Authority noted that the subject was appraised in the 418th SEAC meeting held on 19.10.2023. Based on the recommendation of the sub-committee, SEAC decided to call for additional details as follows  • The Project Proponent shall provide a clear plan of implementation towards ecological remediation, natural resource and community augmentation. To the extent possible all

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	Clearance under violation category (SIA/TN/INFRA2/427183/2023)		remediation/augmentation activities shall take place near the project site to ensure possible reversal of damage caused by the construction without environmental clearance.  • The PP shall submit an action plan for greenbelt development at the project site as tree cover at the project site is very minimal.  • In addition, the PP may be asked to furnish plan and proof for undertaking the proposed CER activities in the nearby schools.  • The PP shall submit affidavit for undertaking maintenance of STP and other facilities for 10 years at the project site.  • The PP shall submit action plan to fulfil the requirement of undertaking roof top solar panel installation at the project site.  On receipt of the above, further deliberations will be carried out. Hence, the Proponent is advised to submit the additional documents/information as sought above within the period of 30 days failing which your proposal will automatically get delisted from the PARIVESH portal.  In view of the above, the Authority decided to request the Member Secretary, SEIAA to communicate the SEAC minutes to the project proponent held on 19.10.2023.
16.	Proposed Expansion in Construction of Residential and Commercial Group Development at S.Nos. 133/1A, 134/2, 136/1, 136/2A, 136/2B, 137, 138, 139, 140,	10334	The authority noted that the subject was appraised in the 418th SEAC meeting held on 19.10.2023. SEAC has furnished its recommendations to the authority for granting environmental clearance subject to the conditions stated therein.

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	141/1A, 141/1B, 141/2 of Koluthuvanchery Village, Sriperumbudur Taluk, Kancheepuram District, Tamil Nadu by M/s, Sheetala Credit and Holdings Private Limited – For Environmental Clearance (SIA/TN/INFRA2/439895/2023)		After detailed discussions, the Authority accepts the recommendation of SEAC and decided to grant Environmental Clearance subject to the conditions as recommended by SEAC & normal/standard conditions stipulated by MoEF&CC and the following conditions and the conditions in Annexure 'C' of this minutes.  i) The proponent shall obtain a consent letter from Kundrathur Municipality for reusing the treated wastewater for avenue plantations before obtaining CTE from TNPCB.  ii) The proponent shall earmark space for children's play area, gym and other recreational facilities. A copy of the above mentioned details shall be submitted to SEIAA before obtaining CTE from TNPCB.
17.	Proposed expansion and construction of Additional Court Building Comprising of Basement Stilt and three floors above the stilt to accommodate 18 Court Halls in the District Court Campus at SF. No. 814/2, 816/12, 820/3 of Tallakulam Village, Madurai North Taluk, Madurai, Tamil Nadu by the PP M/s. Public Works Department, Madurai - For Environmental Clearance. (SIA/TN/INFRA2/447214/2023)	10463	The authority noted that the subject was appraised in the 418th SEAC meeting held on 19.10.2023. SEAC has furnished its recommendations to the authority for granting environmental clearance subject to the conditions stated therein.  After detailed discussions, the Authority accepts the recommendation of SEAC and decided to grant Environmental Clearance subject to the conditions as recommended by SEAC & normal/standard conditions stipulated by MoEF&CC and the conditions in Annexure 'C' of this minutes.
18.	Proposed Rough stone & Gravel lease over an extent of 1.68.5 Ha at S.F.Nos. 27/2B (Part) Kodangipalayam Village, Palladam	10121	The Authority noted that the subject was placed in the 394th meeting of SEAC held on 21.07.2023 and the SEAC has furnished its recommendation for the grant of Terms of Reference (TOR) with Public Hearing

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Taluk, Tiruppur District, Tamil for the EIA study subject to the conditions stated Nadu by Thiru. P.Gopal- For Terms therein. After detailed discussions, the Authority of Reference. decided to seek the following document from the (SIA/TN/MIN/432831/2023) Project proponent: · Valid Certified compliance report for the existing quarry from the competent Authority. On receipt of the same the Authority will further deliberate and decide on future course of action. The PP furnished the reply and hence the subject was placed in this 672nd meeting of Authority held on 14.11.2023. After detailed discussions, the Authority accepted the recommendation of SEAC and decided to grant Terms of Reference (TOR) along with Public Hearing based on studies, assessments and records to be produced as sought by the SEAC and SEIAA. 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 and conditions in Annexure 'B' of this minutes. 19. Existing Black Granite Quarry lease | 10159 The authority noted that the subject was appraised in over an extent of 3.89.5 Ha in the 394th SEAC meeting held on 20.07.2023. During S.F.No. 715/3(P), 719/4(P), 721/1, the presentation, proponent stated that he would like 721/2A(P), 721/2B(P) & 722/1(P) at to withdraw the proposal. Hence, SEAC decided to Irudhukottai Village, Denkanikottai accept the proponent's request to withdraw the Taluk, Krishnagiri District, Tamil proposal and SEIAA may accordingly take necessary Nadu by Thiru.D.Karunanithi - For action in accordance with the procedures laid by the Terms of Reference. MoEF & CC. (SIA/TN/MIN/433811/2023) Earlier, the subject was placed in the 644th authority

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meeting and was deferred for reasons stated therein.

			On receipt of a reply from the proponent vide letter dated.01.11.2023, the proposal is again placed in this 672 <sup>nd</sup> authority meeting.  The Authority, taking into account the recommendations of SEAC, decided to accept the withdrawal request of the proponent.
20.	Proposed Rough Stone and Gravel quarry lease over an extent of 3.981 Ha at S.F.No. 282/3B(P), 283/2, 278/2(P), 277/1B(P), 284/1A1 (P) & 284/2 Irukkandurai Part-II Village, Radhapuram Taluk, Tirunelveli District, Tamil Nadu by Tvl. Hi Tech Rock Products & Aggregates Limited -for Environmental Clearance Amendment.	9406	The authority noted that the proponent, Tvl. Hi-Tech Rock Products & Aggregates Limited has obtained Environmental Clearance for the Proposed Rough Stone and Gravel quarry lease over an extent of 3.98.1 Ha at S.F.Nos. 282/3B(P), 283/2(P), 278/2(P), 277/1B(P), 284/1A1(P) and 284/2(P) of Irukkandurai Part-II Village, Radhapuram Taluk, Tirunelveli District, Tamil Nadu vide Lr. No.SEIAA-TN/ F.No.9406/EC.No:5716/2023 dated: 09.05.2023. Now, the proponent has applied for Corrigendum in Environmental Clearance in Form-10 vide SIA/TN/MIN/306071/2023, dated: 27.10.2023.  After detailed discussions, the Authority decided that the proponent's request for inclusion of the product 'weathered rock' in the Environmental Clearance cannot be considered, due to technical and ecological reasoning.
21.	Proposed construction of residential apartment building at S.F.Nos. 399/3B, 414A/1C2 & 414A/3 of Chettypunniyam Village, Chengalpattu Taluk, Kancheepuram District, Tamil Nadu- for Environmental Clearance Extension	5698	After detailed discussion, the authority noted as follows:  1. The proponent M/s. Pallava Estate LLP has obtained Environmental Clearance vide Letter No. SEIAA/TN/F.5698/EC/8(a)/495/2016 dated: 05.10.2016 for the Proposed construction of residential apartment building at S.F.Nos.

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			399/3B, 414A/1C2 & 414A/3 of Chettypunniyam Village, Chengalpattu Taluk, Kancheepuram District, Tamil Nadu for the total built up area of 52880.42 Sq.m.  2. Now, the proponent has applied for extension of validity of earlier issued EC in Form-6 vide SIA/TN/MIS/304606/2023, dated: 26.09.2023.  In view of the above, the authority has decided to forward the proposal to SEAC for remarks and recommendations.
22.	To consider the proposal for the grant of Environment Clearance Amendment for the Proposed Rough Stone quarry lease over an extent of 1.52.0Ha in S.F.Nos. 293/2 (Part - IV) of Suriyanagaram Village, Tiruttani Taluk, Tiruvallur District, Tamil Nadu	7055	The authority noted that the proponent has applied for Amendment in EC issued vide Lr.No.SEIAA-TN/F.No.7055/EC.No.4481//2020 dated 12.01.2021. The PP has requested for change in EC quantity and Latitude, Longitude. The Authority noted that the EC was issued for quantity of 53,77,775m³ against the approved quantity of 3,77,775m³ of Rough stone. Hence the Authority decided that, MS may call for an explanation from the concerned Engineer.  Also, since there is change in Latitude and Longitude, the Authority after detailed deliberation decided to forward the proponent's request to SEAC.

# 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.
- All the conditions as presented by the proponent in the PPT during SEAC appraisal should be addressed in Full.

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- 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).
- 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 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

- 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

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

# e) Air Environment - Protection and mitigation measures

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

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- The proponent shall ensure that the operations do not result in loss of soil biological properties and nutrients.
- 21. The proponent shall ensure that activity does not deplete the indigenous soil seed bank and disturb the mycorrizal fungi, soil organism, soil community nor result in eutrophication of soil and water.
- 22. The activities should not disturb the soil properties and seed and plant growth. Soil amendments as required to be carried out, to improve soil health.
- Bio remediation using microorganisms should be carried out to restore the soil environment to enable carbon sequestration.
- 24. The proponent shall ensure that the mine restoration is done using mycorrizal VAM, 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

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- 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 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.
- 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.

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- 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.
- 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).

#### 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.

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- 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.
- 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 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.

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- The EMP shall also be implemented in consultation with local self-government institutions & Govt. departments.
- The follow-up action on the implementation of CER Shall be included in the compliance report.

# p) Directions for Reclamation of mine sites

- 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.
- 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.
- 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.
- 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

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- 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.
- 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

 Cluster Management Committee shall be framed which must include all the proponents in the cluster as members including the existing as well as proposed quarry.

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

# Impact study of mining

- 12. Detailed study shall be carried out in regard to impact of mining around the proposed mine lease area covering the entire mine lease period as per precise area communication order issued from reputed research institutions on the following
  - a) Soil health & soil biological, physical land chemical features.
  - b) Climate change leading to Droughts, Floods etc.
  - c) Pollution leading to release of Greenhouse gases (GHG), rise in Temperature, & Livelihood of the local people.
  - d) Possibilities of water contamination and impact on aquatic ecosystem health.
  - e) Agriculture, Forestry & Traditional practices.
  - f) Hydrothermal/Geothermal effect due to destruction in the Environment.
  - g) Bio-geochemical processes and its foot prints including environmental stress.

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.
- Action should specifically suggest for sustainable management of the area and restoration of ecosystem for flow of goods and services.
- 18. The project proponent shall study and furnish the impact of project on plantations in adjoining patta lands, Horticulture, Agriculture and livestock.

## Forests

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

#### Water Environment

- 23. Hydro-geological study considering the contour map of the water table detailing the number of ground water pumping & open wells, and surface water bodies such as rivers, tanks, canals, ponds etc. within 1 km (radius) so as to assess the impacts on the nearby waterbodies due to mining activity. Based on actual monitored data, it may clearly be shown whether working will intersect groundwater. Necessary data and documentation in this regard may be provided, covering the entire mine lease period.
- 24. Erosion Control measures.
- 25. Detailed study shall be carried out in regard to impact of mining around the proposed mine lease area on the nearby Villages, Water-bodies/ Rivers, & any ecological fragile areas.

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- The project proponent shall study impact on fish habitats and the food WEB/ food chain in the water body and Reservoir.
- 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.
- The Environmental Impact Assessment should study on wetlands, water bodies, rivers streams, lakes and farmer sites.

# Energy

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

# Climate Change

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

# Mine Closure Plan

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

# EMP

- 35. Detailed Environment Management Plan along with adaptation, mitigation & remedial strategies covering the entire mine lease period as per precise area communication order issued.
- 36. The Environmental Impact Assessment should hold detailed study on EMP with budget for Green belt development and mine closure plan including disaster management plan.

#### Risk Assessment

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

# Disaster Management Plan

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38. To furnish disaster management plan and disaster mitigation measures in regard to all aspects to avoid/reduce vulnerability to hazards & to cope with disaster/untoward accidents in & around the proposed mine lease area due to the proposed method of mining activity & its related activities covering the entire mine lease period as per precise area communication order issued.

#### Others

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

#### 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.
- The proponent shall adopt methodology to control thermal environment and other shocks in the building.
- The proponent shall adopt detailed plan to reduce carbon footprints and also develop strategies for climate proofing and climate mitigation.
- The proponent shall adopt strategies to ensure the buildings in blocks are not trapping heat to become local urban heat islands.
- The proponent shall ensure that the building does not create artificial wind tunnels creating cold water and uncomfortable living conditions resulting in health issues.

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- 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.
- The proponent shall ensure that the buildings should not cause any damage to water environment, air quality and should be carbon neutral building.

# Health

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.
- The proponent shall provide provisions for controlled ventilation and lighting systems.
- 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.
- 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.

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# Database maintenance & audits

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

## Biodiversity

- 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.
- 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

- 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.
- 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.
- 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.

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- 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.

# Parking

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

# 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.
- 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

- The proponent shall ensure that the EIA/EMP and disaster management plan should be adhered strictly.
- 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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