

State Expert Appraisal Committee (SEAC)

Minutes of 380<sup>th</sup> meeting of the State Expert Appraisal Committee (SEAC) held on 17.05.2023(Wednesday) at SEIAA Conference Hall, 2<sup>nd</sup> Floor, Panagal Maligai, Saidapet, Chennai 600 015 for consideration of Building Construction Projects & Mining Projects

Agenda No: 380-01  
(File No: 9744/2022)

Proposed Establishment of Common Bio-Medical Waste Treatment Facility at S.F.No. 58/1, 58/2, 59/1A(Pt) & 59/1B (Pt) of Melpakkam Village, Uthiramerur Taluk, Kanchipuram District, Tamil Nadu by M/s. S Growth Alliances LLP- For Terms of Reference. (SIA/TN/INFRA2/412697/2023 Dt.06.01.2023)

The proposal was placed for appraisal in this 380<sup>th</sup> meeting of SEAC held on 17.05.2023. The details of the project furnished by the proponent are given in the website (parivesh.nic.in).

The SEAC noted the following:

1. The project proponent, **M/s. S Growth Alliances LLP** has applied for terms of Reference for the Proposed Establishment of Common Bio-Medical Waste Treatment Facility at S.F.No. 58/1, 58/2, 59/1A(Pt) & 59/1B (Pt) of Melpakkam Village, Uthiramerur Taluk, Kanchipuram District, Tamil Nadu.
2. The project/activity is covered under category "B1" of Item 7 da "Bio-Medical Waste Treatment Facilities" of the schedule to the EIA Notification, 2006.
3. Earlier, the proposal was placed for appraisal in the 358<sup>th</sup> SEAC meeting held on 24.02.2023. Based on the presentation and documents furnished by the project proponent, SEAC noted that the proposed site has not been selected in consultation with the TNPCB as per the provisions of Bio-Medical Waste Management Rules, 2016. Hence, the proposal is directed to comply with the Rules regarding site selection and inform the details, after which the proposal will be taken up for further examination.

Accordingly, the proponent has approached TNPCB and the TNPCB officials have inspected the site and have furnished a report on the same to SEIAA-TN on 05.05.2023. This proposal was again placed in the 380<sup>th</sup> SEAC meeting held on 17.05.2023.

  
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1

  
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Based on the presentation and documents furnished by the project proponent, SEAC after detailed deliberations, decided to **recommend the proposal for the grant of Terms of Reference (ToR) with public hearing**, subject to the following ToRs in addition to the standard terms of reference for EIA study and details issued by the MoEF & CC to be included in EIA/EMP report:

1. The implications of the proposed project on the industrial unit nearby should be studied and appropriate mitigation measures should be incorporated in the EMP.
2. The implication on Flora & fauna shall be included in the EIA report.
3. Commitment letter obtained from local body for fresh water supply.
4. The PP shall include the specific study on implications of this CBMWF on the water bodies and nearby habitations.
5. Enumerate the structures located within 100,200 & 300m from the project site and the details shall be included in the EIA report.
6. Detailed design specification of incinerator shall be included.
7. Soil testing should be carried out at various depths in the proposed site as the PP stated that the same site was used before for deep burial of bio-medical waste.
8. Details of various state of the art of technology available in this field and justification for selection of a particular technology.
9. Details of permanent structures available within 2km from the project site shall be provided in the EIA.
10. Land requirement for the facility including its break up for various purposes, its availability and optimization.
11. Details of proposed layout clearly demarcating various activities such as security, Waste Storage Rooms, Waste Treatment Equipment Rooms/Areas, Treated Waste Storage Room, Pollution Control Devices like APCS and ETP, ash storage/disposal area, vehicle washing areas, and others such as admin area, worker's room, health centers, greenbelt, etc.
12. Details on collection and transportation of Bio Medical Waste from health care establishment, number of vehicles and feature of vehicles, etc.
13. Details of waste storage facilities/rooms.
14. Details of the treatment equipment's capacity.

15. Details of the incineration system – a statement on the compliance to CPCB guidelines for common bio medical waste incinerators in respect of waste feed cut-offs, operating parameters of combustion chambers, flue gas cleaning, ash handling, etc.
16. Details on fuel requirement for incineration.
17. Details on flue gas emissions discharge through stack and proposed pollution control technologies.
18. Details on residue/ash generation and management.
19. Details of waste heat utilization, if any.
20. Details on wastewater management.
21. Details of the proposed overall safety and health protection measures.
22. Details on source of water and power to the facility.
23. Details of the existing access road(s)/walkways to the designed operations in the site and its layout.
24. Location of the incineration facility and nearest habitats with distances from the facility to be demarcated on a toposheet (1: 50000 scale).
25. Landuse map based on satellite imagery including location specific sensitivities such as national parks / wildlife sanctuary, villages, industries, etc.
26. Topography details.
27. Surface water quality of nearby water bodies.
28. Details on proposed groundwater monitoring wells, locations, frequency of monitoring, parameters, etc.
29. Action plan for the greenbelt development in accordance to CPCB guidelines.
30. Details on pollution control technologies and online monitoring equipment.
31. Details on monitoring of pollutants at source –performance of the incinerator, including operating hours, fuel consumption, operating parameters (Combustion chamber – temperature, pressure, Stack temperature, total particulate matter, HCl, NOx as per Bio Medial Waste (Management & Handling) Rules 1998.
32. Stack and fugitive emissions may be monitored for SPM, HCL & NO2 as per Bio Medial Waste (Management & Handling) Rules 2016.
33. Specific programme to monitor safety and health protection of workers.

  
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34. Details of administrative and technical organizational structure.
35. Details of the emergency preparedness plan and on-site & off-site disaster management plan. Submit details of a comprehensive Disaster Management Plan including emergency evacuation during natural and man-made disaster.
36. The EIA/EMP shall conform to the 'Revised Guidelines for Common Bio-medical Waste Treatment and Disposal Facilities' issued by the Central Pollution Control Board.
32. PP shall strive to generate a minimum of 25% of energy consumption by way of solar energy.
33. Details of litigation pending against the project, if any, with direction /order passed by any Court of Law against the Project will be given.
34. The cost of the Project (capital cost and recurring cost) as well as the cost towards implementation of EMP will be clearly spelt out.


**Agenda No: 380-02**  
**(File No: 8556/2023)**

**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 Clearance under violation category (SIA/TN/INFRA2/427183/2023, Dated: 26.04.2023).**

The proposal was placed in this 380<sup>th</sup> SEAC Meeting held on 17.05.2023. The project proponent gave detailed presentation. The details of the project furnished by the proponent are available in the website (parivesh.nic.in).

**The SEAC noted the following:**

1. The Proponent, M/s. Sanklecha Infra projects Private Limited has applied for Environmental Clearance under violation category for the Proposed Expansion of Residential Apartment at SF.No. 273/48(p), & 274/49(p) Block- No. 17, Purasaiwakkam Village, Purasaiwakkam- Perambur Taluk, Chennai District, Tamil Nadu.
2. The project/activity is covered under Category "B" of item 8(a) "Building & Construction Projects" of the Schedule to the EIA Notification, 2006.
3. Earlier, the PP has obtained EC from SEIAA vide Lr.No.SEIAA-TN/F.No.6393/EC/8(a)/529/2017 Dated:21.07.2017 to construct Residential

  
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Apartment comprising of Block R (S+7), Block S (S+7), Block T (S+8) and a club house with 452 dwelling units having total built up area of 25,569.46 Sqm at R.S. Nos: 273/48 (part) & 274/49 (part), Block No.17, Purasawakkam Village, Purasawakkam-Perambur taluk, Chennai district, Tamil Nadu.

4. CCR From MoEF&CC, IRO (SZ) vide E.P/12.1/ SEIAA/2020-21/01/TN/122 Dt:10.11.2020.
5. The expansion proposal involves construction of additional two floors in Block R (S+9), and Block S (S+9), Additional construction of eight floors in Block T (S+16). After expansion the total built up area of the project is 39373.58 Sqm. Total land area of the project is 13292.52 Sqm.
6. It falls under violation category.
7. TOR issued vide Letter No.SEIAA-TN/F.No.8556/Violation/ToR-1373/2021 dated:27.02.2023 under violation category.
8. EIA submitted vide online proposal No. (SIA/TN/INFRA2/427183/2023, Dated: 26.04.2023).

Based on the presentation made and documents furnished by the project proponent, SEAC decided to make on-the spot site-inspection by the sub-committee constituted by SEAC to assess the present status of the project and environmental settings as the proposal falls under violation category. **Further the sub- committee will assess the ecological damage and also to check the Remedial Plan & Community Augmentation Plan submitted by the Project Proponent during the inspection.**

**Agenda No. 380 – 03.**

**File No. 10001/2023.**

**Proposed Expansion of Existing Special Economic Zone over an area of 63.03 Ha & Total Builtup area > 1,50,000 Sq.m at SIPCOT Industrial Park, Phase -II, Sunguvachatram Village, Sriperumbudur Taluk, Kancheepuram District, Tamilnadu by M/s. FIH India Developer Pvt Ltd – For Terms of Reference (ToR) Under Violation Category. (SIA/TN/INFRA2/426440/2023 Dt:20.04.2023)**

Now, the proposal was placed in 380<sup>th</sup> SEAC meeting held on 17.05.2023. The details of the project furnished by the proponent are given in the website ([parivesh.nic.in](http://parivesh.nic.in)).

  
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5

  
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The SEAC noted the following:

1. The project/activity is covered under category "B1" without public Hearing of Item 8 (b) "Township & Area development" of the schedule to the EIA Notification, 2006.
2. Total Plot area (Existing & Expansion) – 63.03 Ha (No Change). Total Built up area - 4,34,558 Sq.m in which existing Built up area – 3,19,102 Sq.m & proposed Built-up area – 1,15,456 Sq.m. The total plot area of 63.03 Ha in which M/s. Bharat FIH Ltd (BFIH) as 49.73 Ha & M/s. Foxcon Hon Hoi India Mega development projects Pvt Ltd (FHHI) as 13.30 Ha.
3. The total existing built-up area is 3,19,102 Sq.m in which M/s. Bharat FIH Ltd (BFIH) as 1,42,815.1 Sq.m & M/s. Foxcon Hon Hoi India Mega development projects Pvt Ltd (FHHI) as 1,76,286.49 Sq.m. Further, M/s. FHHI has proposed additional Buildings with built-up area – 1,15,456 Sq.m.
4. MoEF&CC notification vide S.O. 804 (E) Dt. 14.3.2017.
5. MoEF& CC Notification S.O.1030 (E) dated 08.03.2018.
6. MoEF&CC OM F.No.22-21/2020-IA.III Dt:07.07.2021.
7. MoEF&CC OM F.No.22-21/2020-IA.III [138949] Dt:28.01.2022.


Based on the presentation and documents furnished by the project proponent, SEAC after detailed deliberations, decided to **recommend the proposal for the grant of Terms of Reference (ToR) under violation category**, subject to the following ToRs in addition to the standard terms of reference for EIA study and details issued by the MoEF & CC to be included in EIA/EMP report. Further, this ToR granted will be legally subject to the outcome of the case W.P (MD), No. 11757 of 2021 of 2021 pending before Hon'ble Madurai Bench of the High Court of Madras,

1. The proponent shall furnish the details of sewage treatment and Effluent treatment technology proposed for this proposed existing & Expansion activity and also furnish the design details of the said STP along with adequacy report from any one of the reputed Educational Institution.

  
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2. The PP shall furnish the proposal identifying land area within the existing site and additional land area outside the project site to plant 2500 Nos. of Trees/Hectare for afforestation purpose to compensate the loss of 3600 Nos. of trees cut-off during development of the existing site by planting 10 times to the trees cut-off.
3. The PP shall adopt green building norms for the proposed buildings.
4. The PP shall furnish proposal for utilization of at least 50% of roof top area for harnessing Solar Energy for common area lighting and Solar water heater etc shall be included in the EIA/EMP report.
5. The Proponent shall furnish the proposal of providing the dispenser for the disposal of Sanitary Napkins.
6. The project proponent shall furnish the proposal of a health care facility within the proposed project activity possibly with a medical officer 24x7 in the project site for continuous monitoring the health of workers.
7. The project proponent shall furnish proposal for the adequate elevated closed roof 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, STP, ETP along with development area for the proposed project activity.
8. The proposal to construct a pond of appropriate size in the earmarked OSR land in consultation with the local body. The pond should be modelled like a temple tank with parapet walls, steps, etc. The pond is meant to play three hydraulic roles, namely (1) as a storage, which acted as insurance against low rainfall periods and also recharges groundwater in the surrounding area, (2) as a flood control measure, preventing soil erosion and wastage of runoff

  
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waters during the period of heavy rainfall, and (3) as a device which was crucial to the overall eco-system.

9. As per G.O. Ms. No. 142 approval from Central Ground Water Authority shall be obtained for withdrawal of water and furnish the copy of the same, if applicable.
10. Commitment letter from competent authority for supply of water shall be furnished.
11. Copy of the village map, FMB sketch and "A" register shall be furnished.
12. Detailed Evacuation plan during emergency/natural disaster/untoward accidents shall be submitted.
13. Details of the Rain water harvesting system with cost estimation should be furnished.
14. A detailed storm water management plan to drain out the storm water entering the premises during heavy rains period shall be prepared including main drains and sub-drains in accordance with the contour levels of the proposed project considering the flood occurred in the year 2015 and also considering the water bodies around the proposed project site & the surrounding development. The storm water drain shall be designed in accordance with the guidelines prescribed by the Ministry of Urban Development.
15. The proposed OSR area should not be included in the activity area. The OSR area should not be taken in to account for the green belt area.
16. The layout plan shall be furnished for the greenbelt area earmarked with GPS co ordinates by the project proponent on the periphery of the site and the same shall be submitted for CMDA/DTCP approval. The green belt width should be at least 3m wide all along the boundaries of the project site. The green belt area should not be less than 15%of the total land area of the project.
17. Cumulative impacts of the Project considering with other infrastructure developments and industrial parks in the surrounding environment within 5 km & 10 km radius shall be furnished.



18. A detailed post-COVID health management plan for construction workers as per ICMR and MHA or the State Govt. guideline may be followed and report shall be furnished.
19. The project proponent shall furnish detailed baseline monitoring data with prediction parameters for modelling for the ground water, emission, noise and traffic.

**Agenda No: 380-04**  
**(File No: 7268/2018)**


**Recommendations for releasing the Bank guarantee for the value of Rs. 4.83 Crores remitted towards Ecological remediation, Natural resources Augmentation and Community resources Augmentation under EIA Notifications dated 14.3.2017 & 08.03.2018 (violation category) for Proposed Expansion of IT Park and Change in Concept from IT building, Hotel, Residential Complex & Retail Shop (Built up area 3,75,328 Sq.m) to IT Park comprising Block A-F and Utility Block, Serviced Apartment & Conventional Centre (Built Up area 6,65,940 Sq.m) at Block No. 6, T.S. Nos. 2/3 & 3/2, Kanagam Village of Guindy-Mambalam Taluk & Block No. 4, T.S. No. 2/1, Thiruvanmiyur Village of Mylapore-Triplicane Taluk, Chennai District, Tamil Nadu by M/s. TRIL Info Park Limited.**

This proposal was placed in 378<sup>th</sup> SEAC meeting held on 11.05.2023. The details of the project furnished by the proponent are available on the web portal (parivesh.nic.in).

**The SEAC noted the following:**

1. The PP was issued with Environmental Clearance vide Lr.No.SEIAA-TN/F.No.7268/EC/8(b)/786/2021 dated: 30.09.2021 under violation category with the following conditions.
  - The amount prescribed for Ecological remediation (Rs. 2.415 Crores), natural resource augmentation (Rs. 0.966 Crores) & community resource augmentation (Rs. 1.449 Crores), totaling Rs. 4.83 Crores. Hence the SEAC decided to direct the project proponent to remit the amount of Rs. 4.83 Crores in the form of bank guarantee to Tamil Nadu Pollution Control Board, before obtaining Environmental Clearance and submit the acknowledgement of the same to SEIAATN. The funds shall be utilized for the remediation plan, Natural resource augmentation plan & Community resource augmentation plan as indicated in the EIA/EMP report.

  
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- 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. If not, the bank guarantee will be forfeited to TNPCB without further notice.
- The amount committed by the PP for CER (Rs.3.75 Crores) shall be remitted in the form of DD to the beneficiary for the activities committed by the PP. A copy of receipt from the beneficiary shall be submitted to SEIAA-TN.

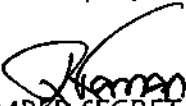
In this connection, the proponent has submitted the following details vide its letter dated: 20.09.2021 as recommended by SEAC in the 226<sup>th</sup> meeting of SEAC held on 17.08.2021.

- Copy of the acknowledgement towards submission of Bank Guarantee for Rs.4.83 crore (B.G.No.0999921BG0001066, State Bank of India dated 20.09.2021, towards ecological damage remediation plan, natural resource augmentation plan and community resource augmentation plan as indicated in the EIA/EMP report to the office of DEE/TNPCB/Chennai.
- Copy of the receipt towards submission of Rs.3.75 crores under CER to M/s. Voluntary Health Services (VHS) Hospital, Taramani by DD No.556424 dated: 18.09.2021 drawn in favour of VHS through SBI main branch.
- The proponent has reported that the credible action was initiated by TNPCB by filing case in the court of No.5-XVIII Metropolitan Magistrate, Chennai vide CNR No. TNCH0C0132222021 & Case Type: CC, Registration Number: 3249/2021 & Filing No.13220/2021 dated on 04.09.2021.

The PP has applied for releasing of the above said Bank guarantee of Rs.4.83 crore given to TNPCB along with CCR received from MoEF&CC.

Hence, this proposal was placed in the 378<sup>th</sup> SEAC meeting held on 11.05.2023. During the meeting, SEAC asked for item-wise expenditure details with explanation for variance in expenditure wherever found. PP has requested for additional time to produce the details in tabular form with explanation for variances in item-wise spending. Therefore, SEAC decided to take up this proposal in ensuing SEAC meeting.

Now, this proposal was placed in the 380<sup>th</sup> SEAC meeting held on 17.05.2023.

  
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10

  
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The EIA Notification 2006 vide S.O No S.O. 804(E), Dt 14.3.2017 stated that  
“(7) The project proponent will be required to submit a bank guarantee equivalent to the amount of remediation plan and Natural and Community Resource Augmentation Plan with the State Pollution Control Board and the quantification will be recommended by Expert Appraisal Committee and finalized by Regulatory Authority and the bank guarantee shall be deposited prior to the grant of environmental clearance and will be released after successful implementation of the remediation plan and Natural and Community Resource Augmentation Plan, and after the recommendation by regional office of the Ministry, Expert Appraisal Committee and approval of the Regulatory Authority.”


PP has furnished the required details and SEAC has examined the same. The SEAC accepted the documents & details furnished by the Project Proponent and decided to recommend the release of Bank Guarantee to SEIAA.

**Agenda No. 380-5**  
**F.No.9866/2023**  
**SIA/TN/INFRA2/4189605/2023**

Based on the documents submitted and presentation made by the project proponent along with the consultant, the following facts have emerged: -

**The environmental clearance is sought for “Construction of new multi-storeyed “C” type quarters at Todhunter Nagar, Saidapet, Chennai” at Survey No: Block No. 27 – T.S No. : 1-13 of Todhunter Nagar Village, Saidapet Taluk and Chennai District by the proponent, M/s. Public Works Department–for Environmental Clearance.**


1. M/s Hubert Envirocare Systems Private Limited is the EIA Consultant for the project.
2. Total plot area of the project is 7001.6 Sq.m and built-up area is 21,281 Sq.m respectively.
3. Maximum number of floors will be G+ 19 floors and maximum height of the building will be 60.5m AGL
4. Total Saleable DU's (dwelling units) is 190
5. Salient features of the project as submitted by the project proponent:

  
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11

  
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PROJECT SUMMARY			
Sl. No.	Description	Total Quantity	Unit
GENERAL			
1	Plot Area	7001.6	SQMT
2	Proposed Built Up Area	21,281	SQMT
3	Total no of Saleable DU's/Villas	190	No.
4	Max Height - (Height of tallest block)	60.5 AGL	M
5	No of Building Blocks (Residential + Community facilities)	1 block residential	
6	Max No of Floors	19	No.
7	Expected Population (760 Residential + 40 Floating)	800	No.
8	Total Cost of Project	99.76	CR
9	Project Activity :	Construction of new multistoried "C" type quarters at Todhunter Nagar With built up area – 21,281 Sq.m (B+5+19 FL)	
AREAS			
10	Permissible Ground Coverage Area	1342	SQMT
11	Proposed Ground Coverage Area (19.17%)	1342	SQMT
12	Permissible FAR Area	3.62	SQMT
13	Proposed FAR Area	3.04	SQMT
14	Other Non FAR Areas - including basement area etc.	NA	SQMT
15	Proposed Total Built Up Area	21,281	SQMT
WATER			
16	Total Water Requirement	169.2	KLD
17	Fresh water requirement	72	KLD
18	Treated Water Requirement	97.2	KLD

  
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19	Wastewater Generation	97.2	KLD
20	Proposed Capacity of STP	500	KLD
21	Treated Water Available for Reuse	97.2	KLD
22	Treated Water Recycled	97.2	KLD
23	Surplus treated water to be discharged in Municipal Sewer with Prior permission	0	KLD
RAINWATER HARVESTING			
24	Rainwater Harvesting - Recharge Pits	33	No.
PARKING			
25	Total Parking Required as / Building Bye Laws	107	ECS
26	Proposed Total Parking	107	ECS
27	Parking in Basements	21	ECS
GREEN AREA			
28	Proposed Green Area (Minimum 15.0% of plot area)	1050.2	SQMT
	Total area	7001.6	SQMT
	Existing trees on plot	22	
	Number of trees to be planted	1100	
	Number of trees to be transplanted/cut	22	
SOLID WASTE MANAGEMENT			
29	Total Solid Waste Generation	480	TPD
30	Organic waste	288	TPD
32	Quantity of Hazardous waste Generation	7300	LPD
33	Quantity of Sludge Generated from STP	132.85	KG/DAY
POWER / GREEN POWER			
34	Total Power Requirement	1000	KW
35	DG set backup	125	KVA
36	No of DG Sets	1	No.

  
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13

  
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37	Solar Panels – Roof Coverage	50	%
38	Hot Water Requirement Of which met by Solar Panels	3800	l/day

6. The project proposal falls under Category–8(a) of EIA Notification, 2006 (as amended).

### RECOMMENDATION OF THE COMMITTEE

The Committee discussed the matter and recommended grant of environmental clearance for the project proposal as above along with standard environmental clearance conditions prescribed by MoEF&CC, GoI and following additional conditions:

#### Additional Conditions:

1. The construction shall comply with Green Building norms and shall get IGBC Gold rating.
2. STP shall be installed on 10-year BOOT basis, so that the construction and maintenance are combined in one single responsibility.
3. The project proponent shall provide entry and exit points for the OSR area, play area as per the norms for the public usage and as committed. The PP shall construct a pond of appropriate size in the earmarked OSR land in consultation with the local body. The pond should be modelled like a temple tank with parapet walls, steps, etc. The pond is meant to play three hydraulic roles, namely (1) as a storage, which acted as insurance against low rainfall periods and also recharges groundwater in the surrounding area, (2) as a flood control measure, preventing soil erosion and wastage of runoff waters during the period of heavy rainfall, and (3) as a device which was crucial to the overall eco-system.
4. Project proponent is advised to explore the possibility and getting the cement in a closed container rather through the plastic bag to prevent dust emissions at the time of loading/unloading.
5. Project proponent should ensure that there will be no use of "Single use of Plastic" (SUP).

  
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6. The proponent should provide the sufficient electric vehicle charging points as per the requirements at ground level and allocate the safe and suitable place in the premises for the same.
7. The project proponent should develop green belt in the township as per the plan submitted and also follow the guidelines of CPCB/Development authority for green belt as per the norms.
8. Project proponent should invest the CSR amount as per the proposal and submit the compliance report regularly to the concerned authority/Directorate of environment.
9. Proponent should submit the certified compliance report of previous/present EC along with action taken report to the Regional office MoEF Lko/Director of Environment and other concerning authority regularly.
10. Proponent shall provide the dual pipeline network in the project for utilization of treated water of STP for different purposes and also provide the monitoring mechanism for the same. STP treated water not to be discharged outside the premises without the permission of the concerned authority.
11. The project proponent shall provide a measuring device for monitoring the various sources of water supply namely fresh water, treated waste water and harvested rain water.
12. The proponent should provide the MoU with STPs' owner/concerned department for getting the STPs treated water for construction use.

Standard Environmental Clearance Conditions prescribed by MoEF & CC:

**1. Statutory Compliance:**

1. The project proponent shall obtain all necessary clearance/ permission from all relevant agencies including town planning authority before commencement of work. All the construction shall be done in accordance with the local building byelaws.
2. The approval of the Competent Authority shall be obtained for structural safety of buildings due to earthquakes, adequacy of firefighting equipment etc as per National Building Code including protection measures from lightning etc.

  
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15

  
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3. The project proponent shall obtain forest clearance under the provisions of Forest (Conservation) Act, 1986, in case of the diversion of forest land for non-forest purpose involved in the project.
4. The project proponent shall obtain clearance from the National Board for Wildlife, if applicable.
5. The project proponent shall obtain Consent to Establish / Operate under the provisions of Air (Prevention & Control of Pollution) Act, 1981 and the Water (Prevention & Control of Pollution) Act, 1974 from the concerned State Pollution Control Board/ Committee.
6. The project proponent shall obtain the necessary permission for drawl of ground water / surface water required for the project from the competent authority.
7. A certificate of adequacy of available power from the agency supplying power to the project along with the load allowed for the project should be obtained.
8. All other statutory clearances such as the approvals for storage of diesel from Chief Controller of Explosives, Fire Department and Civil Aviation Department shall be obtained, as applicable, by project proponents from the respective competent authorities.
9. The provisions of the Solid Waste (Management) Rules, 2016, e-Waste (Management) Rules, 2016, and the Plastics Waste (Management) Rules, 2016 shall be followed.
10. The project proponent shall follow the ECBC/ECBC-R prescribed by Bureau of Energy Efficiency, Ministry of Power strictly.

**2. Air quality monitoring and preservation:**

1. Notification GSR 94(E) dated 25.01.2018 of MoEF&CC regarding Mandatory Implementation of Dust Mitigation Measures for Construction and Demolition Activities for projects requiring Environmental Clearance shall be complied with.
2. A management plan shall be drawn up and implemented to contain the current exceedance in ambient air quality at the site.
3. The project proponent shall install system to carryout Ambient Air Quality monitoring for common/criterion parameters relevant to the main pollutants

  
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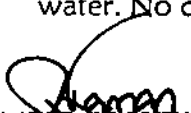


released (e.g. PM10 and PM25) covering upwind and downwind directions during the construction period.

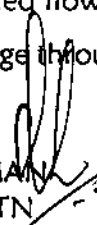
4. Construction site shall be adequately barricaded before the construction begins. Dust, smoke & other air pollution prevention measures shall be provided for the building as well as the site. These measures shall include screens for the building under construction, continuous dust/ wind breaking walls all around the site (at least 3 meter height). Plastic/tarpaulin sheet covers shall be provided for vehicles bringing in sand, cement, murrum and other construction materials prone to causing dust pollution at the site as well as taking out debris from the site.
5. Sand, murrum, loose soil, cement, stored on site shall be covered adequately so as to prevent dust pollution.
6. Wet jet shall be provided for grinding and stone cutting.
7. Unpaved surfaces and loose soil shall be adequately sprinkled with water to suppress dust.
8. All construction and demolition debris shall be stored at the site (and not dumped on the roads or open spaces outside) before they are properly disposed. All demolition and construction waste shall be managed as per the provisions of the Construction and Demolition Waste Rules 2016.
9. The diesel generator sets to be used during construction phase shall be low sulphur diesel type and shall conform to Environmental (Protection) prescribed for air and noise mission standards.
10. The gaseous emissions from DG set shall be dispersed through adequate stack height as per CPCB standards. Acoustic enclosure shall be provided to the DG sets to mitigate the noise pollution. The location of the DG set and exhaust pipe height shall be as per the provisions of the Central Pollution Control Board (CPCB) norms.
11. For indoor air quality the ventilation provisions as per National Building Code of India.

### 3. Water Quality Monitoring and Preservation:

1. The natural drain system should be maintained for ensuring unrestricted flow of water. No construction shall be allowed to obstruct the natural drainage through

  
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17

  
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the site, on wetland and water bodies. Check dams, bio-swales, landscape, and other sustainable urban drainage systems (SUDS) are allowed for maintaining the drainage pattern and to harvest rainwater.

2. Buildings shall be designed to follow the natural topography as much as possible. Minimum cutting and filling should be done.
3. Total freshwater use shall not exceed the proposed requirement as provided in the project details.
4. The quantity of freshwater usage, water recycling and rainwater harvesting shall be measured and recorded to monitor the water balance as projected by the project proponent. The record shall be submitted to the Regional Office, MoEF&CC along with six monthly Monitoring reports.
5. A certificate shall be obtained from the local body supplying water, specifying the total annual water availability with the local authority, the quantity of water already committed, the quantity of water allotted to the project under consideration and the balance water available. This should be specified separately for ground water and surface water sources, ensuring that there is no impact on other users.
6. At least 20% of the open spaces as required by the local building byelaws shall be pervious. Use of Grass pavers, paver blocks with at least 50% opening, landscape etc. would be considered as pervious surface.
7. Installation of dual pipe plumbing for supplying fresh water for drinking, cooking and bathing etc and other for supply of recycled water for flushing, landscape irrigation car washing, thermal cooling, conditioning etc. shall be done.
8. Use of water saving devices/ fixtures (viz. low flow flushing systems; use of low flow faucets tap aerators etc) for water conservation shall be incorporated in the building plan.
9. Use of water saving devices/ fixtures (viz. low flow flushing systems; use of low flow faucets tap aerators etc) for water conservation shall be incorporated in the building plan.
10. Water demand during construction should be reduced by use of pre-mixed concrete, curing agents and other best practices referred.

11. The local bye-law provisions on rainwater harvesting should be followed. If local byelaw provision is not available, adequate provision for storage and recharge should be followed as per the Ministry of Urban Development Model Building Byelaws, 2016. Rainwater harvesting recharge pits/storage tanks shall be provided for ground water recharging as per the CGWB norms.
12. A rainwater harvesting plan needs to be designed where the recharge bores of minimum one recharge bore per 5,000 square meters of built-up area and storage capacity of minimum one day of total fresh water requirement shall be provided. In areas where ground water recharge is not feasible, the rainwater should be harvested and stored for reuse. The ground water shall not be withdrawn without approval from the Competent Authority.
13. All recharges should be limited to shallow aquifer.
14. No ground water shall be used during construction phase of the project.
15. Any ground water dewatering should be properly managed and shall conform to the approvals and the guidelines of the CGWA in the matter. Formal approval shall be taken from the CGWA for any ground water abstraction or dewatering.
16. The quantity of freshwater usage, water recycling and rainwater harvesting shall be measured and recorded to monitor the water balance as projected by the project proponent. The record shall be submitted to the Regional Office, MoEF&CC along with six monthly Monitoring reports.
17. Sewage shall be treated in the STP with tertiary treatment. The treated effluent from STP shall be recycled/re-used for flushing, AC make up water and gardening. As proposed, not related water shall be disposed into municipal drain.
18. No sewage or untreated effluent water would be discharged through storm water drains.
19. Onsite sewage treatment of capacity of treating 100% wastewater to be installed. The installation of the Sewage Treatment Plant (STP) shall be certified by an independent expert and a report in this regard shall be submitted to the Ministry before the project is commissioned for operation. Treated wastewater shall be reused on site for landscape, flushing, cooling tower, and other end-uses. Excess treated water shall be discharged as per statutory norms notified by Ministry of

  
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SEAC -TN

19

  
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SEAC-TN

Environment, Forest and Climate Change. Natural treatment systems shall be promoted.

20. Periodical monitoring of water quality of treated sewage shall be conducted. Necessary measures should be made to mitigate the odor problem from STP.

21. Sludge from the onsite sewage treatment, including septic tanks, shall be collected, conveyed and disposed as per the Ministry of Urban Development, Centre Public Health and Environmental Engineering Organization (CPHEEO) Manual on Sewerage and Sewage Treatment Systems, 2013.

**4. Noise Monitoring and Prevention:**

1. Ambient noise levels shall conform to residential area/commercial area/industrial area/silence zone both during day and night as per Noise Pollution (Control and Regulation) Rules, 2000. Incremental pollution loads on the ambient air and noise quality shall be closely monitored during construction phase. Adequate measures shall be made to reduce ambient air and noise level during construction phase, so as to conform to the stipulated standards by CPCB / SPCB.

2. Noise level survey shall be carried as per the prescribed guidelines and report in this regard shall be submitted to Regional Officer of the Ministry as a part of sixmonthly compliance report.

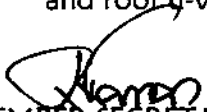
3. Acoustic enclosures for DG sets, noise barriers for ground-run bays, ear plugs for operating personnel shall be implemented as mitigation measures for noise impact due to ground sources.

**5. Energy Conservation Measures:**

1. Compliance with the Energy Conservation Building Code (ECBC) of Bureau of Energy Efficiency shall be ensured. Buildings in the States which have notified their own ECBC, shall comply with the State ECBC.

2. Outdoor and common area lighting shall be LED.

3. Concept of passive solar design that minimize energy consumption in buildings by using design elements, such as building orientation, landscaping, efficient building envelope, appropriate fenestration, increased day lighting design and thermal mass etc. shall be incorporated in the building design. Wall, window, and roof u-values shall be as per ECBC specifications.

  
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4. Energy conservation measures like installation of CFLs/ LED for the lighting the area outside the building should be integral part of the project design and should be in place before project commissioning.
5. Solar, wind or other Renewable Energy shall be installed to meet electricity generation equivalent to 1% of the demand load or as per the state level/ local building byelaws requirement, whichever is higher.
6. Solar power shall be used for lighting in the apartment to reduce the power load on grid. Separate electric meter shall be installed for solar power. Solar water heating shall be provided to meet 20% of the hot water demand of the commercial and institutional building or as per the requirement of the local building byelaws, whichever is higher. Residential buildings are also recommended to meet its hot water demand from solar water heaters, as far as possible.

**6. Waste Management :**

1. A certificate from the competent authority handling municipal solid wastes, indicating the existing civic capacities of handling and their adequacy to cater to the M.S.W. generated from project shall be obtained.
2. Disposal of muck during construction phase shall not create any adverse effect on the neighbouring communities and be disposed taking the necessary precautions for general safety and health aspects of people, only in approved sites with the approval of competent authority.
3. Separate wet and dry bins must be provided in each unit and at the ground level for facilitating segregation of waste. Solid waste shall be segregated into wet garbage and inert materials.
4. Organic waste compost/ Vermiculture pit/ Organic Waste Converter within the premises with a minimum capacity of 0.3 kg /person/day must be installed.
5. All non-biodegradable waste shall be handed over to authorized recyclers for which a written tie up must be done with the authorized recyclers.
6. Any hazardous waste generated during construction phase, shall be disposed off as per applicable rules and norms with necessary approvals of the State Pollution Control Board.

  
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SEAC -TN

21

  
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SEAC -TN

7. Use of environment friendly materials in bricks, blocks and other construction materials, shall be required for at least 20% of the construction material quantity. These include Fly Ash bricks, hollow bricks, AACs, Fly Ash Lime Gypsum blocks, Compressed earth blocks, and other environment friendly materials.
8. Fly ash should be used as building material in the construction as per the provision of Fly Ash Notification of September, 1999 and amended from time to time. Ready mixed concrete must be used in building construction.
9. Any wastes from construction and demolition activities related thereto shall be managed so as to strictly conform to the Construction and Demolition Rules, 2016.
10. Used CFLs and TFLs should be properly collected and disposed off/sent for recycling as per the prevailing guidelines/ rules of the regulatory authority to avoid mercury contamination.

**7. Green Cover:**

1. No tree can be felled/transplant unless exigencies demand. Where absolutely necessary, tree felling shall be with prior permission from the concerned regulatory authority. Old trees should be retained based on girth and age regulations as may be prescribed by the Forest Department. Plantations to be ensured species (cut) to species (planted).
2. A minimum of 1 tree for every 80 sqm of land should be planted and maintained. The existing trees will be counted for this purpose. The landscape planning should include plantation of native species. The species with heavy foliage, broad leaves and wide canopy cover are desirable. Water intensive and/or invasive species should not be used for landscaping.
3. Where the trees need to be cut with prior permission from the concerned local Authority, compensatory plantation in the ratio of 1:10 (i.e. planting of 10 trees for every 1 tree that is cut) shall be done and maintained. Plantations to be ensured species (cut) to species (planted). Area for green belt development shall be provided as per the details provided in the project document.
4. Topsoil should be stripped to a depth of 20 cm from the areas proposed for buildings, roads, paved areas, and external services. It should be stockpiled

appropriately in designated areas and reapplied during plantation of the proposed vegetation on site.

**8. Transport:**

1. A comprehensive mobility plan, as per MoUD best practices guidelines (URDPFI), shall be prepared to include motorized, non-motorized, public, and private networks. Road should be designed with due consideration for environment, and safety of users. The road system can be designed with these basic criteria.
  - a. Hierarchy of roads with proper segregation of vehicular and pedestrian traffic.
  - b. Traffic calming measures.
  - c. Proper design of entry and exit points.
  - d. Parking norms as per local regulation.
2. Vehicles hired for bringing construction material to the site should be in good condition and should have a pollution check certificate and should conform to applicable air and noise emission standards be operated only during non-peak hours.
3. A detailed traffic management and traffic decongestion plan shall be drawn up to ensure that the current level of service of the roads within a 05 kms radius of the project is maintained and improved upon after the implementation of the project. This plan should be based on cumulative impact of all development and increased habitation being carried out or proposed to be carried out by the project or other agencies in this 05 Kms radius of the site in different scenarios of space and time and the traffic management plan shall be duly validated and certified by the State Urban Development department and the P.W.D./ competent authority for road augmentation and shall also have their consent to the implementation of components of the plan which involve the participation of these departments.

**9. Human Health Issues:**

1. All workers working at the construction site and involved in loading, unloading, carriage of construction material and construction debris or working in any area with dust pollution shall be provided with dust mask.

  
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SEAC -TN

23

  
CHAIRMAN  
SEAC- TN

2. For indoor air quality the ventilation provisions as per National Building Code of India.
3. Emergency preparedness plan based on the Hazard identification and Risk Assessment (HIRA) and Disaster Management Plan shall be implemented.
4. Provision shall be made for the housing of construction labour within the site with all necessary infrastructure and facilities such as fuel for cooking, mobile toilets, mobile STP, safe drinking water, medical health care, crèche etc. The housing may be in the form of temporary structures to be removed after the completion of the project.
5. Occupational health surveillance of the workers shall be done on a regular basis.
6. A First Aid Room shall be provided in the project both during construction and operations of the project.

**10. Corporate Environment Responsibility:**

1. The project proponent shall comply with the provisions contained in this Ministry's OM vide F.No. 22-65/2017-IA.III dated 1st May 2018, as applicable, regarding Corporate Environment Responsibility.
2. The company shall have a well laid down environmental policy duly approved by the Board of Directors. The environmental policy should prescribe for standard operating procedures to have proper checks and balances and to bring into focus any infringements/deviation/violation of the environmental / forest / wildlife norms / conditions. The company shall have defined system of reporting infringements / deviation / violation of the environmental / forest / wildlife norms / conditions and / or shareholders / stake holders. The copy of the board resolution in this regard shall be submitted to the MoEF&CC as a part of sixmonthly report.
3. A separate Environmental Cell both at the project and company head quarter level, with qualified personnel shall be set up under the control of senior Executive, who will directly to the head of the organization.
4. Action plan for implementing EMP and environmental conditions along with responsibility matrix of the company shall be prepared and shall be duly approved by competent authority. The year wise funds earmarked for



environmental protection measures shall be kept in separate account and not to be diverted for any other purpose. Year wise progress of implementation of action plan shall be reported to the Ministry/Regional Office along with the Half Yearly Compliance Report (HYCR).

**11. Miscellaneous:**

1. The project proponent shall prominently advertise it at least in two local newspapers of the District or State, of which one shall be in Tamil language within seven days indicating that the project has been accorded environment clearance and the details of MoEFCC/SEIAA website where it is displayed.
2. The copies of the environmental clearance shall be submitted by the project proponents to the Heads of local bodies, Panchayats and Municipal Bodies in addition to the relevant offices of the Government who in turn has to display the same for 30 days from the date of receipt.
3. The project proponent shall upload the status of compliance of the stipulated environment clearance conditions, including results of monitored data on their website and update the same on half-yearly basis.
4. The project proponent shall submit six-monthly reports on the status of the compliance of the stipulated environmental conditions on the website of the ministry of Environment, Forest and Climate Change at environment clearance portal.
5. The project proponent shall submit the environmental statement for each financial year in Form-V to the concerned State Pollution Control Board as prescribed under the Environment (Protection) Rules, 1986, as amended subsequently and put on the website of the company.
6. The project proponent shall inform the Regional Office as well as the Ministry, the date of financial closure and final approval of the project by the concerned authorities, commencing the land development work and start of production operation by the project.
7. The project authorities must strictly adhere to the stipulations made by the State Pollution Control Board and the State Government.

  
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SEAC -TN

25

  
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SEAC- TN

8. The project proponent shall abide by all the commitments and recommendations made in the EIA/EMP report, commitment made during Public Hearing and also that during their presentation to the Expert Appraisal Committee.
9. No further expansion or modifications in the plant shall be carried out without prior approval of the Ministry of Environment, Forests and Climate Change (MoEF&CC).
10. Concealing factual data or submission of false/fabricated data may result in revocation of this environmental clearance and attract action under the provisions of Environment (Protection) Act, 1986.
11. The Ministry may revoke or suspend the clearance, if implementation of any of the above conditions is not satisfactory.
12. The Ministry reserves the right to stipulate additional conditions if found necessary. The Company in a time bound manner shall implement these conditions.
13. The Regional Office of this Ministry shall monitor compliance of the stipulated conditions. The project authorities should extend full cooperation to the officer (s) of the Regional Office by furnishing the requisite data / information/monitoring reports.
14. The above conditions shall be enforced, inter-alia under the provisions of the Water (Prevention & Control of Pollution) Act, 1974, the Air (Prevention & Control of Pollution) Act, 1981, the Environment (Protection) Act, 1986, Hazardous and Other Wastes (Management and Transboundary Movement) Rules, 2016 and the Public Liability Insurance Act, 1991 along with their amendments and Rules and any other orders passed by the Hon'ble Supreme Court of India / High Courts and any other Court of Law relating to the subject matter.
15. Any appeal against this EC shall lie with the National Green Tribunal, if preferred, within a period of 30 days as prescribed under Section 16 of the National Green Tribunal Act, 2010.

  
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SEAC- TN

16. As accepted by the Project Proponent the CER cost is Rs. 200 Lakhs and the amount shall be spent for the committed activities before obtaining CTO from TNPCB.

**Agenda No: 380-06**

**(File No – 9798)**

**Proposed Modernization and Upgradation of Chennai Fishing Harbour, Kasimedu at SF.No. 3483, 3482, 3514, 3515, 3522, 3524, 4321, 4342, 4343, 3457, 348 5, 3464, 3527, 3518 Kasimedu Village Chennai Taluk Chennai District Tamil Nadu by M/s Chennai Port Authority–for Amendment to Terms of Reference. (SIA/TN/INFRA1/411618/2022, Dated: 21.12.2022)**

The proposal was placed in this 380<sup>th</sup> meeting of SEAC held on 17.05.2023. The project proponent gave detailed presentation. The details of the project furnished by the proponent are available in the website (parivesh.nic.in).

The SEAC noted the following:

1. The Proponent, M/s Chennai Port Authority has applied seeking amendment to ToR issued for the proposed Modernization and Upgradation of Chennai Fishing Harbour, Kasimedu at SF.No. 3483, 3482, 3514, 3515, 3522, 3524, 4321, 4342, 4343, 3457, 348 5, 3464, 3527, 3518 Kasimedu Village Chennai Taluk Chennai District Tamil Nadu.
2. The project/activity is covered under Category "B1" of Item 7(e) "Fishing Harbour Project" of the Schedule to the EIA Notification, 2006, as amended.
3. ToR Lr.No. SEIAA-TN-/F.No.9798/SEAC/7(e)/ToR1382/2022 dated 07.03.2023

Amendment requested			
Sl.No.	Project Components	Official ToR	ToR Amendment
1	Built up area	22834.98 Sq.m	36369.99 Sq.m. (Additional)
2	Project Components	There are total 18 proposed project activities	From the 18 proposed activities, two activities are removed and 9 new project components are added. There are total 25 proposed project activities.

  
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SEAC -TN

27

  
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SEAC- TN

**Initially proposed Activities -Official ToR**

S.No	Proposed Structures	L x W (m x m)	Length (m) / Area (sq.m)
1	Boat repair spare parts complex	15 x 15	225
2	Fish handling shed at Trawler Wharf	100 x 27	2700
3	Cleaning, Packaging and Cold storage complex	20 x 10	200
4	Administrative Complex& Centralized control Block with Commercial Complex on the Ground Floor	25 x 15	375
5	Two & Four wheeler parking – 1	45 x 16	720
6	Two & Four wheeler parking – 2	44 x 35	1540
7	Sanitary Complex	10 x 5	50
8	Two-lane peripheral road with storm water drains, cable truff and a pedestrian path including widening and repair of existing road network	1600 x 7.5	12000
9	Ship lifting facility and Boat Repair Yard	2 x 30 x4	240
10	Additional Southern Landing wharf	150 x 8	1200
11	Auction Hall-III	100 x 30	3000
12	Vessel Monitoring and control system at Harbour Entrance	-	25.5
13	Low Level Reservoir	11.2x7.30	81.76
14	Over Head Water Tank	Dia - 6m	28.26
15	Effluent Treatment Plant (ETP)-150 KLD	40.81 x 7.2	293.8
16	Sewage Treatment Plant (STP)-80 KLD	18.1 x 8.6	155.66
<b>Built Up area</b>			<b>22834.98</b>
17	<b>Dredging</b>		<b>454214</b>
18	<b>Controlled Entry and Exit Arrangements, Elevated Compound wall and 2Nos. of Arched Entrances</b>		<b>1600 m</b>

**Final proposed Activities -Amendment ToR**

Sl.No	Proposed Structures	L x W (m x m)	Length (m)	Area (sq.m)
1	Boat repair spare parts complex	15 x 15		225
2	Fish handling shed at Trawler Wharf	100 x 27		2700
3	Cleaning, Packaging and Cold storage complex	20 x 10		200
4	Administrative Complex & Centralized control Block with Commercial Complex on the Ground Floor (G+2)	25 x 15		375
5	Two & Four wheeler parking - 1	45 x 16		720
6	Two & Four wheeler parking - 2	44 x 35		1540
7	Sanitary Complex	10 x 5		50
8	Two-lane peripheral road with storm water drains, cable truss and a pedestrian path including widening and repair of existing road network	1600 x 7.5		12000
9	Shap lifting facility and Boat Repair Yard	76x123		9348
10	Vessel Monitoring and control system at Harbour Entrance	5x5		25
11	Additional Fish Handling Shed at Trawler Wharf	100x27		2700
12	Two nos. of Northern Wharf supporting with existing structure	50x20.5		1025
13	Truck Paved parking area facility near proposed two & four wheeler parking no1	(27x35)+(26x35)		1925
14	Providing Two numbers of solar operated with electrical backup fish drying machine (1 Tonne capacity) including civil structure as Pilot Project	11x22		242
15	Two wheeler and Car Parking for administrative and commercial complex and two wheeler parking shed in the Eastern side of the Administrative and commercial complex building	(22x16)+(22x4)		416
16	Net Mending shed at southern side	30x12		360
17	New open shed with Arabian Tent Roofing for fish cutting stalls near retail shops	2x30x5		300
18	Proposed rooms for stacking unsold steels in the rear side of fish cutting stall	72x5		360
19	New open sheds with Arabian Tent roofing for prawn sale point	66x20		1320
20	Low Level Reservoir	11.2x7.30		81.76
21	Over Head Water Tank	Dia - 6m		28.76
22	Effluent Treatment Plant (ETP) -40 KLD	28.2 x11.4		321.48
23	Sewage Treatment Plant (STP) -40 KLD	6.6x12.65		83.49
<b>Built Up area</b>				<b>36369.99</b>
24	Dredging			454214
25	Controlled Entry and Exit Arrangements, Elevated Compound wall and 2Nos of Arched Entrances			1600

Based on the presentation made by the proponent and the documents furnished, the SEAC decided to recommend for the grant of amendment to the ToR issued vide Lr.No. SEIAA-TN-/F.No.9798/SEAC/7(e)/ToR1382/2022 dated 07.03.2023 for the preparation of EIA report along with conduct of Public Hearing. The EIA shall include standard ToR along with the following additional ToR:

1. Necessary supporting documents including land documents, approval from Competent Authority for supply of fresh water, first and latest valid consents of TNPCB for the existing operation shall be furnished.
2. There shall not be any treated/untreated wastewater discharge into the sea water.
3. The PP shall furnish project timeline enlisting the proposed activities in chronological order.

  
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SEAC -TN

29

  
CHAIRMAN  
SEAC- TN

4. The PP shall explore the alternate potable water sources and shall furnish feasibility study report for in-situ desalination plant.
5. The proposed modernisation of fishing harbour by the PP shall conform to the start -of -art facilities to the sellers and buyers.
6. Lead-free paints shall be used for painting boats/docks.
7. Implications of drilling operations proposed for the project activity shall be detailed.
8. The PP shall furnish detailed plan for providing solar panels as alternate source of energy.
9. PP shall detail environmental priorities of fishing port, environmental policy of the port, environment management cell available at the port and eco-friendly port assessment model.
10. The proponent should ensure that the boats are properly maintained and there is no oil spillage. Used oil disposal details shall be furnished.
11. The proponent should prepare a comprehensive line diagram in which all the facilities to be created should be marked. Then for each facility, the probable effluent generation and waste generation should be indicated with quantity and quality. Finally, the methodology for collection, treatment and reuse/disposal of the liquid and solid waste should be indicated. Specific attention should be paid to the marine discharges.
12. Within 10km radius all the parameters like air, sediment and biology including coastal ecology should be studied in detail.
13. The sampling should be done in grid pattern and every one kilometre the samples (air, water, sediment and biological samples) within the 10km of radius.
14. Heavy metal studies in water and sediments shall be conducted.
15. The report should include the proposal for proper treatment for waste water generated from the fish handling platforms so as to ensure no pollution to the ground water as well as the sea water from the harbour operation.
16. The study proposal shall include details pertaining to collection, treatment and disposal of solid wastes both municipal and fish waste.

17. The project proponent shall submit a comprehensive monitoring plan for coastal ecology covering coastal ecosystem and riverine system for both construction and operation period. All physical, chemical and biological parameters including plankton, productivity, benthic fauna and flora, fishery, etc shall be covered in monitoring plan. Monitoring during construction period will be on weekly basis and during the operational period on seasonal basis (4 times in a year, for a minimum of 5years).
18. There should not any damage/ impact on these resources and associated biodiversity. The project proponent shall submit the detailed proposal to implement mangrove afforestation by involving reputed Institution like Annamalai University (Marine Biology Centre) and a detailed plan with budget shall be prepared for Mangrove afforestation and monitoring for a period of minimum 5 years in consultation with the said institution and submit a copy of the same along with the EIA Report. The proponent shall also sign an MOU and submit a copy of the same along with EIA report
19. A study shall be conducted on reputed Institutions like Annamalai University (Marine Biology Department), etc the impact on the proposed modernization of fishing harbour on movement of turtles and other aquatic species.
20. A detail study on impact of oil spillage from the operation of the fishing harbour and its mitigation measures shall be part of EIA study.
21. Impact on the Distortion effects on the proposed modernization of the fishing harbour shall be part of EIA.

**7(e): STANDARD TERMS OF REFERENCE FOR CONDUCTING ENVIRONMENT IMPACT ASSESSMENT STUDY FOR PORTS, HARBOURS AND INFORMATION TO BE INCLUDED IN EIA/EMP REPORT**


1. Reasons for selecting the site with details of alternate sites examined/rejected/selected on merit with comparative statement and reason/basis for selection. The examination should justify site suitability in terms of environmental angle, resources sustainability associated with selected site as compared to rejected sites. The analysis should include parameters considered along with weightage criteria for short-listing selected site.

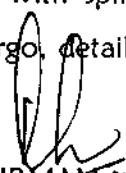
  
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SEAC -TN

31

  
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SEAC- TN

2. Details of the land use break-up for the proposed project. Details of land use around 10 km radius of the project site. Examine and submit detail of land use around 10 km radius of the project site and map of the project area and 10 km area from boundary of the proposed/existing project area, delineating project areas notified under the wild life (Protection) Act, 1972/critically polluted areas as identified by the CPCB from time to time/notified eco-sensitive areas/interstate boundaries and international boundaries. Analysis should be made based on latest satellite imagery for land use with raw images.
3. Submit the present land use and permission required for any conversion such as forest, agriculture etc. land acquisition status, rehabilitation of communities/ villages and present status of such activities.
4. Examine and submit the water bodies including the seasonal ones within the corridor of impacts along with their status, volumetric capacity, quality likely impacts on them due to the project.
5. Submit a copy of the contour plan with slopes, drainage pattern of the site and surrounding area
6. Submit the details of terrain, level with respect to MSL, filling required, source of filling materials and transportation details etc.
7. Examine road/rail connectivity to the project site and impact on the existing traffic network due to the proposed project/activities. A detailed traffic and transportation study should be made for existing and projected passenger and cargo traffic.
8. Submit details regarding R&R involved in the project
9. Submit a copy of layout superimposed on the HTL/LTL map demarcated by an authorized agency on 1:4000 scale along with the recommendation of the SCZMA.
10. Submit the status of shore line change at the project site
11. Details of the layout plan including details of channel, breakwaters, dredging, disposal and reclamation.
12. Details of handling of each cargo, storage, transport along with spillage control, dust preventive measures. In case of coal, mineral cargo, details of

  
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SEAC -TN

  
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SEAC- TN



storage and closed conveyance , dust suppression and prevention filters.

13. Submit the details of fishing activity and likely impacts on the fishing activity due to the project. Specific study on effects of construction activity and pile driving on marine life.
14. Details of oil spill contingency plan.

#### **STANDARD TERMS OF REFERENCE (TOR) FOR EIA/EMP REPORT FOR PROJECTS/ACTIVITIES REQUIRING ENVIRONMENT CLEARANCE**

1. Details of bathymetry study.
2. Details of ship tranquillity study.
3. Examine the details of water requirement, impact on competitive user, treatment details, use of treated waste water. Prepare a water balance chart.
4. Details of rainwater harvesting and utilization of rain water.
5. Examine details of Solid waste generation treatment and its disposal.
6. Details of desalination plant and the study for outfall and intake.
7. Examine baseline environmental quality along with projected incremental load due to the proposed project/activities.
8. The air quality monitoring should be carried out according to the notification issued on 16th November, 2009.
9. Examine separately the details for construction and operation phases both for Environmental Management Plan and Environmental Monitoring Plan with cost and parameters.
10. Submit details of a comprehensive Risk Assessment and Disaster Management Plan including emergency evacuation during natural and man-made disasters.
11. Submit details of the trees to be cut including their species and whether it also involves any protected or endangered species. Measures taken to reduce the number of the trees to be removed should be explained in detail. Submit the details of compensatory plantation. Explore the possibilities of relocating the existing trees.
12. Examine the details of afforestation measures indicating land and financial outlay. Landscape plan, green belts and open spaces may be described. A

  
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SEAC -TN

33

  
CHAIRMAN  
SEAC- TN

thick green belt should be planned all around the nearest settlement to mitigate noise and vibrations. The identification of species/ plants should be made based on the botanical studies.

13. The Public Hearing should be conducted for the project in accordance with provisions of Environmental Impact Assessment Notification, 2006 and the issues raised by the public should be addressed in the Environmental Management Plan. The Public Hearing should be conducted based on the ToR letter issued by the Ministry and not on the basis of Minutes of the Meeting available on the web-site.
14. A detailed draft EIA/EMP report should be prepared in accordance with the above additional TOR and should be submitted to the Ministry in accordance with the Notification.
15. Details of litigation pending against the project, if any, with direction /order passed by any Court of Law against the Project should be given.
16. The cost of the Project (capital cost and recurring cost) as well as the cost towards implementation of EMP should be clearly spelt out.
17. Any further clarification on carrying out the above studies including anticipated impacts due to the project and mitigative measure, project proponent can refer to the model ToR available on Ministry website "<http://moef.nic.in/Manual/Port and harbour>".

**Agenda No: 380-07**


**(File No: 10033/2023)**


**Proposed Construction of Multi Super Specialty Hospital Building in Government Pentland Hospital at Survey Nos. 693, 961 & Block.No.13, 16 of Vellore Taluk, Vellore District, Tamil Nadu by M/s. Public Works Department - For Environmental Clearance (SIA/TN/INFRA2/427969/2023, dated.05.05.2023)**

The proposal was placed in 380<sup>th</sup> SEAC meeting held on 17.05.2023. The details of the project furnished by the proponent are given in the website ([parivesh.nic.in](http://parivesh.nic.in)).

**The SEAC noted the following:**

Based on the documents submitted and presentation made by the project proponent along with the consultant, the following facts have emerged:-

  
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1. The environmental clearance is sought for Construction Project at Plot No: Survey Nos. 693, 961, & Block No. 13, 16. District-Vellore, Tamilnadu by the PP Public Works Department.
2. M/s HUBERT ENVIRO CARE SYSTEMS (P) LTD, CHENNAI is the EIA Consultant for the project.
3. Total plot area of the project is 20006.95 m<sup>2</sup> and Proposed built-up area is 35312.01 m<sup>2</sup> respectively.
4. Maximum number of floors will be B+S+7 FL and maximum height of the building will be 31.4 m.
5. Salient features of the project as submitted by the project proponent:

PROJECT SUMMARY			
Sl. No.	Description	Total Quantity	Unit
<b>GENERAL</b>			
1	Plot Area	20006.95	SQMT
2	Proposed Built Up Area	35312.01	SQMT
3	Total no of Saleable DU's/Villas	0	No.
4	Max Height - (Height of tallest block)	31.4	M
5	No of Building Blocks (Residential + Community facilities)	3	
6	Max No of Floors	G+7	No.
7	Expected Population	3450	No.
8	Total Cost of Project	150	Rs.CR
9	Project Activity :	Proposed Construction of Multi Super Speciality Hospital Building in Government Pentland Hospital At Vellore" at Vellore District, Tamil Nadu.	
<b>AREAS</b>			
10	Permissible Ground Coverage Area (xx%)	8002.78	SQMT

  
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35

  
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SEAC- TN

11	Proposed Ground Coverage Area	4298.31	SQMT
12	Permissible FAR Area (xxx)	0.8	SQMT
13	Proposed FAR Area	1.87	SQMT
14	Other Non FAR Areas - including basement area etc.	0	SQMT
15	Proposed Total Built Up Area	35312.01	SQMT
WATER			
16	Total Water Requirement	530.5	KLD
17	Fresh water requirement	345	KLD
18	Treated Water Requirement	185.5	KLD
19	Wastewater Generation	585	KLD
20	Proposed Capacity of STP	800	KLD
21	Treated Water Available for Reuse	495	KLD
22	Treated Water Recycled	185.5	KLD
23	Surplus treated water to be discharged in Municipal Sewer with Prior permission	309.5	KLD
RAINWATER HARVESTING			
24	Rainwater Harvesting - Recharge Pits	21	No.
PARKING			
25	Total Parking Required as / Building Bye Laws	680	ECS
26	Proposed Total Parking	689	ECS
27	Parking in Basements	0	ECS
GREEN AREA			
28	Proposed Green Area (Minimum 15.0% of plot area)	3010	SQMT
	Total area	20006.95	SQMT
	Existing trees on plot	108	Nos
	Number of trees to be planted	582	Nos

  
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	Number of trees to be planted for compensation	380	
	Number of trees to be transplanted/cut	38	Nos
<b>SOLID WASTE MANAGEMENT</b>			
29	Total Solid Waste Generation	1.557	TPD
30	Organic waste	0.934	TPD
31	Quantity of E-Waste Generation- Kg/Day	0	KG/DAY
32	Quantity of Hazardous waste Generation	3.33	LPD
33	Quantity of Sludge Generated from STP	5	KG/DAY
<b>POWER / GREEN POWER</b>			
34	Total Power Requirement	2000	KW
35	DG set backup	500	KVA
36	No of DG Sets	2	No.
37	Solar Panels – Roof Coverage	50	%
38	Hot Water Requirement	2	KLD
	Of which met by Solar Panels	1	KLD

The project proposal falls under Category–8(a) of EIA Notification, 2006 (as amended).

#### **RECOMMENDATION OF THE COMMITTEE**

The Committee discussed the matter and recommended grant of environmental clearance for the project proposal as above along with standard environmental clearance conditions prescribed by MoEF&CC, GoI and following additional conditions:

#### **Additional Conditions:**

1. The construction shall comply with Green Building norms and shall get IGBC Gold rating.
2. STP shall be installed on 10-year BOOT basis, so that the construction and maintenance are combined in one single responsibility.
3. The project proponent shall provide entry and exit points for the OSR area, play area as per the norms for the public usage and as committed. The PP shall construct a pond of appropriate size in the earmarked OSR land in consultation with the local

  
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SEAC -TN

37

  
CHAIRMAN  
SEAC- TN

body. The pond should be modelled like a temple tank with parapet walls, steps, etc. The pond is meant to play three hydraulic roles, namely (1) as a storage, which acted as insurance against low rainfall periods and also recharges groundwater in the surrounding area, (2) as a flood control measure, preventing soil erosion and wastage of runoff waters during the period of heavy rainfall, and (3) as a device which was crucial to the overall eco-system.

4. Project proponent is advised to explore the possibility and getting the cement in a closed container rather through the plastic bag to prevent dust emissions at the time of loading/unloading.
5. Project proponent should ensure that there will be no use of "Single use of Plastic" (SUP).
6. The proponent should provide the sufficient electric vehicle charging points as per the requirements at ground level and allocate the safe and suitable place in the premises for the same.
7. The project proponent should develop green belt in the township as per the plan submitted and also follow the guidelines of CPCB/Development authority for green belt as per the norms.
8. Project proponent should invest the CSR amount as per the proposal and submit the compliance report regularly to the concerned authority/Directorate of environment.
9. Proponent should submit the certified compliance report of previous/present EC along with action taken report to the Regional office MoEF Lko/Director of Environment and other concerning authority regularly.
10. Proponent shall provide the dual pipeline network in the project for utilization of treated water of STP for different purposes and also provide the monitoring mechanism for the same. STP treated water not to be discharged outside the premises without the permission of the concerned authority.
11. The project proponent shall provide a measuring device for monitoring the various sources of water supply namely fresh water, treated waste water and harvested rain water.
12. The proponent should provide the MoU with STPs' owner/concerned department for getting the STPs treated water for construction use.

**Standard Environmental Clearance Conditions prescribed by MoEF&CC:**

**1. Statutory Compliance:**

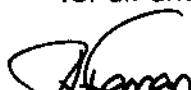
1. The project proponent shall obtain all necessary clearance/ permission from all relevant agencies including town planning authority before commencement of work. All the construction shall be done in accordance with the local building byelaws.
2. The approval of the Competent Authority shall be obtained for structural safety of buildings due to earthquakes, adequacy of firefighting equipment etc as per National Building Code including protection measures from lightning etc.
3. The project proponent shall obtain forest clearance under the provisions of Forest (Conservation) Act, 1986, in case of the diversion of forest land for non-forest purpose involved in the project.
4. The project proponent shall obtain clearance from the National Board for Wildlife, if applicable.
5. The project proponent shall obtain Consent to Establish / Operate under the provisions of Air (Prevention & Control of Pollution) Act, 1981 and the Water (Prevention & Control of Pollution) Act, 1974 from the concerned State Pollution Control Board/ Committee.
6. The project proponent shall obtain the necessary permission for drawl of ground water / surface water required for the project from the competent authority.
7. A certificate of adequacy of available power from the agency supplying power to the project along with the load allowed for the project should be obtained.
8. All other statutory clearances such as the approvals for storage of diesel from Chief Controller of Explosives, Fire Department and Civil Aviation Department shall be obtained, as applicable, by project proponents from the respective competent authorities.
9. The provisions of the Solid Waste (Management) Rules, 2016, e-Waste (Management) Rules, 2016, and the Plastics Waste (Management) Rules, 2016 shall be followed.

  
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SEAC -TN

39

  
CHAIRMAN  
SEAC- TN

10. The project proponent shall follow the ECBC/ECBC-R prescribed by Bureau of Energy Efficiency, Ministry of Power strictly.
- 2. Air quality monitoring and preservation:**
1. Notification GSR 94(E) dated 25.01.2018 of MoEF&CC regarding Mandatory Implementation of Dust Mitigation Measures for Construction and Demolition Activities for projects requiring Environmental Clearance shall be complied with.
  2. A management plan shall be drawn up and implemented to contain the current exceedance in ambient air quality at the site.
  3. The project proponent shall install system to carryout Ambient Air Quality monitoring for common/criterion parameters relevant to the main pollutants released (e.g. PM10 and PM25) covering upwind and downwind directions during the construction period.
  4. Construction site shall be adequately barricaded before the construction begins. Dust, smoke & other air pollution prevention measures shall be provided for the building as well as the site. These measures shall include screens for the building under construction, continuous dust/ wind breaking walls all around the site (at least 3 meter height). Plastic/tarpaulin sheet covers shall be provided for vehicles bringing in sand, cement, murrum and other construction materials prone to causing dust pollution at the site as well as taking out debris from the site.
  5. Sand, murrum, loose soil, cement, stored on site shall be covered adequately so as to prevent dust pollution.
  6. Wet jet shall be provided for grinding and stone cutting.
  7. Unpaved surfaces and loose soil shall be adequately sprinkled with water to suppress dust.
  8. All construction and demolition debris shall be stored at the site (and not dumped on the roads or open spaces outside) before they are properly disposed. All demolition and construction waste shall be managed as per the provisions of the Construction and Demolition Waste Rules 2016.
  9. The diesel generator sets to be used during construction phase shall be low sulphur diesel type and shall conform to Environmental (Protection) prescribed for air and noise mission standards.

  
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SEAC- TN



10. The gaseous emissions from DG set shall be dispersed through adequate stack height as per CPCB standards. Acoustic enclosure shall be provided to the DG sets to mitigate the noise pollution. The location of the DG set and exhaust pipe height shall be as per the provisions of the Central Pollution Control Board (CPCB) norms.
11. For indoor air quality the ventilation provisions as per National Building Code of India.


**3. Water Quality Monitoring and Preservation:**

1. The natural drain system should be maintained for ensuring unrestricted flow of water. No construction shall be allowed to obstruct the natural drainage through the site, on wetland and water bodies. Check dams, bio-swales, landscape, and other sustainable urban drainage systems (SUDS) are allowed for maintaining the drainage pattern and to harvest rainwater.
2. Buildings shall be designed to follow the natural topography as much as possible. Minimum cutting and filling should be done.
3. Total freshwater use shall not exceed the proposed requirement as provided in the project details.
4. The quantity of freshwater usage, water recycling and rainwater harvesting shall be measured and recorded to monitor the water balance as projected by the project proponent. The record shall be submitted to the Regional Office, MoEF&CC along with six monthly Monitoring reports.
5. A certificate shall be obtained from the local body supplying water, specifying the total annual water availability with the local authority, the quantity of water already committed, the quantity of water allotted to the project under consideration and the balance water available. This should be specified separately for ground water and surface water sources, ensuring that there is no impact on other users.
6. At least 20% of the open spaces as required by the local building byelaws shall be pervious. Use of Grass pavers, paver blocks with at least 50% opening, landscape etc. would be considered as pervious surface.

  
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CHAIRMAN  
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7. Installation of dual pipe plumbing for supplying fresh water for drinking, cooking and bathing etc and other for supply of recycled water for flushing, landscape irrigation car washing, thermal cooling, conditioning etc. shall be done.
8. Use of water saving devices/ fixtures (viz. low flow flushing systems; use of low flow faucets tap aerators etc) for water conservation shall be incorporated in the building plan.
9. Use of water saving devices/ fixtures (viz. low flow flushing systems; use of low flow faucets tap aerators etc) for water conservation shall be incorporated in the building plan.
10. Water demand during construction should be reduced by use of pre-mixed concrete, curing agents and other best practices referred.
11. The local bye-law provisions on rainwater harvesting should be followed. If local byelaw provision is not available, adequate provision for storage and recharge should be followed as per the Ministry of Urban Development Model Building Byelaws, 2016. Rainwater harvesting recharge pits/storage tanks shall be provided for ground water recharging as per the CGWB norms.
12. A rainwater harvesting plan needs to be designed where the recharge bores of minimum one recharge bore per 5,000 square meters of built-up area and storage capacity of minimum one day of total fresh water requirement shall be provided. In areas where ground water recharge is not feasible, the rainwater should be harvested and stored for reuse. The ground water shall not be withdrawn without approval from the Competent Authority.
13. All recharges should be limited to shallow aquifer.
14. No ground water shall be used during construction phase of the project.
15. Any ground water dewatering should be properly managed and shall conform to the approvals and the guidelines of the CGWA in the matter. Formal approval shall be taken from the CGWA for any ground water abstraction or dewatering.
16. The quantity of freshwater usage, water recycling and rainwater harvesting shall be measured and recorded to monitor the water balance as projected by the project proponent. The record shall be submitted to the Regional Office, MoEF&CC along with six monthly Monitoring reports.


  
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SEAC- TN

17. Sewage shall be treated in the STP with tertiary treatment. The treated effluent from STP shall be recycled/re-used for flushing, AC make up water and gardening. As proposed, not related water shall be disposed into municipal drain.
  18. No sewage or untreated effluent water would be discharged through storm water drains.
  19. Onsite sewage treatment of capacity of treating 100% wastewater to be installed. The installation of the Sewage Treatment Plant (STP) shall be certified by an independent expert and a report in this regard shall be submitted to the Ministry before the project is commissioned for operation. Treated wastewater shall be reused on site for landscape, flushing, cooling tower, and other end-uses. Excess treated water shall be discharged as per statutory norms notified by Ministry of Environment, Forest and Climate Change. Natural treatment systems shall be promoted.
  20. Periodical monitoring of water quality of treated sewage shall be conducted. Necessary measures should be made to mitigate the odor problem from STP.
  21. Sludge from the onsite sewage treatment, including septic tanks, shall be collected, conveyed and disposed as per the Ministry of Urban Development, Centre Public Health and Environmental Engineering Organization (CPHEEO) Manual on Sewerage and Sewage Treatment Systems, 2013.
- 4. Noise Monitoring and Prevention:**
1. Ambient noise levels shall conform to residential area/commercial area/industrial area/silence zone both during day and night as per Noise Pollution (Control and Regulation) Rules, 2000. Incremental pollution loads on the ambient air and noise quality shall be closely monitored during construction phase. Adequate measures shall be made to reduce ambient air and noise level during construction phase, so as to conform to the stipulated standards by CPCB / SPCB.
  2. Noise level survey shall be carried as per the prescribed guidelines and report in this regard shall be submitted to Regional Officer of the Ministry as a part of sixmonthly compliance report.



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3. Acoustic enclosures for DG sets, noise barriers for ground-run bays, ear plugs for operating personnel shall be implemented as mitigation measures for noise impact due to ground sources.

**5. Energy Conservation Measures:**

1. Compliance with the Energy Conservation Building Code (ECBC) of Bureau of Energy Efficiency shall be ensured. Buildings in the States which have notified their own ECBC, shall comply with the State ECBC.
2. Outdoor and common area lighting shall be LED.
3. Concept of passive solar design that minimize energy consumption in buildings by using design elements, such as building orientation, landscaping, efficient building envelope, appropriate fenestration, increased day lighting design and thermal mass etc. shall be incorporated in the building design. Wall, window, and roof u-values shall be as per ECBC specifications.
4. Energy conservation measures like installation of CFLs/ LED for the lighting the area outside the building should be integral part of the project design and should be in place before project commissioning.
5. Solar, wind or other Renewable Energy shall be installed to meet electricity generation equivalent to 1% of the demand load or as per the state level/ local building byelaws requirement, whichever is higher.
6. Solar power shall be used for lighting in the apartment to reduce the power load on grid. Separate electric meter shall be installed for solar power. Solar water heating shall be provided to meet 20% of the hot water demand of the commercial and institutional building or as per the requirement of the local building byelaws, whichever is higher. Residential buildings are also recommended to meet its hot water demand from solar water heaters, as far as possible.

**6. Waste Management :**

1. A certificate from the competent authority handling municipal solid wastes, indicating the existing civic capacities of handling and their adequacy to cater to the M.S.W. generated from project shall be obtained.

  
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CHAIRMAN  
SEAC- TN

2. Disposal of muck during construction phase shall not create any adverse effect on the neighbouring communities and be disposed taking the necessary precautions for general safety and health aspects of people, only in approved sites with the approval of competent authority.
3. Separate wet and dry bins must be provided in each unit and at the ground level for facilitating segregation of waste. Solid waste shall be segregated into wet garbage and inert materials.
4. Organic waste compost/ Vermiculture pit/ Organic Waste Converter within the premises with a minimum capacity of 0.3 kg /person/day must be installed.
5. All non-biodegradable waste shall be handed over to authorized recyclers for which a written tie up must be done with the authorized recyclers.
6. Any hazardous waste generated during construction phase, shall be disposed off as per applicable rules and norms with necessary approvals of the State Pollution Control Board.
7. Use of environment friendly materials in bricks, blocks and other construction materials, shall be required for at least 20% of the construction material quantity. These include Fly Ash bricks, hollow bricks, AACs, Fly Ash Lime Gypsum blocks, Compressed earth blocks, and other environment friendly materials.
8. Fly ash should be used as building material in the construction as per the provision of Fly Ash Notification of September, 1999 and amended from time to time. Ready mixed concrete must be used in building construction.
9. Any wastes from construction and demolition activities related thereto shall be managed so as to strictly conform to the Construction and Demolition Rules, 2016.
10. Used CFLs and TFLs should be properly collected and disposed off/sent for recycling as per the prevailing guidelines/ rules of the regulatory authority to avoid mercury contamination.

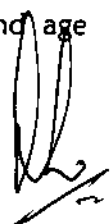
**7. Green Cover:**

1. No tree can be felled/transplant unless exigencies demand. Where absolutely necessary, tree felling shall be with prior permission from the concerned regulatory authority. Old trees should be retained based on girth and age

  
MEMBER SECRETARY  
SEAC -TN

45

CHAIRMAN  
SEAC- TN




regulations as may be prescribed by the Forest Department. Plantations to be ensured species (cut) to species (planted).

2. A minimum of 1 tree for every 80 sqm of land should be planted and maintained. The existing trees will be counted for this purpose. The landscape planning should include plantation of native species. The species with heavy foliage, broad leaves and wide canopy cover are desirable. Water intensive and/or invasive species should not be used for landscaping.
3. Where the trees need to be cut with prior permission from the concerned local Authority, compensatory plantation in the ratio of 1:10 (i.e. planting of 10 trees for every 1 tree that is cut) shall be done and maintained. Plantations to be ensured species (cut) to species (planted). Area for green belt development shall be provided as per the details provided in the project document.
4. Topsoil should be stripped to a depth of 20 cm from the areas proposed for buildings, roads, paved areas, and external services. It should be stockpiled appropriately in designated areas and reapplied during plantation of the proposed vegetation on site.

#### 8. Transport:

1. A comprehensive mobility plan, as per MoUD best practices guidelines (URDPFI), shall be prepared to include motorized, non-motorized, public, and private networks. Road should be designed with due consideration for environment, and safety of users. The road system can be designed with these basic criteria.
  - a. Hierarchy of roads with proper segregation of vehicular and pedestrian traffic.
  - b. Traffic calming measures.
  - c. Proper design of entry and exit points.
  - d. Parking norms as per local regulation.
2. Vehicles hired for bringing construction material to the site should be in good condition and should have a pollution check certificate and should conform to applicable air and noise emission standards be operated only during non-peak hours.

  
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SEAC- TN

3. A detailed traffic management and traffic decongestion plan shall be drawn up to ensure that the current level of service of the roads within a 05 kms radius of the project is maintained and improved upon after the implementation of the project. This plan should be based on cumulative impact of all development and increased habitation being carried out or proposed to be carried out by the project or other agencies in this 05 Kms radius of the site in different scenarios of space and time and the traffic management plan shall be duly validated and certified by the State Urban Development department and the P.W.D./ competent authority for road augmentation and shall also have their consent to the implementation of components of the plan which involve the participation of these departments.

**9. Human Health Issues:**

1. All workers working at the construction site and involved in loading, unloading, carriage of construction material and construction debris or working in any area with dust pollution shall be provided with dust mask.
2. For indoor air quality the ventilation provisions as per National Building Code of India.
3. Emergency preparedness plan based on the Hazard identification and Risk Assessment (HIRA) and Disaster Management Plan shall be implemented.
4. Provision shall be made for the housing of construction labour within the site with all necessary infrastructure and facilities such as fuel for cooking, mobile toilets, mobile STP, safe drinking water, medical health care, crèche etc. The housing may be in the form of temporary structures to be removed after the completion of the project.
5. Occupational health surveillance of the workers shall be done on a regular basis.
6. A First Aid Room shall be provided in the project both during construction and operations of the project.

**10. Corporate Environment Responsibility:**

1. The project proponent shall comply with the provisions contained in this Ministry's OM vide F.No. 22-65/2017-IA.III dated 1st May 2018, as applicable, regarding Corporate Environment Responsibility.

  
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SEAC -TN


47

  
CHAIRMAN  
SEAC- TN

2. The company shall have a well laid down environmental policy duly approved by the Board of Directors. The environmental policy should prescribe for standard operating procedures to have proper checks and balances and to bring into focus any infringements/deviation/violation of the environmental / forest / wildlife norms / conditions. The company shall have defined system of reporting infringements / deviation / violation of the environmental / forest / wildlife norms / conditions and / or shareholders / stake holders. The copy of the board resolution in this regard shall be submitted to the MoEF&CC as a part of sixmonthly report.
3. A separate Environmental Cell both at the project and company head quarter level, with qualified personnel shall be set up under the control of senior Executive, who will directly to the head of the organization.
4. Action plan for implementing EMP and environmental conditions along with responsibility matrix of the company shall be prepared and shall be duly approved by competent authority. The year wise funds earmarked for environmental protection measures shall be kept in separate account and not to be diverted for any other purpose. Year wise progress of implementation of action plan shall be reported to the Ministry/Regional Office along with the Half Yearly Compliance Report (HYCR).

**11. Miscellaneous:**

1. The project proponent shall prominently advertise it at least in two local newspapers of the District or State, of which one shall be in Tamil language within seven days indicating that the project has been accorded environment clearance and the details of MoEFCC/SEIAA website where it is displayed.
2. The copies of the environmental clearance shall be submitted by the project proponents to the Heads of local bodies, Panchayats and Municipal Bodies in addition to the relevant offices of the Government who in turn has to display the same for 30 days from the date of receipt.
3. The project proponent shall upload the status of compliance of the stipulated environment clearance conditions, including results of monitored data on their website and update the same on half-yearly basis.

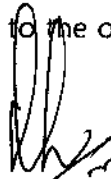
  
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CHAIRMAN  
SEAC- TN



4. The project proponent shall submit six-monthly reports on the status of the compliance of the stipulated environmental conditions on the website of the ministry of Environment, Forest and Climate Change at environment clearance portal.
5. The project proponent shall submit the environmental statement for each financial year in Form-V to the concerned State Pollution Control Board as prescribed under the Environment (Protection) Rules, 1986, as amended subsequently and put on the website of the company.
6. The project proponent shall inform the Regional Office as well as the Ministry, the date of financial closure and final approval of the project by the concerned authorities, commencing the land development work and start of production operation by the project.
7. The project authorities must strictly adhere to the stipulations made by the State Pollution Control Board and the State Government.
8. The project proponent shall abide by all the commitments and recommendations made in the EIA/EMP report, commitment made during Public Hearing and also that during their presentation to the Expert Appraisal Committee.
9. No further expansion or modifications in the plant shall be carried out without prior approval of the Ministry of Environment, Forests and Climate Change (MoEF&CC).
10. Concealing factual data or submission of false/fabricated data may result in revocation of this environmental clearance and attract action under the provisions of Environment (Protection) Act, 1986.
11. The Ministry may revoke or suspend the clearance, if implementation of any of the above conditions is not satisfactory.
12. The Ministry reserves the right to stipulate additional conditions if found necessary. The Company in a time bound manner shall implement these conditions.
13. The Regional Office of this Ministry shall monitor compliance of the stipulated conditions. The project authorities should extend full cooperation to the officer

  
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SEAC -TN

  
CHAIRMAN  
SEAC- TN

(s) of the Regional Office by furnishing the requisite data / information/monitoring reports.

14. The above conditions shall be enforced, inter-alia under the provisions of the Water (Prevention & Control of Pollution) Act, 1974, the Air (Prevention & Control of Pollution) Act, 1981, the Environment (Protection) Act, 1986, Hazardous and Other Wastes (Management and Transboundary Movement) Rules, 2016 and the Public Liability Insurance Act, 1991 along with their amendments and Rules and any other orders passed by the Hon'ble Supreme Court of India / High Courts and any other Court of Law relating to the subject matter.
15. Any appeal against this EC shall lie with the National Green Tribunal, if preferred, within a period of 30 days as prescribed under Section 16 of the National Green Tribunal Act, 2010.
16. As accepted by the Project Proponent the CER cost is Rs. 165 Lakhs and the amount shall be spent for the committed activities before obtaining CTO from TNPCB

**Agenda No: 380 - 08**

**(File No: 9321/2023)**


**Existing New Building for Collectorate and other offices located at S.F.No. 191 Ward B, Block 4, T.S no.36 and others Tenkasi village, Tenkasi Taluk, Tirunelveli District, Tamil Nadu by M/s. Executive Engineer, PWD, Buildings (C&M) Division- For Environmental Clearance**

**(SIA/TN/MIS/252442/2022, dated 20-01-2022)**

The proposal was placed in this 380<sup>th</sup> SEAC Meeting held on 17.05.2023. The project proponent gave detailed presentation. The details of the project furnished by the proponent are available in the website (parivesh.nic.in).

The project proponent gave detailed presentation. SEAC noted the following:

1. The Proponent, M/s. Executive Engineer, PWD, Buildings (C&M) Division has applied for Environmental Clearance for the proposed Construction of New Building for Collectorate and other offices located at S.F.No. 191 Ward B, Block 4, T.S no.36 and others Tenkasi village, Tenkasi Taluk, Tirunelveli District, Tamil Nadu.

  
MEMBER SECRETARY  
SEAC -TN

50

  
CHAIRMAN  
SEAC - TN

2. The project/activity is covered under Category "B" of item 8(a) "Building & Construction" of the Schedule to the EIA Notification, 2006.
3. The proposal comes under violation category.
4. ToR under violation category issued vide Letter. No. SEIAA-TN/F.No. 9321/Violation/ToR- 1383/2023, dated: 27.02.2023.

The proposal was placed in 380th SEAC meeting held on 17.05.2023. Based on the presentation made by the proponent, SEAC decided to constitute a sub-committee to make on-site inspection to examine the present status of the proposed project, environmental settings besides assessing the ecological damage assessment, remediation plan, natural resource augmentation and community resource augmentation furnished by the sub-committee.

After the receipt of the site evaluation and ecological assessment report by the Sub-committee, the SEAC will deliberate on the issue of Environmental Clearance under violation category.

**Agenda No: 380-09**

**(File No: 3776/2021)**

**Proposed Black Granite (Dolerite) lease area over an extent of 1.91.0 Ha in S.F.No. 530/1, 530/2 at Puligunda Village, Krishnagiri Taluk, Krishnagiri District, Tamil Nadu by Tvl. Bannari Amman Sugars Limited- For Extension of validity of Environmental Clearance (SIA/TN/MIN/214619/2021, dated: 09.06.2021)**

The proposal was earlier placed in the 261<sup>st</sup> SEAC Meeting held on 07.04.2022. The details, furnished by the Proponent are given in the PARIVESH website. (parivesh.nic.in)

The SEAC noted the following:

1. The project proponent, Tvl. Bannari Amman Sugars Limited has applied for extension of Environmental Clearance for the existing Black Granite (Dolerite) lease area over an extent of 1.91.0 Ha in S.F.No. 530/1, 530/2 at Puligunda Village, Krishnagiri Taluk, Krishnagiri District, Tamil Nadu.
2. The project/activity is covered under Category "B2" of Item 1(a) "Mining of Minerals Projects" of the Schedule to the EIA Notification, 2006, as amended.

  
MEMBER SECRETARY  
SEAC -TN

51

  
CHAIRMAN  
SEAC- TN

Based on the presentation made by the proponent and the documents furnished, SEAC decided that the project proponent shall furnish documentary evidence from the concerned District Forest Officer showing the exact distance of location of the nearest Pulikonda R.F from the proposed quarry site.

Now, the proposal was placed in this 352<sup>nd</sup> meeting of SEAC held on 08.02.2023.


Based on the presentation made by the proponent and the documents furnished, the SEAC noted the following:

1. Previous EC was issued vide Lr. No. SEIAA-TN/F.No.5055/1(a)/ EC.No: 3237/2016 dated:06.07.2016 to Tvl. Bannari Amman Sugars Limited for Black Granite (Dolerite) lease area over an extent of 1.91.0 Ha in S.F.No. 530/1, 530/2 at Puligunda Village, Krishnagiri Taluk, Krishnagiri District, Tamil Nadu for the production of 2025 cu.m Grey Granite to a depth of 9m.
2. MoEF&CC Notification S.O. 221(E), Dt:18.01.2021.
3. MoEF&CC Notification S.O. 1807(E), Dt: 12.04.2022.
4. MoEF&CC O.M. Dt: 13.12.2022.
5. As per the mining plan, total production for the first 5 years not to exceed RoM: 19130 m<sup>3</sup>, Grey Granite (50% recovery) – 9565 m<sup>3</sup>, Granite Waste (50%)- 9565 and the Ultimate depth not to exceed 19m. The annual peak production shall not exceed 1040 m<sup>3</sup>(4<sup>th</sup> year).

During the meeting, the proponent stated that he had requested for an automatic extension as per the MoEF&CC notification dated 12.04.2022 and O.M dated 13.12.2022 and hence requested for the same.

SEAC noted that as per OM Dated 13.12.2022, clarification on the amendment to EIA Notification 2006 issued vide S.O. No. 1807(E) dated 12.04.2022 with regard to validity of Environment Clearance, para 2 (ii) states that...

*“The Environment Clearances for which the project proponents have submitted the application for extension of validity as per the provisions of the EIA Notification 2006 as on the date of publication of Notification i.e., 12.04.2022 shall stand automatically extended to respective increased validity as mentioned at Para no. 1 column (C) above.”*

  
MEMBER SECRETARY  
SEAC -TN

  
CHAIRMAN  
SEAC- TN

Based on the presentation made by the proponent, the SEAC decided to confirm that the proposal is entitled for 'automatic extension to the respective increased validity' as per the aforesaid OM issued by the MoEF & CC subject to the following commitment made by the PP.

As accepted by the Project Proponent the CER cost is **Rs. 8 Lakh** and the amount shall be spent for the committed activities before obtaining CTO from TNPCB.

Simultaneously, the subject was placed in 598<sup>th</sup> meeting of Authority held on 01.03.2023. The Authority, after detailed discussions, decided to call for the following clarification/ additional particulars from the PP: On receipt of the same the proposal shall be referred back to the SEAC for re-appraisal.

1. Reply for the additional details sought by the Authority in its 469<sup>th</sup> meeting held on 13.10.2021
2. On perusal of the documents furnished by the PP it was noticed that the mined quantity of Granite is more than that permitted in the EC dated 08.02.2016 and subsequent EC Amendment dated 09.09.2020. A clarification in this regard may be obtained from the AD/Mines concerned.
3. Certified compliance report from the Competent Authority for the existing quarry.
4. Valid Mine plan/scheme of mining and approval letter.
5. Details of litigation pending against the project, if any, with direction /order passed by any Court of Law against the Project shall be given.

The subject was taken up for discussion in this 371<sup>st</sup> meeting of SEAC held on 25.04.2023. During the presentation PP requested time to submit additional documents. Hence, SEAC decided to defer the proposal.

Now the subject was placed in this 380<sup>th</sup> meeting of SEAC held on 17.05.2023. The project proponent made power point presentation. The Committee carefully examined the points raised by SEIAA and the replies furnished by the PP and decided to **reiterate its earlier recommendation for the grant of extension of validity of the existing Environmental Clearance for a period upto the life of the project or 30 years whichever is earlier for the total production quantity of 35121 m<sup>3</sup> of RoM, by**

  
MEMBER SECRETARY  
SEAC -TN

  
CHAIRMAN  
SEAC - TN

maintaining an ultimate depth of 37m BGL and however the annual peak production shall not exceed 8799m<sup>3</sup> of RoM. All other conditions in the earlier EC will remain unchanged.

**Agenda No: 380 - 10**

**(File No: 7844/2020)**

**Existing Black Granite quarry over an extent of 3.68.5 Ha in S.F.No. 781(Part), 744(Part), 526/2A, 526/2B, 526/3A, 526/3B, 529/2(Part), 529/3(Part), 529/4(Part), 531/1(Part), 531/2(Part) and 531/3(P) at Puligunda Village, Bargur (Formerly Krishnagiri) Taluk, Krishnagiri District, Tamil Nadu by TVL. Bannari Amman Sugars Limited - For Environmental Clearance. (SIA/TN/MIN/171168/2020, dated: 03.09.2020)**


**The SEAC noted the following:**

1. The project proponent, TVL. Bannari Amman Sugars Limited has applied for Environmental Clearance for the Existing Black Granite quarry over an extent of 3.68.5 Ha at S.F.No. 781(Part), 744(Part), 526/2A, 526/2B, 526/3A, 526/3B, 529/2(Part), 529/3(Part), 529/4(Part), 531/1(Part), 531/2(Part) and 531/3(P), Puligunda Village, Bargur (Formerly Krishnagiri) Taluk, Krishnagiri District, Tamil Nadu.
2. The project/activity is covered under Category "B2" of Item 1(a) "Mining of Mineral Projects" of the Schedule to the EIA Notification, 2006.
3. Earlier the proposal was placed in 265<sup>th</sup> SEAC meeting held on 21.04.2022. Based on the presentation made by the proponent and the documents furnished, SEAC decided that the project proponent shall furnish documentary evidence from the concerned District Forest Officer showing the exact distance of location of the nearest Pulikonda R.F from the proposed quarry site.  
On receipt of the aforesaid details, SEAC would further deliberate on the project and decide the further course of action.
4. Subsequently, the proposal was placed in the 510<sup>th</sup> Authority meeting held on 23.05.2022. In view of the above, the Authority after detailed discussion decided to refer back the proposal to SEAC after the receipt of following additional particulars from the project proponent with reference to project life (or) subject to a maximum of thirty years, whichever is earlier.

  
MEMBER SECRETARY  
SEAC -TN

  
CHAIRMAN  
SEAC- TN

- i. Detailed study shall be carried out in regard to impact of mining around the proposed mine lease area 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.
- ii. 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 project life (or) subject to a maximum of thirty years, whichever is earlier.
- iii. 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.
- iv. To furnish risk assessment and management plan including anticipated vulnerabilities during operational and post operational phases of Mining.
- v. Detailed Mine Closure Plan covering the project life (or) subject to a maximum of thirty years, whichever is earlier.

  
MEMBER SECRETARY  
SEAC -TN

  
CHAIRMAN  
SEAC- TN

- vi. Detailed Environment Management Plan including adaptation, mitigation & remedial strategies covering the project life (or) subject to a maximum of thirty years, whichever is earlier.
5. Subsequently, the proposal was again placed in the 352<sup>nd</sup> SEAC meeting held on 08.02.2023. SEAC have satisfied with the reply furnished by the PP to the queries raised by the Authority.

EC obtained Date	08.02.2016
Lease Deed Registered Date: 11.12.2016	Validity of EC – 07.02.2021
Validity of Extension of EC	S.O. 221 (E) Dated: 18.01.2021 Validity of EC – 07.02.2022
Proponent applied for extension of validity of Environmental Clearance – Form – 6	21.06.2021 (Proposal No.SIA/TN/MIN/216113/2021

The SEAC had observed that all the clauses and conditions required for the normal EC extension has been furnished during presentation and the project is fit for extension up to the lease period.

The SEAC also noted that as per OM Dated 13.12.2022, Clarification on the amendment to EIA Notification 2006 issued vide S.O. No. 1807(E) dated 12.04.2022 with regard to validity of Environment Clearance, para 2 (i) states that...

*“The validity of the Environmental Clearance, which had not expired as on the dated of publication of notification, i.e., 12/04/2022, shall stand automatically extended to respective increased validity as mentioned at para no. 1 column (C) above.”*

Based on the presentation made by the proponent, the SEAC decided to confirm that the proposal is entitled for ‘automatic extension to the respective increased validity’ as per the aforesaid OM issued by the MoEF& CC subject to the following commitment made by the PP.

  
MEMBER SECRETARY  
SEAC -TN

  
CHAIRMAN  
SEAC- TN



- As accepted by the Project Proponent the CER cost is **Rs. 2 Lakh** and the amount shall be spent towards Re-Construction of Toilets for Girls and Maintenance for Thogarapalli Government Higher Secondary School, Krishnagiri, for the committed activities before obtaining CTO from TNPCB.
6. Subsequently, the proposal was placed in the 598<sup>th</sup> Authority meeting held on 01.03.2023. The proposal is placed in this 352<sup>nd</sup> SEAC Meeting held on 08.02.2023. Based on the presentation made by the proponent, the SEAC decided to confirm that the proposal is entitled for 'automatic extension to the respective increased validity' as per the aforesaid OM issued by the MoEF& CC. The authority after detailed deliberation, noted that
- i) Upon the scrutiny of unapproved mining plan, it is ascertained that the proponent had achieved excess recovery than the approved quantity in the earlier EC issued vide Lr.No. SEIAA-TN/F.No.3775/EC/1(a)/2804/2015 Dated: 08.02.2016.

**Proposed and actual Production particulars from the commencement of quarry operations:**

Table 2

Year	Proposed		Achieved Production (m <sup>3</sup> )	Period
	ROM	Production @ 5%		
2008 - 09	1000	50	Nil	Mining Plan Period
2009 - 10	2000	100	Nil	
2010 - 11	2000	100	20,380	
2011 - 12	2000	100	971,780	
2012 - 13	2000	100	149,000	
<b>Total</b>	<b>9000</b>	<b>450</b>	<b>1,141,160</b>	
2013 - 14	-	-	2,837,536	1 <sup>st</sup> Scheme Period
2014 - 15	12000	600	1251,500	
2015 - 16	12000	600	1050,014	
2016 - 17	12010	601	1271,183	
2017 - 18	11970	599	1180,544	
<b>Total</b>	<b>47980</b>	<b>2400</b>	<b>7,590,777</b>	
<b>Grand Total</b>	<b>56980</b>	<b>2850</b>	<b>8,731,937</b>	

Hence, as per the EC General condition point no. 3 & 4, the proponent must have informed SEIAA regarding the increase in the recovery percentage.

Further, as per the OM dated: 07.07.2021, SoP regarding handling of violation cases, MoEF&CC has defined

  
MEMBER SECRETARY  
SEAC -TN

  
CHAIRMAN  
SEAC- TN

"... 'Violation' means cases where projects have either started the construction work or installation or excavation, whichever is earlier, on site or have expanded the production capacity and / or project area beyond the limit specified in the Environmental Clearance (Prior-EC) without obtaining Prior-EC or change of scope without prior approval from the ministry."

- i) The proponent is requested to submit approved scheme of mining plan.
- ii) The proponent is requested to submit certified compliance certificate (CCR) obtained from IRO, MoEF&CC.
- iii) The proponent is requested to submit EMP including progressive mine closure plan for the life of mine.

In the view of the above, SEIAA decided to refer back the proposal to SEAC to examine the above-mentioned points and furnish its recommendation to SEIAA to take further course of action.

5. Subsequently, the proposal was again placed in the 371<sup>st</sup> SEAC meeting held on 26.04.2023. During the presentation PP requested time to submit additional documents. Hence, SEAC decided to defer the proposal.

File No		7844 2020	Category	B2 1(a)
Sl. No	Salient Features of the Proposal			
1.	Name of the Owner/Firm	:	Tvl. Bannari Amman Sugars Limited No.1212, Trichy Road Coimbatore District - 641 018	
2.	Type of quarrying (Ordinary Stone/Sand/Granite/Limestone)	:	Black Granite (Dolerite)	
3.	S.F Nos. of the quarry site with area break-up	:	781(Part), 744(Part), 526/2A, 526/2B, 526/3A, 526/3B, 529/2(Part), 529/3(Part), 529/4(Part), 531/1(Part), 531/2(Part) and 531/3(P)	
4.	Village in which situated	:	Puligunda	
5.	Taluk in which situated	:	Bargur (Formerly Krishnagiri)	
6.	District in which situated	:	Krishnagiri	

7.	Extent of quarry (in ha.)	:	3.68.5 Ha	
8.	Latitude & Longitude of all corners of the quarry site	:	12°27'08.21"N to 12°27'14.66"N 78°22'02.82"E to 78°22'28.46"E	
9.	Topo Sheet No.	:	57 L/07	
10.	Type of mining	:	Opencast Mechanized Mining	
11.	Life of Project	:	20 Years	
	Lease Period	:	20 Years	
	Mining Plan Period	:	5 years	
12.	Mining Plan Details	:	As per approved Mining Plan	As modified by SEAC
	Geological Resources m <sup>3</sup> (RoM)	:	Black Granite	Black Granite
			ROM- 6,31,832m <sup>3</sup> , Recoverable Reserves @ 20% - 1,26,370m <sup>3</sup> , Granite waste @ 80%- 5,05,462m <sup>3</sup>	ROM- 6,31,832m <sup>3</sup> , Recoverable Reserves @ 20% - 1,26,370m <sup>3</sup> , Granite waste @ 80%- 5,05,462m <sup>3</sup>
	Minable Resources m <sup>3</sup> (RoM)	:	Black Granite	Black Granite
			ROM- 1,99,465m <sup>3</sup> , Recoverable Reserves @ 20% - 39,893m <sup>3</sup> , Granite waste @ 80%- 1,59,572m <sup>3</sup>	ROM- 1,99,465m <sup>3</sup> , Recoverable Reserves @ 20% - 39,893m <sup>3</sup> , Granite waste @ 80%- 1,59,572m <sup>3</sup>
Annual Peak Production in m <sup>3</sup>	:	Black Granite	Black Granite	
Maximum Depth in meters	:	ROM - 9833 m <sup>3</sup>	ROM - 9833 m <sup>3</sup>	
13.	Depth of water table	:	49.5m BGL	
14.	Man Power requirement per day:	:	74m in rainy & 78m in summer seasons	
15.	Water requirement: 1. Drinking water 2. Dust suppression 3. Green belt	:	3.5 KLD 1.0 KLD 1.5 KLD 1.0 KLD	
16.	Power requirement	:	1,63,184 Litres of HSD	

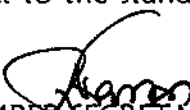
  
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SEAC -TN

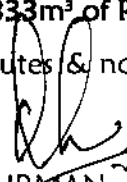
59

  
CHAIRMAN  
SEAC -TN

17.	Precise area communication approved by the Industries (MME.2) Department, Department of G&M.	:	G.O.(Ms) No.121 Industries (MME.2) Department, Dated: 13.06.2013	
18.	Mining Plan approved by Commissioner, Department of G&M.	:	Roc.3083/MM4/Mines, Dated: 04.05.2023	
19.	Department of G&M, Assistant Director (Additional Charge), 500m Cluster Letter	:	Roc.85/2020/Mines, Dated: 21.02.2022	
20.	VAO Certificate Regarding Structures within 300m Radius	:	Letter Dated: 05.02.2020	
21.	Project Cost (excluding EMP cost)	:	Rs. 3,12,55,000	
22.	EC Recommendation	:	Validity	30 years subject to the following upper limits. Black Granite
		:	Max Total Excavation RoM in m <sup>3</sup>	47,957 m <sup>3</sup>
		:	Annual Peak Capacity RoM in m <sup>3</sup>	9,833 m <sup>3</sup>
		:	Max Depth in mtrs	49.5m
23.	EMP cost (in Rs. Lakh).	:	Capital Cost – Rs. 38,27,950 Recurring Cost – Rs. 12,65,459	
24.	CER cost (in Rs. Lakh).	:	Rs. 10,00,000	

Now the proposal was again placed in 380<sup>th</sup> SEAC meeting held on 17.05.2023. Based on the presentation and documents furnished by the project proponent, **SEAC decided to recommend the proposal for the grant of Environmental Clearance** considering the safety aspect the **depth of mining up to 49.5m BGL and should not exceed ROM – 47,957m<sup>3</sup>, but not exceeding the annual peak production capacity of 9,833m<sup>3</sup> of ROM,** subject to the standard conditions as per the Annexure I of this minutes & normal

  
MEMBER SECRETARY  
SEAC -TN

  
CHAIRMAN  
SEAC- TN

conditions stipulated by MOEF &CC, in addition to the following specific conditions:

1. The prior Environmental Clearance granted for this mining project shall be valid for the project life including production value as laid down in the mining plan approved and renewed by competent authority, from time to time, subject to a maximum of thirty years, whichever is earlier vide MoEF&CC Notification S.O. 1807(E) dated 12.04.2022.
2. The proponent shall ensure that the transportation of the quarried granite stones shall not cause any hindrance to the Village people/Existing Village Road and shall take adequate safety precautionary measures while the vehicles are passing through the schools / hospital. The Project Proponent shall ensure that the road may not be damaged due to transportation of the quarried granite stones; and transport of granite stones will be as per IRC Guidelines with respect to complying with traffic congestion and density.
3. The proponent shall obtain a 'Star Rating' system awarded by Anna University, Chennai annually to the mining lease being operated for their efforts and initiatives taken for successful implementation of the Sustainable Development Framework (SDF).
4. The proponent shall mandatorily appoint the statutory Mines Manager & other statutory competent persons and the Geologist in relevant to the proposed quarry size as per the provisions of Mines Act 1952 and Granite Conservation & Development Rules, 1999 respectively before obtaining the CTO.
5. The PP shall inform/send the 'Notice of Opening' of the quarry to the Director of Mines Safety, Chennai Region before obtaining the CTO from the TNPCB.
6. The proponent shall construct the 'S3 (or) G2' type of fencing all around the boundary of the proposed working quarry with gates for entry/exit before the commencement of the operation as recommended in the DGMS Circular, 11/1959 and shall furnish the photographs/map showing the same before obtaining the CTO from TNPCB.
7. The PP shall extract the dimensional stone blocks through non-explosive techniques such that the surrounding structures are not impacted.

  
MEMBER SECRETARY  
SEAC -TN

  
CHAIRMAN  
SEAC- TN

8. The PP shall strictly adhere with the safety provisions as laid for the operation of Diamond Wire Saw machines and use of Cranes vide DGMS Tech Circulars No: 02 of 29.11.2019 & No. 10 of 19.07.2002 respectively.
9. The PP shall carry out the tree plantation to act as a barrier to reduce noise level and dust pollution along the boundary of the quarrying site considering the wind direction before obtaining the CTO from the TNPCB.
10. The PP shall ensure that the Catch drains and siltation ponds of appropriate size should be constructed to arrest silt and sediment flows from soil, OB and mineral reject (Granite waste) dumps. The water so collected in such sump should be utilized for watering the mine area, roads, green belt development, etc. The drains should be regularly de-silted and maintained properly.
11. The PP shall ensure that the Diamond Wire Saw Machine Operators/Technicians shall be adequately trained in safe operation/proper maintenance of Machine and the rope.
12. In the interest of safety, the PP of the planned quarry where the Diamond Wire Saw Machines are proposed and OEM of such machines are advised to comply with the safety provisions as given in DGMS (Tech) Circular No. 02 of 2019 so that accidents are mitigated adequately.
13. The PP shall conduct a Slope Stability study after a period of five years from the commencement of quarrying operation through any one of these reputed scientific institutions such as Central Mining & Fuel Research Institute/Dhanbad, NIRM/Bengaluru, IIT(ISM)/Dhanbad, IIT/Madras, NITK Surathkal-Dept of Mining Engg, Anna University Chennai – CEG Campus and any other CSIR labs, to study the efficacy of the slope stability of highwall in the proposed quarry for the safe operation.
14. The Project Proponent shall also install necessary dust and noise extraction system around mineral handling area with proper enclosures before obtaining the CTO from TNPCB.
15. Perennial maintenance of haulage road/village / Panchayat Road shall be done by the project proponent as required in connection with the concerned Govt. Authority.

16. Perennial sprinkling arrangement shall be in place on the haulage road for fugitive dust suppression. Fugitive emission measurements should be carried out during the mining operation at regular intervals.
17. Proper barriers to reduce noise level and dust pollution should be established by providing greenbelt along the boundary of the quarrying site and suitable working methodology to be adopted by considering the wind direction.
18. The purpose of green belt around the project is to capture the fugitive emissions, carbon sequestration and to attenuate the noise generated, in addition to improving the aesthetics.
19. Taller/one year old saplings raised in appropriate size of bags (preferably eco-friendly bags) should be planted in proper spacing as per the advice of local forest authorities/botanist/horticulturist with regard to site specific choices.
20. Noise and Vibration Related: (i) Appropriate measures should be taken for control of noise levels below 85 dBA in the work environment. Workers engaged in operations of HEMM, etc. should be provided with ear plugs/muffs, (iii) Noise levels should be monitored regularly (on weekly basis) near the major sources of noise generation within the core zone.
21. The operation of the quarry should not affect the agricultural activities & water bodies near the project site and a 50 m safety distance from water body should be maintained without carrying any activity. The proponent shall take appropriate measures for "Silt Management" and prepare a SOP for periodical de-siltation indicating the possible silt content and size in case of any agricultural land exists around the quarry.
22. The proponent shall provide sedimentation tank / settling tank with adequate capacity for runoff management.
23. The proponent shall ensure that the transportation of the quarried granite stones shall not cause any hindrance to the Village people/Existing Village Road and shall take adequate safety precautionary measures while the vehicles are passing through the schools / hospital. The Project Proponent shall ensure that the road may not be damaged due to transportation of the quarried granite

  
MEMBER SECRETARY  
SEAC -TN

  
CHAIRMAN  
SEAC- TN

- stones; and transport of granite stones will be as per IRC Guidelines with respect to complying with traffic congestion and density.
24. To ensure safety measures along the boundary of the quarry site, security guards are to be posted during the entire period of the mining operation.
25. The Project Proponent shall take all possible precautions for the protection of environment and control of pollution while carrying out the mining or processing of granite in the area for which such licence or lease is granted, as per
26. The Project Proponent shall comply with the provisions of the Mines Act, 1952, MMR 1961 and Mines Rules 1955 for ensuring safety, health and welfare of the people working in the mines and the surrounding habitants.
27. The project proponent shall ensure that the provisions of the MMDR Act, 1957, the MCDR 2017 and Tamilnadu Minor Mineral Concession Rules 1959 are complied by carrying out the quarrying operations in a skillful, scientific and systematic manner keeping in view proper safety of the labour, structure and the public and public works located in that vicinity of the quarrying area and in a manner to preserve the environment and ecology of the area.
28. The quarrying activity shall be stopped if the entire quantity indicated in the Mining plan is quarried even before the expiry of the quarry lease period and the same shall be informed to the District AD/DD (Geology and Mining) District Environmental Engineer (TNPCB) by the proponent without fail.
29. The Project Proponent shall abide by the annual production scheduled specified in the approved mining plan and if any deviation is observed, it will render the Project Proponent liable for legal action in accordance with Environment and Mining Laws.
30. All the conditions imposed by the Assistant/Deputy Director, Geology & Mining, concerned District in the mining plan approval letter and the Precise area communication letter issued by concerned District Collector should be strictly followed.

  
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31. The Project Proponent shall adhere to the provision of the Mines Act, 1952, Mines and Mineral (Development & Regulation), Act, 2015 and rules & regulations made there under.
32. That the grant of this E.C. is issued from the environmental angle only, and does not absolve the project proponent from the other statutory obligations prescribed under any other law or any other instrument in force. The sole and complete responsibility, to comply with the conditions laid down in all other laws for the time-being in force, rests with the project proponent.
33. The mining lease holders shall, after ceasing mining operations, undertake re-grassing the mining area and any other area which may have been disturbed due to their mining activities and restore the land to a condition which is fit for growth of fodder, flora, fauna etc.
34. The Project Proponent shall ensure that the funds earmarked for environmental protection measures should be kept in separate account and should not be diverted for other purpose. Year-wise expenditure should be reported to the MoEF & CC Ministry and its Integrated Regional Office (IRO) located in Chennai.
35. 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 adhere EMP furnished.
36. As accepted by the Project proponent the CER cost is Rs. 10 lakhs and the amount shall be spent as committed, before obtaining CTO from TNPCB.

**Agenda No. 380-TA-1**

**File No. C.No. 6013/2023**

**Daimia Bharat Sugar and Industries Ltd at Chettichavadi Jaghir Magnesite and Dunite Mines, to an extent of 449.364 Ha in Chettichavadi village, Salem Taluk and District, Tamilnadu. Salem District Survey Report for Dunite to be approved by SEIAA, Tamilnadu as per Minutes of Meeting of EAC, MOEF, New Delhi dated 17.01.2023-Reg**

Earlier, the proposal is placed in this 361<sup>st</sup> meeting of SEAC held on 10.03.2023. The details of the project furnished by the proponent are available in the website ([parivesh.nic.in](http://parivesh.nic.in)).

**The SEAC noted the following**

  
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SEAC -TN

65

  
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SEAC- TN

- M/s Dalmia Bharat Sugar and Industries Ltd at Chettichavadi Jaghir Magnesite and Dunite Mines, to an extent of 449.364 Ha in Chettichavadi village, Salem Taluk and District, Tamilnadu has obtained ToR from MoEF&CC on 05.02.2021. Subsequently, the Public Hearing was conducted and final EIA/EMP report was submitted to MOEF on 29.11.2021.
- The MOEF in its 9<sup>th</sup> EAC Meeting held on 17.01.2023 has instructed the PP to furnish on the points below, besides other details to be provided by the PP.

1. The Project Proponent needs to submit the District Survey Report for Dunite to be approved by the SEIAA, Tamil Nadu.

- Based on that the PP has furnished a copy of Salem District Survey Report approved and signed by Deputy Director, Department of Geology and Mining, Salem and the District Collector, Salem requested the SEIAA for necessary recommendation vide Lr Dt. 31.1.2023 received on 23.2.2023.

The Proposal was placed in 597<sup>th</sup> Authority meeting held on 27.2.2023 and Authority decided to refer the proposal to SEAC for necessary remarks on District Survey Report furnished by the PP.

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.

**Again, this proposal was placed in 379<sup>th</sup> SEAC meeting held on 12.5.2023.** Based on the presentation and documents furnished by the project proponent, SEAC after detailed deliberations, decided to constitute sub committee to examine the DSR. The sub committee has submitted its report.

**Sub-Committee Report on District Survey Report for Dunite in Salem District prepared by Dept of Geology and Mining, Salem**

**1 Background**

1. M/s Dalmia Bharat Sugar and Industries Ltd at Chettichavadi Jaghir Magnesite and Dunite Mines, to an extent of 449.364 Ha in Chettichavadi village, Salem Taluk and District, Tamil Nadu has obtained ToR from MoEF&CC on 05.02.2021. Subsequently, the Public Hearing was conducted and final EIA/EMP report was submitted to MOEF on 29.11.2021.

  
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SEAC -TN

66

  
CHAIRMAN  
SEAC- TN

2. The MOEF in its 9<sup>th</sup> EAC Meeting held on 17.01.2023 has instructed the PP to furnish on the points below, besides other details to be provided by the PP.
  - The Project Proponent needs to submit the District Survey Report for Dunite to be approved by the SEIAA, Tamil Nadu.
3. Based on that the PP has furnished the copy of the Salem District Survey Report approved and signed by Deputy Director, Department of Geology and Mining, Salem and the District Collector, Salem requested the SEIAA for necessary recommendation vide Lr Dt. 31.1.2023 received on 23.2.2023.
4. The Proposal was placed in 597<sup>th</sup> Authority meeting held on 27.2.2023 and Authority decided to refer the proposal to SEAC for necessary remarks on District Survey Report furnished by the PP.
5. The proposal was placed in the 361<sup>st</sup> meeting of SEAC held on 10.03.2023. However, the PP was not present and it was deferred subsequently.
6. Now, the proposal was taken up for the presentation during the 379<sup>th</sup> SEAC meeting held on 12.05.2023.
7. Based on the presentation and documents submitted by the PP, the Chairman have constituted a Sub-Committee comprising of the following expert members to examine the DSR furnished by the PP.
  - Dr. P. Balamadeswaran, SEAC – Member
  - Dr. B. Gowtham, SEAC – Member

#### COMMITTEE OBSERVATIONS

1. As per the direction of the Chairman, SEAC, the Sub-Committee has examined the District Survey Report for Dunite in Salem District prepared by Dept of Geology and Mining, Salem in accordance with MoEF Notification S.O. 3611 (E) dated. 25.07.2018 which states that

*“.....The District Survey Report shall form the basis for application for environmental clearance, preparation of reports and appraisal of projects.....”*
2. Besides, the Sub-Committee has observed the Judgement of “Deepak Kumar Case” and subsequent MoEF & CC OM-S.O.3977 (E), dated. 14.08.2018, it has

  
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SEAC -TN

67


  
CHAIRMAN  
SEAC- TN

been indicated that the DSR & DMP are mandatorily required to be submitted by the PP while filing the EC application for purpose of ascertaining whether an area is fit for mining from the parameters laid down for EIA.

3. Further, the Sub-Committee noted that the said DSR has been prepared during May 2019 and approved by the competent authority has not been updated later as it is currently available in the <https://salem.nic.in/salem-district-mineral-survey-report-new/>.
4. The DSR report for Dunite Mineral approved by Deputy Director, Dept of Geology and Mining and signed by District Collector, Salem which was submitted by the PP vide our letter dated 31.01.2023.
5. In the case of approved DSR, the Sub-Committee has noted that Dunite specific to the Chettichavadi Jaghir Magnesite and Dunite Mines over an extent of 449.364 Ha situated in Chettichavadi Village, Salem District, Tamil Nādu of Dalmia Bharat Sugar and Industries Ltd.
6. In the DSR (2019) for Dunite prepared by the Dy. Director, Dept of Geology and Mining, Salem and approved by District Collector, Salem, the following information are examined:
  - a) Details of the Mining Lease of PP are listed in Table No-9 under S.No.2 of Page No-34.
  - b) The reserves available in the Mining Lease of PP is listed in Table No-14 under S.No.2 of Page No-41.

## 2 RECOMMENDATIONS

1. Based on the above, the Sub-Committee verified the DSR submitted by the PP with respect to the associated mineral "Dunite" produced with Magnesite in the Salem District and hence it is concluded that the said DSR has been prepared during May 2019 and approved by the competent authority is in order.
2. In the case of approved DSR, the Sub-Committee has observed that Dunite specific to Chettichavadi Jaghir 'Magnesite and Dunite' Mines over an extent of 449.364 Ha is situated in Chettichavadi Village, Salem District, Tamil Nadu owned by Dalmia Bharat Sugar and Industries Ltd.
3. The Sub-Committee has recommended that the mine shall be operated taking

  
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SEAC -TN

  
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SEAC- TN

into consideration of all the Environmental Norms and stipulations as per EC to be granted. Further, the EMP for Mining of Magnesite and Dunite as stipulated in DSR and EC shall be implemented during Operation of the Mines to mitigate the Impact on the environment.

4. This District Survey report of Dunite in the Salem District shall be updated and revised every five year in accordance with MoEF Notification S.O. 3611 (E) dated 25.07.2018. Hence, the Sub- committee recommends that the DSR shall be updated by the Competent authority by involving any of these reputed institutions – Dept of Geology, Anna University Chennai, and Dept of Geology, University of Madras.

Now the subject was placed in this 380<sup>th</sup> meeting of SEAC held on 17.05.2023. Based on the recommendation of the sub-committee, SEAC decided to endorse District Survey Report prepared for the mineral - Dunite by the Dept of Geology & Mining and approved by the District Administration, which establish that the mineral resource of Dunite is existing along with the magnesite in the mine lease hold area of an extent of 449.364 Ha in Chettichavadi Village, Salem District, Tamil Nadu owned by Dalmia Bharat Sugar and Industries Ltd and therefore SEIAA may send a suitable reply to MoEF.

**Agenda Item No:380-TA-2**

**File No. 6216/2018**

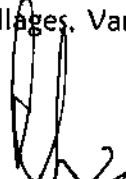
**Existing Black Granite Quarry lease over an extent of 1.09.0 Ha at S.F.No.1/12, 2/3A, 4/1B & 123/9B2, Semangalam & Kunnam Villages, Vanur Taluk, Villupuram District, Tamil Nadu by M/s. Karthik Raja Exports for Environmental Clearance under violation category (SIA/TN/MIN/153020/2020, Dt.13.05.2020).**

Earlier, this proposal was placed in this 341<sup>st</sup> meeting of SEAC held on 29.12.2022. The details of the project furnished by the proponent are available in the website (parivesh.nic.in).

**The SEAC noted the following:**

1. The Project Proponent, M/s. Karthik Raja Exports has applied for Environmental Clearance for the Existing Black Granite quarry lease over an extent of 1.09.0 Ha at S.F.No. 1/12, 2/3A, 4/1B & 123/9B2, Semangalam & Kunnam Villages, Vanur Taluk, Villupuram District, Tamil Nadu.

  
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SEAC -TN

  
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SEAC- TN

2. The proposed quarry/activity is covered under Category "B1" of Item 1(a) "Mining Projects" of the Schedule to the EIA Notification, 2006.
3. ToR issued under violation category vide Lr.No.SEIAA-TN/F.No.6216/TOR-371/2018 dated 18.05.2018.
4. As per the Hon'ble High Court of Madras order dated 13.10.2017 in W.P.No.11189 of 2017, amendment in the ToR was issued vide Lr.No.SEIAA-TN/F-6216/SEAC-CXVIII/TOR-371(A)/2018, dt.30.07.2018.
5. Public hearing conducted on 11.02.2020.
6. Extension of validity of ToR issued vide Lr. No.SEIAA-TN/F.No. 6216/TOR-371/2018/A/ dated: 29.10.2021.
7. The PP has furnished the EIA Report under violation indicating the 'High - level damage' for the ecological assessment & EMP measures due to the mining operations carried out for the violation period in the mines in accordance with the **MoEF & CC Notification No. S.O.804 (E), dated. 14.03.2017.**


Based on the presentation made and documents furnished by the project proponent, the SEAC decided to **make site inspection by the sub-committee** to be constituted by the SEAC to assess the present status of the project and environmental settings as the proposal falls under violation category. Further the subcommittee will assess the ecological damage and to check the Remedial Plan & Community Augmentation Plan submitted by the PP during the inspection. On the receipt of the sub-committee report, further deliberation will be carried out.

Besides, the SEIAA shall immediately initiate take action u/s 19 of E(P) Act 1986 against the PP for the committed violation.

### **Sub Committee Report**

#### **1.0 PREAMBLE**

The proponent M/s. Karthik Raja Exports, Sole Proprietor No. R 23A / A2, Ambattur Industrial Estate Road, Anna Nagar West, Chennai have applied for EC to quarry Black Granite in Semangalam and Kunnam Villages, Vanur Taluk, Villupuram District, Tamil Nadu covering S.F. Nos. 1 / 12, 2 / 3A, 4 / 1B and 123 / 9B2 with an

  
MEMBER SECRETARY  
SEAC -TN

  
CHAIRMAN  
SEAC- TN

extent of 1.09.0 Ha. The mining lease was granted vide G.O 3(D) No. 23 Industries (MMB - 1) Dept. dated 18.02.2011 for a period of 20 years (28.02.2011 to 27.02.2031).

**SALIENT FEATURES OF THE PROPOSED QUARRY**

EC Proposal No	SIA/TN/MIN/153020/2020
SEIAA File No.	6216
Category	'B1' Under Violation
Mining Lease details	G.O 3(D) No. 23 Industries (MMB-1) Dept. dated 18.02.2011 <b>(Lease period: 28.02.2011 to 27.02.2031)</b>
Extent	1.09.0 Ha
Proposal Description	Black Granite Quarry
District	Villupuram District
Taluk	Vanur Taluk
Village	Semangalam and Kunnam Villages
SF No.	1 / 12, 2 / 3A, 4 / 1B & 123 / 9B2
Land Classification	Patta land
Latitude & Longitude	12°04'50.08" N to 12°04'54.22" N 79°41'29.80"E to 79°41'40.42"E
Site Elevation above MSL	45 m above MSL
Topography	Flat terrain
Lease area Topo Sheet details	57 P / 12
Land use of the site	Patta land
Depth of Mining	32 m (Proposed)
Method of mining	Opencast Mechanized method of mining
Power Requirement	Diesel operated
Manpower	19 Nos
Eco Sensitivity Areas	<ul style="list-style-type: none"> <li>• Interstate Boundary – Puducherry Union Territory – 7 km South.</li> <li>• No Reserved Forests are situated within 10 km radius.</li> <li>• Kumalampattu Reserve Forest is at 14 km (NE).</li> <li>• There is no wildlife sanctuary within 10 km under the Wildlife Protection Act 1972.</li> <li>• Ossudu lake Bird Sanctuary– 15 km – SE.</li> </ul>

  
MEMBER SECRETARY  
SEAC -TN

71

CHAIRMAN  
SEAC- TN  


	<ul style="list-style-type: none"> <li>• Bay of Bengal – 22 km (E)</li> <li>• Kunnam Lake is at 830 m (W) and Ilavampattu Lake is at 620 m E.</li> </ul>
Proposed Production Capacity (15%)	RoM- 1,00,676 – (Production- 15,101 m <sup>3</sup> for period of Five years @ 15% Recovery)
Seismicity	Zone-II, Low damage risk zone as per BMTPC, Vulnerability atlas: Seismic zone of India IS: 1893-2002
Project Cost	Rs. 43.00 lakhs

#### Other Salient Features of the Project

S. No	Description	Details, Direction & Distance from lease boundary (~km)
1	Nearest Habitation	Elavampattu – 850 m (NE)
2	Nearest Airport	Chennai – 114 km (NE)
3	Nearest Railway Station	Tindivanam – 17 km (NE)
4	Nearest Town	Vanur – 11 km (SE)
5	State & National Boundaries	There is an interstate boundary around 7 km Tamil Nadu – Puducherry Union Territory.

#### 2.0 CHRONOLOGY OF THE PROJECT

Sl. No	Sequence of events	Date
1.	Mining Plan approval letter No. 11015 / MM5 / 2010	10.02.2011
2.	G.O. (3D) No. 23 Industries (MMB-1) Department dated 18.02.2011	18.02.2011
3.	ToR applied under violation category Online Proposal No. SIA/TN/MIN/23297/2018. SEIAA File No. 6216/2018.	02.04.2018
4.	ToR granted under violation category vide Lr.No. SEIAA-TN/F.No.6216/TOR-371/2018	18.05.2018
5.	<b>Public Hearing Conducted on</b>	11.02.2020
6.	EC Application applied vide Online Proposal No. SIA/TN/MIN/15320/2020	01.04.2022
7.	SEAC 341 <sup>th</sup> meeting held on	29.12.2022
9.	SEAC sub-committee visited the area vide SEAC –TN/1260 Site Inspection / 2022 Dated	07.04.2023

  
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### 3.0 VIOLATION CATEGORY

**M/S. KARTHIK RAJA EXPORTS** continued to operate the mines without obtaining Environment Clearance (EC) after 15.01.2016 under EIA Notification, 2006 and declared as violation case as per MoEF CC Notification S.O 804(E) dated 14.03.2017. In view of the above the proponent **M/S. KARTHIK RAJA EXPORTS** applied for grant of specific ToR to EAC, New Delhi on 06.09.2017 vide proposal no: IA/TN/MIN/67905/2017 as per MoEFCC Notification S.O 804(E) dated 14.03.2017.

The ministry has issued another Notification No. S.O 1030 (E) dated 08.03.2018 that the projects/activities covered under category 'B' shall be considered by SEAC/SEIAAs in the respective states. In view of the above the proponent submitted the application again by ONLINE to SEIAA vide file no. SIA/TN/MIN/ 23297/2018 dated 02.04.2018. Then, the proposal has been placed in 109th STATE EXPERT APPRAISAL COMMITTEE (SEAC) MEETING ON 26th April 2018 and granted Terms of Reference vide Lr.No.SEIAA-TN/F.No.6216/TOR-371/2018 dated 18.05.2018 for preparation of EIA/EMP report including Ecological damage assessment, remediation plan, natural resource augmentation and community resource augmentation for obtaining Environment Clearance from SEIAA/SEAC, Tamil Nadu. The Proponent presented his EIA / EMP report in the 341<sup>st</sup> SEAC meeting held on 29.12.2022. A Sub Committee consists of Dr. B.Gowtham, Member – SEAC – TN has been appointed by the Chairman, SEAC (Vide Lr. No. SEAC-TN/6216/Site Inspection / 2022 dated 30.12.2022).


The Sub Committee made site inspection on 07.04.2023.

#### 4. Mining Lease Details

Sl. No.	ML Grant	ML Grant Reference	Validity	
			From	To
1	Mining Lease Grant	G.O (3D) No. 23 Industries (MMB-1) Department dated 18.02.2011 for a period of 20 years (28.02.2011 to 27.02.2031).	28.02.2011	27.02.2031

#### 5. Mining Plan Details

Sl. No.	Mining Plan/Scheme	Plan Period	Approval by CGM Reference
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SEAC -TN

73

CHAIRMAN  
SEAC- TN  


1	Mining Plan: 1 <sup>st</sup> Scheme of Mining	2016 – 17 to 2020 - 21	Mining plan approved 11015/MM5/2010 dated 10.02.2011.
2	2 <sup>nd</sup> Scheme of Mining	2021-22 to 2025-26	Submitted, Deemed approval under Rule 18(3) of GCDR 1999; NOT APPROVED to TILL DATE

### 6. Details of Mining


Sl. No.	Particulars	Details
1	Method of mining	Open cast semi mechanized
2	Updated Geological reserves as per 3 <sup>rd</sup> SOM	1,24,926 m <sup>3</sup>
3	Updated Mineable reserves as per 3 <sup>rd</sup> SOM	78,720 m <sup>3</sup>
4	Proposed production per Annum (50%)	RoM- 50,532 (Production-25,266 m <sup>3</sup> for period of Five years@50% Recovery)
5	Elevation range of the mine site	292m
6	Bench height	6 m
7	Bench width	6 m
8	Bench slope	45°
9	Proposed Depth of mining	30m (Proposed)
10	Life of mine	20 years

### 7. Proposed Production Details

Year	Topsoil (m <sup>3</sup> )	ROM Granite (m <sup>3</sup> )	Production @ 50% (m <sup>3</sup> )	Sub Grade ore / Waste / Weathered Rock	Reject @ 85% (m <sup>3</sup> )	Black Granite to Over Burden ratio
2021 - 22	4208	18876	2831	-	16045	1:7.15
2022 – 23	-	19640	2946	-	16694	1:5.67
2023 – 24	-	20640	3096	-	17544	1:5.67
2024 – 25	-	20880	3132	-	17748	1:5.67
2025 – 26	-	20640	3096	-	17544	1:5.94
<b>TOTAL</b>	<b>4208</b>	<b>100676</b>	<b>15101</b>	<b>-</b>	<b>85575</b>	<b>1:5.94</b>

### 8.0 Status on Compliance of TOR

Complied as Reported and given in the EIA Report.

  
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## 9.0 Violation Category

The M/s Karthik Raja Exports has operated Granite quarry in Semangalam and Kunnam villages Granite Quarry during 2016-2017 and produced very less quantity of Granite. Operating the granite quarry after 15.01.2016 without EC is the Violation. Lease is not in operation since 2017.

Sl. No.	Statute Requirement	Yes / No	Violation Status	Remarks
1	Valid EC	X	Operating the Lease after 2016-2017 for a Production of granite leads to Violation.	EC was not obtained and it was under working after 15.01.2016.
2	Valid CTO	✓	No CTO obtained	Violation
3	Valid Mining Plans / Schemes	✓	Mining plan approved 12965/MM5/2005 dated 23.02.2006. Prepared for the year of 2006 – 2011. The first, second and third scheme of mining was prepared and submitted as per Rule 18(3) GCDR, 1999 for the period 2006-2007 to 2010-2011, 2011-2012 to 2015-2016, 2016-2017 to 2020-2021 & 2021-2022 to 2025-2026 respectively	There is No violation Any Mining Plan/ Scheme, if not approved within 90 days, the lessee shall continue the quarry operation and considered as deemed approval as per Rule 18 (5) of Granite Conservation and Development Rules, 1999.
4	Forest Clearance	-	No Forest Land involved	Not Applicable
5	Transport Permits	✓	Proponent has obtained the required Transport Permits.	No violation
6	Any other violation	-	Nil	Nil

## 10. Land Use Pattern

S.No	Description	Present area	Proposed land use
1	Mine working area	0.45.7	0.54.0
2	Mineral Reject Dump	---	0.26.0
3	Office Infrastructure	-	0.01.0

  
MEMBER SECRETARY  
SEAC - TN

75

  
CHAIRMAN  
SEAC - TN

4	Mine Roads	0.01.0	0.02.0
5	Area under Plantation	-	0.10.0
6	Unutilized Area	0.62.3	0.16.0
<b>Total</b>		<b>1.09.0 Ha</b>	<b>1.09.0Ha</b>

## 11 OBSERVATIONS OF THE SEAC SUB-COMMITTEE DURING THE PROJECT SITE INSPECTION

1. The black granite quarry of **M/S KARTHIK RAJA EXPORTS** over an extent of 1.09.0 Ha is located in Semangalam and Kunnam Villages, Vanur Taluk, Villupuram District.
2. As submitted and verified, the mining Lease was under G.O (3D) No. 23 Industries (MMB-1) Department dated 18.02.2011 for a period of 20 years. The lease deed was executed on 28.02.2011 and will expire on 27.02.2011.
3. The peak production in the quarry is recorded in the year 2015 – 16 which is 132.66 CBM.
4. Delay in EC application from the Date of issue of ToR.
5. The proposed quarry is under B1 (Cluster) category as per MoEF & CC, F.No. L – 11011/175/2018 – IA – II (M) dated 12.12. 2018.
6. 11 quarries are found within 500 m radius (14.30.5 Ha) vide AD, Mines L.No. R.C.No. A/G&M/922/2015 dated 15.10.2019.
7. The ToR issued vide letter L.No. SEIAA-TN / F.No. 6216 / ToR – 371 / 2018 dated 18.05.2018.
8. Habitation is located at Semangalam – 1.5 Km South.
9. The Lease is fenced with barbed wire in all sides and boundary pillars marked are noticed with geo Coordinates.
10. Mine is not in operation and Pit is filled with rain water.
11. As reported, the mine is not in operation since 2017.
12. The mine offices, Rest Shelter, First Aid facility, are available adjacent to mining lease area.
13. Developed Green belt is noticed in around mine offices, Rest Shelter, First Aid facility. However, PP has now planted new saplings along the peripheries of the Lease.

  
MEMBER SECRETARY  
SEAC -TN

  
CHAIRMAN  
SEAC- TN

14. As informed, environment friendly Mining activity, mechanized method using excavator was carried out in the Lease during the Violation Period upto a depth of 18 m BGL and no ground water- table intersection was encountered as it exist at the depth of 60 m BGL.

## 12. Status of Mining Operation

The Mining activities were stopped from the year 2016-17 and there was no production from this Mine since then. The mining plan was approved by Department of Geology and Mining, Guindy, Chennai vide Letter letter no:11015/MM5/2010 dated 10.02.2011. The second scheme of mining was prepared and submitted as per the Rule 18(3) of GCDR 1999, for the period 2021-22 to 2025-2026 and is under deemed approval and extension. Any Mining Plan/Scheme if not approved within 90 days, the lessee shall continue the quarry operation and considered as deemed approval as per Rule 18 (5) of Granite Conservation and Development Rules, 1999. Consents to Operate from Tamil Nadu Pollution Control Board (TNPCB) are to be obtained after getting EC from SEAC.

## 13. Present Condition of the Mine Pit

Existing Pit Dimension

Pit	L (m)	W (m)	D (m)
I	49.0 m	39.0 m	17.0 m
II	85.0 m	39.0 m	15.0 m

## 14. MANPOWER

The total manpower employed including statutory, semiskilled, unskilled and management staff in this project is 19.

### Green Belt Development and Plantation

The proponent has planted more than 100 numbers of trees in and around the lease area but still it is not adequate. The proponent is agreed to plant 300 saplings within the lease area beyond planned in scheme of mining. Quarry is not in operation since 2017. The proponent has planned following afforestation plan for the scheme of mining period 2021-22 to 2025-26

  
MEMBER SECRETARY  
SEAC -TN

77

  
CHAIRMAN  
SEAC- TN

### Proposed Green Belt Development

Year	Place	Type of Trees	Number	Spacing	Rate of survival
I	Lease Boundary & Dump	Teak, Coconut & Neem	30	5m x 5m	80%
II	Lease Boundary & Dump	Vaagai, Usil, punnai	30	5m x 5m	80%
III	Lease Boundary & Dump	Teak, Coconut & Neem	30	5m x 5m	80%
IV	Lease Boundary & Dump	Vaagai, Usil, punnai	30	5m x 5m	80%
V	Lease Boundary & Dump	Echai, Pungam, Munnai	30	5m x 5m	80%

#### 16 Violation

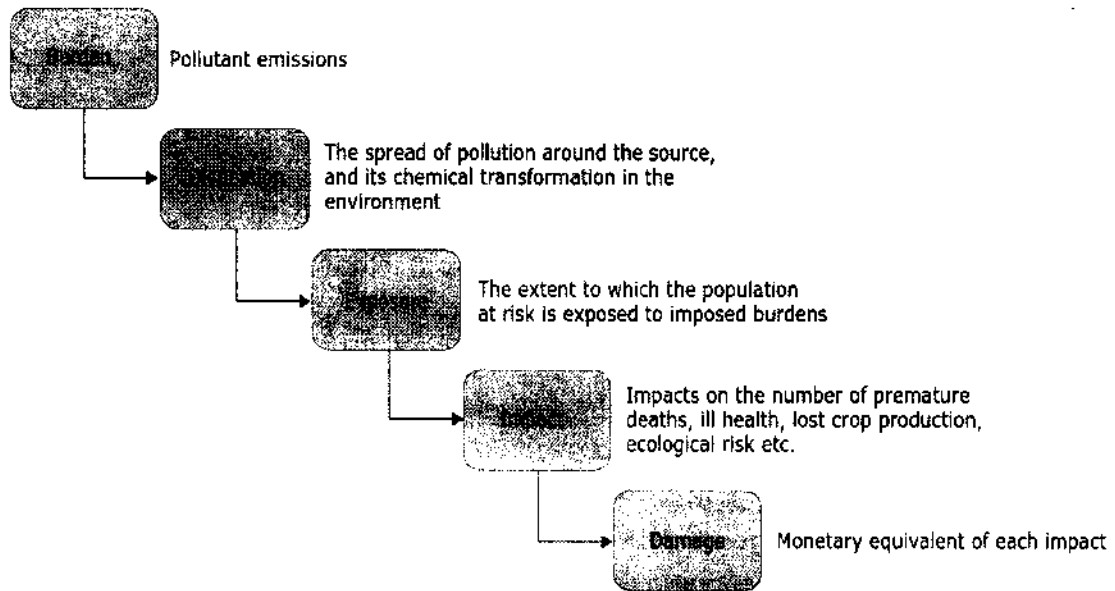
M/s Karthik Raja Exports has not applied for EC within the prescribed time from the ToR after 15.01.2016 under EIA Notification, 2006 and declared as violation case as per MoEF CC Notification S.O 804(E) dated 14.03.2017.

#### 17. Enumerate the aspects of Violation

Quantification of the effects on human health of particulate matter emissions, for which inhalation is the only relevant exposure route. In this case, it is necessary to quantify the pollutant emission, describe its dispersion and the extent to which the population is exposed, apply a concentration-response function and finally evaluate the economic impact. A pathway for estimating impacts & Impact Pathway Approach is shown below.

  
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### Impact Pathway Approach

Source: European Environmental Agency - EEA Technical report N15/2011 "Revealing the costs of air pollution",

#### 17.1 Air Environment

The major source of air pollution due to emission generation by is quarry machineries & transportation of granite. Drilling, Haul roads, Waste dump & Open pit activities are considered for air emission generation.

##### **Emission calculation References:**

- The drilling emission is calculated with the equation of Chakraborty, et al. (2002),
- The emission factors for the haul roads the equation from the literature Chauhya, (2006).
- Haul Roads & Waste dump emission calculated based on the literature Chakraborty, et al., (2002).
- Open pit Emission calculation as per the open pit estimation is another tool than the area source in AERMOD. (Neshuku, 2012).

#### 17.2 Water Environment

There is no wastewater generation in the quarry. The sewage generated is being collected in Septic tank followed by soak pit. Assuming 100% of the sewage is collected in soak pit contaminating.

  
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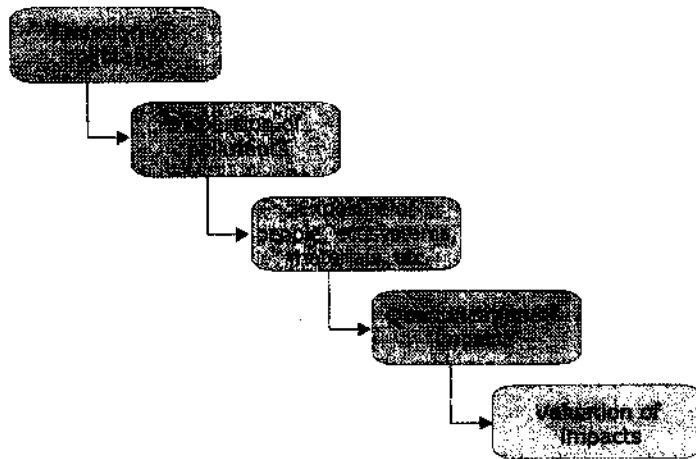
  
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### 17.3 Solid Waste

Municipal solid waste will be generated. If not managed properly, waste will affect the health of staff and employees as well as locals in the surrounding areas and will also be aesthetically unpleasant.

### 17.4 Removal of Trees

The quarry Lease area is fully rocky terrain. The quarry is in operation since, 1984. As per proponent information there is no removal of trees.



#### Impact pathway methodology

Source: European Environmental Agency - EEA Technical report N15/2011 "Revealing the costs of air pollution",

### 18 Damage Cost Evaluation

SEAC Sub-committee inspected the project site and the documents of project cost details were verified. The level of damage is assessed by the following criteria proposed by PCPB:

1. Low level Ecological damage: Only procedural violation – work / operation at site without obtaining EC.
2. Medium level Ecological damage:
  - a. Procedural violation started the construction at site or operation without obtaining EC.
  - b. Infrastructural violation such as deviation from awarded EC, CTO & Mining Plan approvals.
  - c. Non operation of the project.



3. High level Ecological damage: a. Procedural violation (started the construction operation at site without obtaining EC).
- a. Infrastructural violation such as deviation from awarded EC, CTO & Mining Plan approvals..
- b. Operated (occupied) without Statutory Approvals.

**THE PROPOSAL FALLS IN HIGH LEVEL ECOLOGICAL DAMAGE CATEGORY.**

**19 Ecological Damage Assessment**

M/s Karthik Raja Exports has operated Black granite quarry in Semangalam and Kunnam Village during 2016-2017 (Violation period) to achieve small quantity of granite. Operating the quarry after 15.01.2016 without EC is the Violation. Lease is not in operation since 2017. During the violation period the impacts on the Environmental Components viz. Air, Water, Land, Biological and Socio-economic Environment are assessed as below:

Sl. No	Environmental Component	Mine Activity	Impact on the Environment	Damage	Damage Cost
1.	Land Use	Production of few quantities of granite Over an Extent of 1.53.0Ha by Semi mechanized Method of Mining	Mining was carried out in already excavated pit. No loss of vegetation.	No damage	Nil
2	Air Quality & Ecology	Drilling, mild blasting for pre splitting of rock, wire saw cutting of rocks and transportation of granite were the mine activities taken placing during violation period.	The sprinkling of water along the haul road was not adopted during violation period. The fugitive dust generated during transportation was deposited on the plants in the surroundings	The growth of the plants around the quarry area was affected.	Rs.80,000
3	Noise & Vibration	Drilling, mild blasting for pre splitting of rock, wire saw cutting of rocks and	Mild blasting only carried out for this granite quarry. So it did not produce high noise level and	All the workers were provided with PPE	Rs.80,000

  
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81

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Sl. No	Environmental Component	Mine Activity	Impact on the Environment	Damage	Damage Cost
		transportation of granite were the mine activities taken placing during violation period.	ground vibration.	such as ear muffs and earplugs. The greenbelt has to be developed around the lease area to suppress the noise within lease area.	
4	Dewatering for consumption	No surface or ground water drawls for mine water demand. No ground water table intersection observed	The rain water collected in the pit had enhanced the ground water level.	No Damage	Nil
5	Wastewaters	No effluent and no mine pit discharge	Domestic sewage generation was 0.75 KLD and was biologically treated in the septic tank followed by a dispersion trench.	No damage due to the activity	No damage cost
6	Solid wastes	The granite rejects were generated during violation period.	The rejects were properly dumped as per scheme of mining during violation period.	No major damages. Garland drainage & Parapet has to be developed around dump.	Rs.80,000
7	Socio economics	Direct and indirect employment was given more than 20 people	The living standard of the people (workers) in nearby village has been improved	The project gave boost to economic development in the region. No damage.	Nil

Sl. No	Environmental Component	Mine Activity	Impact on the Environment	Damage	Damage Cost
8	Occupational Health and Risk Public Health	Mining and allied activities.	Occupational health and safety standards were adopted. As mild blasting and wire saw cutting were adopted for mining operation, there was no impact to nearby villages	No workers were suffered due to mining activity	Rs.60,000

## 20 Environment Remediation Plan, Cost and Time Schedule (As proposed)

S.No	Environmental component	Remediation Plan/ Activity Description	Budgetary Provision Rs. Lakhs			Total Rs. Lakhs
			I	II	III	
1	Air Quality and Ecology	Additional Green Belt by Planting 300 Trees in Mine lease boundary @ Rs.200 per tree including its maintenance	0.3	0.3	0.2	0.80
2	Noise & Vibration	All the workers were provided with PPE such as ear muffs and earplugs. The greenbelt has to be developed around the lease area to suppress the noise within lease area.	0.3	0.3	0.2	0.80
3	Solid wastes	Development of garland drainages & Parapet around the dumps	0.3	0.3	0.2	0.80
4	Occupational Health and Risk & Public Health	Conducting Medical Camp for the workers and people in nearest habitation	0.2	0.2	0.2	0.60
<b>Total</b>			<b>1.1</b>	<b>1.1</b>	<b>0.8</b>	<b>3.0</b>

## 21. Natural and Community Resource Augmentation Plan (Proposed)

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83

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**Natural Resource Augmentation Plan**

Sl. No.	Activity Proposed	Total Rs
1	Plantation in common areas of villages like bus stops, Govt hospitals, VAO offices (20 Trees)	10,000.00
2	Installing 2 numbers of 20 watt solar street light with post in nearby villages at the rate of Rs. 15,000 per light	30,000.00
3	Development of Rainwater Harvesting pit in the houses of nearest villages (2 Houses)	5,000.00
4	Providing two number of one year old saplings to 50 Houses	20,000.00
<b>Total</b>		<b>65,000.00</b>

**Community Resource Augmentation Plan**

Sl. No.	Activity Proposed	Total, Rs.
1	Installation of RO Plant for safe drinking water supply to Government Hospital and Government schools in Nearest Village. (Capacity = 50LPH – 32 Nos)	60,000.00
2	Placing cement concrete chairs in village bus stops	20,000.00
3	Conducting Health and Safety Awareness Program among nearest village people	10,000.00
<b>Total</b>		<b>90,000.00</b>

**22 Summary of Budget Allocation proposed for Remediation, Natural Resource Augmentation & Community Resource Augmentation plan (Proposed)**

Sl.No.	Activity Proposed	Total, Rs. Lakhs
1	Cost of Damage Remediation Plan	3.00
2	Natural Resource Augmentation Plan	0.65
3	Community Resource Augmentation Plan	0.90
<b>Total</b>		<b>4.55</b>

**23. CER Budget-Proposed**

Project Cost is Rs.43.0 Lakhs. About Rs.5.00 Lakhs has to be allotted as Corporate Environmental Responsibility (CER) Budget in compliance with MoEF & CC OM dated 01.05.2018 for execution within 2 years period. PP will spend the

  
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CER cost for developing library and sanitary facilities in the Government school in Kunnam village.

#### 24. RECOMMENDATIONS

- The proponent has violated by carrying out the mining during the year 2016-17 without valid EC.
- The proponent also agreed to pay the Budget allocation proposed for Remediation, Natural Resource Augmentation and Community Resource Augmentation plan based on EIA Model which is Rs. 4.55 Lakhs.
- The proponent committed to spend Rs. 5.00 Lakhs towards the CER activity for Government higher secondary school at Kunnam village.
- The green belt development for the nearby village including Plantation in common areas of villages like bus stops, Government Hospitals, VAO offices (20 Trees).
- In concluding views, the subcommittee member suggests the Honourable Committee to issue Environmental Clearance requested by the proponent.

#### SUBMITTED TO THE COMMITTEE FOR FURTHER ACTION.

The site inspection report was placed in this 380<sup>th</sup> SEAC meeting of SEAC held on 17.5.2023. The SEAC observed that the proposal of Black Granite quarry lease over an extent of 1.09.0 Ha at S.F.No. 1/12, 2/3A, 4/1B & 123/9B2, Semangalam & Kunnam Villages, Vanur Taluk, Villupuram District, Tamil Nadu for Environmental Clearance under violation comes under the "High level Ecological damage category" as per the SEAC Violation norms. The Committee decided to recommend the proposal to SEIAA for grant of EC subject to the following conditions in addition to the normal conditions stipulated by MOEF&.CC:


1. The amount prescribed for Ecological remediation (Rs. 3,00,000), natural resource augmentation (Rs. 65,0000) & community resource augmentation (Rs. 90,000), totaling Rs. 4,55,000/-. Hence the SEAC decided to direct the

  
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project proponent to remit the amount of Rs. 4,55,000/- in the form of bank guarantee to Tamil Nadu Pollution Control Board and submit the acknowledgement of the same to SEIAA-TN. The funds shall be utilized for the remediation plan, Natural resource augmentation plan & Community resource augmentation plan as indicated in the EIA/EMP report.

2. The project proponent shall carry out the works assigned under ecological damage, natural resource augmentation and community resource augmentation within a period of three years. If not, the bank guarantee will be forfeited to TNPCB without further notice.
3. The amount committed by the Project proponent for CER (Rs. 5,00,000) shall be remitted in the form of DD to the beneficiary for the activities committed by the proponent. A copy of receipt from the beneficiary shall be submitted to SEIAA-TN. However, the PP shall supervise the work and submit the status of the work complied pertaining to the CER within a period of one year to the DEE/TNPCB and the SEIAA.
4. The project proponent shall submit the proof for the action taken by the state Government/TNPCB against project proponent under the provisions of Section 19 of the Environment (Protection) Act, 1986 as per the EIA Notification dated: 14.03.2017 and amended 08.03.2018.
5. The company shall obtain 'No Dues Certificate' from State Government i.e. Department of Geology & Mining within a period of two weeks and submit the same to SEAC before grant of EC, if not produced earlier.
6. The PP shall ensure that the plantation shall be carried out in 1.00 Ha in a phase manner as a part of mine closure activities.
7. The PP shall install the Environmental Management Cell headed by the statutory (I/II Class) Mines Manager of the concerned mine under violation category and the cell shall include a dedicated full-time Environmental Engineer exclusively to look into the effective implementation of Environmental Management Plan besides the reviewing the compliance reports with the regulatory authorities.

  
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8. The PP shall strictly adhere with the safety provisions as laid for the operation of Diamond Wire Saw machines and use of Cranes vide DGMS Tech Circulars No: 02 of 29.11.2019 & No. 10 of 19.07.2002 respectively.
9. The PP shall ensure that the Catch drains and siltation ponds of appropriate size should be constructed to arrest silt and sediment flows from soil, OB and mineral reject (Granite waste) dumps. The water so collected in such sump should be utilized for watering the mine area, roads, green belt development, etc. The drains should be regularly de-silted and maintained properly.
10. The mining lease holders shall, after ceasing mining operations, undertake re-grassing the mining area and any other area which may have been disturbed due to their mining activities and restore the land to a condition which is fit for growth of fodder, flora, fauna etc.
11. The proponent shall obtain a 'Star Rating' system awarded by Anna University, Chennai annually to the mining lease being operated for their efforts and initiatives taken for successful implementation of the Sustainable Development Framework (SDF).
12. The Project Proponent shall ensure that the funds earmarked for environmental protection measures should be kept in separate account and should not be diverted for other purpose. Year-wise expenditure should be reported to the MoEF & CC Ministry and its Integrated Regional Office (IRO) located in Chennai.

**Agenda Item No.:380-TA-3**

**File No. 1193/2018**

**Proposed Environmental Clearance for the Existing Black Granite Quarry over an extent of 6.59.91 Ha. at S.F. Nos. 83 (Part) of Jamanahalli Village, Pappireddipatti Taluk, Dharmapuri District, Tamil Nadu by M/s. Tamil Nadu Minerals Limited - For Environmental Clearance under violation category. (SIA/TN/MIN/72624/2018 dated: 24.02.2022)**

  
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The proposal was earlier placed for appraisal in the 329<sup>th</sup> meeting of SEAC held on 16.11.2022. The details of the project furnished by the proponent are available on the website (parivesh.nic.in).


The project proponent gave detailed presentation. SEAC noted the following:

1. The Project Proponent, M/s. Tamil Nadu Minerals Limited has applied for Environmental Clearance for the Existing Black Granite Quarry over an extent of 6.59.91 Ha. at S.F. Nos. 83 (Part) of Jamanahalli Village, Pappireddipatti Taluk, Dharmapuri District, Tamil Nadu under violation category.
2. The project/activity is covered under Category "B - under violation" of Item 1(a) "Mining Projects" of the Schedule to the EIA Notification 2006, as amended.
3. TOR issued vide T.O Lr Lr No.SEIAA-TN/F.No.1193/TOR-467/2018, Dated: 05.06.2018 under violation category.
4. Amendment to ToR under violation category with public hearing vide Letter No. SEIAA-TN/F-1193/SEAC- CXVIII/TOR- 467(A)/2018 Dt.30.07.2018.
5. ToR Extension vide T.O Lr. No.SEIAA-TN/F.No.1193/1(a)/ToR.467/2016/A/ dated:30.10.2021.
6. Public hearing conducted on 25.11.2021
7. EIA submitted vide online proposal No. SIA/TN/MIN/72624/2018 dated: 24.02.2022

Based on the presentation made and documents furnished by the project proponent, SEAC decided to make on-the spot site-inspection by the sub-committee constituted by SEAC to assess the present status of the project and environmental settings as the proposal falls under violation category. Further the sub- committee will assess the ecological damage and also to check the Remedial Plan & Community Augmentation Plan submitted by the Project Proponent during the inspection.

The sub-committee inspected the site and submitted the following report during 380<sup>th</sup> SEAC meeting of SEAC held on 17.5.2023

Thiru. K.Kumar and Thiru. Velazhagan.D , Expert Members, SEAC Tamil Nadu inspected the project site on 20.02.2023 and has furnished the following inspection report:

  
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SEAC Sub-Committee Inspection Report on Environmental Clearance (EC) Proposal under Violation Category:

## INTRODUCTION

### About the Company

M/s Tamil Nadu Minerals Limited (An Undertaking of Government of Tamil Nadu hereinafter referred as TAMIN) was established in the year 1978 to carryout systematic mining and development of different minerals all over the State.

### About the Mine:

District	:	Dharmapuri
Taluk	:	Pappireddipatty
Village	:	Jammanahalli
SF No.	:	83(Part)
Extent	:	6.59.91Ha
Land Classification	:	Govt.Pormaboke
Mineral	:	Black Granite
Lease period	:	20 Years. 16.02.2012 to 15.02.2032.

### Basic need for going for EC.

Tvl.TAMIN commenced this granite mine without prior Environmental Clearance as per the MoEF Notification S.O 1533(E) dated, 14.09.2006. Hence, the project comes under violation category as per MoEF&CC Notification S.O 804(E) dated 14.03.2017.

As directed by the above notification TAMIN has applied under violation category.

### Chronology

Sl. No	Sequence of events	Date
1.	ToR applied under violation category Online Proposal No. SIA/TN/MIN/24900/2018. SEIAA File No. 1193/2018	13.04.2018
2.	ToR granted under violation category vide SEIAA-TN/F.No.1193/TOR-467/2018	05.06.2018
3.	ToR extension granted under violation category vide SEIAA-TN/F.No.1193/SEAC-CXVIII/TOR-467(A)/2018	30.07.2018

  
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89

  
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3.	Public Hearing Conducted on	25.11.2021
4.	EC Application submitted vide Online Proposal No. SIA/TN/MIN/72624/2018	06.12.2022
5.	SEAC meeting held on	16.11.2022
6.	SEAC sub-committee visited the area vide SEAC -TN/1193 Site Inspection/2023	20.02.2023

### Salient Features of the Project

S. No	Particulars	Details
1.	Latitude & Longitude	12°00'22.09"N to 12°00'37.47"N 78°25'22.83"E to 78°25'36.93"E
2.	Site Elevation above MSL	~383m-419m
3.	Topography	Hilly terrain
4.	Lease area Topo Sheet details	57 L/8 & 58 I/5
5.	Land use of the site	Government Poramboke land
6.	Lease Period	16.02.2012 to 15.02.2032 (20 years)
7.	Depth of Mining (Proposed)	30m (from top of the hill)
8.	Method of mining	Semi- mechanized opencast system
9.	Water Requirement (KLD)	25.0 KLD
10.	Source of water	Private Tankers
11.	Power Requirement	60 kVA
12.	DG set capacity	1 * 125 kVA (will be used during power failure)
13.	Fuel Requirements (Diesel)	200L/Day
14.	Manpower	35 Nos
15.	Municipal Solid waste Generation	16.0 kg/day
16.	Waste Oil Generation	3.0 Liters/Annum
17.	Seismicity	Seismic zone-III (Moderate risk)
18.	Project Cost	Rs. 99.97 Lakhs (Say 1.0 Crore)

### Other Salient Features of the Project

  
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S. No	Description	Details, Direction & Distance from lease boundary (~km)
1	Nearest Highway	SH6A(Harur-Tiruvannamalai)Road ~ 7.55km (NE) NH-179A (Salem-Harur-Vaniyambadi)Road ~ 2.33km (SE)
2	Nearest Airport	Salem Domestic Airport ~ 45.36 km (SW) Tiruchirappalli International Airport ~ 139.88KM (SSE)
3	Archaeologically places	Nil in 15Km radius
4	Nearest Town	Harur~ 6.15 km (ENE)
5	Nearest City	Salem ~ 41.79 km (SW)
6	State & National Boundaries	Nil in 15KM radius

S.No	Name of Villages	Distance (~km)	Direction from project site	Population (Census 2011)
1	Paraiyapatti	0.39	ESE	15
2	Alamarattuppatti	0.81	NNE	25
3	Devarajapalalyam	0.92	ESE	2737
4	Jammanahalli	1.01	SW	2475
5	Mottur	1.06	SSE	60


#### Mining Lease Details

Sl. No.	ML Grant	ML Grant Reference	Validity	
			From	To
1	Renewal lease	G.O (3D) No.50 Industries (MME.1) Dept. dt. 08.11.2011	16.02.2012	15.02.2032

#### Mining Plan Details

Sl. No.	Mining Plan/Scheme	Plan Period	Approval by CGM Reference
1.	Present Scheme of Mining (II)	2020-2025	Lr.No.88/MM4/2021,dt.31.10.2022

#### Details of Mining

  
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91

  
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Sl. No.	Particulars	Details
1	Method of mining	Open cast semi mechanized
2	Updated Geological reserves (RoM) as on 31.03.2020	13,50,825 cu.m
3	Updated Mineable reserves (RoM) as on 31.03.2020	9,94,511 cu.m
4	Proposed production per Annum	1,739 cu.m
5	Elevation range of the mine site	Top RL 132
6	Bench height	6 m
7	Bench width	Not exceeding 6 m
8	Bench slope	60° to vertical
9	Proposed Depth of mining	33 m Top of the hillock (Bottom RL 100 m)
10	Life of mine	57 years

#### Past Production Details

S No	Year	ROM Proposed in the SOM – I (m <sup>3</sup> )	Saleable Quantity Proposed @ 5 % (m <sup>3</sup> )	Actual ROM production achieved (m <sup>3</sup> )	Actual saleable production achieved @ 5 % (m <sup>3</sup> )	Permit obtained quantity (m <sup>3</sup> )
1	2015-2016	351	18	351	18	26.323
2	2016-2017	2999	150	2999	150	178.605
3	2017-2018	24057	1203	--	-	--
4	2018-2019	24048	1202	--	--	--
5	2019-2020	--	--	--	--	--
<b>Total</b>		<b>51,455</b>	<b>2,573</b>	<b>3,350</b>	<b>168</b>	<b>204.928</b>

#### Proposed Production Details

S.No	Year	Production of ROM (m <sup>3</sup> )	Recovery @ 10% (m <sup>3</sup> )	Granite rejects (m <sup>3</sup> )
1	2020-2021	17206	1721	15485
2	2021-2022	17388	1739	15649
3	2022-2023	17064	1706	15358
4	2023-2024	17009	1701	15308
5	2024-2025	17100	1710	15390
<b>Total</b>		<b>85,767</b>	<b>8,577</b>	<b>77,190</b>

  
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### Status on Compliance of TOR

Complied as Reported and given in the EIA Report.

### Violation Category

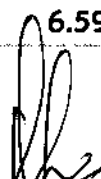
Tvl.TAMIN commenced this granite mine without prior Environmental Clearance as per the MoEF Notification S.O 1533(E) dated, 14.09.2006. Hence, the project comes under violation category as per MoEF&CC Notification S.O 804(E) dated 14.03.2017.

Sl. No.	Statute Requirement	Yes / No	Violation Status	Remarks
1	Valid EC	X	EC not obtained	EC violation
2	Valid CTO	X	Nil	
3	Valid Mining Plans/Schemes	√	Lr.No.88/MM4/2021,dt. 31.10.2022.	There is No violation in this regard.
4	Forest Clearance	-	Not applicable.	Revenue poramboke
5	Transport Permits	√	TAMIN has obtained the required Transport Permits.	There is No violation in this regard.
6	Any other violation	-	Nil	Nil

### Land Use Pattern

S. No.	Description	Present Area (Ha.)	Area to be required at the present Scheme Period (Ha.)	Area at the end of life of Quarry (Ha.)
1	Area under Quarrying	1.46.0	0.76.5	5.45.0
2	Approach Roads	0.26.0	--	--
3	Waste dump	0.13.5	0.43.0	1.13.91
4	Green Belt	0.17.0	0.06.5	(above dump) (1.13.91)
5	Infrastructure	0.01.0	--	0.01.0
6	Unutilized	4.56.41	3.30.41	--
	<b>Total</b>	<b>6.59.91</b>	<b>4.56.41</b>	<b>6.59.91</b>

  
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### Ecological Damage Assessment:-

TAMIN has remitted the amount Rs.1,36,90,426/- to the Department of Geology and Mining towards 100% cost value of the mined mineral against the permitted EC quantity.

Accordingly, the Director of Geology and Mining has issued No Objection Certificate to TAMIN for getting EC vide Letter Rc. No. 265/MM4/2020, dt. 08.07.2020.

Tamil Nadu Pollution Control Board has filed the case under Section 19 of Environment (Protection) Act, 1986 in Hon'ble Judicial Magistrate No.1 Dharmapuri vide Calendar Case No.303/2022. Judgment Pronounced.

Damage Assessment report has been prepared in accordance with MoEF & CC Notification dated 14.03.2017 and it is given as follows:

### Quantification of Enumerating the aspects of Violation

Quantification of the effects on human health of particulate matter emissions, for which inhalation is the only relevant exposure route. In this case, it is necessary to quantify the pollutant emission, describe its dispersion and the extent to which the population is exposed, apply a concentration-response function and finally evaluate the economic impact.

### Ecological Damage Assessment

Damage assessment is carried out for Air Environment, Noise Environment, Water Environment, Land Environment, and Biological Environment & Socio Economic Environment. The following observations are made:

### Land Environment

Land Use and Land Cover of the lease area for the period of 2003 is given in Table 7-4.

Land Use and Land Cover of the lease area for the period of 2017 is summarized in Table 7-5. Land Use/Land Cover pattern changes from 2003 to 2017 are given in Table 7-6.

**Table 7-4 Land use and land cover of the lease area for the period of 2003**

S. No	Land Classification	Area (Ha)	%
1.	Agriculture, Fallow	0.64.7	9.82
2.	Barren, wastelands , Scrub	4.85.4	73.64
3.	Mining	1.09.0	16.54
Total		6.59.1	100

**Figure 7-3 Land use and land cover pattern of the lease area for the period of 2003**  
**Table 7-5 Land Use and Land Cover of the lease area for the period of 2017**

S. No	Land Classification	Area(Ha)	%
1.	Agriculture, Fallow	0.14.4	2.18
2.	Barren, wastelands, Scrub	2.27.3	34.49
3.	Mining	4.17.4	63.33
<b>Total</b>		<b>6.59.1</b>	<b>100</b>

**Environmental Damage due to Land Environment**

To study the damage due to land environment, Google images are collected for the years 2003 & 2017. Land Use/Land Cover maps are prepared and studied the changes based on LISS-III Imagery. The observations are as follows.

**Table 7-6 Land Use/Land Cover changes in 2003 & 2017**

S. No	Land Description	Area (Ha)		Changes (Ha)	Changes (%)
		2003	2017		
1	Agriculture, Fallow	0.64.7	0.14.4	(-) 0.50.3	7.63
2.	Barren, wastelands, Scrub	4.85.4	2.27.3	(-) 2.581	39.16
3.	Mining	1.09.0	4.17.4	(+) 3.084	46.80
<b>Total</b>		<b>6.59.1</b>	<b>6.59.1</b>		

**Air Environment**

The major source of air pollution due to emission generation by is quarry machineries & transportation of granite. Drilling, Haul roads, Waste dump & Open pit activities are considered for air emission generation.

**Table 7-7 Quantification of Emissions due to quarry activities**

S. No	Pollutants	Emissions quantity Ton /Year	Emissions quantity total Violation Ton/ yrs
1.	TSPM	1.10	3.31
2.	PM10	0.22	0.6

  
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3.	PM2.5	0.13	0.4 0
4.	SO2	0.13	0.3 9
5.	NOx	2.32	6.9 5

### Water Environment

The total water requirement is 25.0 KLD. The total water requirements meet through private water suppliers. Ground water quantity season wise from 2003 to 2017 is shown in Table 7-11.

### Ground Water Consumption

### Post Monsoon Water Requirement


Table 7-8 Non monsoon season Water requirement

S. No	Description	Water Requirement(KLD)
1	Domestic Use	1.5
2	Dust suppression	11.0
3	Green belt	12.5
<b>Total</b>		<b>25.0</b>

### Monsoon Water Requirement

Table 7-9 Monsoon Season Water Requirement

S. No	Description	Water Requirement(KLD)
1	Domestic Use	1.5
<b>Total</b>		<b>1.5</b>
Source of Water: Private Water suppliers		

  
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**Table 7-10 Water Consumption Estimation in Season Wise**

S. No	Details	Monsoon	Post Monsoon
1	Water Quantity in KLD	1.5	25.0
2	No of working days in year	78	222
3	KL/Year	117	7500

**Table 7-11 Ground Water Quantity season wise from 2003 to 2017**

S. No	Year	Year wise Water Quantity (KL)	
		Monsoon	Non Monsoon
1	2003-2004	117	7500
2	2004-2005	117	7500
3	2005-2006	117	7500
4	2006-2007	117	7500
5	2007-2008	117	7500
6	2008-2009	117	7500
7	2009-2010	117	7500
8	2010-2011	117	7500
9	2011-2012	117	7500
10	2012-2013	117	7500
11	2013-2014	117	7500
12	2014-2015	117	7500
13	2015-2016	117	7500
14	2016-2017	117	7500
<b>Sub total</b>		<b>1638</b>	<b>105000</b>
<b>Grand Total</b>		<b>106638</b>	
<b>Total Water consumption: 2003 to 2017 =106638</b>			

Surface Water

  
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Run off Estimated as follows:

**Table 7-12 Estimation of Runoff**

S. No	Land Use	Area (m <sup>2</sup> )	Volume (m <sup>3</sup> )	Run off Coefficient	Volume harvested (m <sup>3</sup> )	Volume of runoff harvested (KLD)	
1	Quarry area	18820	13189	0.4	5275.62	101.65	
2	Waste dump	6700	4695.4	0.7	3286.75	63.3286	
3	Infrastructure	60	42.048	0.8	33.6384	0.64814	
4	Quarry Roads	2000	1401.6	0.3	420.48	8.10173	
5	Area Under plantation	1500	1051.2	0.4	420.48	8.10173	
6	Unutilized area	36911	25867	0.4	10346.9	199.362	
<b>Total</b>		<b>65991</b>	<b>46246</b>	<b>3</b>	<b>19783.9</b>	<b>381.192</b>	
						<b>KL/Year</b>	<b>139135</b>
						<b>KL/14Years</b>	<b>1947891</b>

**Biological Environment**

**Table 7-13 Biological Environment Damages due to Land Pattern Changes:**

S. No	Land Description	Area (Ha)		Changes (Ha)	Changes (%)
		2003	2017		
1	Agriculture, Fallow	0.64.7	0.14.4	(-) 0.50.3	7.63
2.	Barren, wastelands, Scrub	4.85.4	2.27.3	(-) 2.581	39.16
3.	Mining	1.09.0	4.17.4	(+) 3.084	46.80
<b>Total</b>		<b>6.59.1</b>	<b>6.59.1</b>		

  
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## Occupational Health & Safety

Mining operations exposes the workers/staff, work discomfort to machinery, dust, noise, vibration, Heat and radiation.

### Impacts:

- Air pollution due to Mining Activities (Mainly dust generation)
- Noise due to mining activities (Drilling, Blasting & Mining Machinery)

### Measures taken by TAMIN for Occupational Health & Safety:

- Water sprinkling on haul roads.
- Green Belt development within the mine lease area.
- Conducting Initial Medical Examination (IME) at pre-entry level stage for workers by qualified doctors, as per DGMS circulars.
- Periodical health checks up to employees.
- Provided Personnel Protective Equipments (PPE) to all staff and workers to guard against excess noise levels, dust generation and inhalation, etc., as per standards prescribed by DGMS.

#### Socio Economic

#### Environment Impacts

#### on Socio Economic

#### Environment:

- Air pollution due to Mining Activities (Mainly dust generation)
- Noise due to mining activities (Drilling, Blasting & Mining Machinery)
- Water Scarcity due to exploitation of Ground Water

### Measures taken by TAMIN:

- Green Belt development
- Supporting locals through CSR/CER activities

## Natural Resources, Ecological Damage & Remediation Plan and Cost

Table 7-14 Ecological Damage due to mining Activities & Remediation Plan and Cost


S. No	Activity/ Causes of Pollution	Probable Impacts	Damage Assessment	Remediation plan proposed Remediation Measures	Cost Allocation (INR)Rs
1	Land Environment A) Excavation of Soil				

  
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99

  
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1. Excavation of Top Soil	<ul style="list-style-type: none"> <li>• Change in Land use/ Land cover of site</li> </ul>	<ul style="list-style-type: none"> <li>• No Top soil/other soil-Rock formation</li> </ul>	1. Developing Green Belt at neighborhoods	No. of Trees :100 Nosx Rs 500 <b>Sub Total Rs. 50,000</b>
2. Generation of Hazardous waste like empty cans of diesel and its spills.	<ul style="list-style-type: none"> <li>• Change in topography and drainage pattern</li> <li>• Due to blowing wind, can cause fugitive dust emission</li> </ul>	<ul style="list-style-type: none"> <li>• Dust pollution in dry season</li> <li>• Contamination of soil/water.</li> <li>• Effects on Flora/ Fauna</li> <li>• Health effects on workers handling chemical/oil/fuel/ paints etc.</li> </ul>	2. Awareness among villagers in the neighborhood shall be provided for collection and segregation of Solid waste.	For printing& distribution of leaflets. <b>Rs. 10, 000 (LS)</b>
3. Site clearance removal of grasses growing in the mine area.	<ul style="list-style-type: none"> <li>• Reducing productivity and fertility of the soil</li> <li>• Soil erosion</li> <li>• Unmanaged dumping.</li> </ul>	<ul style="list-style-type: none"> <li>• Contamination of soil/water</li> <li>• Effects on Flora/ Fauna</li> </ul>		
4. Diversion of Grazing land for mining activity.	<ul style="list-style-type: none"> <li>• Runoff during rains may lead to contamination in surface water</li> </ul>			<b>Sub Rs. 10, 000 (LS)</b>

  
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5.	Genera tion of solid Mine waste & dum ping of waste	bodie s		
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<b>A) Solid Waste</b>	<ul style="list-style-type: none"> <li>• Unmanaged disposal of domestic solid waste without segregation</li> </ul>	<ul style="list-style-type: none"> <li>• Contamination of Soil, Leaching may impact Ground water contamination</li> <li>• Contamination or degradation of soil/ water quality</li> <li>• Effect on plant growth</li> <li>• Nuisance due to unmanaged disposal or storage of</li> </ul>	<p>1. Waste collection centers shall be provided in Jammanahalli village</p> <p>2. Dispensing of knowledge of Proper segregation (degradable and non-biodegradable) at source. Proper storage bins for biodegradable waste &amp; non-Biodegradable wastes recycle through</p>	<p>2 bins 2x 35000 <b>Rs.70,000/-</b></p> <p><b>Rs. 10,000/-</b></p> <p><b>Sub-Total 80,000/-</b></p>
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101

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		MSW and construction wastes	vendors.	
<b>Total Cost of Remediation Measures for Land Environment</b>				<b>Rs. 1,40,000/-</b>
<b>2 Air Environment</b>				
1. Air Emission from Site preparation	<ul style="list-style-type: none"> <li>Dust emission</li> <li>Gaseous Emission</li> </ul>	<ul style="list-style-type: none"> <li>24 hrs maximum increment GLC of baseline value of PM<sub>10</sub> by 0.030 ppm.</li> </ul>	1. Suppression of Dust by Sprinkling of water through water tankers in quarry surrounding areas	Dust Sprinkling System (Tipper with fabricated water storage tank along with Sprinkling
2. Drilling, Blasting & Heavy Machinery movement	<ul style="list-style-type: none"> <li>Aerial distance of nearest habitation is around from the mines.</li> <li>Increase in GLCs may lead to health issues to the nearby habitation</li> </ul>	<ul style="list-style-type: none"> <li>considering all the activities together.</li> <li>Additional dust emission due to annual excavation in the core zone, prediction</li> </ul>		arrangements) Tippers (1 No) Rs. 6,00,000/- Water Storage tank Rs. 50,000/- Maintenance per Year Rs. 10,000/- <b>Total Rs. 6,60,000/-</b>
3. Loading and Unloading of materials			2. Plantation Green Belt/Barriers around villageroads	Already considered in Land Environment
4. Granite and				

Overburden transportation		of fugitive emission (PM <sub>10</sub> &PM <sub>2.5</sub> )	3. Planting and maintaining trees along the highway in collaboration with NHAI/Forest Dep't.	No. of trees 100 x 500 (cost of each plant) <b>Total Rs.50,000</b>
5. Wind impact on dumps		<ul style="list-style-type: none"> <li>GLC at worst scenario with maximum production</li> </ul>	4. Monitoring of Ambient Air Quality (3 Samples, twice a year) in Nearby areas (Jamma nahalli village)	Rs.5000 x 3Nos x 2 times in a Years <b>Total Rs. 30,000</b> <b>In one Village</b> <b>Total = 30,000</b>
6. Gas Emissions from equipments		<ul style="list-style-type: none"> <li>GLC without control measures and with control measures</li> </ul>		
7. Site Clearance (removal of shrubs)		<ul style="list-style-type: none"> <li>Isopleths of GLC Prediction for all the parameters and with control measures</li> </ul>		
8. Soil Excavation				
9. Operation of DG Sets				
10. Operation of heavy machinery				

  
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11.	Temporary Sta y of W or ker s				
<b>Total Cost of Remediation Measures for Air Environment</b>					<b>Rs. 7,40,000 /-</b>
<b>3</b>	<b>Water Environment</b>				
a)	<b>Surfa ce Wat er</b>	All surface run offs from the mine lead to increase in Suspended Solids concentrati ons of Natural Water bodies.	• There will be a considerable increase in TSS, if partially controlled.	1. Maintenance of existing garland and diversio n to nearby water bodies	<b>Rs. 50,000 per year</b>
1.	Generati on of suspend ed solids in storm water run-offs during monsoo n seasons			2. Rehabilitati on of abandoned public wells (Jammanah alli village)	2 bore wells * 20,000/- = <b>40,000/-</b> <b>Total Rs 40,000/-</b>

  
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				<p>3. Existing sewage disposed in to Septic tank followed by Soak pit.</p> <p>4. Proper provision for maintenance of sewage disposal.</p>	<p>Cost of Sewage Disposal :  <b>Rs. 5,000</b>  per year.</p>
<p>b)</p> <p><b>Ground Water</b></p> <ul style="list-style-type: none"> <li>• Usage of Ground water for mining activities.</li> <li>• Obstruction of rainwater percolation</li> <li>• Percolation of contaminated ground</li> </ul>	<ul style="list-style-type: none"> <li>• Contamination of ground water</li> <li>• Depletion of ground water level may result in water shortage in nearby villages during dry seasons.</li> <li>• Discharge of polluted water to nearby villages.</li> <li>• The direct impact on human</li> </ul>	<ul style="list-style-type: none"> <li>• Change in ground water quantity and quality nearby villages.</li> <li>• Polluted water discharge to drains/streams/neighborhood</li> </ul>	<p>1.</p> <p>Construction of Recharge Pits in Jammanahalli village</p>	<p>2 pits</p> <p>Each pit cost 10,000 x 2 Nos</p> <p><b>Total Rs 20,000/-</b></p>	

  
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105

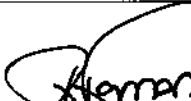
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<p>water near the quarry.</p> <ul style="list-style-type: none"> <li>Waste water from work shop/s ervice</li> </ul>	<p>beings due to poor water quality can lead to various water borne diseases like</p>			
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<p>building</p> <ul style="list-style-type: none"> <li>Domes tic effluen t</li> <li>Disturban ce- Drainage</li> <li>Effect on ground water table</li> </ul>	<p>diarrhea, jaundice, dysentery etc. Polluted water may not be useful for human or animal consumption etc., if not treated to standards</p>			
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<b>Total Cost of Remediation Measures for Water Environment</b>	<b>Rs. 1,15,000/-</b>
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<p><b>4 Noise &amp; Vibration Environment</b></p> <ul style="list-style-type: none"> <li>Movemen t of</li> </ul>	<ul style="list-style-type: none"> <li>Prolonged exposure to high noise level is harmful to human auditory system</li> </ul>	<ul style="list-style-type: none"> <li>Accide nt and injury damage to the nearby structur</li> </ul>	<p>1. Controlled Blasting Methods &amp; Drilling</p>	<p>Rs. 5,000/Mo nth x 12 Months <b>Total Rs. 60,000/-</b></p>
			<p>2. Providin</p>	

  
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<p>Mining equipments and activities</p> <ul style="list-style-type: none"> <li>Transportation of Trucks and Dumpers</li> </ul>	<ul style="list-style-type: none"> <li>Creation of Vibration Effect</li> </ul>	<p>es due to vibration.</p> <ul style="list-style-type: none"> <li>Increase in ambient noise levels due to mining activities and movement of vehicles</li> <li>49.1 dB (A) to 68.2 dB(A) noise level has been observed in study area.</li> <li>Increase in ambient noise levels causing discomfort to residents.</li> </ul>	<p>g in-built mechanism for reducing sound emissions</p> <p>3. Regular medical health checkups to workers including audiometric test for the workers engaged in noise prone area.</p>	<p>PPE &amp; Health checkup for employees &amp; Health camps are considered as per DGMS &amp; in CER PPE for Rs 50,000 /-</p>
<p><b>Total Cost of Remediation Measures for Noise &amp; Vibration</b></p>				<p><b>Rs 1,10,000</b></p>

  
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107

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5	<b>Ecological Environment</b>  1. Impacts on plants and trees in the vicinity of the mine/impact	<ul style="list-style-type: none"> <li>Loss of vegetation in the lease area</li> <li>Habitat loss to fauna specially avi-fauna.</li> </ul>	<ul style="list-style-type: none"> <li>Loss of native flora and aesthetic view</li> <li>Removal of some native plant species while clearing the land</li> <li>Change of land use</li> <li>Habitat disturbance</li> </ul>	1. Compensatory additional plantation outside the mine lease	Considered in Air Environment
				2. Avenue plantation on external road	Considered in Air Environment
				3. Development of green belt along the village roads	considered in above section  Land Environment

  
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<p>on fauna</p> <p>2. Clearance of vegetation/trees in the lease area</p> <p>3. Impact of tree growth stop</p> <p>4. Impact on surface water quality/siltation</p> <p>5. Forest Land diversion</p>		<ul style="list-style-type: none"> <li>Health complication in cattle's</li> </ul>	<p>4. Distribution of tree seedling to peripheral villagers preferably native plants</p>	<p><b>Total Rs. 50,000</b> per year</p>
<b>Total</b>				<b>50,000</b>
<p><b>6. Socio-Economic Environment</b></p> <p>1. Occupational Health and Amenities</p> <p>2. Other social attributes</p>	<ul style="list-style-type: none"> <li>Health of the workers and facilities related to hygiene and sanitation</li> <li>Pressure on the existing</li> </ul>	<ul style="list-style-type: none"> <li>Impacts of pollution on the health of neighborhood</li> <li>Serious health complications</li> <li>Loss of cattle health</li> </ul>	<p>1. Distribution of PPE kits to workers</p>	<p>Considered in above section</p>

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es	infrastr ucture  • Loss of livelihood  • Air emission leadto damage to human health inflow of mining	• Inflow of mining  • Workers increased load on local infrastructure.		Environme nt.	
			3. Generati on of source of income	2. Provision of ambulanc e for transporta tion of injured labour	Ambulanc e is already available at site.
			4. Inflow of people	3. Commu nity based rehabilit ation of differentl yabled persons in Jammanaha lli village	<b>LS-Total          Rs. 50,000</b>
				4. Solar street lamps to communi ty (Jamman ahalli Village)	Solar street lamps installatio n  in Jammana halli village  <b>Total Rs.          50,000</b>

  
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		workers may increase load on local infrastructure. Workers increased load on local infrastructure.			
<b>Total Cost of Remediation Measures for Socio Economic</b>					<b>Rs. 1,00,000</b>
<b>7 Occupational Health and safety</b> 1. Mining operations exposes the workers/staff, work discomfort to machinery, dust, noise, vibration. Heat and radiation	<ul style="list-style-type: none"> <li>Impact on health or workers due to dust generation</li> <li>Noise and vibration</li> <li>Effect</li> </ul>	<ul style="list-style-type: none"> <li>Dust respiratory problems, general health problems like hypertension.</li> <li>Impacts of pollution on health of neighborhood</li> </ul>	1. Health camps in Jammana halli village	2 Camps x 20,000  Total = 40,000/-	
			2. Self employment training programme to neighborhood educated persons. (Once in 3 Years)	Total Rs. 1,00,000	
<b>Total Cost of Remediation Measures for Occupational Health &amp; Safety</b>					<b>1,40,000</b>
<b>Grand Total</b>					<b>13,95,000</b>

  
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111

  
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## Natural & Community Resource Augmentation Plan

**Introduction:** A need assessment survey was carried out for the purposes to formulate the Natural and community resources augmentation plan. The need assessment survey covered the 1.5Km radius study area mainly Jammanahalli village.

### Identified Activities:

The following activities were identified during the survey:

1. Development of Greenery in the surrounding area and road side plantation
2. Provision of Drinking water facilities through hand pumps/dug wells/tube wells(2 wells per year in the nearby villages)
3. Renovation of open wells in nearby villages

**Table 7-15 Natural Resource Augmentation Plan**

S. No	Activity	Year wise Implementation and Budgetary provision			Total Cost Rs
		Year 1	Year 2	Year 3	
1	Development of Greenery in the surrounding area and roadside plantation	5000	5000	5000	15000
2	Provision of Drinking water facilities through hand pumps/dug wells/tube wells (2 wells per year in the nearby village)	0	75000	75000	150000
3	Renovation of open wells in nearby villages	5000	5000	5000	15000
4	Ground Water Recharge Wells in the Village	10000	50000	50000	110000
<b>Total</b>					<b>290000</b>

### Community Augmentation Plan breakup

**Introduction:** A need assessment survey was carried out for the purposes to formulate the community resources augmentation plan. The need assessment survey covered the 1.5Km radius study area, Jammanahalli village.



**Identified Activities:**

The following activities were identified during the survey

1. Providing water to the farmers & supporting for irrigation
2. Construction of sanitation facilities (toilet) in schools and villages
3. Assistance in development of technical skills and training to the children of farmers.
4. Scholarship to the clever students for higher education

**Table 7-16 Community Resource Augmentation Plan**

S. No	Activity	Year wise Implementation and Budgetary provision			Total Cost
		Year 1	Year 2	Year 3	
1	Providing water to the farmers & supporting for irrigation	5000	5000	5000	15000
	Construction of village roads, repair and maintenance	5000	5000	5000	15000
2	Construction of sanitation facilities toilet in schools and villages (3 toilets)	0	20000	20000	40000
3	Technical skill development programmes to the children of farmers/poor people	5000	5000	5000	15000
4	Scholarship to the needy students for higher education	5000	5000	5000	15000
<b>Total</b>					<b>1,00,000</b>

**Table 7-17 Summary Remediation Plan, Natural Resource Augmentation Plan & Community Augmentation Plan for Damage Assessment**

S. No	Name of the area	Budget (Rs)
1	Land Environment	1,40,000
2	Air Environment	7,40,000
3	Water Environment	1,15,000
4	Noise & Vibration Environment	1,10,000
5	Ecological Environment	50,000

  
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113

  
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6	Socio-Economic Environment	1,00,000
7	Occupational Health & Safety	1,40,000
<b>Total Budget allocated for remediation measures</b>		<b>13,95,000</b>

**Table 7-18 Total Budget proposed**

S. No	Name of the area	Budget(Rs)
1	Estimation cost for remediation plan based on the Damage Assessment due to violation	13,95,000
2	Natural Resource Augmentation Plan	2,90,000
3	Community Resource Augmentation Plan	1,00,000
<b>Grand total</b>		<b>17,85,000</b>

**Summary of Remediation Plan, Natural Resource Augmentation Plan & Community Augmentation Plan for Damage Assessment (EIA Report)**

S. No	Name of the area	Budget (Rs)
1	Land Environment	1,40,000
2	Air Environment	7,40,000
3	Water Environment	1,15,000
4	Noise & Vibration Environment	1,10,000
5	Ecological Environment	50,000
6	Socio-Economic Environment	1,00,000
7	Occupational Health & Safety	1,40,000
<b>Total Budget allocated for remediation measures</b>		<b>13,95,000</b>

**Total Budget proposed**

S. No	Name of the area	Budget (Rs)
1	Estimation cost for remediation plan based on the Damage Assessment due to violation	13,95,000
2	Natural Resource Augmentation Plan	2,90,000
3	Community Resource Augmentation Plan	1,00,000
<b>Grand total</b>		<b>17,85,000</b>

**CER Budget-Proposed:-**

Name of the Village	Particulars	CER Amount
Jammanahalli Govt School. Jammanahalli village	As per MoEF&CC Notification dated 20.10.2020.	Rs.2.00 Lakhs

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**13. OBSERVATIONS OF THE SEAC SUB-COMMITTEE DURING THE PROJECT SITE INSPECTION**

1. Sub Committee has visited Jammanahalli Granite Quarry during the Inspection to have over all mining scenario in the Region.
2. The Lease over an extent of 6.59.91 Ha is being operated in the Jammanahalli. It is wire fenced in all sides.
3. The settlements/habitations are observed in 390 m from Lease boundary in eastern sides.
4. There was no mining activities in the quarry during the site visit
5. Rain water accumulated in the Quarry and atleast two bottom most benches are covered in water, as noticed.
6. During Violation Period, Environmentally friendly Mining activities, involving the Drilling & highly mild controlled Blasting and Diamond Wire Saw cutting, were carried out in the Lease.
7. There was no Top Soil and Over Burden generation during the Period and thus only the Granite Rejects produced from the quarry are formed as waste dump within the Lease area.
8. No Ground Water-table intersection as noticed in the existing benches of the quarry.
9. Dedicated Haul Roads from Quarry to Panchayat/village road and from Panchayat Road to the SH exists and very minimal transportation through village road (during the Violation Period) was carried out (maximum of 2 load trucks).
10. Green Belt, was developed along the periphery of quarry pit including in Safety Barriers.
11. The Water tanker trucks possessing the water sprinklers were deployed along the Haul Road during the violation period and is in the working condition.
12. Garland Drains are partially provided along the periphery but its maintenance has to be improved.
13. Green belt developed along the boundaries is infested with *Procopius juliflora* which are to be eradicated and additional green belt shall be developed. So far

  
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the PP has raised around 200 plantation and further hundred sapling is available for plantation.

14. M/s. TAMIN is carrying out various CSR activities in the Region as per CSR Policy of the Company, as reported.

**STATUS OF MINING OPERATION**

The mining activities were stopped on 28.04.2017 and there was no production from this Mine since then.

**MINING PLAN APPROVALS**

The Director, DMG, Chennai has accorded the latest Scheme of mining for the period from form 2020-2025 Lr.No.88/MM4/2021,dt. 31.10.2022

**PRESENT CONDITION OF THE MINES PIT AND DUMP (Incorporate your data)**

- The physical nature of the Black Granite deposit:
  - Strike length (m) : 535.5 m
  - Width (m) : 86.5m
  - Strike direction : NW-SE
  - Dip : Almost vertical
  - Depth proved (m) : More than 33 m as it Dolerite rock formation

➤ Pit Dimension

Description	Length (m)	Width (m)	Depth (m)
Present pit -I	206	46	7.5
Present pit -II	23	16	4.0
Present pit -III	23	16	0.3
Present pit -IV	86	48	2.5

- Waste Dump details : The dumps have been maintained at an average height of 5m and the angle of slope of dumps at 45° from horizontal. The waste dump has been earmarked in the Schem of Mining plate Nos 4 & 5

**STATUTORY MANPOWER (during the violation period)**

Sl. No.	Name of the Post Occupied	Statutory Requirement as per MMR 1961	Manpower available during the Mining Operations

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1.	Manager. (Second Class Competency Certificate)	1	1
2.	Mines Foreman	1	1
3.	Mine Mate (Will act as Blaster)	1	1

### GREEN BELT DEVELOPMENT AND PLANTATION

Since the lease area is Granite terrain TAMIN has proposed to plant predominately 100 native species during the IIIrd Scheme of mining period .

### PENALTY FOR VIOLATION

TAMIN has remitted the amount Rs.1,36,90,426/- to the Department of Geology and Mining towards 100% cost value of the mined mineral against the permitted EC quantity.


Accordingly, the Director of Geology and Mining has issued No Objection Certificate to TAMIN for getting EC vide Letter Rc. No. 265/MM4/2020, dt. 08.07.2020.

Tamil Nadu Pollution Control Board has filed the case under Section 19 of Environment (Protection) Act, 1986 in Hon'ble Judicial Magistrate No.1 Dharmapuri vide Calendar Case No.303/2022.

Based on the inspection of the project site and other documents furnished by project proponent, M/s. TAMIN, SEAC Sub-Committee recommends the following Estimation made towards the Ecological remediation cost, Natural resources augmentation cost and Community resources augmentation cost under violation category for the concerned lease of Jammanahalli Black Granite Mine of TAMIN, Jammanahalli, Pappireddipatty Taluk, Dharmapuri District following the SEAC Guidelines after discussing the following related legal provisions made from time to time by various agencies/courts.

**1. Extracts of the Supreme Court of India Common Cause vs Union Of India . on 2 August, 2017 WRIT PETITION (CIVIL) NO. 114 of 2014**

".....In our opinion, as far as the first question is concerned, a reading of EIA 1994 read with the 1st Note implies that the base year would need to be the immediately preceding year that is 1993-94. This is obvious from the opening sentence of the 1st

  
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SEAC -TN

117

  
CHAIRMAN  
SEAC-TN

Note, that is, "A project proponent is required to seek environmental clearance for a proposed expansion/modernization activity if the resultant pollution load is to exceed the existing levels." (Emphasis supplied). In its report, the CEC has taken 1993-94 as the base year and we see no error in this. Even the MoEF in its circular dated 28<sup>th</sup> October, 2004 stated with regard to the expansion in production: "If the annual production of any year from 1994-95 onwards exceeds the annual production of 1993-94 or its preceding years (even if approved by IBM), it would constitute expansion." If that expansion results in an increase in the pollution load over the existing levels, then an EC is mandated...."

"...The contention of learned counsel for the mining lease holders that EIA 1994 was rather vague, uncertain and ambiguous cannot be accepted. In our opinion, on a composite reading of EIA 1994, it is clear that: (i) A no objection certificate from the SPCB was necessary for continuing mining operations; (ii) An expansion or modernization activity required an EC unless the pollution load was not exceeded beyond the existing levels; (iii) The base year for determining the pollution load and therefore the proposed expansion would be with reference to 1993-94; (iv) Whether an expansion or modernization would lead to exceeding the existing pollution load or not would require a certificate from the SPCB which could be reviewed by the IAA; (v) New projects require an EC; and (vi) Existing projects do not require an EC unless there is an expansion or modernization for the duration (if any) of the validity of the certificate from the SPCB. We need not say anything more on this subject since the CEC has proceeded to discuss the issue of mining in excess of the EC or in excess of the mining plan only W.P. (C) Nos. 114/2014 etc. from the year 2000-01 onwards. The prior period may, therefore, be ignored and it is the period from 2000-01 onwards which is actually relevant for the present discussion....."

"...All that we need to say on this subject is that there is no confusion, vagueness or uncertainty in the application of EIA 1994 and EIA 2006 insofar as mining operations were commenced on mining leases before 27th January, 1994 (or even thereafter). Post EIA 2006, every mining lease holder having a lease area of 5 hectares or more and undertaking mining operations in respect of major minerals (with which we are concerned) was obliged to get an EC in terms of EIA 2006...."

  
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".....In a subsequent letter dated 12th December, 2011 addressed to the Chief Secretary in the Government of Orissa the said Ministry of Mines noted that there were violations of the actual production limit laid down in the mining plan and that the State Government had finally taken steps to curb illegal mining in respect of over-production of minerals. There was a reference to suggest (and we take it to be so) that **20% deviation from the mining plan** (in terms of over-production) would be reasonable and permissible. However, it appears from a reading of the communication that illegal mining was going on beyond the 20% deviation limit and that appropriate steps were needed to curb these violations. Learned counsel for the petitioners submitted that such egregious violations must be firmly dealt with by cancellation or termination of the mining lease and a soft approach is not called for...."

".....In this context, it is worth noting that a High Level Committee (called the Hoda Committee) on the National Mineral Policy noted in its Report dated 22nd December, 2006 in paragraph 3.47 as follows :

*"3.47 An EMP [Environment Management Plan] has to be prepared under the MCDR and got approved by IBM. However, this EMP is not acceptable to the MoEF. The miner has to prepare two EMPs separately – one for IBM and another for MoEF. The Committee suggests that IBM and MoEF should prepare guidelines for a composite EMP so that IBM can approve the same in consultation with MoEF's field offices. This will eliminate anomalous situations where increase of even a few tonnes in production requires project authorities to get a fresh EMP approved from the MoEF although the IBM allows a grace of +10% per cent, keeping in view the fluctuations in the market situation and process complexities. If a single EMP is accepted in principle such anomalies can be resolved in advance. The Committee feels the MoEF should also have a cushion of +10% per cent in production while giving EIA clearance."*

"....The above passage indicates that the permissible variation in production as per the Indian Bureau of Mines is +10% but according to the letter dated 12th December, 2011 issued by the Ministry of Mines, **the reasonable variation limit could be +20%...."**

  
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SEAC -TN

119

  
CHAIRMAN  
SEAC- TN


“...In terms of Rule 22(5) of the MCR a mining plan shall incorporate a tentative scheme of mining and annual program and plan for excavation from year to year for five years. At best, there could be a variation in extraction of 20% in each given year but this would be subject to the overall mining plan limit of a variation of 20% over five years. What this means is that a mining lease holder cannot extract the five year quantity (with a variation of 20%) in one or two years only. The extraction has to be staggered and continued over a period of five years. If any other interpretation is given, it would lead to an absurd situation where a mining lease holder could extract the entire permissible quantity under the mining plan plus 20% in one year and extract miniscule amounts over the remaining four years, and this could be done without any reference to the EC. The submission of learned counsel in this regard simply cannot be accepted....”

“.....A submission made by the mining lease holders was that the maximum production in any year up to 1993-94 should be considered as the base for making the calculations. Such a contention was also urged before the CEC and was rejected. We have examined this contention independently and are of the view that the base year of 1993-94 is most appropriate - we have already given our reasons for this. Some lessees might lose in the process while some of them might benefit but that cannot be avoided. In any event, each mining lease holder is being given the benefit of calculations only from 2000-01 and is not being ‘penalized’ for the period prior thereto. We think the mining lease holders should be grateful for this since it was submitted by learned counsel for the petitioners and the learned Amicus that the penalty should be levied from the date of EIA 1994. In our opinion, the cut-off from 2000-2001 (without interest) is undoubtedly reasonable and there can be hardly be any grievance in this regard....”

“.....To avoid any misunderstanding, confusion or ambiguity, we make the following very clear:

*(1) A mining project that has commenced prior to 27th January, 1994 and has obtained a No Objection Certificate from the SPCB prior to that date is permitted to continue its mining operations without obtaining an EC from the Impact Assessment Agency. However, this is subject to any expansion (including an increase in the lease area) or modernization activity after 27th January, 1994 which would result in an increase in*

  
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CHAIRMAN  
SEAC- TN



*the pollution load. In that event, a prior EC is required. However, if the pollution load is not expected to increase despite the proposed expansion (including an increase in the lease area) or modernization activity, a certificate to this effect is absolutely necessary from the SPCB, which would be reviewed by the Impact Assessment Agency.*

*(2) The renewal of a mining lease after 27th January, 1994 will require an EC even if there is no expansion or modernization activity or any increase in the pollution load.*

*(3) For considering the pollution load the base year would be 1993-94, which is to say that if the annual production after 27th January, 1994 exceeds the annual production of 1993-94, it would be treated as an expansion requiring an EC.*

*(4) There is no doubt that a new mining project after 27th January, 1994 would require a prior EC.*

*(5) Any iron ore or manganese ore extracted contrary to EIA 1994 or EIA 2006 would constitute illegal or unlawful mining (as understood and interpreted by us) and compensation at 100% of the price of the mineral should be recovered from 2000-2001 onwards in terms of Section 21(5) of the MMDR Act, if the extracted mineral has been disposed of. In addition, any rent, royalty or tax for the period that such mining activity was W.P. (C) Nos. 114/2014 etc. carried out outside the mining lease area should be recovered.*

*(6) With effect from 14th September, 2006 all mining projects having a lease area of 5 hectares or more are required to have an EC. The extraction of any mineral in such a case without an EC would amount to illegal or unlawful mining attracting the provisions of Section 21(5) of the MMDR Act.*

Further, based on the inspection report and the violation notifications issued by the MoEF&CC dated 14.03.2017 & 08.03.2018, SEAC Sub-committee classified the level of damages caused by the Project Proponent on the environment based on the following criteria:

As per the above Notifications, the estimation of Ecological Remediation cost, Natural Resources Augmentation cost and Community Resources Augmentation cost are part of the appraisal of mining projects under violation category.

## **2. Damage Assessment and Evaluation of Costs**

  
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121


  
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SEAC- TN

Each mining project has its own characteristics such as mineral mined, mining lease area, mining lease period, method of mining, mined mineral output, mined material storage, waste material storage, transportation of mined material, formation of benches, green belt development, proximity to the habitations, water body and forest, market value of mined ore, pollution potential of mining project, human safety and health issues and ecological damage. Hence, the SEAC has arrived the following methodology based on major and important factors, field inspection and data collected and expertise of the members of SEAC.

**Table 1: Classification of Mining Projects for Violation Category**

Sl. No	Criteria	Low	High
1.	Year wise Mined Mineral Output	As per approved Mining Plan	Not as per approved Mining Plan
2.	Benches formation	Formed and as per specifications	Not formed
3.	Drilling, Blasting and Heavy Machineries use	Not used	Drilling, Blasting and Heavy Machineries used
4.	Adequate and qualified statutory personnel	Employed	Inadequate and unqualified personnel employed
5.	Waste dumps location	Within the lease hold area	Outside the lease hold area
6.	Habitations/Forest location	Away from the site by 500 m or more	Located within 500m
7.	Ground water table intersection	Not intersected	Intersected
8.	Green belt development in safety zone and as per norms of species & numbers	Developed in safety zone and as per norms	Green belt formed outside the safety zone and also not as per norms
9.	Mined Mineral storage (Ore)	Scientific and within the lease area	Unscientific and outside the lease area

  
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10.	Surface Drainage	Constructed and as per specifications	Not constructed
11.	Mined material transport route	Away from habitations atleast by 500 m	Passing through the habitations

In the step 1, the objective is to classify the mining project taken up for the study into either low level ecological damage category (or) high level ecological damage category. In this exercise, 11 characteristics attributed to the mining projects in general are used as criteria. Depending upon the applicability of the each of the criteria to the mining project, the mining project will become classified into either low level ecological damage category or high level ecological damage category. In the above Table, if a minimum of 6 criteria becomes applicable for a classification, then the project is classified under the concerned type of classification (low/high).

In view of the above and based on the inspection report & the Ecological damage, remediation plan and natural & community resource augmentation plan furnished by the project proponent, the SEAC decided the fund allocation for Ecological remediation, natural resource augmentation & community resource augmentation and penalty by following the below mentioned criteria given in Table 2.

**Table 2: Damage Assessment Classification of Granite Mining Projects**

Level of damages	Ecological remediation cost	Natural resource augmentation cost	Community resource augmentation cost	CER	Total
	Rs in lakhs / Ha	Rs in lakhs / Ha	Rs in lakhs / Ha	Rs in lakhs / Ha	Rs in lakhs / Ha
Low level Ecological damage	0.40	0.50	0.70	0.40	2.00
High level Ecological damage	0.75	1.00	1.25	0.75	3.75

In the step 2, the objective is to estimate the Ecological Remediation cost, Natural Resources Augmentation cost and Community Resources Augmentation cost. In this exercise, data related to the select mining projects from project proposals and field conditions have been used to calculate the damage assessment from the above Table 2.

  
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123

  
CHAIRMAN  
SEAC -TN

**ESTIMATION OF ECOLOGICAL REMEDIATION COST, NATURAL RESOURCES AUGMENTATION COST AND COMMUNITY RESOURCES AUGMENTATION COST UNDER VIOLATION CATEGORY – M/s. TAMIN Limited, Jammanahalli.**

**STEP – 1:**

Classification of Mining Projects according to the Violation level

Sl. No	Criteria	Response	Level of Damage	Concluding Remarks	Final Classification
1.	Year wise Mined Mineral output	The mining operation was carried out within the quantity as stipulated in the approved Mining Plan but <b>without Prior EC</b> from 16.02.2012.	Quarrying was carried out in accordance without prior Environmental Clearance as per the MoEF Notification S.O 1533(E) dated, 14.09.2006– <b>High Level damage</b>	Out of 11 criteria, <b>7 criteria</b> have been scored for <b>Low Level of Damage.</b>	<b>Low Level Ecological Damage</b>
2.	Benches formation	Partially Formed as per the specifications given in the approved Mining Plan. BH = 6.0 m & BW not less than BH (i.e., 6.0 to 12.0 m); Bench Slope = 60° to vertical.	Benches are fully formed as per the Approved Mining Plan using Diamond Wire Saw cutting technique – <b>Low Level damage</b>		

  
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SEAC- TN

3.	Drilling, Blasting and Heavy Machineries use	No Heavy Blasting operations were carried out. Instead, the mild blasting operations to cause fracturing carried out at some areas but however non-explosive technique has been adopted.	Very mild and Controlled Drilling & Blasting operations were adopted along with the Diamond Wire Saw Cutting for the Extraction of Dimension Stones but the HEMM were used- <b>Low Level damage</b>
4.	Adequate and qualified statutory personnel	Required: 3 Sanctioned & Available:3	Three number of statutory personnel employed – <b>Low Level damage</b>
5.	Waste dumps location	Low quantity of waste produced due to low stripping ratio. However, the mineral rejects were produced also stored in the mine lease holed area.	The waste dump placed within the mine lease hold area in the non-mineralized zone.- <b>Low Level damage</b>
6.	Habitations/Forest location	Periyapatti village located in the ESE Part at 390 m	Habitations are located within 500 m


  
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SEAC -TN

125

  
CHAIRMAN  
SEAC - TN.

		range where about 15 persons are living.	- High level damage		
7.	Ground water intersection	Not intersecting the Ground Water Table.	Mining operations are not intersecting the Ground Water Table - Low level damage		
8.	Green belt development in safety zone and as per norms in terms of species & numbers	Yes, provided. About 200 Trees in an extent of 0.20 Ha, predominantly local species like Neem, Pungan, etc. are planted and maintained with about 90.0% Survival Rate in this Lease.	Green belt developed around the safety zone - Low level damage		
9.	Mined Mineral storage	It is being stored in the mine lease area currently with a systematic & scientific manner in the non-mineralized zone.	Further, Reserve Ore Stock is being maintained in the mine lease area - Low level damage		

  
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 SEAC- TN

10.	Surface Drainage	Not Constructed as per the specifications.	Garland drains are not constructed due to hilly deposit- <b>High level damage</b>		
11.	Mined Material transport route	Necessarily Passing through the village	Trucks carrying the Granite blocks are necessarily pass through the villages for a stretch of atleast 500 m distance as the alternative route is not available. - <b>High level damage</b>		

**Step 2: (i) Application of SEAC Methodology**

Level of Damage	Ecological Remediation Cost	Natural Resource Augmentation Cost	Community Resource Augmentation Cost	CER	Total
	Rs. in lakhs / Ha	Rs. in lakhs / Ha	Rs. in lakhs / Ha	Rs. in lakhs / Ha	Rs. in lakhs / Ha
SEAC Scale	0.40	0.50	0.70	0.40	2.00
Actual Amount	40000 × 6.59.91 2,63,964	50000 × 6.59.91 3,29,955	70000 × 6.59.91 4,61,937	40000 × 6.59.91 2,63,964	200000 × 6.59.91 13,19,820/=

**DAMAGE COST CALCULATION**

SEAC Sub-committee inspected the project site and the documents of project cost details were verified.

The level of damages are assessed by the following criteria:

1. Low level Ecological damage: Only procedural violation – work/operation at site without obtaining EC.
2. Medium level Ecological damage:

  
MEMBER SECRETARY  
SEAC -TN

127

  
CHAIRMAN  
SEAC- TN

- a. Procedural violation started the construction at site or operation without obtaining EC.
  - b. Infrastructural violation such as deviation from awarded EC, CTO & Mining Plan approvals.
  - c. Non operation of the project.
3. High level Ecological damage:
    - a. Procedural violation (started the construction or operation at site without obtaining EC).
    - b. Infrastructural violation such as deviation from awarded EC, CTO & Mining Plan approvals.
    - c. Under Operation (occupied) without Statutory Approvals.

Thus, the Proposal falls in **Low Level Ecological Damage** as the operations were carried out without obtaining prior EC but however the quantity excavated as per the approved Mining Plan.

**CONCLUSIONS:**

As the Proposal falls in **Low Level Ecological Damage** during the Violation Period, the Sub-Committee is of the opinion that the higher Environmental Compensation value has been arrived based on EIA Model prepared by the EIA coordinator - Rs. 17,85,000/- which is higher than the other estimation - Environmental Compensation values of Rs. 13,19,820/- based on the SEAC-TN model. Therefore, the aforesaid value of Rs. 17,85,000/- must be compensated for Remediation, Natural Resource Augmentation and Community Resource Augmentation plan as follows:

Sl. No.	Activity Proposed	Total, Rs.
1	Ecological Damage Remediation Plan	13,95,000
2	Natural Resource Augmentation Plan	2,90,000
3	Community Resource Augmentation Plan	1,00,000
<b>Grand Total</b>		<b>17,85,000</b>

However, based on the SEAC-TN model for the violation cases, the CER value is estimated as Rs. 2,63,964/-. Here, the PP had committed to provide the following budget towards the Corporate Environmental Responsibility (CER) during the SEAC appraisal meeting.

Name of the Village	Particulars	CER Amount
Jammanahalli Govt School. Jammanahalli village	Education & Repairs and Maintenance of School buildings, Upliftment of Toilet facilities for the Students, Tree Plantation and Environmental related Books for the Library etc.	Rs. 2,63,964



Total	Rs. 2,63,964
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**STATUTORY PROCEDURES TO BE FOLLOWED:**

1. The Bank Guarantee for Rs. **17,85,000/-** must be given to TNPCB for successful implementation of the Schemes in ONE year period. The Bank Guarantee will be released after successful implementation of the Remediation Plan and Natural and Community Resource Augmentation Plan.
2. CER fund of Rs. **2,63,964** must be spent by M/s. TAMIN as committed during the appraisal and receipt has to be produced to SEAC/SEIAA-TN for awarding the EC.
3. Credible Action under Section 19 of the E(P) Act shall also be complied for awarding the EC.

**RECOMMENDATIONS**

The SEAC Sub-Committee observed that the Mining of Black Granite in an extent of 6.59.91 Ha & SF No. 83(part) for Environmental Clearance under violation comes under the "Low level Ecological damage category" as per the SEAC Violation norms. Hence, the subcommittee opines the **grant of Environmental Clearance** for Mining of Black Granite in an extent of 6.59.91 Ha & SF No. 83(part) of M/s Tamil Nadu Minerals Limited **may be considered** subject to the following conditions in addition to the normal conditions:

1. The amount prescribed for Ecological remediation (Rs. 13,95,000), natural resource augmentation (Rs. 2,90,000) & community resource augmentation (Rs. 1,00,000), totaling Rs. **17,85,000**. Hence the SEAC decided to direct the project proponent to remit the amount of Rs. **17,85,000** in the form of bank guarantee to Tamil Nadu Pollution Control Board and submit the acknowledgement of the same to SEIAA-TN. The funds shall be utilized for the remediation plan, Natural resource augmentation plan & Community resource augmentation plan as indicated in the EIA/EMP report.
2. The project proponent shall carry out the works assigned under ecological damage, natural resource augmentation and community resource augmentation within a period of three years. If not, the bank guarantee will be forfeited to TNPCB without further notice.

  
MEMBER SECRETARY  
SEAC - TN

129

  
CHAIRMAN  
SEAC- TN

3. The amount committed by the Project proponent for CER (Rs. **2,63,964**) shall be remitted in the form of DD to the beneficiary for the activities committed by the proponent. A copy of receipt from the beneficiary shall be submitted to SEIAA-TN. However, the PP shall supervise the work and submit the status of the work complied pertaining to the CER within a period of one year to the DEE/TNPCB and the SEIAA.
4. The project proponent shall submit the proof for the action taken by the state Government/TNPCB against project proponent under the provisions of Section 19 of the Environment (Protection) Ac, 1986 as per the EIA Notification dated: 14.03.2017 and amended 08.03.2018.
5. The company shall obtain 'No Dues Certificate' from State Government i.e. Department of Geology & Mining within a period of two weeks and submit the same to SEAC before grant of EC, if not produced earlier.
6. The PP shall ensure that the plantation shall be carried out in 1.00 Ha in a phase manner as a part of mine closure activities.
7. The PP shall install the Environmental Management Cell headed by the statutory (I/II Class) Mines Manager of the concerned mine under violation category and the cell shall include a dedicated full-time Environmental Engineer exclusively to look into the effective implementation of Environmental Management Plan besides the reviewing the compliance reports with the regulatory authorities.
8. The PP shall strictly adhere with the safety provisions as laid for the operation of Diamond Wire Saw machines and use of Cranes vide DGMS Tech Circulars No: 02 of 29.11.2019 & No. 10 of 19.07.2002 respectively.
9. The PP shall ensure that the Catch drains and siltation ponds of appropriate size should be constructed to arrest silt and sediment flows from soil, OB and mineral reject (Granite waste) dumps. The water so collected in such sump should be utilized for watering the mine area, roads, green belt development, etc. The drains should be regularly de-silted and maintained properly.
10. The mining lease holders shall, after ceasing mining operations, undertake re-grassing the mining area and any other area which may have been disturbed due to their mining activities and restore the land to a condition which is fit for growth of fodder, flora, fauna etc.
11. The proponent shall obtain a 'Star Rating' system awarded by Anna University, Chennai annually to the mining lease being operated for their efforts and initiatives taken for successful implementation of the Sustainable Development Framework (SDF).
12. The Project Proponent shall ensure that the funds earmarked for environmental protection measures should be kept in separate account and should not be

diverted for other purpose. Year-wise expenditure should be reported to the MoEF & CC Ministry and its Integrated Regional Office (IRO) located in Chennai.

Submitted to the committee for further action.

The site inspection report was placed in this 380<sup>th</sup> SEAC meeting of SEAC held on 17.5.2023. The SEAC observed that the proposal of Mining of Black Granite in an extent of 6.59.91 Ha & SF No. 83(part) for Environmental Clearance under violation comes under the "Low level Ecological damage category" as per the SEAC Violation norms. The Committee decided to recommend the proposal to SEIAA for grant of EC subject to the following conditions in addition to the normal conditions stipulated by MOEF&.CC:

1. The amount prescribed for Ecological remediation (Rs. 13,95,000), natural resource augmentation (Rs. 2,90,000) & community resource augmentation (Rs. 1,00,000), totaling Rs. **17,85,000**. Hence the SEAC decided to direct the project proponent to remit the amount of Rs. **17,85,000** in the form of bank guarantee to Tamil Nadu Pollution Control Board and submit the acknowledgement of the same to SEIAA-TN. The funds shall be utilized for the remediation plan, Natural resource augmentation plan & Community resource augmentation plan as indicated in the EIA/EMP report.
2. The project proponent shall carry out the works assigned under ecological damage, natural resource augmentation and community resource augmentation within a period of three years. If not, the bank guarantee will be forfeited to TNPCB without further notice.
3. The amount committed by the Project proponent for CER (Rs. **2,63,964**) shall be remitted in the form of DD to the beneficiary for the activities committed by the proponent. A copy of receipt from the beneficiary shall be submitted to SEIAA-TN. However, the PP shall supervise the work and submit the status of the work complied pertaining to the CER within a period of one year to the DEE/TNPCB and the SEIAA.

  
MEMBER SECRETARY  
SEAC -TN

131

  
CHAIRMAN  
SEAC- TN

4. The project proponent shall submit the proof for the action taken by the state Government/TNPCB against project proponent under the provisions of Section 19 of the Environment (Protection) Ac, 1986 as per the EIA Notification dated: 14.03.2017 and amended 08.03.2018.
5. The company shall obtain 'No Dues Certificate' from State Government i.e. Department of Geology & Mining within a period of two weeks and submit the same to SEAC before grant of EC, if not produced earlier.
6. The PP shall ensure that the plantation shall be carried out in 1.00 Ha in a phase manner as a part of mine closure activities.
7. The PP shall install the Environmental Management Cell headed by the statutory (I/II Class) Mines Manager of the concerned mine under violation category and the cell shall include a dedicated full-time Environmental Engineer exclusively to look into the effective implementation of Environmental Management Plan besides the reviewing the compliance reports with the regulatory authorities.
8. The PP shall strictly adhere with the safety provisions as laid for the operation of Diamond Wire Saw machines and use of Cranes vide DGMS Tech Circulars No: 02 of 29.11.2019 & No. 10 of 19.07.2002 respectively.
9. The PP shall ensure that the Catch drains and siltation ponds of appropriate size should be constructed to arrest silt and sediment flows from soil, OB and mineral reject (Granite waste) dumps. The water so collected in such sump should be utilized for watering the mine area, roads, green belt development, etc. The drains should be regularly de-silted and maintained properly.
10. The mining lease holders shall, after ceasing mining operations, undertake re-grassing the mining area and any other area which may have been disturbed due to their mining activities and restore the land to a condition which is fit for growth of fodder, flora, fauna etc.
11. The proponent shall obtain a 'Star Rating' system awarded by Anna University, Chennai annually to the mining lease being operated for their efforts and initiatives taken for successful implementation of the Sustainable Development Framework (SDF).

  
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CHAIRMAN  
SEAC- TN

12. The Project Proponent shall ensure that the funds earmarked for environmental protection measures should be kept in separate account and should not be diverted for other purpose. Year-wise expenditure should be reported to the MoEF & CC Ministry and its Integrated Regional Office (IRO) located in Chennai.

**Agenda No: 380-TA:04**

**(File No: 4045/2020)**

**Proposed Colour Granite Quarry lease over an extent of 22.88.5Ha at S.F.No. 55A/IB1 (Part) at Sengunam Village, Polur Taluk, Tiruvannamalai District, Tamil Nadu by M/s. Tamil Nadu Minerals Limited – For Environmental Clearance. (SIA/TN/MIN/59723/2019, dated: 08.01.2021) The SEAC noted the following:**

1. The Proponent, M/s. Tamil Nadu Minerals Limited has applied seeking Environmental Clearance for the proposed Colour Granite Quarry lease over an extent of 22.88.5 Ha at S.F.No. 55A/IB1 (Part) at Sengunam Village, Polur Taluk, Tiruvannamalai District, Tamil Nadu.
2. The project/activity is covered under Category "B1" of Item 1(a) "Mining and Mineral Projects" of the Schedule to the EIA Notification, 2006.
3. As per the mining plan, the lease period is for 30 years. Production for Five years shall not exceed 40.692m<sup>3</sup> of ROM , 10,173 m<sup>3</sup> of Recovery @25% & 30,519 m<sup>3</sup> of Granite rejects with an ultimate depth of mining 30m AGL. The annual peak production is 8,161m<sup>3</sup> of ROM (4<sup>th</sup> year), 2,040m<sup>3</sup> of Recovery @25% (4<sup>th</sup> year) & 6,120m<sup>3</sup> of Granite rejects (4<sup>th</sup> year).
4. ToR Issued vide.Lr. No. SEIAA-TN/F. No.4045/2018/TOR-609/2019 dated 20.02.2019.
5. Public hearing was conducted on 12.04.2022.

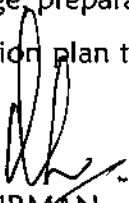
Earlier, the proposal was placed in 218<sup>th</sup> meeting of SEAC held on 09.07.2021.

Based on the presentation made and the documents furnished by the Project proponent, SEAC directed to submit the following additional particulars

1. To revise assessment of Ecological damage, remediation plan and natural & community resource augmentation plan by the accredited consultant and also with collection and analysis of data for the assessment of ecological damage, preparation of remediation plan and natural & community resource augmentation plan to be

  
MEMBER SECRETARY  
SEAC -TN

133

  
CHAIRMAN  
SEAC- TN

done by an Environmental laboratory duly notified under the Environment (Protection) Act, 1986, accredited by NABET or a laboratory of Council of Scientific and Industrial Research Institutions working in the field of Environment.

2. To furnish details of measures taken regard to control of noise, fugitive emission and safety of wild animals and for the grievances mentioned during public hearing as per the public hearing minutes.
3. The Proponent shall carry out the impact study due to mining on the environment in terms of ambient air quality considering vehicular movement & noise level and the Environment Management plan should be prepared, accordingly.
4. To furnish NOC from District Forest Officer, Tiruvannamalai District with regard to the existence/Non - existence of wild animals& birds as mentioned during public hearing by the general public in the proposed mining area.
5. The proponent shall furnish photographs of adequate fencing, green belt along the periphery under Miyawaki method with native species including re-plantation of existing trees as per the approved mining plan.
6. The proponent shall furnish details of silica/ $PM_{2.5}$  &  $PM_{10}$  exposure survey conducted for the nearby residents & employees.

Further, SEAC after detailed deliberations decided to make an onsite inspection to assess the present environmental settings of the project site by the sub-committee to be constituted by the SEAC. On receipt of the aforesaid details, SEAC would further deliberate on this project and decide the further course of action.

In this connection, the site was inspected by the sub-committee on 04.09.2021(Saturday) and submitted the inspection report to the SEAC for further course of action.

#### **OBSERVATIONS OF THE SUB-COMMITTEE**

- The quarry field is mountain and has its own ecology of Grass and thousands of huge rocks as shown in the photo
- During the visit, the mining operation is not found
- There are no houses nearby or within the radius of 300 m

  
MEMBER SECRETARY  
SEAC -TN

  
CHAIRMAN  
SEAC- TN

- Many boulders brought from the top of the mountain to foot of the hills and making cut as per the size of the stone are rejected due to minor cracks and colour variation
- The native grass and native trees Pungan and Neem are not disturbed due to the quarry operation
- The proponent also planted some trees at foot of the hills which are well grown now.
- There is no human habitation either as agriculturist or as local residents.
- The committee has not found any cattle grazing nearby the quarry field.


### **RECOMMENDATIONS OF THE SUB COMMITTEE**

After the inspection of the field on 04-09-2021 the subcommittee furnish the following recommendation

- The quarry operation is around 22.88.5 Ha only in the mountain area. The Natural stones from the mountain is brought to foot and making cut for required size. So the damage on the ecosystem is minimal.
- Since there is no human activities nearby the hills, there shall not be any severe ecological damage in and around the field. But the proponent shall furnish the study of Ecological damage / status report.
- The proponent shall be given EC and shall be allowed to operate the Quarry to maximize the good quality of stone.
- Directed to get the NOC from the forest office about the non-existence of wild animals.
- Few houses are seen at the entrance of the Ghat route, which is more than 1.50 km (aerial route) away from the quarry site. While interacting with them regarding the effects of the quarry on settlement they said that they are not at all affected because of this project.
- Since the quarry operation is partly in the hill and foot of the hills. So there is no need of fencing the Quarry area.
- There is no cutting of trees found and the native ecology itself has good numbers of native trees, no need of green belt promotion.

  
MEMBER SECRETARY  
SEAC -TN

135

  
CHAIRMAN  
SEAC- TN

In this connection, the proposal was again placed for appraisal in 234<sup>th</sup> meeting of SEAC held on 22.09.2021.

In view of the above, SEAC after detailed deliberations directed the proponent to furnish NOC from DFO regarding movement of wild animals/birds for the proposed mining activity and to conduct and submit report on exposure survey for parameters such as silica/PM<sub>2.5</sub> & PM<sub>10</sub> to the nearby residents & employees.

The State Expert Appraisal Committee (SEAC) Tamil Nadu constituted a subcommittee vide its Lr.No. SEAC-TN/TAMIN/Site Inspection/2023 dated 17.02.2023 to inspect and study the field condition for the proposal seeking EC. The Committee comprises of Thiru K.Kumar, Member, SEAC and Thiru.Velazhagan, Member, SEAC.

As per the above letter the sub-committee visited the site on 25.02.2023.


The Sub Committee report has placed in 380<sup>th</sup> SEAC meeting held on 17.05.2023.

**Now the proposal was placed in 380<sup>th</sup> meeting of SEAC held on 17.05.2023.**

The observations made in the field and recommendation derived on the basis of the field visit are as below:

#### **OBSERVATIONS OF THE SEAC SUB-COMMITTEE DURING THE PROJECT SITE INSPECTION**

1. Sub Committee has visited Sengunam Granite Quarry during the Inspection to have over all mining scenario in the Region.
2. The Lease over an extent of 22.88.5Ha is being operated in the Sengunam. It is wire fenced in all sides.
3. The settlements/habitations are observed in 900m from Lease boundary in eastern sides.
4. There was no mining activities in the quarry during the site visit.
5. Rain water accumulated in the Quarry and atleast two bottom most benches are covered in water, as noticed.
6. During Violation Period, environmentally friendly Mining activities, involving the Drilling & highly mild controlled Blasting and Diamond Wire Saw cutting, were carried out in the Lease.

  
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SEAC -TN

  
CHAIRMAN  
SEAC- TN



7. There was no Top Soil and Over Burden generation during the Period and thus only the Granite Rejects produced from the quarry are formed as waste dump within the Lease area.
8. No Ground Water-table intersection as noticed in the existing benches of the quarry.
9. Dedicated Haul Roads from Quarry to Panchayat/village road and from Panchayat Road to the SH exists and very minimal transportation through village road (during the Violation Period) was carried out (maximum of 2 load trucks).
10. Green Belt, was developed along the periphery of quarry pit including in Safety Barriers.
11. The Water tanker trucks possessing the water sprinklers were deployed along the Haul Road during the violation period and is in the working condition.
12. Garland Drains are partially provided along the periphery but its maintenance has to be improved.
13. Green belt developed along the boundaries is infested with *Procopius juliflora* which are to be eradicated and additional green belt shall be developed. So far the PP has raised plantation and further directed to make more plantation all along the boundary of lease hold area.
14. M/s. TAMIN is carrying out various CSR activities in the Region as per CSR Policy of the Company, as reported.

#### **STATUS OF MINING OPERATION**

The mining activities were stopped on 28.04.2017 and there was no production from this Mine since then.

#### **MINING PLAN APPROVALS**

The Director, DMG, Chennai has accorded the latest Scheme of mining for the period from form 2020-2025 Lr.No.4012/MM4/2020, dt. 09.12.2020.

#### **PRESENT CONDITION OF THE MINES PIT AND DUMP**

➤ The physical nature of the Black Granite deposit:

- Strike length (m) : 352 m
- Width (m) : 55m
- Strike direction : NW-SE

  
MEMBER SECRETARY  
SEAC -TN

137

  
CHAIRMAN  
SEAC- TN

- Dip : Almost vertical
- Depth proved (m) : More than 30 m as it Dolerite rock formation

➤ Pit Dimension

Description	Length (m)	Width (m)	Depth (m)
Present pit size	240	60	8

- Waste Dump details : The dumps have been maintained at an average height of 5m and the angle of slope of dumps at 45° from horizontal. The waste dump has been earmarked in the Scheme of Mining plate Nos 4 & 5.

**STATUTORY MANPOWER** (during the violation period)

Sl. No.	Name of the Post Occupied	Statutory Requirement as per MMR 1961	Manpower available during the Mining Operations
4.	Manager (Second Class Competency Certificate)	1	1
5.	Mines Foreman	1	1
6.	Mine Mate (Will act as Blaster)	1	1

**GREEN BELT DEVELOPMENT AND PLANTATION**

Since the lease area is Granite terrain TAMIN has proposed to plant predomenetly 100 native species during the Third Scheme of mining period .

**PENALTY FOR VIOLATION**

TAMIN has remitted the amount Rs.3,17,19,289/- to the Department of Geology and Mining towards 100% cost value of the mined mineral against the permitted EC quantity.

Accordingly, the Director of Geology and Mining has issued 'No Objection Certificate' to TAMIN for getting EC vide Letter Rc. No.265/MM4/2020, dt. 08.07.2020.

Tamil Nadu Pollution Control Board has filed the case under Section 19 of Environment (Protection) Act, 1986 in Hon'ble Judicial Magistrate No.1 Dharmapuri vide Calendar Case No.305/2022 . Judgment pronounced.

  
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SEAC -TN

  
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SEAC- TN

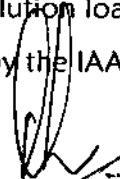
Based on the inspection of the project site and other documents furnished by project proponent, M/s. TAMIN, SEAC Sub-Committee recommends the following Estimation made towards the Ecological remediation cost, Natural resources augmentation cost and Community resources augmentation cost under violation category for the concerned lease of Sengunam Colour Granite Mine of TAMIN, Sengunam, Polur Taluk, Tiruvannamalai District following the SEAC Guidelines after discussing the following related legal provisions made from time to time by various agencies/courts.

**3. Extracts of the Supreme Court of India Common Cause vs Union Of India . on 2 August, 2017 WRIT PETITION (CIVIL) NO. 114 of 2014**

".....In our opinion, as far as the first question is concerned, a reading of EIA 1994 read with the 1st Note implies that the base year would need to be the immediately preceding year that is 1993-94. This is obvious from the opening sentence of the 1st Note, that is, "A project proponent is required to seek environmental clearance for a proposed expansion/modernization activity if the resultant pollution load is to exceed the existing levels." (Emphasis supplied). In its report, the CEC has taken 1993-94 as the base year and we see no error in this. Even the MoEF in its circular dated 28<sup>th</sup> October, 2004 stated with regard to the expansion in production: "If the annual production of any year from 1994-95 onwards exceeds the annual production of 1993-94 or its preceding years (even if approved by IBM), it would constitute expansion." If that expansion results in an increase in the pollution load over the existing levels, then an EC is mandated...."

"....The contention of learned counsel for the mining lease holders that EIA 1994 was rather vague, uncertain and ambiguous cannot be accepted. In our opinion, on a composite reading of EIA 1994, it is clear that: (i) A no objection certificate from the SPCB was necessary for continuing mining operations; (ii) An expansion or modernization activity required an EC unless the pollution load was not exceeded beyond the existing levels; (iii) The base year for determining the pollution load and therefore the proposed expansion would be with reference to 1993-94; (iv) Whether an expansion or modernization would lead to exceeding the existing pollution load or not would require a certificate from the SPCB which could be reviewed by the IAA; (v)

  
MEMBER SECRETARY  
SEAC -TN

  
CHAIRMAN  
SEAC- TN


New projects require an EC; and (vi) Existing projects do not require an EC unless there is an expansion or modernization for the duration (if any) of the validity of the certificate from the SPCB. We need not say anything more on this subject since the CEC has proceeded to discuss the issue of mining in excess of the EC or in excess of the mining plan only W.P. (C) Nos. 114/2014 etc. from the year 2000-01 onwards. The prior period may, therefore, be ignored and it is the period from 2000-01 onwards which is actually relevant for the present discussion.....”

“....All that we need to say on this subject is that there is no confusion, vagueness or uncertainty in the application of EIA 1994 and EIA 2006 insofar as mining operations were commenced on mining leases before 27th January, 1994 (or even thereafter). Post EIA 2006, every mining lease holder having a lease area of 5 hectares or more and undertaking mining operations in respect of major minerals (with which we are concerned) was obliged to get an EC in terms of EIA 2006....”

“.....In a subsequent letter dated 12th December, 2011 addressed to the Chief Secretary in the Government of Orissa the said Ministry of Mines noted that there were violations of the actual production limit laid down in the mining plan and that the State Government had finally taken steps to curb illegal mining in respect of over-production of minerals. There was a reference to suggest (and we take it to be so) that **20% deviation from the mining plan** (in terms of over-production) would be reasonable and permissible. However, it appears from a reading of the communication that illegal mining was going on beyond the 20% deviation limit and that appropriate steps were needed to curb these violations. Learned counsel for the petitioners submitted that such egregious violations must be firmly dealt with by cancellation or termination of the mining lease and a soft approach is not called for....”

“.....In this context, it is worth noting that a High Level Committee (called the Hoda Committee) on the National Mineral Policy noted in its Report dated 22nd December, 2006 in paragraph 3.47 as follows :

*“3.47 An EMP [Environment Management Plan] has to be prepared under the MCDR and got approved by IBM. However, this EMP is not acceptable to the MoEF. The miner has to prepare two EMPs separately – one for IBM and another for MoEF. The Committee suggests that IBM and MoEF should*

  
MEMBER SECRETARY  
SEAC -TN

  
CHAIRMAN  
SEAC- TN

*prepare guidelines for a composite EMP so that IBM can approve the same in consultation with MoEF's field offices. This will eliminate anomalous situations where increase of even a few tonnes in production requires project authorities to get a fresh EMP approved from the MoEF although the IBM allows a grace of +10% per cent, keeping in view the fluctuations in the market situation and process complexities. If a single EMP is accepted in principle such anomalies can be resolved in advance. The Committee feels the MoEF should also have a cushion of +10% per cent in production while giving EIA clearance."*

"....The above passage indicates that the permissible variation in production as per the Indian Bureau of Mines is +10% but according to the letter dated 12th December, 2011 issued by the Ministry of Mines, the **reasonable variation limit could be +20%...."**

"....In terms of Rule 22(5) of the MCR a mining plan shall incorporate a tentative scheme of mining and annual program and plan for excavation from year to year for five years. At best, **there could be a variation in extraction of 20% in each given year but this would be subject to the overall mining plan limit of a variation of 20% over five years.** What this means is that a mining lease holder cannot extract the five year quantity (with a variation of 20%) in one or two years only. The extraction has to be staggered and continued over a period of five years. If any other interpretation is given, it would lead to an absurd situation where a mining lease holder could extract the entire permissible quantity under the mining plan plus 20% in one year and extract miniscule amounts over the remaining four years, and this could be done without any reference to the EC. The submission of learned counsel in this regard simply cannot be accepted...."

".....A submission made by the mining lease holders was that the maximum production in any year up to 1993-94 should be considered as the base for making the calculations. Such a contention was also urged before the CEC and was rejected. We have examined this contention independently and are of the view that the base year of 1993-94 is most appropriate - we have already given our reasons for this. Some lessees might lose in the process while some of them might benefit but that cannot be avoided. In any event, each mining lease holder is being given the benefit of calculations only from 2000-01

  
MEMBER SECRETARY  
SEAC -TN

141

  
CHAIRMAN  
SEAC- TN

and is not being 'penalized' for the period prior thereto. We think the mining lease holders should be grateful for this since it was submitted by learned counsel for the petitioners and the learned Amicus that the penalty should be levied from the date of EIA 1994. In our opinion, the cut-off from 2000-2001 (without interest) is undoubtedly reasonable and there can be hardly be any grievance in this regard...."

".....To avoid any misunderstanding, confusion or ambiguity, we make the following very clear:

*(1) A mining project that has commenced prior to 27th January, 1994 and has obtained a No Objection Certificate from the SPCB prior to that date is permitted to continue its mining operations without obtaining an EC from the Impact Assessment Agency. However, this is subject to any expansion (including an increase in the lease area) or modernization activity after 27th January, 1994 which would result in an increase in the pollution load. In that event, a prior EC is required. However, if the pollution load is not expected to increase despite the proposed expansion (including an increase in the lease area) or modernization activity, a certificate to this effect is absolutely necessary from the SPCB, which would be reviewed by the Impact Assessment Agency.*

*(2) The renewal of a mining lease after 27th January, 1994 will require an EC even if there is no expansion or modernization activity or any increase in the pollution load.*

*(3) For considering the pollution load the base year would be 1993-94, which is to say that if the annual production after 27th January, 1994 exceeds the annual production of 1993-94, it would be treated as an expansion requiring an EC.*

*(4) There is no doubt that a new mining project after 27th January, 1994 would require a prior EC.*

*(5) Any iron ore or manganese ore extracted contrary to EIA 1994 or EIA 2006 would constitute illegal or unlawful mining (as understood and interpreted by us) and compensation at 100% of the price of the mineral should be recovered from 2000-2001 onwards in terms of Section 21(5) of the MMDR Act, if the extracted mineral has been disposed of. In addition, any rent, royalty or tax for the period that such mining activity was W.P. (C) Nos. 114/2014 etc. carried out outside the mining lease area should be recovered.*

  
MEMBER SECRETARY  
SEAC - TN

  
CHAIRMAN  
SEAC- TN

*(6) With effect from 14th September, 2006 all mining projects having a lease area of 5 hectares or more are required to have an EC. The extraction of any mineral in such a case without an EC would amount to illegal or unlawful mining attracting the provisions of Section 21(5) of the MMDR Act.*

Further, based on the inspection report and the violation notifications issued by the MoEF&CC dated 14.03.2017 & 08.03.2018, SEAC Sub-committee classified the level of damages caused by the Project Proponent on the environment based on the following criteria:

As per the above Notifications, the estimation of Ecological Remediation cost, Natural Resources Augmentation cost and Community Resources Augmentation cost are part of the appraisal of mining projects under violation category.

#### **4. Damage Assessment and Evaluation of Costs**

Each mining project has its own characteristics such as mineral mined, mining lease area, mining lease period, method of mining, mined mineral output, mined material storage, waste material storage, transportation of mined material, formation of benches, green belt development, proximity to the habitations, water body and forest, market value of mined ore, pollution potential of mining project, human safety and health issues and ecological damage. Hence, the SEAC has arrived the following methodology based on major and important factors, field inspection and data collected and expertise of the members of SEAC.

In the step 1, the objective is to classify the mining project taken up for the study into either low level ecological damage category (or) high level ecological damage category. In this exercise, 11 characteristics attributed to the mining projects in general are used as criteria. Depending upon the applicability of the each of the criteria to the mining project, the mining project will become classified into either low level ecological damage category or high level ecological damage category. In the below-mentioned Table, if a minimum of 6 criteria becomes applicable for a classification, then the project is classified under the concerned type of classification (low/high).

**Table 1: Classification of Mining Projects for Violation Category**

Sl. No	Criteria	Low	High
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MEMBER SECRETARY  
SEAC -TN

143

  
CHAIRMAN  
SEAC- TN

12.	Year wise Mined Mineral Output	As per approved Mining Plan	Not as per approved Mining Plan
13.	Benches formation	Formed and as per specifications	Not formed
14.	Drilling, Blasting and Heavy Machineries use	Not used	Drilling, Blasting and Heavy Machineries used
15.	Adequate and qualified statutory personnel	Employed	Inadequate and unqualified personnel employed
16.	Waste dumps location	Within the lease hold area	Outside the lease hold area
17.	Habitations/Forest location	Away from the site by 500 m or more	Located within 500m
18.	Ground water table intersection	Not intersected	Intersected
19.	Green belt development in safety zone and as per norms of species & numbers	Developed in safety zone and as per norms	Green belt formed outside the safety zone and also not as per norms
20.	Mined Mineral storage (Ore)	Scientific and within the lease area	Unscientific and outside the lease area
21.	Surface Drainage	Constructed and as per specifications	Not constructed
22.	Mined material transport route	Away from habitations atleast by 500 m	Passing through the habitations

In view of the above and based on the inspection report & the Ecological damage, remediation plan and natural & community resource augmentation plan furnished by

  
MEMBER SECRETARY  
SEAC -TN

  
CHAIRMAN  
SEAC- TN



the project proponent, the SEAC decided the fund allocation for Ecological remediation, natural resource augmentation & community resource augmentation and penalty by following the below mentioned criteria given in Table 2.

**Table 2: Damage Assessment Classification of Granite Mining Projects**

Level of damages	Ecological remediation cost	Natural resource augmentation cost	Community resource augmentation cost	CER	Total
	Rs in lakhs / Ha	Rs in lakhs / Ha	Rs in lakhs / Ha	Rs in lakhs / Ha	Rs in lakhs / Ha
Low level Ecological damage	0.40	0.50	0.70	0.40	2.00
High level Ecological damage	0.75	1.00	1.25	0.75	3.75


In the step 2, the objective is to estimate the Ecological Remediation cost, Natural Resources Augmentation cost and Community Resources Augmentation cost. In this exercise, data related to the select mining projects from project proposals and field conditions have been used to calculate the damage assessment from the above Table 2.

**ESTIMATION OF ECOLOGICAL REMEDIATION COST, NATURAL RESOURCES AUGMENTATION COST AND COMMUNITY RESOURCES AUGMENTATION COST UNDER VIOLATION CATEGORY – M/s. TAMIN Limited, Sengunam.**

**STEP – 1:**

Classification of Mining Projects according to the Violation level

Sl. No	Criteria	Response	Level of Damage	Concluding Remarks	Final Classification
12.	Year wise Mined Mineral output	The mining operation was carried out within the quantity as stipulated in the approved Mining Plan but <b>without Prior EC</b> from 16.02.2012*.	Quarrying was carried out in accordance without prior Environmental Clearance as per the MoEF Notification S.O	Out of 11 criteria, <b>7 criteria</b> have been scored for <b>Low Level</b>	<b>Low Level Ecological Damage</b>

  
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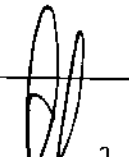
  
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			1533(E) dated, 14.09.2006– <b>High</b> <b>Level damage</b>	<b>of</b> <b>Damage.</b>	
13.	Benches formation	No Benches are formed as per the specifications given in the approved Mining Plan. BH: 10m but BW is 6 m.	Benches are NOT formed as per the Approved Mining Plan– <b>High Level damage</b>		
14.	Drilling, Blasting and Heavy Machineries use	No Heavy Blasting operations were carried out. Instead, the mild blasting operations to cause fracturing carried out at some areas but however Diamond wire saw cutting (non-explosive) technique has been adopted.	Very mild and Controlled Drilling & Blasting operations were adopted along with the Diamond Wire Saw Cutting for the Extraction of Dimension Stones but the HEMM were used- <b>Low Level damage</b>		
15.	Adequate and qualified statutory personnel	Required: 3 Sanctioned & Available: 3	Three number of statutory personnel employed – <b>Low Level damage</b>		
16.	Waste dumps location	Low quantity of waste produced due to low stripping ratio. However, the mineral rejects were produced also stored in the mine lease holed area.	The waste dump placed within the mine lease hold area in the non-mineralized zone.- <b>Low Level damage</b>		

17.	Habitations/F orest location	Kunanture village located in the SW Part at 900 m range where about 900 persons are living.	Habitations are NOT located within 500 m – <b>Low level damage</b>		
18.	Ground water intersection	Not intersecting the Ground Water Table.	Mining operations are not intersecting the Ground Water Table – <b>Low level damage</b>		
19.	Green belt development in safety zone and as per norms in terms of species & numbers	Yes, provided. About 100 Trees in an extent of 1.75 Ha, predominantly local species like Neem, Pungan, etc. are planted and maintained with about 90.0% Survival Rate in this Lease.	Green belt developed around the safety zone – <b>Low level damage</b>		
20.	Mined Mineral storage	It is being stored in the mine lease area currently with a systematic & scientific manner in the non-mineralized zone.	Further, Reserve Ore Stock is being maintained in the mine lease area – <b>Low level damage</b>		
21.	Surface Drainage	Not Constructed as per the specifications.	Garland drains are not constructed due to hilly deposit– <b>High level damage</b>		
22.	Mined Material transport route	Necessarily Passing through the village	Trucks carrying the Granite blocks are necessarily pass through the villages for a stretch of atleast 500 m distance as the		

  
MEMBER SECRETARY  
SEAC -TN

147

  
CHAIRMAN  
SEAC- TN

			alternative route is not available. - High level damage		
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**Step 2: (i) Application of SEAC Methodology**

Level of Damage	Ecological Remediation Cost	Natural Resource Augmentation Cost	Community Resource Augmentation Cost	CER	Total
	Rs. in lakhs / Ha	Rs. in lakhs / Ha	Rs. in lakhs / Ha	Rs. in lakhs / Ha	Rs. in lakhs / Ha
SEAC Scale	0.40	0.50	0.70	0.40	2.00
Actual Amount	40000 × 22.88.5	50000 × 22.88.5	70000 × 22.88.5	40000 × 22.88.5	200000 × 22.88.5
	9,15,400	11,44,250	16,01,950	9,15,400	45,77,000/=

**DAMAGE COST CALCULATION**

SEAC Sub-committee inspected the project site and the documents of project cost details were verified.

The level of damages are assessed by the following criteria:

1. Low level Ecological damage: Only procedural violation – work/operation at site without obtaining EC.
2. Medium level Ecological damage:
  - d. Procedural violation started the construction at site or operation without obtaining EC.
  - e. Infrastructural violation such as deviation from awarded EC, CTO & Mining Plan approvals.
  - f. Non operation of the project.

  
MEMBER SECRETARY  
SEAC -TN

  
CHAIRMAN  
SEAC- TN

3. High level Ecological damage: a. Procedural violation (started the construction or operation at site without obtaining EC).
- b. infrastructural violation such as deviation from awarded EC, CTO & Mining Plan approvals.
- c. Under Operation (occupied) without Statutory Approvals.

Thus, the Proposal falls in **Low Level Ecological Damage** as the operations were carried out without obtaining prior EC but however the quantity excavated as per the approved Mining Plan.

**CONCLUSIONS:**

As the Proposal falls in **Low Level Ecological Damage** during the Violation Period, the Sub-Committee is of the opinion that the higher Environmental Compensation value has been arrived **based on the SEAC Model - Rs. 36,61,600/-** which is higher than the other estimation - Environmental Compensation values of Rs. 17,85,000/- arrived by the EIA Co-ordinator based on the EIA model. Therefore, the aforesaid value of Rs. 36,61,600/- must be compensated for Remediation, Natural Resource Augmentation and Community Resource Augmentation plan as follows:

Sl. No.	Activity Proposed	Total, Rs.
1	Ecological Damage Remediation Plan	9,15,400
2	Natural Resource Augmentation Plan	11,44,250
3	Community Resource Augmentation Plan	16,01,950
<b>Grand Total</b>		<b>36,61,600</b>

However, based on the SEAC-TN model for the violation cases, the CER value is estimated as Rs. 2,63,964/-. Here, the PP had committed to provide the following budget towards the Corporate Environmental Responsibility (CER) during the SEAC appraisal meeting.

Name of the Village	Particulars	CER Amount
Sengunam Govt School.	Education & Repairs and Maintenance of School buildings, Upliftment of Toilet facilities	Rs. 9,15,400

  
MEMBER SECRETARY  
SEAC -TN

149

  
CHAIRMAN  
SEAC- TN

Sengunam village	for the Students & Teachers, Tree Plantation and Environmental related Books for the Library etc.	
<b>Total</b>		<b>Rs. 9,15,400</b>

#### STATUTORY PROCEDURES TO BE FOLLOWED:

1. The Bank Guarantee for Rs. **36,61,600/-** must be given to TNPCB for successful implementation of the Schemes in a three years period. The Bank Guarantee will be released after successful implementation of the Remediation Plan and Natural and Community Resource Augmentation Plan.
2. CER fund of Rs. **9,15,400** must be spent by M/s. TAMIN as committed during the appraisal and receipt has to be produced to SEAC/SEIAA-TN for awarding the EC.
3. Credible Action under Section 19 of the E(P) Act shall also be complied for awarding the EC.


#### RECOMMENDATIONS

The SEAC Sub-Committee observed that the Mining of Colour Granite in an extent of 22.88.5 Ha & SF No. 55A/1B1(part) for Environmental Clearance under violation comes under the "Low level Ecological damage category" as per the SEAC Violation norms. Hence, the subcommittee opines the **grant of Environmental Clearance** for Mining of Colour Granite in an extent of 22.88.5 Ha & SF No. 55A/1B1(part) of M/s Tamil Nadu Minerals Limited **may be considered** subject to the following conditions in addition to the normal conditions:

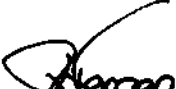
1. The amount prescribed for Ecological remediation (Rs. 9,15,400), natural resource augmentation (Rs. 11,44,250) & community resource augmentation (Rs. 16,01,950), totaling Rs. **36,61,600**. Hence the SEAC decided to direct the project proponent to remit the amount of Rs. **36,61,600** in the form of bank guarantee to Tamil Nadu Pollution Control Board and submit the acknowledgement of the same to SEIAA-TN. The funds shall be utilized for the remediation plan, Natural resource augmentation plan & Community resource augmentation plan as indicated in the EIA/EMP report.

  
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SEAC -TN

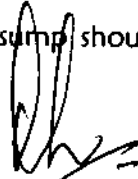
150

  
CHAIRMAN  
SEAC- TN

2. The project proponent shall carry out the works assigned under ecological damage, natural resource augmentation and community resource augmentation within a period of three years. If not, the bank guarantee will be forfeited to TNPCB without further notice.
3. The amount committed by the Project proponent for CER (Rs. **9,15,400**) shall be remitted in the form of DD to the beneficiary for the activities committed by the proponent. A copy of receipt from the beneficiary shall be submitted to SEIAA-TN. However, the PP shall supervise the work and submit the status of the work complied pertaining to the CER within a period of one year to the DEE/TNPCB and the SEIAA.
4. The project proponent shall submit the proof for the action taken by the state Government/TNPCB against project proponent under the provisions of Section 19 of the Environment (Protection) Ac, 1986 as per the EIA Notification dated: 14.03.2017 and amended 08.03.2018.
5. The company shall obtain 'No Dues Certificate' from State Government i.e. Department of Geology & Mining within a period of two weeks and submit the same to SEAC before grant of EC, if not produced earlier.
6. The PP shall ensure that the plantation shall be carried out in 1.00 Ha in a phase manner as a part of mine closure activities.
7. The PP shall install the Environmental Management Cell headed by the statutory (I/II Class) Mines Manager of the concerned mine under violation category and the cell shall include a dedicated full-time Environmental Engineer exclusively to look into the effective implementation of Environmental Management Plan besides the reviewing the compliance reports with the regulatory authorities.
8. The PP shall strictly adhere with the safety provisions as laid for the operation of Diamond Wire Saw machines and use of Cranes vide DGMS Tech Circulars No: 02 of 29.11.2019 & No. 10 of 19.07.2002 respectively.
9. The PP shall ensure that the Catch drains and siltation ponds of appropriate size should be constructed to arrest silt and sediment flows from soil, OB and mineral reject (Granite waste) dumps. The water so collected in such sump should be

  
MEMBER SECRETARY  
SEAC -TN

151

  
CHAIRMAN  
SEAC- TN

utilized for watering the mine area, roads, green belt development, etc. The drains should be regularly de-silted and maintained properly.

10. The mining lease holders shall, after ceasing mining operations, undertake re-grassing the mining area and any other area which may have been disturbed due to their mining activities and restore the land to a condition which is fit for growth of fodder, flora, fauna etc.
11. The proponent shall obtain a 'Star Rating' system awarded by Anna University, Chennai annually to the mining lease being operated for their efforts and initiatives taken for successful implementation of the Sustainable Development Framework (SDF).
12. The Project Proponent shall ensure that the funds earmarked for environmental protection measures should be kept in separate account and should not be diverted for other purpose. Year-wise expenditure should be reported to the MoEF & CC Ministry and its Integrated Regional Office (IRO) located in Chennai.

File No	4045	Category	B1
Sl. No	Salient Features of the Proposal		
1.	Name of the Owner/Firm	:	M/s. Tamil Nadu Minerals Limited, 31, Kamarajar Salai, TWAD House, Chepauk, P.B.No.2961,  Chennai - 600 005
2.	Type of quarrying (Ordinary Stone/Sand/Granite/Limestone)	:	Colour Granite
3.	S.F Nos. of the quarry site with area break-up	:	55A/1B1(P)
4.	Village in which situated	:	Sengunam
5.	Taluk in which situated	:	Polur
6.	District in which situated	:	Tiruvannamalai
7.	Extent of quarry (in ha.)	:	22.88.5Ha
8.	Latitude & Longitude of all corners of the quarry site	:	12°32'24.29"N to 12°32'41.29"N 79°08'47.42"E to 79°09'05.80"E

  
MEMBER SECRETARY  
SEAC - TN

152

  
CHAIRMAN  
SEAC - TN



9.	Topo Sheet No.	:	57 P/2&3	
10.	Type of mining	:	Open cast- Semi- mechanized Method	
11.	Life of Project	:	5 Years	
	Lease Period	:	17.10.2005 to 16.10.2035 (30 Years)	
	Mining Scheme Period	:	2020-2021 to 2024-2025 (RSoM-III)	
12.	Mining Plan Details	:	As per approved Revised Scheme of Mining –III [2020-2021 to 2024-2025]	As modified by SEAC
	Geological Resources RoM (m <sup>3</sup> )	:	11,97,850	
	Minable Resources RoM(m <sup>3</sup> )	:	11,34,501	
	Annual Peak Production in RoM(m <sup>3</sup> )	:	8161	
	Maximum Depth in meters	:	30m	
13.	Depth of water table	:	14.00 BGL	
14.	Man Power requirement per day:	:	35 Employees	
15.	Water requirement:	:	1.5 KLD	
	1. Drinking water	:	0.5 KLD	
	2. Utilized water	:	0.3 KLD	
	3. Dust suppression	:	0.3 KLD	
	4. Green belt	:	0.4 KLD	
16.	Power requirement	:	Diesel Generator 125kva	
17.	Precise area communication approved by the Department of G&M.	:	19664/MME1/2004-2, Indus, dated.11.05.2005	
18.	Mining Plan approved by Department of G&M.	:	Letter: 4012/MM4/2020, dated.09.12.2020 (RSoM-III)	
19.	Department of G&M, Deputy Director 500m Cluster Letter	:	170/Kanimam/2017, dated.22.03.2017	
20.	VAO Certificate Regarding Structures within 300m Radius	:	A1/00556/2016, dated.27.06.2016 issued by the Tahsildar, Polur	

  
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SEAC -TN

153


  
CHAIRMAN  
SEAC- TN

21.	Project Cost (excluding EMP cost)	:	1.00 crore
22.	EC Recommendation	:	<b>Validity</b> 30 years subject to the following upper limits.
		:	Max Total RoM(m <sup>3</sup> ) 40,692
		:	Annual Max RoM(m <sup>3</sup> ) 8161
		:	Max Depth in mtrs 30m
23.	EMP cost (in Rs. Lakh).	:	12.5 lakhs
24.	ToR details	:	Lr. No. SEIAA-TN/F. No.4045/2018/TOR-609/2019 dated 20.02.2019.
25.	Public hearing details	:	Public hearing was conducted on 12.04.2022.
26.	EIA report submitted on	:	Dated: 08.01.2021
27.	CER cost	:	10 Lakhs

Based on the inspection report and documents furnished, SEAC decided to accept the recommendation made by the subcommittee and **decided to recommend the proposal for the grant of Environmental Clearance for the production quantity of 40,692m<sup>3</sup> of ROM Multi colour granite, 10,173m<sup>3</sup> Recovery of Granite @ 25% & 30,519m<sup>3</sup> of Granite waste @ 75%. The peak production shall not exceed 8,161 m<sup>3</sup> of ROM, 2,040m<sup>3</sup> of Granite & 6,120m<sup>3</sup> of Granite waste with the ultimate depth of mining upto 30m subject to the standard conditions & normal conditions stipulated by MOEF &CC, in addition to the following specific conditions:**

1. The amount prescribed for Ecological remediation (Rs. 9,15,400), natural resource augmentation (Rs. 11,44,250) & community resource augmentation (Rs. 16,01,950), totaling Rs. **36,61,600**. Hence the SEAC decided to direct the project proponent to remit the amount of Rs. **36,61,600** in the form of bank guarantee to Tamil Nadu Pollution Control Board and submit the acknowledgement of the same to SEIAA-TN. The funds shall be utilized for the remediation plan, Natural

  
MEMBER SECRETARY  
SEAC -TN

  
CHAIRMAN  
SEAC- TN

resource augmentation plan & Community resource augmentation plan as indicated in the EIA/EMP report.


2. The project proponent shall carry out the works assigned under ecological damage, natural resource augmentation and community resource augmentation within a period of three years. If not, the bank guarantee will be forfeited to TNPCB without further notice.
3. The amount committed by the Project proponent for CER (Rs. **9,15,400**) shall be remitted in the form of DD to the beneficiary for the activities committed by the proponent. A copy of receipt from the beneficiary shall be submitted to SEIAA-TN. However, the PP shall supervise the work and submit the status of the work complied pertaining to the CER within a period of one year to the DEE/TNPCB and the SEIAA.
4. The project proponent shall submit the proof for the action taken by the state Government/TNPCB against project proponent under the provisions of Section 19 of the Environment (Protection) Ac, 1986 as per the EIA Notification dated: 14.03.2017 and amended 08.03.2018.
5. The PP shall furnish NOC from DFO regarding movement of wild animals/birds for the proposed mining activity before grant of EC.
6. The PP shall conduct and submit report on exposure survey for parameters such as silica/PM<sub>2.5</sub> & PM<sub>10</sub> to the nearby residents & employees before grant of EC.
7. The company shall obtain 'No Dues Certificate' from State Government i.e. Department of Geology & Mining within a period of two weeks and submit the same to SEAC before grant of EC, if not produced earlier.
8. The PP shall ensure that the plantation shall be carried out in 1.00 Ha in a phase manner as a part of mine closure activities.
9. The PP shall install the Environmental Management Cell headed by the statutory (I/II Class) Mines Manager of the concerned mine under violation category and the cell shall include a dedicated full-time Environmental Engineer exclusively to look into the effective implementation of Environmental Management Plan besides the reviewing the compliance reports with the regulatory authorities.

  
MEMBER SECRETARY  
SEAC -TN

155

  
CHAIRMAN  
SEAC- TN

10. The PP shall strictly adhere with the safety provisions as laid for the operation of Diamond Wire Saw machines and use of Cranes vide DGMS Tech Circulars No: 02 of 29.11.2019 & No. 10 of 19.07.2002 respectively.
11. The PP shall ensure that the Catch drains and siltation ponds of appropriate size should be constructed to arrest silt and sediment flows from soil, OB and mineral reject (Granite waste) dumps. The water so collected in such sump should be utilized for watering the mine area, roads, green belt development, etc. The drains should be regularly de-silted and maintained properly.
12. The mining lease holders shall, after ceasing mining operations, undertake re-grassing the mining area and any other area which may have been disturbed due to their mining activities and restore the land to a condition which is fit for growth of fodder, flora, fauna etc.
13. The proponent shall obtain a 'Star Rating' system awarded by Anna University, Chennai annually to the mining lease being operated for their efforts and initiatives taken for successful implementation of the Sustainable Development Framework (SDF).
14. The Project Proponent shall ensure that the funds earmarked for environmental protection measures should be kept in separate account and should not be diverted for other purpose. Year-wise expenditure should be reported to the MoEF & CC Ministry and its Integrated Regional Office (IRO) located in Chennai.
15. 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 adhere the EMP of Rs,1,55,000 Lakhs as committed.
16. As accepted by the Project Proponent the revised CER cost is Rs. 10 lakhs and the amount shall be spent for activities of (1) construction/renovation of Girls toilet with 24/7 water facility, (2) providing free supply of sanitary napkins for three months to adult girl students through the Headmaster (3) installation of incinerator in the Girls toilet for safe disposal of sanitary napkins and (4) tree plantation in school in consultation with concerned Government school HM in Government High School, Suanur Village before obtaining CTO from TNPCB.

  
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CHAIRMAN  
SEAC- TN

The project proponent shall also distribute 1000 mango saplings to the people in nearby village at free of cost.

17. The project proponent shall strengthen the road to be used for transporting mined materials in discussion with District Collector.
18. The proponent shall mandatorily appoint the statutory Mines Manager and the Mining Engineer in relevant to the proposed quarry size as per the provisions of Mines Act 1952 and Granite Conservation & Development Rules, 1999 respectively.
19. The proponent shall erect fencing all around the boundary of the proposed area with gates for entry/exit before the commencement of the operation and shall furnish the photographs/map showing the same before obtaining the CTO from TNPCB.
20. Perennial maintenance of haulage road/village / Panchayat Road shall be done by the project proponent as required in connection with the concerned Govt. Authority.
21. The Project Proponent shall adhere to the working parameters of mining plan which was submitted at the time of EC appraisal wherein year-wise plan was mentioned for total excavation i.e. quantum of Granite, waste, over burden, side burden and top soil etc. No change in basic mining proposal like mining technology, total excavation, mineral & waste production, lease area and scope of working (viz. method of mining, overburden & dump management, O.B & dump mining, mineral transportation mode, ultimate depth of mining etc.) shall not be carried out without prior approval of the Ministry of Environment, Forest and Climate Change, which entail adverse environmental impacts, even if it is a part of approved mining plan modified after grant of EC or granted by State Govt. in the form of Short Term Permit (STP), Query license or any other name.
22. The Proponent shall ensure that the overburden, waste rock and non-saleable granite generated during prospecting or mining operations of the granite quarry shall be stored separately in properly formed dumps on grounds earmarked. The physical parameters of the waste dumps like height, width and angle of slope shall be governed as per the approved Mining Plan as per the guidelines/circulars

  
MEMBER SECRETARY  
SEAC -TN

157

  
CHAIRMAN  
SEAC- TN


issued by DGMS w.r.t. safety in mining operations shall be strictly adhered to maintain the stability of waste dumps. Such dumps shall be properly secured to prevent the escape of material in harmful quantities which may cause degradation of the surrounding land or silting of water courses.

23. Perennial sprinkling arrangement shall be in place on the haulage road for fugitive dust suppression. Fugitive emission measurements should be carried out during the mining operation at regular intervals and submit the consolidated report to TNPCB once in six months.
24. The Proponent shall ensure that the Noise level is monitored during mining operation at the project site for all the machineries deployed and adequate noise level reduction measures undertaken accordingly. The report on the periodic monitoring shall be submitted to TNPCB once in 6 months.
25. Proper barriers to reduce noise level and dust pollution should be established by providing greenbelt along the boundary of the quarrying site and suitable working methodology to be adopted by considering the wind direction.
26. The purpose of Green belt around the project is to capture the fugitive emissions, carbon sequestration and to attenuate the noise generated, in addition to improving the aesthetics. A wide range of indigenous plant species should be planted as given in the appendix in consultation with the DFO, State Agriculture University and local school/college authorities. The plant species with dense/moderate canopy of native origin should be chosen. Species of small/medium/tall trees alternating with shrubs should be planted in a mixed manner.
27. Taller/one year old Saplings raised in appropriate size of bags (preferably eco-friendly bags) should be planted in proper espacement as per the advice of local forest authorities/botanist/Horticulturist with regard to site specific choices. The proponent shall earmark the greenbelt area with GPS coordinates all along the boundary of the project site with at least 3 meters wide and in between blocks in an organized manner.
28. Noise and Vibration Related: (i) The Proponent shall carry out only the Controlled Blasting operation using the detonating cord/fuse of low grammage

PETN (or) Gun powder (or) safety fuse for the extraction of the granite blocks in the quarry. However, the proponent shall use NONEL based shock tube initiation system only while carrying out the controlled blasting operations for the excavation of overburden and side burden even though no habitations (or) forest exists around the proposed site. The proponent shall not carry out any blasting operation involving the initiation system such as detonating cord safety fuse, ordinary detonators, cord relays, in the blasting operation carried out for the excavation of overburden and side burden. The mitigation measures for control of ground vibrations and to arrest fly rocks should be implemented meticulously under the supervision of statutory competent persons possessing the I / II Class Mines Manager / Foreman / Blaster certificate issued by the DGMS under MMR 1961, appointed in the quarry. No secondary blasting of granite boulders shall be carried out in any occasions and only other suitable non-explosive techniques involving chemical agents shall be adopted if such secondary breakage is required. The Project Proponent shall provide required number of the security sentries for guarding the danger zone of 500 m radius from the site of blasting to ensure that no human/animal is present within this danger zone and also no person is allowed to enter into (or) stay in the danger zone during the blasting. (ii) Appropriate measures should be taken for control of noise levels below 85 dBA in the work environment. Workers engaged in operations of HEMM, etc. should be provided with ear plugs/muffs, (iii) Noise levels should be monitored regularly (on weekly basis) near the major sources of noise generation within the core zone.

29. The proponent shall undertake in a phased manner restoration, reclamation and rehabilitation of lands affected by the quarrying operations and shall complete this work before the conclusion of such operations and the abandonment of the granite quarry as assured in the Environmental Management Plan & the approved Mine Closure Plan.


30. Ground water quality monitoring should be conducted once in every six months and the report should be submitted to TNPCB.

  
MEMBER SECRETARY  
SEAC - TN

159

  
CHAIRMAN  
SEAC- TN

31. The operation of the quarry should not affect the agricultural activities & water bodies near the project site and a 50 m safety distance from water body should be maintained without carrying any activity. The proponent shall take appropriate measures for "Silt Management" and prepare a SOP for periodical de-siltation indicating the possible silt content and size in case of any agricultural land exists around the quarry.
32. The proponent shall provide sedimentation tank / settling tank with adequate capacity for runoff management.
33. The proponent shall ensure that the transportation of the quarried granite stones shall not cause any hindrance to the Village people/Existing Village Road and shall take adequate safety precautionary measures while the vehicles are passing through the schools / hospital. The Project Proponent shall ensure that the road may not be damaged due to transportation of the quarried granite stones; and transport of granite stones will be as per IRC Guidelines with respect to complying with traffic congestion and density.
34. To ensure safety measures along the boundary of the quarry site, security guards are to be posted during the entire period of the mining operation.
35. The Project Proponent shall take all possible precautions for the protection of environment and control of pollution while carrying out the mining or processing of granite in the area for which such licence or lease is granted, as per
36. The Project Proponent shall comply with the provisions of the Mines Act, 1952, MMR 1961 and Mines Rules 1955 for ensuring safety, health and welfare of the people working in the mines and the surrounding habitants.
37. The project proponent shall ensure that the provisions of the MMDR Act, 1957, the Granite Conservation and Development Rules 1999, the MCDR 2017 and Tamilnadu Minor Mineral Concession Rules 1959 are complied by carrying out the quarrying operations in a skillful, scientific and systematic manner keeping in view proper safety of the labour, structure and the public and public works located in that vicinity of the quarrying area and in a manner to preserve the environment and ecology of the area.

  
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SEAC -TN

  
CHAIRMAN  
SEAC- TN



38. The quarrying activity shall be stopped if the entire quantity indicated in the Mining plan is quarried even before the expiry of the quarry lease period and the same shall be informed to the District AD/DD (Geology and Mining) District Environmental Engineer (TNPCCB) and the Director of Mines Safety (DMS), Chennai Region by the proponent without fail.
39. The Project Proponent shall abide by the annual production scheduled specified in the approved mining plan and if any deviation is observed, it will render the Project Proponent liable for legal action in accordance with Environment and Mining Laws.
40. Prior clearance from Forestry & Wild Life including clearance from committee of the National Board for Wildlife as applicable shall be obtained before starting the quarrying operation, if the project site attracts the NBWL clearance, as per the existing law from time to time.
41. All the conditions imposed by the Assistant/Deputy Director, Geology & Mining, concerned District in the mining plan approval letter and the Precise area communication letter issued by concerned District Collector should be strictly followed.
42. The recommendation for the issue of environmental clearance is subject to the outcome of the Hon'ble NGT, Principal Bench, New Delhi in O.A.No.186 of 2016 (M.A.No.350/2016) and O.A.No.200/2016 and O.A.No.580/2016 (M.A.No.1182/2016) and O.A.No.102/2017 and O.A.No.404/2016 (M.A.No.758/2016, M.A.No.920/2016, M.A.No.1122/2016, M.A.No.12/2017 & M.A.No.843/2017) and O.A.No.405/2016 and O.A.No.520 of 2016 (M.A.No.981/2016, M.A.No.982/2016 & M.A.No.384/2017).
43. The Project Proponent shall adhere to the provision of the Mines Act, 1952, Mines and Mineral (Development & Regulation), Act, 2015 and rules & regulations made there under. The Project Proponent shall adhere to various circulars issued by Directorate General Mines Safety (DGMS) and Indian Bureau of Mines (IBM) from time to time.
44. That the grant of this E.C. is issued from the environmental angle only, and does not absolve the project proponent from the other statutory obligations

  
MEMBER SECRETARY  
SEAC -TN

161

  
CHAIRMAN  
SEAC- TN

prescribed under any other law or any other instrument in force. The sole and complete responsibility, to comply with the conditions laid down in all other laws for the time-being in force, rests with the project proponent.

45. All the commitments made by the proponent during the Public Hearing, as per the minutes of Public Hearing should be implemented in total.


**Agenda No: 380 – TA-5.**

**(File No: 9262/2023)**


**Proposed Development of Industrial Park in an area of 425.55 ha (1051.10 Acres) at E.Kumaralingapuram Village SF.Nos.134/1, 134/2, 134/3, 134/4, 134/5, 154/1, 154/2, 154/4A, 154/3, 154/4B, 155/1, 155/2, 155/3, 155/4, 155/5, 155/6, 155/7, 156/1, 156/2, 156/3, 156/4, 156/5, 156/6, 156/7, 156/8, 219/1, 219/2, 219/3, 220/1, 220/2, 220/3, 228/1, 228/2, 215/1A, 215/1B, 215/2, 215/3, 216, 217, 234/1, 234/4, 234/2, 234/3, 235/1, 235/2, 235/3, 235/4, 235/5A, 235/5B, 231/1, 231/2, 231/3, 231/4, 231/5, 231/6, 232/1, 232/5, 232/2, 232/3, 232/4, 232/6A, 232/6B1, 232/6B2, 229/1, 229/2, 229/3, 229/4, 226/6A, 227/1, 227/2, 227/3, 227/4, 227/5, 222/1, 222/2A, 222/2B1, 223, 224, 225/1, 225/2A, 225/3, 225/4, 225/5, 225/6A1, 225/6B1A, 225/6B1B, 221/1, 221/2, 221/3, 230/1, 230/2, 230/3, 230/4, 230/5, 230/6, 230/7, 206, 207, 233/1, 233/2A, 233/2B, 233/2C, 233/2D, 233/2E, 233/2F, 233/3, 235/6, 236, 237, 238/1, 238/2, 238/3, 238/4, 239/1A, 239/1B, 239/2, 239/3, 239/4, 239/5, 240, 263/1, 263/2, 263/3, 263/4A1, 263/4A2, 263/4B, 263/5A1, 263/5A2, 263/5A3, 263/6A1, 263/6B1, 263/6C1, 263/7, 263/8A, 263/9A, 263/10A, 263/11, 263/12A, 264/1, 264/2, 264/3, 264/4, 264/5, 264/6, 264/7, 265/2, 265/3, 265/4, 265/5, 266/1, 266/2, 266/3, 266/4, 266/5, 266/6, 266/8, 266/7, 266/9, 266/10, 266/11, 266/12, 266/13, 266/14, 266/15, 267/1, 267/2, 267/3, 267/4, 267/5, 268/1A, 268/1B, 268/1C, 268/1D, 268/2, 268/3, 268/4, 269/1, 269/2, 269/3, 269/4, 269/5, 269/6, 269/7, 270/1, 270/2, 270/3, 270/4, 270/5, 270/6, 270/7, 270/8, 271/1, 271/2, 271/3, 271/4A, 271/4B, 271/5, 271/6, 271/7, 271/8, 271/9, 271/10, 272/1, 272/2, 272/3, 272/4, 272/5, 272/6, 272/7, 272/8, 272/9, 273/1, 273/2, 273/3, 273/4, 273/5, 273/6, 273/7, 273/8, 273/9, 273/10, 274/1, 274/2A, 274/2B, 274/3, 274/4, 275/1, 275/2, 275/3, 276/1, 276/2, 276/3, 276/4, 276/5, 277/1, 277/2A, 277/2B, 277/3, 277/4, 278/1, 278/2A, 278/2B, 278/3, 278/4, 278/5, 279/1, 279/2, 279/3, 279/4, 279/5A, 279/5B,**

  
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162

  
CHAIRMAN  
SEAC- TN

279/6, 279/7, 279/8, 279/9, 280/1, 280/2A, 280/2B, 280/3, 280/4, 280/5, 280/6, 280/7, 280/8, 281/1, 281/2, 281/3, 281/4, 281/5A, 281/5B, 281/6, 281/7, 281/8, 281/9, 281/10, 282/1, 282/2A, 282/2B, 282/2C, 283/1, 283/2A1, 283/2C1, 283/3A, 283/4A, 283/5, 283/6A, 80/1, 80/2A, 80/2B, 81/1, 81/2, 81/3, 81/4, 81/5A, 81/5B, 81/6, 81/7, 82/1, 82/2, 82/3, 82/4, 82/5, 82/6, 82/7, 82/8, 82/9, 83/1, 83/2, 83/3, 83/4, 83/5, 83/6, 83/7A, 83/7B, 83/8, 84/1, 84/2, 84/3, 84/4, 84/5A, 84/5B, 84/6, 84/7, 85/1, 85/2, 85/3, 85/4, 86/2, 86/3, 86/4, 86/5, 86/6, 99/1A, 99/1B, 99/1C, 99/1D, 99/1E, 99/2A, 99/2B, 99/2C, 99/3, 99/4, 99/5, 99/6, 99/7, 100/1, 100/2, 101/1, 101/2, 101/3, 101/4, 101/5, 101/6A, 101/6B, 101/6C, 101/6D, 101/6E, 101/6F, 171, 172, 173/1, 173/2, 173/3, 173/4, 173/5, 173/6, 173/7, 173/8, 173/9, 174/1, 174/2, 174/3, 174/4, 174/5, 174/6, 174/7, 174/8, 175/1, 175/2, 175/3, 175/4, 175/5A, 175/5B, 175/6, 176/1, 176/2, 176/3A, 176/3B, 176/4, 177/1, 177/2, 177/3, 177/4, 177/5, 177/6, 177/7, 177/8, 177/9, 178/1, 178/2, 178/3, 178/4, 178/5A, 178/5B, 179/1, 179/2, 179/3A, 179/3B, 179/4, 179/5, 179/6, 202/1, 202/2A, 202/2B, 202/3, 202/4, 202/5A, 202/5B, 202/6A, 202/6B, 203/1, 203/2, 203/3A1, 203/3A2, 203/3B, 203/4, 204/1, 204/2, 204/3, 204/4, 205/1, 205/2, 205/3, 205/4, 205/5, 208/1, 208/2, 208/3, 208/4, 208/5, 208/6, 208/7, 209/1, 209/2, 209/3, 209/4, 209/5, 209/6, 210/1, 210/2A, 210/2B, 210/2C, 210/2D, 210/3, 210/4A1, 210/4A2, 210/4A3, 210/4A4, 210/4A5, 210/4B, 210/5, 211/1, 211/2, 211/3A, 211/3B, 211/4A, 211/4B, 211/4C, 211/4D, 211/5, 212/1A, 212/1B1, 212/1B2, 212/2A, 212/2B, 212/3, 212/4A, 212/4B, 212/5, 213/1, 213/2, 213/3A, 213/3B, 213/3C, 213/3D, 213/3E, 213/3F, 213/3G, 213/4, 213/5, 213/6, 180/1A, 180/1B, 180/1C, 180/1D, 180/2, 180/3, 181/1, 181/2, 181/3A, 181/3B, 181/4, 181/5, 181/6, 182/1, 182/2, 183/1A, 183/1B, 183/2, 184/1, 184/2, 184/3, 185/1, 185/2, 185/3, 185/4, 186/1, 186/2, 186/3, 187/1, 187/2, 187/3A, 187/3B, 187/3C, 187/4, 188/1, 188/2, 189/1, 189/2, 189/3, 189/4, 189/5, 189/6, 189/7, 190/1, 190/2, 190/3, 190/4, 191/1, 191/2, 191/3, 191/4, 191/5A, 191/5B, 191/6, 191/7, 192/1, 192/2, 192/3, 192/4A, 192/4B, 193/1, 193/2, 193/3, 193/4, 193/5, 193/6, 194/1, 194/2, 194/3, 195/1, 195/2, 195/3, 196/1A, 196/1B, 196/2, 196/3, 197/1, 197/2, 197/3, 197/4, 197/5A, 197/5B, 198/1, 198/2, 199/1, 199/2, 199/3, 199/4, 200, 201/1A, 201/1B, 201/2A, 201/2B, 201/3.

  
MEMBER SECRETARY  
SEAC - TN

163

  
CHAIRMAN  
SEAC- TN

E.Muthulingapuram Village SF.Nos. 14/1, 14/2, 14/3, 14/4, 14/5, 14/6, 14/7, 15/1, 15/2, 15/3, 62/1, 62/2, 62/3, 62/4, 63/1, 63/2, 63/3, 64, 67, 68/1, 68/2, 69/1, 69/2, 69/3, 69/4, 71/1, 71/2, 71/3, 71/4.

Thulukapatty Village SF.Nos. 239/1, 239/2, 239/3, 239/4, 239/5, 239/6, 239/7, 239/8, 239/9, 239/10, 239/11, 240/1A, 240/1B, 240/2A, 240/2B, 240/2C, 240/3B, 240/3C, 240/3D, 240/4A, 240/4B, 240/4C, 240/4D, 240/6A, 240/6B, 240/7A, 240/7B, 240/8, 240/9A, 240/9B, 240/10A, 240/10B, 240/11, 240/12, 240/13, 241/1, 241/2, 241/3, 241/4A, 241/4B, 241/5, 241/6, 241/7, 241/8, 241/9, 242/1, 242/2, 242/3A, 242/3B, 242/4A, 242/4B, 242/5A, 242/5B, 242/5C, 242/6, 243/1A, 243/1B, 243/1C, 243/1D, 243/2, 243/3, 244, 245/1, 245/2, 247/1, 247/2, 247/3A, 247/3B, 247/4, 247/5, 248/1, 248/2, 248/3A, 248/3B, 248/4A, 248/4B, 248/4C, 248/5, 248/6, 248/7A, 248/7B, 248/8, 248/9, 248/10, 248/11, 250/1A, 250/1B, 250/2, 250/4, 250/5B, 250/6, 250/7A, 250/7B, 250/8A, 250/8B, 250/9, 250/10, 250/11, 250/12, 250/13, 250/14, 250/15, 250/16, 250/17 Sattur & Virudhunagar Taluks, Virudhunagar District Tamil Nadu By M/s. State Industries Promotion Corporation of Tamilnadu Limited (SIPCOT) – For Environmental Clearance. (SIA/TN/INFRA2/423033/2023, dated 22.03.2023)

The details of the project furnished by the proponent are available in the website (parivesh.nic.in).

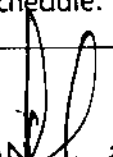
**The SEAC noted the following:**

1. The project/activity is covered under Category "B" of Item 8(b) "Township & Area Development Projects" of the Schedule to the EIA Notification, 2006.
2. TOR was issued vide Lr No. SEIAA-TN/F.No.9262/SEAC/8(b)/ToR-1205/2022 dated:14.07.2022.
3. EIA report Submitted :23.03.2023

The salient features of the project as follows

S. NO	Description	Details
1	Name of the Project	State Industries Promotion Corporation of Tamil Nadu Limited (SIPCOT) Limited Tamil Nadu under Sl.No 8(b) of the Schedule.

  
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2	Location	Latitude 9°25'26.91"N, Longitude 77°54'24.04"E (Centre Coordinates)																																																																									
3	Type of Project	Township and Area Development Projects Schedule 8(b):																																																																									
4	Total Plot Area	Breakup of Total Plot Area:																																																																									
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 SEAC -TN

165

  
 CHAIRMAN  
 SEAC- TN

			<i>Non - EC attracting Industries.</i>																																											
			<i>Total</i>	<i>639.65</i>	<i>258.97</i>	<i>100</i>																																								
		Industrial Housing comprising of 7 nos. of towers with Stilt + 10 Floors and the total Built up Area for Industrial Housing is 1,11.858 sq.m & 1680 Dormitory Rooms.																																												
6	Project Cost	1800 Crores																																												
7	Water Requirement	<p>Total water requirement for the project is 29944 KLD. Fresh water requirement is 4545 (domestic purpose and Process), TTRO water 5000 KLD. Water requirement for Process and Utilities (887KLD) and green belt development (5210 KLD) and flushing (2656KLD) will be met from recycled water (20399 KLD).</p> <p>Fresh water (from Thamirabarani River) and TTRO Water will be sourced through TWAD.</p> <table border="1"> <thead> <tr> <th>Details</th> <th>Fresh water (KLD)</th> <th>TTRO (KLD)</th> <th>Recycled water (KLD)</th> <th>Total water (KLD)</th> </tr> </thead> <tbody> <tr> <td>Domestic (Industry)</td> <td>2758</td> <td></td> <td>0</td> <td>2758</td> </tr> <tr> <td>Domestic (Hostel)</td> <td>900</td> <td></td> <td>0</td> <td>900</td> </tr> <tr> <td>Flushing (Industry)</td> <td></td> <td>2183</td> <td>23</td> <td>2206</td> </tr> <tr> <td>Flushing (Hostel)</td> <td></td> <td>0</td> <td>450</td> <td>450</td> </tr> <tr> <td>Process &amp; Utilities</td> <td>887</td> <td>2817</td> <td>14716</td> <td>18420</td> </tr> <tr> <td>Green belt</td> <td></td> <td></td> <td>5210</td> <td>5210</td> </tr> <tr> <td><b>Total</b></td> <td><b>4545</b></td> <td><b>5000</b></td> <td><b>20399</b></td> <td><b>29944</b></td> </tr> </tbody> </table>					Details	Fresh water (KLD)	TTRO (KLD)	Recycled water (KLD)	Total water (KLD)	Domestic (Industry)	2758		0	2758	Domestic (Hostel)	900		0	900	Flushing (Industry)		2183	23	2206	Flushing (Hostel)		0	450	450	Process & Utilities	887	2817	14716	18420	Green belt			5210	5210	<b>Total</b>	<b>4545</b>	<b>5000</b>	<b>20399</b>	<b>29944</b>
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8	Wastewater Management	S.No	wastewater	Quantity (KLD)	Method of Disposal
		Construction Phase			
		1	Sewage	8	Treated in 10 KLD Packaged STP
		Operation Phase			
		2	Sewage from industries	4468	Will be treated by individual industries and treated sewage will be used for flushing and green belt development for IP
		3	Sewage from Housing	1215	Will be treated in STP of 2000 KLD and treated sewage will be used for flushing for housing and green belt development for IP
4	Effluent from individual industries	9048	Will be treated in CETP of 3 Nos. X 5 MLD followed by ZLD system and treated effluent will be used for process & utilities.		
9	Solid Waste Generation and Management	S.No	Waste type	Quantity (kg/day)	Disposal Method
		Construction Phase			
		1	Organic waste	41	Will be collected and disposed in municipal bins through Local body
		2	Inorganic waste	27	
			Total	68	
		Operation Phase			
		1	Organic waste	29781	Individual industries will segregate the waste and organic waste will be

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SEAC - TN

167

CHAIRMAN  
SEAC - TN

				composted and used as manure for green belt development.	
		2	Inorganic waste	19854	Inorganic waste will be sold to TNPCB authorized recyclers/local vendors// Local body by individual industries.
			<b>Total</b>	<b>49635</b>	
Industrial Housing					
		1	Organic waste	2700	Organic wastes will be composted in Organic Waste Converter and the compost will be used as manure for green belt development.
		2	Inorganic waste	1800	Inorganic waste will be collected and sold to TNPCB authorized recyclers / local vendors/ Local body by individual industries.
			<b>Total</b>	<b>4500</b>	
10	Power Requirement	<b>Details</b>	<b>Capacity</b>		<b>Source</b>
		Power Requirement (MVA)	104		TANGEDCO
		Back-up (KVA)	2x1000 kVA DG by SIPCOT for industrial housing during power failure		DG
			Individual industries will have their own DG sets		DG
11	Man Power	Construction phase -150 nos.			



		Operation phase – 1,20,300 (Including Industrial Housing)				
12	Green Belt Area	S.No	Area details	Area (Ha)	Area (Acres)	% of developable area
		1	OSR	36.947	91.26	9.18%
		2	Green belt	26.424	65.27	6.56%
		3	33% green belt in plot area to be allotted to individual industries	85.457	211.08	21.23%
			Total	148.828	367.61	36.97%
To plant 2500 Nos. of Trees/Hectare in 148.828 Ha and 560 Nos. of Compensatory trees to compensate the loss of 56 Nos. of trees to be cutoff.						
13	EMP Cost	S.No	EMP activities			
		1.	Strom water drains, Culverts & rainwater harvesting pits			
		2.	CETP with ZLD			
		3.	Sewerage system & STP			
		4.	Solid and Hazardous Waste Management			
		5.	Solar lighting & Internal roads			
		6.	Green belt development			
		7.	Environmental Monitoring during construction phase			
		8.	DG sets Acoustics and stack (for industrial Housing)			

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SEAC -TN

169

CHAIRMAN  
SEAC -TN

		9. Rejuvenation of Pond
		10. OCMS station at 4 locations
		11. Baffle wall around the Match box industry
		12. Conservation plan Schedule -1 Species
		Capital Cost - 373.11 Crores
		Recurring cost - 644 Lakhs.
		Conservation plan for Peafowl – Rs. 10 Lakhs shall be spent for Plantation of 100 Nos. of trees per year for five years in villages around the site, 5 Nos. of Water filling during summer, & Awareness programme in nearby schools regard to Peacock conservation.
14	CER	Rs 50 Lakhs As per SEAC Meeting(5 lakhs per school Totally 50 Lakhs)

The proposal was placed in 377th SEAC meeting held on 10.05.2023. Based on the presentation and documents furnished, SEAC decided to defer and directed the PP & the EIA Coordinator that PP shall revise the presentation and documents including the certain additional details so as to take up the proposal in the next ensuing authority meeting.

The proposal was again placed in 378<sup>th</sup> SEAC meeting held on 11.05.2023. Based on the presentation and documents furnished, SEAC decided to **recommend the proposal for the grant of Environmental Clearance**, subject to the standard conditions & normal conditions stipulated by MOEF &CC, in addition to the following specific conditions.

1. The project proponent shall in-house only non - EIA attracting industries alone as committed especially Textile-wet processing unit & Dry textiles (Apparel, Home Textiles) & Other Non - EC attracting industries for the proposed SIPCOT plots as committed.
2. The project proponent shall obtain and maintain valid permission all time for supply of fresh water as committed.

  
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CHAIRMAN  
SEAC- TN

3. The project proponent shall allot the plots under Court cases to entrepreneurs only after the final orders of the such Court cases.
4. The project proponent shall provide adequate capacity of Sewage treatment plant as committed for the proposed industrial housing and shall maintain & operate continuously to achieve the standards prescribed by the TNPCB/CPCB.
5. The project proponent shall ensure that non - EIA attracting Industries to be in-housed shall provide adequate individual STP and shall reuse the treated sewage for the toilet flushing & green belt/gardening.
6. The project proponent shall provide adequate capacity of CETP with ZLD for the proposed industrial activities as committed and shall maintain & operate continuously to achieve the standards prescribed by the TNPCB/CPCB.
7. The PP shall provide SCADA for operation and maintenance of CETP & STP as committed.
8. The project proponent shall ensure that industries in-housed shall operate and maintain the proposed STP/ETP efficiently and continuously to bring the quality of treated sewage/effluent to satisfy the discharge standards prescribed by the TNPCB at all times.
9. The project proponent shall ensure that non - EIA attracting Industries to be in-housed shall provide elevated STP of adequate capacity & its utilities above the ground level with adequate height considering highest rainfall & flood level /inundation point of view as recommended by the competent authority for the proposed project site.
10. The project proponent and the non - EIA attracting Industries to be in-housed shall provide & ensure that the utilities/ arrangements for fresh water supply, Storm/rain water management, and for reuse of treated sewage/effluent as proposed.
11. The project proponent shall ensure that the industries to be in-housed shall adhere that no treated or untreated trade effluent/sewage is discharged outside the premises under any circumstances.
12. The height of the stacks of DG sets shall be provided as per the CPCB norms.


  
MEMBER SECRETARY  
SEAC -TN

171

  
CHAIRMAN  
SEAC- TN


13. The project proponent shall provide 4 Nos. CAQMS and Online Water quality analyzer for the CETP& STP for the parameters prescribed by the CPCB and shall hook up the same to CAC & WQW of TNPCB & CPCB portal for continuous & effective monitoring to achieve standards prescribed by the Board.
14. The project proponent shall ensure that non - EIA attracting Industries to be in-housed shall 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.
15. The proponent shall provide and maintain adequate green belt around the water bodies and to carryout periodic rejuvenation of water bodies within the proposed SIPCOT.
16. The project proponent shall periodically carryout cconservation plan for Peafowl as committed for Plantation of 100 Nos. of trees per year for five years in villages around the site, 5 Nos. of Water filling during summer, & Awareness programme in nearby schools regard to Peacock conservation.
17. The PP shall plant 2500 Nos. of Trees/Hectare in 148.828 Ha of proposed green belt area excluding 560 Nos. of Compensatory trees to compensate the loss of 56 Nos. of trees to be cutoff.
18. The project proponent shall develop and maintain the project site without hindering the flow of the water bodies within the proposed SIPCOT area.
19. The purpose of Green belt around the project is to capture the fugitive emissions, carbon sequestration and to attenuate the noise generated, in addition to improving the aesthetics. A wide range of indigenous plant species should be planted as given in the appendix in consultation with the DFO, State Agriculture University and local school/college authorities. The plant species with dense/moderate canopy of native origin should be chosen. Species of

  
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CHAIRMAN  
SEAC- TN

small/medium/tall trees alternating with shrubs should be planted in a mixed manner.

20. Taller/one year old Saplings raised in appropriate size of bags, preferably eco-friendly bags should be planted in proper espacement as per the advice of local forest authorities/botanist/Horticulturist with regard to site specific choices. The proponent shall earmark the greenbelt area with GPS coordinates all along the boundary of the project site with at least 3 meters wide and in between blocks in an organized manner.
21. The project proponent shall provide entry and exit points for the OSR area, as per the norms for the public usage and as committed.
22. The Proponent shall provide rain water harvesting sump of adequate capacity for collecting the runoff from rooftops, paved and unpaved roads as committed.
23. The PP shall comply to all the EMP as committed before obtaining CTO from TNPCB.
24. The Proponent shall provide the dispenser for the disposal of Sanitary Napkins.
25. The project proponent shall provide a health care facility within the proposed SIPCOT as committed, possibly with a medical officer 24x7 in the project site for continuous monitoring the health of workers as committed.
26. The project proponent & the industries to be in-housed shall ensure buildings constructed are energy efficient and conform to the green building norms.
27. The project proponent shall insist the individual Industries to provide and utilize at least 20% of roof top area for harnessing Solar Energy.
28. As accepted by the PP, the revised CER cost of Rs.50 Lakhs shall be spent for 10 Nos. of Government Schools each Rs. 5 Lakhs around the proposed SIPCOT towards the activities mentioned in the MoEF&CC OM Dated: 01.05.2018 before obtaining CTO from TNPCB.

  
MEMBER SECRETARY  
SEAC -TN

173

  
CHAIRMAN  
SEAC- TN

## ANNEXURE-I

1. The proponent shall mandatorily appoint the required number of statutory officials and the competent persons in relevant to the proposed quarry size as per the provisions of Mines Act 1952 and Metalliferrous Mines Regulations, 1961.
2. The proponent shall erect fencing all around the boundary of the proposed area with gates for entry/exit before the commencement of the operation and shall furnish the photographs/map showing the same before obtaining the CTO from TNPCB.
3. Perennial maintenance of haulage road/village / Panchayat Road shall be done by the project proponent as required in connection with the concerned Govt. Authority.
4. The Project Proponent shall adhere to the working parameters of mining plan which was submitted at the time of EC appraisal wherein year-wise plan was mentioned for total excavation i.e. quantum of mineral, waste, over burden, inter burden and top soil etc.. No change in basic mining proposal like mining technology, total excavation, mineral & waste production, lease area and scope of working (viz. method of mining, overburden & dump management, O.B & dump mining, mineral transportation mode, ultimate depth of mining etc.) shall not be carried out without prior approval of the Ministry of Environment, Forest and Climate Change, which entail adverse environmental impacts, even if it is a part of approved mining plan modified after grant of EC or granted by State Govt. in the form of Short Term Permit (STP), Query license or any other name.
5. The reject/waste generated during the mining operations shall be stacked at earmarked waste dump site(s) only. The physical parameters of the waste dumps like height, width and angle of slope shall be governed as per the approved Mining Plan as per the guidelines/circulars issued by DGMS w.r.t. safety in mining operations shall be strictly adhered to maintain the stability of waste dumps.
6. The proponent shall ensure that the slope of dumps is suitably vegetated in scientific manner with the native species to maintain the slope stability, prevent erosion and surface run off. The gullies formed on slopes should be adequately taken care of as it impacts the overall stability of dumps.

7. Perennial sprinkling arrangement shall be in place on the haulage road for fugitive dust suppression. Fugitive emission measurements should be carried out during the mining operation at regular intervals and submit the consolidated report to TNPCB once in six months.
8. The Project Proponent shall carry out slope stability study by a reputed academic/research institution such as NIRM, IIT, Anna University for evaluating the safe slope angle if the proposed dump height is more than 30 meters. The slope stability report shall be submitted to concerned Regional office of MoEF&CC, Govt. of India, Chennai as well as SEIAA, Tamilnadu.
9. The Proponent shall ensure that the Noise level is monitored during mining operation at the project site for all the machineries deployed and adequate noise level reduction measures undertaken accordingly. The report on the periodic monitoring shall be submitted to TNPCB once in 6 months.
10. Proper barriers to reduce noise level and dust pollution should be established by providing greenbelt along the boundary of the quarrying site and suitable working methodology to be adopted by considering the wind direction.
11. The purpose of Green belt around the project is to capture the fugitive emissions, carbon sequestration and to attenuate the noise generated, in addition to improving the aesthetics. A wide range of indigenous plant species should be planted as given in the appendix in consultation with the DFO, State Agriculture University and local school/college authorities. The plant species with dense/moderate canopy of native origin should be chosen. Species of small/medium/tall trees alternating with shrubs should be planted in a mixed manner.
12. Taller/one year old Saplings raised in appropriate size of bags, preferably eco-friendly bags should be planted in proper escapements as per the advice of local forest authorities/botanist/Horticulturist with regard to site specific choices. The proponent shall earmark the greenbelt area with GPS coordinates all along the boundary of the project site with at least 3 meters wide and in between blocks in an organized manner.

  
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- 13. Noise and Vibration Related:** (i) The Proponent shall carry out only the Controlled Blasting operation using NONEL shock tube initiation system during daytime. Usage of other initiation systems such as detonating cord/fuse, safety fuse, ordinary detonators, cord relays, should be avoided in the blasting operation. The mitigation measures for control of ground vibrations and to arrest fly rocks should be implemented meticulously under the supervision of statutory competent persons possessing the I / II Class Mines Manager / Foreman / Blaster certificate issued by the DGMS under MMR 1961, appointed in the quarry. No secondary blasting of boulders shall be carried out in any occasions and only the Rock Breakers (or) other suitable non-explosive techniques shall be adopted if such secondary breakage is required. The Project Proponent shall provide required number of the security sentries for guarding the danger zone of 500 m radius from the site of blasting to ensure that no human/animal is present within this danger zone and also no person is allowed to enter into (or) stay in the danger zone during the blasting. (ii) Appropriate measures should be taken for control of noise levels below 85 dBA in the work environment. Workers engaged in operations of HEMM, etc. should be provided with ear plugs/muffs, (iii) Noise levels should be monitored regularly (on weekly basis) near the major sources of noise generation within the core zone.
14. Ground water quality monitoring should be conducted once in every six months and the report should be submitted to TNPCB.
15. The operation of the quarry should not affect the agricultural activities & water bodies near the project site and a 50 m safety distance from water body should be maintained without carrying any activity. The proponent shall take appropriate measures for "Silt Management" and prepare a SOP for periodical de-siltation indicating the possible silt content and size in case of any agricultural land exists around the quarry.
16. The proponent shall provide sedimentation tank / settling tank with adequate capacity for runoff management.
17. The proponent shall ensure that the transportation of the quarried materials shall not cause any hindrance to the Village people/Existing Village Road and shall take

  
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CHAIRMAN  
SEAC- TN



- adequate safety precautionary measures while the vehicles are passing through the schools / hospital. The Project Proponent shall ensure that the road may not be damaged due to transportation of the quarried rough stones; and transport of rough stones will be as per IRC Guidelines with respect to complying with traffic congestion and density.
18. To ensure safety measures along the boundary of the quarry site, security guards are to be posted during the entire period of the mining operation.
  19. After mining operations are completed, the mine closure activities as indicated in the mine closure plan shall be strictly carried out by the Proponent fulfilling the necessary actions as assured in the Environmental Management Plan.
  20. The Project proponent shall, after ceasing mining operations, undertake re-grassing the mining area and any other area which may have been disturbed due to their mining activities and restore the land to a condition that is fit for the growth of fodder, flora, fauna etc.
  21. The Project Proponent shall comply with the provisions of the Mines Act, 1952, MMR 1961 and Mines Rules 1955 for ensuring safety, health and welfare of the people working in the mines and the surrounding habitants.
  22. The project proponent shall ensure that the provisions of the MMRD, 1956, the MCDR 2017 and Tamilnadu Minor Mineral Concession Rules 1959 are complied by carrying out the quarrying operations in a skillful, scientific and systematic manner keeping in view proper safety of the labour, structure and the public and public works located in that vicinity of the quarrying area and in a manner to preserve the environment and ecology of the area.
  23. The quarrying activity shall be stopped if the entire quantity indicated in the Mining plan is quarried even before the expiry of the quarry lease period and the same shall be informed to the District AD/DD (Geology and Mining) District Environmental Engineer (TNPCCB) and the Director of Mines Safety (DMS), Chennai Region by the proponent without fail.
  24. The Project Proponent shall abide by the annual production scheduled specified in the approved mining plan and if any deviation is observed, it will render the

  
MEMBER SECRETARY  
SEAC -TN

177

  
CHAIRMAN  
SEAC- TN

Project Proponent liable for legal action in accordance with Environment and Mining Laws.

25. Prior clearance from Forestry & Wild Life including clearance from committee of the National Board for Wildlife as applicable shall be obtained before starting the quarrying operation, if the project site attracts the NBWL clearance, as per the existing law from time to time.
26. All the conditions imposed by the Assistant/Deputy Director, Geology & Mining, concerned District in the mining plan approval letter and the Precise area communication letter issued by concerned District Collector should be strictly followed.
27. The mining lease holders shall, after ceasing mining operations, undertake re-grassing the mining area and any other area which may have been disturbed due to their mining activities and restore the land to a condition which is fit for growth of fodder, flora, fauna etc.
28. The Project proponent shall install a Display Board at the entrance of the mining lease area/abutting the public Road, about the project information as shown in the Appendix -II of this minute.

  
MEMBER SECRETARY  
SEAC -TN

  
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**Appendix - I**  
**List of Native Trees Suggested for Planting**

No	Scientific Name	Tamil Name	Tamil Name
1	<i>Aegle marmelos</i>	Vilvam	வில்வம்
2	<i>Adenaanthera pavonina</i>	Marjadi	மஞ்சளடி. ஆனைக்குன்றிமணி
3	<i>Albizia lebeck</i>	Vaagai	வாகை
4	<i>Albizia amara</i>	Usil	உசில்
5	<i>Bauhinia purpurea</i>	Mantharai	மந்தாரை
6	<i>Bauhinia racemosa</i>	Aathi	ஆத்தி
7	<i>Bauhinia tomentos</i>	Iruvathi	இருவாத்தி
8	<i>Buchanania axillaris</i>	Kattuma	காட்டுமா
9	<i>Borassus flabellifer</i>	Panai	பனை
10	<i>Butea monosperma</i>	Murukkamaram	முருக்கமரம்
11	<i>Bobax ceiba</i>	Ilavu, Sevvilavu	இலவு
12	<i>Calophyllum inophyllum</i>	Punnai	புன்னை
13	<i>Cassia fistula</i>	Sarakondrai	சரக்கொன்றை
14	<i>Cassia roxburghii</i>	Sengondrai	செங்கொன்றை
15	<i>Chloroxylon swietenia</i>	Purasamaram	பரசு மரம்
16	<i>Cochlospermum religiosum</i>	Kongu, Manjallavu	கோங்கு. மஞ்சள் இலவு
17	<i>Cordia dichotoma</i>	Naruvuli	நருவுளி.
18	<i>Creteva adansonii</i>	Mavalingum	மாவிளங்கம்
19	<i>Dillenia indica</i>	Uva, Uzha	உசா
20	<i>Dillenia pentagyna</i>	SiruUva, Sitruzha	சீரு உசா
21	<i>Diospyro sebenum</i>	Karungali	கருங்காலி
22	<i>Diospyro schloroxylon</i>	Vaganai	வாகனை
23	<i>Ficus amplissima</i>	Kallitchi	கல் இச்சி
24	<i>Hibiscus tiliaceou</i>	Aatrupoovarasu	ஆற்றுப்பூங்க.
25	<i>Hardwickia binata</i>	Aacha	ஆச்சா
26	<i>Holoptelia integrifolia</i>	Aayili	ஆயா மரம். ஆயிலி
27	<i>Lannea coromandelica</i>	Odhiam	ஓதியம்
28	<i>Lagerstroemia speciosa</i>	Poo Marudhu	பூ மருது
29	<i>Lepisanthus tetraphylla</i>	Neikottaimaram	நெய் கொட்டை மரம்
30	<i>Limonia acidissima</i>	Vila maram	விலா மரம்
31	<i>Litsea glutinos</i>	Pisinpattai	பிளிப்பா. பிளிப்பாட்டை.
32	<i>Madhuca longifolia</i>	Iluppai	இலுப்பை
33	<i>Manilkara hexandra</i>	UlakkaiPaalai	உலக்கை பாலை
34	<i>Mimusops elengi</i>	Magizhamaram	மகிழமரம்
35	<i>Mitragyna parvifolia</i>	Kadambu	கடம்பு
36	<i>Morinda pubescens</i>	Nuna	நுணா
37	<i>Morinda citrifolia</i>	Vellai Nuna	வெள்ளை நுணா
38	<i>Phoenix sylvestre</i>	Eachai	எச்சமரம்
39	<i>Pongamia pinnat</i>	Pungam	புங்கம்

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SEAC - TN

179

CHAIRMAN  
SEAC- TN

40	<i>Premna mollissima</i>	Munnai	முன்னை
41	<i>Premna serratifolia</i>	Narumunnai	நறு முன்னை
42	<i>Premna tomentosa</i>	Malaipoovarasu	மலை புவரசு
43	<i>Prosopis cinerea</i>	Vanni maram	வன்னி மரம்
44	<i>Pterocarpus marsupium</i>	Vengai	வேங்கை
45	<i>Pterospermum canescens</i>	Vennangu, Tada	வேண்ணாங்கு
46	<i>Pterospermum xylocarpum</i>	Polavu	புலவு
47	<i>Puthranjiva roxburghii</i>	Karipala	கறிபாலா
48	<i>Salvadora persica</i>	Ugaa Maram	ஊகா மரம்
49	<i>Sapindus emarginatus</i>	Manipungan, Soapukai	மண்புழங்கள் சோப்புக்காய்
50	<i>Saraca asoca</i>	Asoca	அசோகா
51	<i>Streblus asper</i>	Piray maram	பிராய் மரம்
52	<i>Strychnos nuxtomie</i>	Yetti	எட்டி
53	<i>Strychnos potatorum</i>	Therthang Kottai	தேத்தான் கொட்டை
54	<i>Syzygium cumini</i>	Naval	நாவல்
55	<i>Terminalia belleric</i>	Thandri	தாண்டி
56	<i>Terminalia arjuna</i>	Ven marudhu	வேண் மருது
57	<i>Toona ciliate</i>	Sandhana vembu	சந்தன வேம்பு
58	<i>Thespesia populnea</i>	Puvarasu	புவரசு
59	<i>Walsuratrifoliata</i>	valsura	வால்கரா
60	<i>Wrightia tinctoria</i>	Veppalai	வேப்பாலை
61	<i>Pithecellobium dulce</i>	Kodukkapuli	கொடுக்காப்புளி

**Appendix -II**  
**Display Board**  
**(Size 6' x5' with Blue Background and White Letters)**

-----**சுரங்கம்**-----

சுரங்கங்களில் சுவாரி செயல்பாடுகளுக்கான சுற்றுத்தழல் அனுமதி கீழ்க்கண்ட நிபந்தனைகளுக்கு உட்பட்டு வழங்கப்பட்டுள்ளது SEIAA/\_\_\_\_, தேதி\_\_\_\_, சுற்றுத்தழல் அனுமதி \_\_\_\_\_ தேதி வரை செல்லத்தக்கதாக உள்ளது.

பகனம் பகுதி வளர்ச்சி மேம்பாட்டுக்கான சுரங்கத் திட்டம்	சுவாரியின் எல்லைபை சுற்றி வேலி அமைக்க வேண்டும் சுரங்கப்பாதையின் ஆழம் தளமட்டத்திலிருந்து மீட்டர்க்கு கிளமல் இருக்க வேண்டும் காற்றில் மாக ஏற்படாதவாறு சுரங்க பணிகளை மேற்கொள்ள வேண்டும்.
நடப்பட்டு பராமரிக்கப்பட வேண்டிய மரங்கள் எண்ணிக்கை:	வாகனங்கள் செல்லும் பாதையில் மாக ஏற்படாத அளவிற்கு தண்ணீரை முறையாக தண்ணி லாடிகளின் மூலமாக அவ்வப்போது தெளிக்க வேண்டும். இரைச்சல் அளவைபம் தூசி மாகபட்டையும் குறைப்பதற்காக சுவாரியின் எல்லைபை சுற்றி அடத்தியான பகனம் பகுதியை ஏற்படுத்த வேண்டும்.
சுரங்கத்தில் வெடி வைக்கும்பொழுது நிலஅதிர்வுகள் ஏற்படாதவாறும் மற்றும் கற்கள் பறக்காதவாறும் பாதுகாப்பு நடவடிக்கைகளை உள்விப்பாக செயல்படுத்தப்பட வேண்டும்.	
சுரங்கத்தில் இருந்து ஏற்படும் இரைச்சல் அளவு 85 டி.சிபிஎஸ் (dBA) அளவிற்கு மேல் ஏற்படாதவாறு தகுந்த கட்டுப்பாடுகளை மேற் கொள்ள வேண்டும்.	
சுரங்க சட்ட விதிகள் 1986ன் கீழ் சுரங்கத்தில் உள்ள பணியாளர்களுக்கு தகுந்த பாதுகாப்பு கருவிகள் வழங்குவதோடு காரதாரமுள்ள கட்டுப்பாறை வசதிகளை செய்ய தர வேண்டும்.	
கிராமம் அல்லது பஞ்சாயத்து வட்டியாக வாகனங்கள் செல்லும் சாலைபை தொடர்த்து தன்கு பராமரிக்க வேண்டும்.	
சுரங்கப்பணிகளால் அருகில் உள்ள விவசாயப் பணிகள் மற்றும் தீர்நிலைகள் பாதிக்கப்படக் கூடாது.	
நீர்நிலைகள் பாதிக்கப்படாமல் இருப்பதை உறுதி செய்யும் வகையில் நிலத்தடி நீர் தரத்தினை தொடர்த்து எண்ணிக்க வேண்டும்.	
சுரங்கத்திலிருந்து கனிம பொருட்களை எடுத்துச் செல்வது கிராம மக்களுக்கு எந்தத் தீரமத்தினையும் ஏற்படுத்தாதவாறு பாதுகாப்போடும் மற்றும் சுற்றுத்தழல் பாதிக்கவாத வண்ணம் வாகனங்களை இயக்க வேண்டும்.	
சுரங்கப்பணிகள் முடிக்கப்பட்டவுடன் சுரங்க மூடல் திட்டத்தில் உள்ளவாறு சுரங்கத்தினை மூட வேண்டும்.	
சுரங்க நடவடிக்கைகளை முடித்தபின்னர் சுரங்கப் பகுதி மற்றும் சுரங்க நடவடிக்கைகளால் இடையூறு ஏற்படக்கூடிய வேறு எந்தப் பகுதியையும் மறுகட்டுமானம் செய்ய துவங்கக்க விலங்குகள் ஆலிபவற்றின் வளர்ச்சிக்கு ஏற்ற வகையில் பகனம்பகுதியை உருவாக்க வேண்டும்.	
முழுமையான நிபந்தனைகளை அரிய பாரிவேஷ ( <a href="http://parivesh.nic.in">http://parivesh.nic.in</a> ) என்சிற இணையதளத்தைப் பார்வையிடவும் மேலும் சுத்தகித சுற்றுத்தழல் சார்த்த பகார்களுக்கு சென்னைபில் உள்ள சுற்றுத்தழல் மற்றும் வண அமைச்சகத்தின் குருங்கிணைத்த வட்டார அலுவலகம்: 044 - 28222325 (அல்லது) துழிமுதாடு மாக கட்டுப்பாடு வாரியத்தின் மாவட்ட சுற்றுத்தழல் செயரியாளரை அணுகவும்	

  
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