State Expert Appraisal Committee (SEAC)

Minutes of 406th meeting of the State Expert Appraisal Committee (SEAC) held on 01.09.2023 (Friday) at SEIAA Conference Hall, 2nd Floor, Panagal Maligai, Saidapet, Chennai 600 015 for consideration of Building & Construction projects, Metallurgical Industries and Synthetic Organic Chemicals Industries.

Confirmation of Earlier Minutes

The minutes of the 405th SEAC meeting held on 31.08.2023 were circulated to the Members in advance and as there are no remarks, the Committee decided to confirm the minute.

Agenda No. 406 – 01.

File No. 10209/2023.

Existing of hot steel rolling mill S.F. No. 273/2 & 273/3 of Irukkur Village, Paramathi Valur Taluk, Namakkal District, Tamil Nadu by M/s.Sri Kamala Ganapathy Steel Rolling Mills - for Terms of Reference. (SIA/TN/IND1/434295/2023 Dt:24.06.2023)

The proposal was placed in this 406th meeting of SEAC held on 01.09.2023. The details of the project furnished by the proponent are available in the website (parivesh.nic.in).

The SEAC noted the following

1. Earlier, the PP has obtained CTO from TNPCB vide proc. Dt: 01.11.2016 and RCO vide Proc. No. F.0528NML/OM/DEE/TNPCB/NML/W&A/2017, dated 29.04.2017 upto Dt:31.03.2027for production of 1.) TMT Bars - 3800 TPM, 2.) MS Rods - 100TPM, & MS Flats - 100 TPM.
2. The Proponent M/s. Sri Kamala Ganapathy Steel Rolling Mills has applied for Terms of Reference for the existing of hot rolling mill S.F. No. 273/2 & 273/3 of Irukkur Village, Paramathi Valur Taluk, Namakkal District, Tamil Nadu for production of 1.) TMT Bars - 3800 TPM, 2.) MS Rods - 100TPM, & MS Flats - 100 TPM with coal based hot rolling mill (coal based).
3. MoEF&CC Notification Dt: 20.07.2022 directs that all the standalone re-rolling units or cold rolling units, which are in existence and in operation as on the date of this notification, with valid Consent to Establish (CTE) and Consent to Operate (CTO) from the concerned State Pollution Control Board or the Union territory

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Pollution Control Committee, as the case may be, shall apply online for grant of Terms of Reference (ToR) followed by Environment Clearance and the said units shall be granted Standard Terms of Reference as per item 3(a) of the said notification and shall be exempted from the requirement of public consultation: Provided that the application for the grant of ToR shall be made within a period of one year from the date of this notification).

4. MoEF&CC Notification Dt: 20.07.2022 "one year" the words "one year and six months" shall be substituted in the MoEF&CC Notification Dt: 20.07.2022.
5. The project/activity is covered under Category "B" of Item 3(a) "Metallurgical industries (ferrous & non-ferrous)" of the Schedule to the EIA Notification,2006.

Based on the presentation made by the proponent SEAC recommended grant of Terms of Reference (TOR), subject to the following TORs, in addition to the standard terms of reference for EIA study for Metallurgical Industries (Ferrous & Non-Ferrous) and details issued by the MOEF & CC (Annexure III) to be included in EIA/EMP Report:

1. The PP shall conduct an 'energy audit' of the existing plant by an accredited BEE consultant and submit the report along with action plan to implement the suggestions made in the report.
2. The PP shall explore the possibilities of implementing the 'direct rolling technology' and indicate a timeline for its implementation.
3. The PP shall furnish panel board calculation for the existing activity.
4. The PP shall explore possibilities to utilize renewable energy with respect to total power consumption and timeline for substitution of briquette from agricultural waste/biomass instead of coal.
5. The PP shall obtain & furnish NOC from local panchayat.
6. The PP shall furnish photographs & video of the process activity, Air/Water pollution control measures, & green belt area after adopting best manufacturing methods in regard to state of art of technology.
7. Details of quantity Coal, imported/ indigenous and its quality regard to sulphur content & ash content.
8. Details of generation, handling and management & disposal of coal, fly ash, bottom ash, hot rolling mill furnace slag.

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9. The PP shall furnish details of green belt within the proposed site adhering to 33% of Green belt of the total area and shall furnish photographs of the same.
10. The PP shall furnish details of Ingots and Billets obtained from laboratory to ensure free from toxic contaminants.
11. Details of quantity Coal, imported/ indigenous and its quality regard to sulphur content & ash content.
12. Details of generation, handling and management & disposal of coal, fly ash, bottom ash, hot rolling mill furnace slag.
13. The PP shall details of sewage treatment and disposal for this project.
14. The PP shall explore possibilities to provide ESP for the hot rolling mill, since coal is used as the fuel.
15. The PP shall adopt Environmental manager for effective compliance on mitigation measures & monitoring of proposed expansion activity.
16. Since the Periods of idling are inherent because of the following activities, the PP shall study in detail and the same shall be included in the EIA report.
    i. Charging
    ii. Slagging
    iii. Sampling
    iv. Charge material
    v. Molten Heel Practice
    vi. Furnace Cover Losses
17. The PP shall study in detail about Charging and operation of Melting for better and efficient operation of induction furnaces.
18. The proponent shall study in detail about various measures could be adopted during finishing and tapping of a heat.
19. The proponent shall study in detail about operational control measures to Minimize and control the refractory wall wearing.
20. The proponent shall explore the possibilities to Change from mains frequency to medium frequency furnaces.
21. Details of sand reclamation unit shall be incorporated in the EIA report.
22. The proponent shall explore the possibilities of utilizing state of the art technology

with best global practice.

23. The proponent shall explore the possibilities of utilizing the industrial wastewater instead of fresh water.
24. The proponent shall elaborate on the state-of-the-art technology for induction furnace to control emissions (Fumes).
25. The proponent shall submit the Certified Compliance Report for existing plant.
26. The proponent must increase the solar and Wind Energy and must explore the possibilities of achieving Net Zero energy consumption.
27. The proponent shall submit the video and photograph of the operational details with particular reference to points of pollution in the existing plant.
28. Material balance and Water balance shall be furnished in accordance with MoEF&CC guidelines.
29. A detailed report on Solid waste management, hazardous waste shall be furnished.
30. Report on AAQ survey and proposed air pollution prevention and control measures shall be furnished in the EIA report.
31. The project proponent shall do the stoichiometric analysis of all the involved reactions to assess the possible emission of air pollutants in addition to the criteria pollutants, from the proposed project.
32. Adequacy report for ETP &STP for the proposed project obtained from any reputed Government institution such as IIT, Anna University, NIT shall be furnished.
33. Land use classification shall be obtained from the DTCP for the Survey Numbers of this project. Further, the project proponent shall submit the planning permission obtained from the DTCP, if any.
34. The proponent shall conduct the EIA study and submit the EIA report for the entire campus along with layout and necessary documents such as "A" register and village map.
35. Public Hearing points raised and commitments of the Project Proponent on the same along with time bound Action Plan with budgetary provisions to implement the same should be provided and also incorporated in the final EIA/EMP Report of the Project and to be submitted to SEIAA/SEAC with regard to the Office

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Memorandum of MoEF& CC accordingly.

36. The Public hearing advertisement shall be published in one major National daily and one most circulated Tamil daily.
37. The PP shall produce/display the EIA report, executive summery and other related information with respect to public hearing in Tamil.
38. 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.
39. The project proponent shall obtain clearance from the National Board for Wildlife, if applicable.
40. The project proponent shall explore the possibilities of treating and utilizing the trade effluent and sewage within the premises to achieve Zero liquid discharge.
41. The layout plan shall be furnished for the greenbelt area earmarked with GPS coordinates 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 be not less than 15 % of the total land area of the project.
42. As the plant operation involves the sensitive processing, the medical officer and the supporting staff involved in the health centre activities shall be trained in occupational health surveillance (OHS) aspects through the outsourced training from the experts available in the field of OHS for ensuring the health standard of persons employed.
43. The proposal for Roof Top solar panel shall be included in the EIA Report.
44. 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 furnish the detailed EMP.

Agenda No: 406-02

(File No: 10210/2023)

Proposed Construction of Building at S.F.No. 368/1B of Saravanampatti Village, Coimbatore North Taluk, Coimbatore District, Tamil Nadu by Thiru. C. Sukumaran- For Environmental Clearance. (SIA/TN/INFRA2/430311/2023, Dated:30.08.2023)

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The proposal was placed in this 406th SEAC meeting held on 01.09.2023. 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, Thiru. C. Sukumaran has applied for Environmental Clearance for the Proposed Construction of Building at S.F.No. 368/1B of Saravanampatti Village, Coimbatore North Taluk, Coimbatore District, Tamil Nadu.
2. The project/activity is covered under Category "B2" of item 8(a) "Building & Construction Projects" of the Schedule to the EIA Notification, 2006.

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

1. **The environmental clearance is sought for Construction Project at Plot No: 368/1B, City - Coimbatore, District - Coimbatore, Tamil Nadu by the PP M/s. C. Sukumaran**
2. M/s. Enviro Care India Private Limited is the EIA Consultant for the project.
3. Total plot area of the project is 24087.55 m2 and built-up area is 34798.41 m2 respectively.
4. Maximum number of floors will be **B+G+03** and maximum height of the building will be 18.04 m.
5. Total Saleable DU's (dwelling units) is **0.**
6. Salient features of the project as submitted by the project proponent:

PROJECT SUMMARY			
Sl. No.	Description	Total Quantity	Unit
GENERAL			
1	Plot Area	24087.55	SQMT
2	Proposed Built Up Area	34798.41	SQMT
3	Total no of Saleable DU's/Villas	0	No.
4	Max Height - (Height of tallest block)	18.04	M
5	No of Building Blocks (Residential + Community facilities)	2	
6	Max No of Floors	3	No.

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7	Expected Population (125 Data Centre + 25 Floating)	1500+500 = 2000	No.
8	Total Cost of Project	33.80	CR
9	Project Activity:	Commercial Building.	
AREAS			
10	Permissible Ground Coverage Area (50%)	-	SQMT
11	Proposed Ground Coverage Area (43.74%)	7548.88	SQMT
12	Permissible FSI Area (3.25)	-	SQMT
13	Proposed FSI Area (3.16)	27,420.2	SQMT
14	Other Non FSI Areas - including basement area etc.	7196.15	SQMT
15	Proposed Total Built Up Area	34798.41	SQMT
WATER			
16	Total Water Requirement	137.50	KLD
17	Fresh water requirement	67.50	KLD
18	Treated Water Requirement	70.00	KLD
19	Wastewater Generation	123.75	KLD
20	Proposed Capacity of STP	150.00	KLD
21	Treated Water Available for Reuse	-	KLD
22	Treated Water Recycled	70.00	KLD
23	Surplus treated water to be discharged in Municipal Sewer with Prior permission, if any	-	KLD
	RAINWATER HARVESTING		
24	Rainwater Harvesting - Recharge Pits	-	No.
25	Rainwater Harvesting Sump Capacity	250	M^3
	PARKING		
26	Total Parking Required as / Building Bye	Two Wheeler - 1219 Four Wheeler - 305	ECS

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	Laws		
27	Proposed Total Parking	Two Wheeler - 1220 Four Wheeler - 313	ECS
28	Parking in Basements	Two Wheeler - 100 Four Wheeler - 170	ECS
	GREEN AREA		
29	Proposed Green Area (Minimum 15.0% of plot area)	7948.89 (33.00%)	SQMT
	Total area	24087.55	SQMT
	Existing trees on plot	900	No.
	Number of trees to be planted	650	No.
	Number of trees to be transplanted/cut	-	No.
	SOLID WASTE MANAGEMENT		
30	Total Solid Waste Generation	387.50/1000=	TPD
31	Organic waste	232.50/1000=	TPD
32	Mode of Treatment & Disposal	Organic Waste Converter	TPD
33	Quantity of Sludge Generated from STP & Disposal	5.00	KG/DAY
34	Quantity of E-Waste Generation & Disposal	2.00	TPA
35	Quantity of Hazardous waste Generation & Disposal	2.00	TPA
	POWER / GREEN POWER		
34	Total Power Requirement	750	MVA
35	DG set backup	630	KVA
36	No of DG Sets	1	No.
37	Solar Panels - Roof Coverage	60	%
38	Hot Water Requirement Of which met by Solar Panels	-	KWHr

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Population details:

POPULATION			
Residential	DU'S	POP/DU	TOTAL POPULATION
Total Saleable Du's	-	-	-
Total	-	-	-
Non Residential	-	-	-
CLUB house (Employees etc.)	Area		
Club	-	-	-
Commercial	-	-	1500
Facility Management Staff	-	-	-
Total	-	-	-
Visitors	-	-	500
Residential	-	xx% of Residential Population	-
Club/Community Hall	-	xx% of Residential Population	-
Commercial	-	-	-
Total Visitors	-	-	500
Total Population	-	-	2000
EMP Cost	-	-	Capital cost-107.50 Lakhs Recurring cost-9.0 Lakhs/annum
CER Cost	-	-	84.50 Lakhs (The CER activities shall be spent

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		within 1 year from the date of EC issued)
Details of CER Activities	Toilet Facility/Water Treatment plant for nearby government schools	42.00 Lakhs
	Toilet Facility/Water Treatment plant/Incinerator for nearby primary, high and higher secondary government School at Saravanampatti	21.25 Lakhs
	Toilet Facility/Water Treatment plant/Incinerator for nearby Girls government School, Kalapatti	21.25 Lakhs

RECOMMENDATION OF THE COMMITTEE

The Committee discussed the matter and recommended a grant of environmental clearance for the project proposal as above and subject to the standard conditions as per the **Annexure II** of this minutes & normal conditions stipulated by MOEF &CC, in addition to the following specific conditions:

Additional Conditions:

1. The construction shall comply with Green Building norms and shall get minimum IGBC Gold rating.
2. PP shall submit the commitment letter from the local body for supply of fresh water to SEIAA before issue of EC.
3. The PP shall submit Demolition certificate for the existing building before obtaining EC.
4. STP shall be installed on 10-year BOOT basis, so that the construction and maintenance are combined in one single responsibility.

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5. 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.
6. 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.
7. Project proponent should ensure that there will be no use of "Single use of Plastic" (SUP).
8. 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.
9. 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.
10. Project proponent should invest the CSR amount as per the proposal and submit the compliance report regularly to the concerned authority/Directorate of environment.
11. 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.
12. 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.

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13. 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.
14. The proponent should provide the MoU with STPs' owner/concerned department for getting the STPs treated water for construction use.

Agenda No: 406-03

(File No: 10222/2023)

Proposed Construction of Residential Building - Non-High-Rise Group Development at S.F.No.1/1A1B, 1/1A1C, 1/1A1D, 1/1A1E, 1/1C1B, 1/1C1C, 1/4A2, 1/5A, 1/39, 1/40, 1/41, 1/42A, 1/42B, 1/70, 1/71, 1/106 of Moulivakkam Village & S.F.No. 166/5 of Koluthuvanchery Village, Kundrathur Taluk, Kancheepuram District, Tamil Nadu by M/s. Casagrand Fresh Private Limited - For Environmental Clearance. (SIA/TN/INFRA2/435637/2023, Dated:05.07.2023).

The proposal was placed in this 406th SEAC meeting held on 01.09.2023. 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. Casagrand Fresh Private Limited has applied for Environmental Clearance under for the Proposed Construction of Residential Building - Non High Rise Group Development at S.F.No.1/1A1B, 1/1A1C, 1/1A1D, 1/1A1E, 1/1C1B, 1/1C1C, 1/4A2, 1/5A, 1/39, 1/40, 1/41, 1/42A, 1/42B, 1/70, 1/71, 1/106 of Moulivakkam Village & S.F.No. 166/5 of Koluthuvanchery Village, Kundrathur Taluk, Kancheepuram District, Tamil Nadu.
2. The project/activity is covered under Category "B2" of item 8(a) "Building & Construction Projects" of the Schedule to the EIA Notification, 2006.
3. The Project involves construction of High- Rise Residential Group Development Building Consisting of 3 Blocks with Combined Basement and Block – 1 : Ground Floor+ 5 Floors with 118 Dwelling Units & Block – 2 : Ground Floor +5 Floors With 210 Dwelling Units and club house consists of Ground Floor +4 Floors and Block – 3 : Ground Floor+ 5 Floors with 83 Dwelling Units, Totally 411 Dwelling Units.

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Based on the presentation and document furnished by the proponent, SEAC decided to call for the following additional details,

i) The PP shall obtain fresh water supply commitment letter and disposal of excess treated water from the local body/TWAD.

ii) The proponent shall furnish NOC for flood inundation point of view obtained from the Competent Authority/PWD since the site is very close to Porur lake.

iii) The PP shall furnish Geo-Technical report to analyse percentage of clay soil to ensure foundation capability.

iv) The PP shall furnish details of soil strata viz depth of clay & depth of weathered rock to provide efficient storm water management system.

v) The PP shall furnish details regarding parking area provided and detailed traffic congestion study.

vi) The PP shall furnish NOC of Airport authority for Height Clearance.

vii) The PP shall furnish structural stability certificate from the Competent Authority since the site is very close to Porur lake.

viii) The PP shall furnish revised CER details.

On receipt of the above, further deliberations will be carried out. Hence, the Proponent is advised to submit the additional documents/information as sought above within the period of 30 days failing which your proposal will automatically get delisted from the PARIVRESH portal.

Agenda No: 406-04

(File No: 10228/2023)

Existing Re-rolling Mill with the production Capacity of 65,040 T/Annum at S.F.No.8/9, 3/1D(P), 3/1E(P), 22/1A, 22/1B & 22/1C of Vaalavanthi East Village, Musiri Taluk, Trichy District, Tamil Nadu by M/s. Arise Industries and Agency Private Limited - For Terms of Reference. (SIA/TN/IND1/436908/2023, Dated:18.07.2023).

The proposal was placed in this 406th SEAC meeting held on 01.09.2023. 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. Arise Industries and Agency Private Limited has applied for Terms of Reference for the Existing Re-rolling Mill with the

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production Capacity of 65,040 T/Annum at S.F.No.8/9, 3/1D(P), 3/1E(P), 22/1A, 22/1B & 22/1C of Vaalavanthi East Village, Musiri Taluk, Trichy District, Tamil Nadu.

2. The project/activity is covered under Category "B1" of Item 3(a) "Metallurgical Industries (Ferrous & Nonferrous)" of the Schedule to the EIA Notification, 2006.
3. The proponent had obtained Renewal of consent from TNPCB vide consent order No.2008232028863 under Air Act and Consent Order No. 2008132028863 under Water Act Dated: 30.04.2020 for the Manufacturing of Cold Twisted Deformed Bars, TMT Bars, Flats, Angles, Rounds & Squares with production quantity of 5420 Tons/Month and with the point source emissions of Re-heating Furnace (Wet scrubber with stack of 30m height) with validity up to 31.03.2024.
4. The proponent had obtained Renewal of consent from TNPCB vide consent order No.2208244083911 under Air Act and Consent Order No. 2208144083911 under Water Act Dated: 19.12.2022 for the Manufacturing of MS Billets with production quantity of 110000 Tons/Annum and with Induction Furnace-25 Tonnes (2 nos) with validity up to 31.03.2024.

Now, the proposal was placed in the 406th SEAC meeting held on 01.09.2023. During the presentation, committee noted the following

I. <u>Notification issued by MoEF&CC from time to time</u>

1. **As per EIA Notification 2006 S.O. 1533 (E) Dated: 14.09.2006, under 3(a) in the schedule,**

(1)	*(2)*	*(3)*	*(4)*	*(5)*
"3(a)	Metallurgical industries (ferrous & non ferrous	a) Primary metallurgical industry All projects b) Sponge iron manufacturing ≥ 200TPD	Sponge iron manufacturing < 200 TPD Secondary metallurgical	General condition shall apply for Sponge iron manufacturing.

		c)Secondary metallurgical processing industry All toxic and heavy metal producing units ≥ 20,000 tonnes /annum	processing industry i.) All toxic and heavy metal producing units < 20,000 tonnes/annum ii.) All other non –toxic secondary metallurgical processing industries >5000 tonnes/annum	

2. As per Notification S.O. 3067 (E) Dated: 01.12.2009, under sub para (iv) of Para V

(iv) against item 3(a), in column (5), for the entries, the following entries shall be substituted, namely: _

"General condition shall apply.

Note:

(i) The recycling industries units registered under the HSM Rules, are exempted.

(ii) In case of secondary, metallurgical processing industrial units, those projects involving operation of furnaces only, such as induction and electric arc furnace, submerged arc-furnace, and cupola with capacity more than 30,000 tonnes per annum (TPA) would require environmental clearance.

(iii) Plant / units other than power plants (given against entry no. 1(d) or the schedule), based on municipal solid waste (non- hazardous) are exempted.

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3. As per the MoEF&CC Notification S.O. 3250 (E) Dated: 20.07.2022,

"*All the standalone re-rolling units or cold rolling units, which are in existence and in operation as on the date of this notification, with valid Consent to Establish (CTE) and Consent to Operate (CTO) from the concerned state pollution control board or the union territory pollution control committee, as the case may be, shall apply online for grant of Terms of Reference as per item 3(a) of the said notification and shall be exempted from the requirement of public consultation:*

Provided that the application for the grant of ToR shall be made within a period of one year from the date of this notification."

II. Observations of SEAC

- As per EIA Notification 2006 S.O. 1533 (E) Dated: 14.09.2006, All other non – toxic secondary metallurgical processing industries >5000 tonnes/annum would require environmental clearance.
- As per Notification S.O. 3067 (E) Dated: 01.12.2009, Metallurgical processing industrial units, those projects involving operation of furnaces only, such as induction and electric arc furnace, submerged arc-furnace, and cupola with capacity more than 30,000 tonnes per annum (TPA) would require environmental clearance.
- The unit was in operation with the valid consent orders obtained from the TNPCB for the Manufacturing of MS Billets with production quantity of 110000 Tons/Annum and for the Manufacturing of Cold Twisted Deformed Bars, TMT Bars, Flats, Angles, Rounds & Squares with production quantity of 5420 Tons/Month.
- However, the PP had submitted an online application for obtaining ToR for the Manufacturing of Cold Twisted Deformed Bars, TMT Bars, Flats, Angles, Rounds & Squares with production quantity of 5420 Tons/Months only and claims that the proposal is a standalone existing re-rolling unit.
- However, on perusal of the Survey number and Google imagery, it is ascertained that the proposed activity involves manufacturing of billets which is captive to the rolling unit and produces steel products viz Cold Twisted

Deformed Bars, TMT Bars, Flats, Angles, Rounds & Squares which requires EC as per EIA Notification, 2006.

- Both the units are located at S.F.No.8/9, 3/1D(P), 3/1E(P), 22/1A, 22/1B & 22/1C of Vaalavanthi East Village, Musiri Taluk, Trichy District, Tamil Nadu (within the same premises).
- Further, the PP and EIA coordinator did not disclose the fact that the industry has been operating as an integrated unit where the steel ingots manufactured within the same premises is being used as raw material for re-rolling unit is captive to the plant.
- In addition to that, the EIA Coordinator had mentioned in the PPT that the Raw material (MS Billets) will be sourced from the external sources.

Based on the above-mentioned Notification, presentation and documents furnished by the project proponent, SEAC decided to obtain following details from the PP and EIA Coordinator.

1. The PP and EIA Coordinator shall furnish an explanation for not disclosing the fact that the existing industry involves manufacturing of MS Billets which is captive to the rolling unit which produces steel products such as cold twisted deformed Bars, TMT Bars, Flats, Angles, Rounds & Squares with production quantity of 5420 Tons/Month.
2. The PP shall furnish all the CTE and CTO copy obtained from the TNPCB so far in the chronological order.
3. The PP shall furnish if Environmental Clerance was obtained for the proposed activity. If so, the PP may also submit Certified compliance report obtained from IRO, MoEF&CC.
4. If EC was not obtained for the above, the existing industrial unit had been operating without a valid Environmental Clearance as per the schedule 3(a) – Metallurgical Industries (Ferrous & Non-ferrous) of EIA Notification, 2006. Hence, the existing unit will have to be treated as a violation case.

On receipt of the above, further deliberations will be carried out. Hence, the Proponent is advised to submit the additional documents/information as sought

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above within the period of 30 days failing which your proposal will automatically get delisted from the PARIVRESH portal.

Agenda No: 406-05

(File No: 6960/2019)

Proposed construction of Multi Storied Commercial Building [single block with a Basement + Stilt Floor+18 Floors) at S.No. 51/1B1A1A1 & 51/18 of Seewaram village, Sholinganallur Taluk, Kancheepuram District, Tamil Nadu by Mr. Chenaram Seni -For Environmental Clearance. (SIA/TN/MIS/111075/2019 Dt. 13.07.2019).

Earlier, this proposal was placed in the 138th SEAC Meeting held on 08.11.2019.

The SEAC noted the following:

1. The Proponent, Mr. Chenaram Seni has applied for Environmental Clearance for the Proposed construction at S.No 51/1B1A1A1 & 51/18, Seevaran Village. Sholinganallur Taluk, Kancheepuram District
2. The project/activity is covered under Category "B" of Item 8(a) "Building and Construction Projects" of the Schedule to the EIA Notification, 2006.

Based on the presentation made by the proponent and the documents furnished, the committee instructed the project proponent to furnish the following details

1. The contour level of the proposed site shall be measured and the counter map may be furnished
2. A detailed storm water plan shall be prepared in accordance with the contour levels of the proposed project considering the flood occurred In the year 2015 and also considering the development in surrounding.
3. The proponent shall furnish the details of design of STP and Grey water treatment systems after revising the water balance.
4. The layout plan furnished for the greenbelt area earmarked with GPS coordinates by the project proponent on the periphery of the site and the same shall be submitted for CMDA/DTCP approval. The green belt width may be 3m all along the boundaries of the project site.
5. Details of other apartments and other establishments/industries nearby the site and cumulative impact of the project on the surroundings shall be furnished.
6. Details of Solid Waste management plan shall be prepared as per Sollid waste

management Rules, 2016 and shall be furnished.

7. The proponent shall submit the Gross Fixed value include the land value and construction cost as per the PWD guideline value.
8. The proposal for CER shall be furnished as per the office memorandum of MOEF&CC dated 01.05.2018 based on the cost of project as per PWD guidelines.
9. It was noticed that the data furnished during the presentation is varying from the unit's online application and hardcopy submitted in this office. Hence the project proponent and consultant are directed to furnish correct data with respect to online application and presentation.

Hence SEAC directed the proponent to come for re-presentation along with the above said details. The proposal was placed once again in the 146th SEAC meeting on 29.02.2020.

Based on the presentation made by the proponent and the documents furnished, the SEAC committee decided to defer the project for the want of the following details which were requested earlier but not furnished by the proponent.

1. The contour level of the proposed site shall be measured and contour map may be furnished. 6m bench mark is given in the contour drawing. However, reason for giving the 6m bench mark has not explained. Same shall be clarified.
2. A detailed storm water plan to drain out the water from site after conservation shall be prepared in accordance with the contour levels of the proposed project considering the flood occurred in the year 2015 and also considering the surrounding development environment.
3. The treated grey water of 151 KLD is used for flushing which is not feasible hence, revised Grey water balance to be furnished by utilizing the treated sewage for green belt development also.
4. The component of Aeration tank system may be included in the STP treatment system
5. Cumulative Impacts of the project considering with other infrastructure developments on the surrounding Environment shall be furnished.

Based on the Proponent's reply vide letter dated:21.07.2023, The proposal was placed again in the 406th SEAC meeting on 01.09.2023. Based on the documents submitted

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

1. **The environmental clearance is sought for** "Proposed Construction of Multi storied Commercial Building (Basement+ Stilt+ 18 Upper floors)." located at S. No. 51/ 1B1A1A1 & 51/18 Seevaram, Shollinganallur, Kancheepuram, Tamil Nadu by Mr CHENARAM SENI M/s Perfact Enviro Solutions Pvt Ltd is the EIA Consultant for the project.
2. Total plot area of the project is 8072 m^2 and built-up area is 56162.68 m^2 respectively.
3. Maximum number of floors will be **B+S+18 Upper Floors** and maximum height of the building will be 60.2 m.
4. Total Saleable DU's (dwelling units) is **Not Applicable as the proposed Development is a commercial Development.**
5. Salient features of the project as submitted by the project proponent:

PROJECT SUMMARY			
Sl. No.	Description	Total Quantity	Unit
GENERAL			
1	Plot Area	8072.00	SQMT
2	Proposed Built Up Area	56162.68	SQMT
3	Total no of Saleable DU's/Villas	Commercial development	No.
4	Max Height - (Height of tallest block)	60.2	M
5	No of Building Blocks (Residential + Community facilities)	One – commercial block	
6	Max No of Floors	B+S+18 Floors	No.
7	Expected Population (XXX Residential + XXXX Floating)	6210 (5645+565)	No.
8	Total Cost of Project	125.44	INR CR

9	Project Activity :	Commercial Development which will house offices for IT & IT enabled services	
	AREAS		
10	Permissible Ground Coverage Area (50%)	4036.00	SQMT
11	Proposed Ground Coverage Area (36.4%)	2937.37	SQMT
12	Permissible FSI Area (4.875)	39351.00	SQMT
13	Proposed FSI Area	39327.44	SQMT
14	Other Non FSI Areas - including basement area etc.	16729.25	SQMT
15	Proposed Total Built Up Area	56162.68	SQMT
	WATER		
16	Total Water Requirement	354	KLD
17	Fresh water requirement	118	KLD
18	Treated Water Requirement	236	KLD
19	Wastewater Generation	248	KLD
20	Proposed Capacity of STP	300	KLD
21	Treated Water Available for Reuse	236	KLD
22	Treated Water Recycled	236	KLD
23	Surplus treated water to be discharged in Municipal Sewer with Prior permission, if any	Nil	KLD
	RAINWATER HARVESTING		
24	Rainwater Harvesting - Recharge Pits	33	No.
25	Rainwater Harvesting Sump Capacity	240 (60 M3*4 Nos.)	M^3
	PARKING		
25	Total Parking Required as / Building Bye Laws	435	ECS
26	Proposed Total Parking	436	ECS

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27	Parking in Basements	164	ECS
	GREEN AREA		
28	Proposed Green Area (Minimum 15.0% of plot area)	1215.12 (15.05%)	M2 SQMT
	Total Plot area	8072	
	Existing trees on plot	30	
	Number of trees to be planted	263(including 28 trees retained)	
	Number of trees to be transplanted/cut	2 (we have accounted for 20 trees to be planted above)	
	SOLID WASTE MANAGEMENT		
29	Total Solid Waste Generation	1.242	TPD
30	Organic waste	0.7452	TPD
31	Mode of Treatment & Disposal	Organic Waste Converter -0.5 Tons per Batch, 2 batches per day	TPD
32	Quantity of Sludge Generated from STP & Disposal	70 (will be used as manure in-house)	KG/DAY
33	Quantity of E-Waste Generation & Disposal	0.5	TPA
34	Quantity of Hazardous waste Generation & Disposal	360	LPA
	Quantity of Battery wastes Generation & Disposal	0.50	TPA
	Quantity of BMW wastes Generation & Disposal	10	Kg/day
	POWER / GREEN POWER		
34	Total Power Requirement	6000	KW
35	DG set backup	2000	KVA
36	No of DG Sets	3	No.

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37	Solar Panels – Roof Coverage	1280m² (50%) %
38	Hot Water Requirement	Nil
	Of which met by Solar Panels	NA

Population details:

POPULATION			
Residential	DU'S	POP/DU	TOTAL POPULATION
Total Saleable Du's			
Total			
Non-Residential			
CLUB house (Employees etc.)	Area		
Club			
Commercial			5645
Facility Management Staff			250
Total			5895
Visitors			
Residential		xx% of Residential Population	
Club/Community Hall		xx% of Residential Population	
Commercial			315
Total Visitors			315
Total Population			6210
EMP Cost		265	INR Lakhs
CER Cost		125	INR Lakhs
Details of CER Activities			

.No.	Activity	Amount in INR Lakhs
1	Public Park Development with play area and extensive green belt in consultation with concerned authority – Govt of Tamil Nadu	30
2	Allocation of funds for development of Govt High school in terms of • Providing RO drinking water with dispenser arrangement • Providing IT Infrastructure including Digital Library • Improved Sanitation facilities for both boys & girls	30
3	Pallikaranai Mash Area Development - Mash Area Restoration Project	65
	Total	**INR 125 Lakhs** (Within 1 year from the date of EC issued)

RECOMMENDATION OF THE COMMITTEE

The Committee discussed the matter and recommended a grant of environmental clearance for the project proposal as above and subject to the standard conditions as per the **Annexure II** of this minutes & normal conditions stipulated by MOEF &CC, in addition to the following specific conditions:

Additional Conditions:

1. The construction shall comply with Green Building norms and shall get minimum IGBC Gold rating.
2. PP shall submit the commitment letter from the local body for supply of fresh water to SEIAA before issue of EC.

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3. The PP shall frame Environmental policy and Environmental management team and the same shall submitted to SEIAA before issue of EC.
4. The PP shall adopt IGBC Net Zero Water System.
5. STP shall be installed on 10-year BOOT basis, so that the construction and maintenance are combined in one single responsibility.
6. 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.
7. 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.
8. Project proponent should ensure that there will be no use of "Single use of Plastic" (SUP).
9. 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.
10. 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.
11. Project proponent should invest the CSR amount as per the proposal and submit the compliance report regularly to the concerned authority/Directorate of environment.
12. 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.

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13. 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.
14. 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.
15. The proponent should provide the MoU with STPs' owner/concerned department for getting the STPs treated water for construction use.

Agenda No: 406-06

(File No: 9416/2023)

Proposed Captive Resin plant with a Production Capacity of 21250 kg/day for Manufacturing of Plywood & Block Boards of 4329 MT/month at S.No. 139/2A2, 139/2B, 139/3, 140/1A2, 140/1B, 140/2, 140/3, 140/4, 140/5, 140/6, 140/7, 140/8, 146/1, 146/3B & 146/4 of Panchalam Village, Tindivanam Taluk, Villupuram District Tamil Nadu by M/s. HG Industries Limited (HGIL) - For Environmental Clearance. (SIA/TN/IND3/425579/2023 Dt. 10/04/2023).

The proposal was earlier placed in the 385th SEAC meeting held on 22.06.2023. 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. HG Industries Limited (HGIL) (Formerly Himalaya Granites Limited) has applied for Environmental Clearance for the Proposed Captive Resin plant with a Production Capacity of 21250 kg/day for Manufacturing of Plywood & Block Boards of 4329 MT/month at S.No. 139/2A2, 139/2B, 139/3, 140/1A2, 140/1B, 140/2, 140/3, 140/4, 140/5, 140/6, 140/7, 140/8, 146/1, 146/3B & 146/4 Panchalam Village, Tindivanam Taluk, Villupuram District, Tamil Nadu.
2. The project/activity is covered under Category "B1" of Item 5(f) "synthetic organic chemicals" of the Schedule to the EIA Notification, 2006.
3. ToR issued vide Letter No.SEIAA-TN/F.No.9416/2022/5(f)/ToR-1270/2022 Dated:08.10.2022.
4. Public Hearing conducted on 28.02.2023

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5. EIA report submitted on 11.04.2023.

<table>
<tr><td>S. No</td><td>Description</td><td>Details</td></tr>
<tr><td>1</td><td>Name of the Project</td><td>Proposed Captive Resin Plant with a Production Capacity of 21250 kg/day for Manufacturing of Plywood & Block Boards at 4329 MT/Month.</td></tr>
<tr><td>2</td><td>Location</td><td>Sy. Nos: 139/2A2, 139/2B, 139/3, 140/1A2, 140/1B, 140/2, 140/3, 140/4, 140/5, 140/6, 140/7, 140/8, 146/1, 146/3B & 146/4 Village: Panchalam, Melpettai (PO), Taluk: Tindivanam, District: Viluppuram State: Tamil Nadu</td></tr>
<tr><td>3</td><td>Type of Project</td><td>As Per EIA Notification, 2006 and its amendments, all Projects are termed under Schedule 5 (f) Synthetic Organic Chemicals, Category "B"]</td></tr>
<tr><td>4</td><td>Total Area</td><td>
<table>
<tr><th rowspan="2">S. No</th><th rowspan="2">Description</th><th colspan="3">Proposed Area</th></tr>
<tr><th>Sq. m</th><th>Acres</th><th>%</th></tr>
<tr><td>1</td><td>Plot Coverage (Plinth)</td><td>29,092.78</td><td>7.188</td><td>50.03</td></tr>
<tr><td>2</td><td>Roads and Pavements</td><td>7160.92</td><td>1.769</td><td>12.31</td></tr>
<tr><td>3</td><td>Parking area</td><td>2110.24</td><td>0.521</td><td>3.63</td></tr>
<tr><td>4</td><td>Green Belt</td><td>19761.42</td><td>4.883</td><td>33.98</td></tr>
<tr><td>5</td><td>Vacant/Open land</td><td>27.96</td><td>0.007</td><td>0.05</td></tr>
<tr><td colspan="2">Total</td><td>58153.32</td><td>14.367</td><td>100.00</td></tr>
</table>

Total Built-up area: 32832.69 Sq. m
Existing quarters of 278.49 Sq. m of ground coverage (443.8 Sq. m Built up area) will be retained for inhouse employees for residential purpose and further new construction is proposed of 532.44m² of ground coverage (1597.32 m² Built up area).
As per Topographical survey the total area is 14.76 Ac, but as per land document the area is 14.367Acres only considered for EC.

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<tr><td></td><td></td><td>

- Proposed project site is a patta land and classified as non-Planned area as per the Directorate of Town and Country Planning records.

</td></tr>
<tr><td>5</td><td>Cost of Project (INR)</td><td>

Total project cost Rs. 111.14 crores (Resins: INR.3.63 crores and Non-EC Products: INR.107.51 crores)

Break Up:

<table>
<tr><th rowspan="2">S. No</th><th rowspan="2">Description</th><th colspan="3">Lakhs (INR)</th></tr>
<tr><th>GFA-Plywood</th><th>GFA-Resin Plant</th><th>Cumulative Cost</th></tr>
<tr><td>1</td><td>Land</td><td>11.33</td><td>0.00</td><td>11.33</td></tr>
<tr><td rowspan="2">2</td><td>Land development/other supporting Works</td><td>138.67</td><td>0.00</td><td>138.67</td></tr>
<tr><td>Building</td><td>6169.78</td><td>68.37</td><td>6238.15</td></tr>
<tr><td>3</td><td>Plant & Machinery</td><td>4062.76</td><td>257.82</td><td>4320.58</td></tr>
<tr><td>4</td><td>Environnent Management Plan (EMP) Cost (STP, ETP & APC measures)</td><td>210.00</td><td>20.00</td><td>230.00</td></tr>
<tr><td rowspan="3">5</td><td>Other Assets</td><td>130.00</td><td>8.50</td><td>138.50</td></tr>
<tr><td>Project Consultancy</td><td>21.14</td><td>0.71</td><td>21.85</td></tr>
<tr><td>Statutary clearance & Contingency</td><td>7.00</td><td>8.00</td><td>15.00</td></tr>
<tr><td colspan="2">Total</td><td>10,750.68</td><td>363.40</td><td>11,114.08</td></tr>
</table>

</td></tr>
<tr><td>6</td><td>Brief description of the project</td><td>

- M/s. HG Industries Ltd., (a subsidiary of Greenlam Industries Ltd., has proposed a "Captive Resin Plant with a Production Capacity of 21250 kg/day for Manufacturing of Plywood Block Boards of 4329 MT/Month"
- It is a green field project; However, Project proponent was planned for plywood manufacturing facility (Non-EC Category)

</td></tr>
</table>

and obtained CTE from TNPCB for the same, vide No. 2101240864569 dated on 25 10 2021 and CTO order is obtained vide 2304253037518 DATED: 29/05/2023.

- Manufacturing of resins require Environmental Clearance, whereas others (Plywood Block boards) does not require EC as per EIA notification dated 14th September 2006 and its subsequent amendments.

Proposed Products:

EC- Products			
S. No	**Name of the Product**	**Units**	**Capacity**
1	Modified Phenol Resin (Phenol Formaldehyde Resin)	Kg/day	8775
2	Melamine Urea Formaldehyde Resin	Kg/day	8075
3	Urea Formaldehyde Resin	Kg/day	4400
Total (Kg/day)			**21250**
Non-EC Products			
S. No	**Name of the product**	**Units**	**Capacity**
1	Plywood & Block board	Ton/Month	4329

Note:

- The individual resin product quantity may vary as per the market demand. But all three product's total quantity will not exceed the total proposed quantity (21250 Kg/day).
- The proponent will manufacture Resin products for its own use. However, in case of any emergency or plant shutdown where the proponent cannot hold the stock as the product may lose its self-life, may get transferred to other sister concerns or may sale to other similar manufacturing companies.

	By Products	Nill, there is no byproducts generation in the proposed project.

7 Mass balance:

1. Modified Phenol Resin (Phenol Formaldehyde Resin):

S. No	Name of Raw Material	UoM	Batch Qty/4500 K
1	Phenol	Kg	1323
2	Formalin	Kg	2382
3	Oxalic Acid	Kg	37
4	Caustic Soda	Kg	203
5	Water	Kg	555
Total Input		Kg	4500
Actual output		Kg	4500

2. Melamine Urea Formaldehyde Resin:

S. No	Name of Raw Material	UoM	Batch Qty/4500 K
1	Formalin	Kg	2986
2	Melamine	Kg	896
3	Technical Grade Urea	Kg	597
4	Caustic Soda	Kg	8
5	Water	Kg	13
Total Input		Kg	4500
Actual output		Kg	4500

3. Melamine Urea Formaldehyde Resin:

S. No	Name of Raw Material	UoM	Batch Qty/4500 K
1	Formalin	Kg	2986
2	Melamine	Kg	896
3	Technical Grade Urea	Kg	597
4	Caustic Soda	Kg	8
5	Water	Kg	13
Total Input		Kg	4500
Actual output		Kg	4500

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8 **Water requirement:**

S. No	Description	Proposed Qty
1	Total water requirement (KLD)	127.52
2	Fresh water requirement (KLD)	71.98
3	Recycled water (KLD)	55.54

Water usage Breakup:

S. No	Water requirement	Total	Input (KLD)		Output (KLD)	Remarks	
			Fresh	Recycled	Loss	Effluent	
1	Process	1.13	1.13	0	1.13	Nil	Process consumption
2	Process Washings (Glue spreader & kettle wash)	0.25	0.25	0	0.01	0.24	Will be sent to ETP treated water will be used for floor washing
3	Core Veneer treatment	2.5	2.5	0	2.5	Nil	Evaporation Loss
4	Plywood preservative treatment	0.9	0.9	0	0.9	Nil	Evaporation Loss
5	Cooling Tower	5.0	5.0	0	5.0	Nil	Evaporation Loss

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6	Fire hydrant water	0.5	0.5	0	0.5	Nil	Evaporation Loss
7	Machine radiator, DG radiator, Tractor radiator etc.	0.5	0.5	0	0.5	Nil	Evaporation Loss
8	Floor washing	0.24	0.0	0.24	0.24	Nil	Evaporation Loss
9	Domestic	51.5	46.2	5.3	4.2	47.3	Will be sent to STP treated water will be used for GB & Flushing
10	Canteen	15.0	15.0	0	7.0	8.0	
11	Greenbelt	50.0	0	50.0	50.0	Nil	Percolation & Evaporation Loss
Total		**127.52**	**71.98**	**55.54**	**71.98**	**55.54**	

	b) Source of water	local body / village panchayat for permanent Fresh water supply
9	**Sewage generation, treatment, and disposal**	**Construction Phase:** The sewage of 9 KLD from sanitary units, will be disposed in septic tank-soak pit arrangement, Septic tank will be cleaned periodically by the authorized vendors. **Operational Phase:**

S. No	Description	Effluent generation (KLD)	Method of Treatment

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		1	Proposed effluent & Domestic Wastewater quantity and treatment details	Domestic- 55.3 KLD	Domestic Wastewater generation will be 55.3 KLD will be treated in proposed STP (60 KLD) and treated water (55.3 KLD) will be used for Greenbelt (50 KLD) and Flushing (5.3KLD). STP Sludge will be used as a manure for internal greenbelt.
				Effluents- 0.25 KLD	Effluent from Process washings will be treated in ETP (1 KLD). Treated effluent (0.24 KLD) will be used in the plant for Floor washings. Solar Evaporation sludge will be sent to TSDF or Authorized recycler.

10	Quantity of Solid Waste generated per day (in Kgs), Mode of treatment and Disposal of Solid Waste	**Construction Phase:**

S. No	Type	Quantity Kg/day	Disposal method
1	Bio-degradable	67.5	Used as manure after composting within the facility
2	Non-Bio-degradable	22.5	TNPCB authorized recyclers
Total		90.0	

Operational Phase:

S. No	Type	Quantity Kg/day	Disposal method
1	Bio-degradable	330.75	Used as manure after composting within the facility

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		2	Non-Bio-degradable	110.25	TNPCB authorized recyclers
		3	STP Sludge	3.0	Will be used as a manure
		Total		444	

11 **Hazardous waste Management:**

Stream	Hazardous waste generated	Proposed	Disposal Method
34.3 of Schedule–I	ETP Sludge (kg/day)	0.1	Disposed through TSDF
33.1 of Schedule–I	Containers (Nos/annum)	32	After complete detoxification, shall be sold to Authorized agencies
33.1 of Schedule–I	Container liners (Kg/annum)	700	After complete detoxification, shall be sold to Authorized agencies
5.1 of Schedule–I	Waste oil (kg/Year)	200	Authorized recyclers/preprocessors
33.2 of Schedule–I	Cotton waste (kg/Year)	600	Dispose through traders/recycling
-	Used batteries (Nos /annum)	04	Sold to Recycles/ battery manufactures/ dealers on buy back basis as per E-waste Management rules 2016

12	**Power requirement**	2745 KVA from TANGEDCO
13	**Details of D.G. set with Capacity**	1 x 1500 kVA 2 x 500 KVA (stand by)

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14	Fuel requirement	S. No	Name of the material	Total Quantity (TPA)	Physical state	Total Storage capacity (MT)	Mode of storage	Material of Construction	Mode of Transportation
		1	HSD for DG Sets (Lts /Day/ DG)	800	Liquid	Since Petrol Pump is next Door to us, we will maintain stock of 2 Days	Drums	MS	By Road
		2	Grease (Kg/Year)	200	Solid	50	Drums	MS	By Road
		3	Wood Scrap for TFH (T/Month)	2125	Solid	Captive consumption TFH	-	-	Shall be transported through Conveyor to TFH from Generation Point
		4	TFH oil (Lt/Yr) (for	800	Liquid	Captive consumption TFH	Drums	MS	By Road

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			top-up)					

15 Air Pollution Control Measures (Stack)

S. No	Source of Generation	Pollutant	APC measures	Point of Discharge height
1	Double Dimension Saw Machine (2 Nos), Calibrator &Sanding Machine (3 Nos)	Dust	Bag filter	-
2	Hot press and dryer	Hot/Humid air	Hood/exhaust for hot and humid air ventilation. Building will have roof top monitor, side louvers along with windows and Insulated roof with center height of 16.4m to avoid heat from process and rooftop.	
3	TFH wood based (100 Lakh kg/Cal)	SO_2, NO_x& PM	ESP followed by common stack	30m AGL

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		4	1 x 1500kVA DG	SO_2, NO_x& PM	Acoustic enclosure & Common Stack	26m AGL
		5	2 X 500 kVA DG			
		6	Reactors (Resin Kettles)	Process Emissions/ VOC	Condensers. (Condensates will be collected inside the reactors)	-

16 Details of manpower

S. No	Description	Construction Phase	Operation Phase	
		Temporary	Permanent	Temporary
1	Resident at plant	0	75	Nil
2	Non-Resident	200	905	Nil
Total		**200**	**980**	**Nil**

17 Details of Green Belt Area

- HGIL is allocated 33.98% (19761.42 Sq. m) of land for green belt development as per norms.
- Total 183 nos of trees & 50 No's of small trees are already existing in the project site the same will be retained. Other than existing 2400 nos of trees are proposed.
- A capital cost of INR 10.0 Lakhs will be earmarked for this purpose and INR of 0.5 Lakhs will be allocated for recurring expenses towards green belt development and maintenance.

List of Plants proposed:

S. No	Common Name	No. of trees proposed
1	Vaagai	375
2	Ashoka	350
3	Vilvam	300
4	Red Bird of Paradise	50
5	Neem	500

			6	Pungam	300
			7	Usil	300
			8	Jujuba	225
			Total		2400
18	Details of Parking Area	Parking area 2110.24 Sq. m is provided.			
19	Provision for rainwater harvesting	832.9 KL of Rainwater is estimated in rainy reason (600 KL Storage tank proposed along with 38 Recharge pits)			
20	EMP Cost (INR)	Capital Cost: Rs. 2,70,00,000/- & Recurring Cost: Rs. 6,55,000/- per Year **Breakup of the EMP Cost:**			

S. No	Particulars	Cost in Rs.	
		Capital Cost	Recurring Cost/Yr
1	APC Measures		
	ESP	95,00,000	1,00,000
	Bag Filter	55,000.00	1,00,000
	TFH Stack	40,000.00	50,000
2	ETP	15,00,000	25,000
3	STP	25,00,000	1,00,000
4	Solid waste management	5,00,000	20,000
5	Rainwater Harvesting	5,00,000	10,000
6	Green Belt Development	10,00,000	50,000
7	Occupational Health & Safety	20,00,000	1,00,000

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		8	Environmental Monitoring	--	15,75,000
		Total Cost in Rs.		2,70,00,000/-	21,30,000/-
21	CER activity	CER as 15 Lakhs towards Government Arts College, Tindivanam- library development, Digital Classroom facility, Greenbelt development and Furniture as required. The CER activities will be implemented in a period of one year.			

Based on the presentation made by the proponent, the SEAC called for the following details from the PP.

i. The PP shall obtain permanent fresh water supply commitment letter from the Competent authority/Municipality/Panchayat instead of relying on tankers/Ground water.

ii. The PP shall furnish the details of STP and ETP already existing within the premises.

iii. The proponent shall provide details of Solid waste disposal facility such as organic waste convertor within project site.

iv. The PP shall revise the list of plants proposed for greenbelt as suggested by the Committee and the proponent shall complete the plantation as a part of Greenbelt development.

Based on the Proponent's reply, the proposal was again placed in this 406th SEAC meeting held on 01.09.2023. Based on the presentation made and documents furnished by the project proponent, SEAC decided **to recommend the proposal for the grant of Environmental Clearance** subject to the following specific conditions, in addition to normal conditions stipulated by MOEF &CC:

1. The project proponent shall provide ETP of capacity 1 KLD with ZLD system.
2. The proponent shall provide, operate and maintain adequate Air-pollution control measures for the process area.
3. 100% of the roof coverage should be specifically allocated for solar panels and should be used for the generation of solar energy.
4. The proponent should continuously monitor the VOC and ensure that VOC levels are within permissible limits.

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5. The proponent shall obtain and maintain valid safety licenses for the concerned department for boiler, solvent/fuel/raw material storage areas etc.
6. The proponent shall strictly follow the norms and guidelines mentioned in the Hazardous and Other Wastes (Management and Transboundary Movement) Rules, 2016 for the handling and disposal of Hazardous waste to be generated.
7. The proponent shall periodically conduct and submit fire safety study, emergency evacuation plan, risk assessment study, occupational health safety study for the worst case scenario in regard to existing safety measures/standard operating procedures adopted for the process/ equipment/utilities for operation &maintenance and the storage areas of products, raw materials, solvent, fuel, etc. in the different operating zones of the plant at least once in a year to regularly identify safety fragile areas within the plant which requires regular monitoring and the proponent shall submit the same along with timeline for implementation of the said recommendations to the concerned departments.
8. A detail report on the safety measure and health aspects including periodical audiometry, pulmonary lung function, etc., test reports once in a year for all the workers shall be submitted to TNPCB.
9. As the plant operation involves the sensitive processing, the medical officer and the supporting staff involved in the health centre activities shall be trained in occupational health surveillance (OHS) aspects through the outsourced training from the experts available in the field of OHS for ensuring the health standard of persons employed.
10. 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 as committed.
11. As accepted by the Project Proponent the CER cost is Rs. 15 lakhs and the amount shall be spent within 1 year from the date of EC issued, for providing library development, Digital Classroom facility, Greenbelt development and Furniture as required to Government Arts College, Tindivanam.

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Agenda No: 406 - 07

(File No: 10211/2023)

Existing Steel plant at S.F.Nos. 308/1G2, 309/1A, 316/1F1 & 316/1F2 of Devanampalayam Village, Kinathukadavu Taluk, Coimbatore District, Tamil Nadu by M/s. Garuda Steels - For Terms of Reference. (SIA/TN/IND1/436035/2023 dt 08.07.2023)

The proposal was placed in this 406th meeting of SEAC held on 01.09.2023. The project proponent made a detailed presentation. The details of the project furnished by the proponent are available on the PARIVESH web portal (parivesh.nic.in).

The SEAC noted the following:

1. The Project Proponent, M/s. Garuda Steels has applied seeking Terms of Reference for EIA study for the existing Steel plant at S.F.Nos. 308/1G2, 309/1A, 316/1F1 & 316/1F2 of Devanampalayam Village, Kinathukadavu Taluk, Coimbatore District, Tamil Nadu.
2. The proposed project activity is covered under Category "B1" of Item 3(a) "Metallurgical Industries" of the Schedule to the EIA Notification, 2006, as amended.

Based on the presentation made by the proponent SEAC recommended grant of **Terms of Reference (TOR)**, subject to the following TORs, in addition to the standard terms of reference for EIA study for Metallurgical Industries (Ferrous & Non-Ferrous) and details issued by the MOEF & CC (Annexure III) to be included in EIA/EMP Report:

1. The PP shall conduct an 'energy audit' of the existing plant by an accredited BEE consultant and submit the report along with action plan to implement the suggestions made in the report.
2. The PP shall explore the possibilities of implementing the 'direct rolling technology' and indicate a timeline for its implementation.
3. The PP shall furnish the video graph of the entire plant operations.
4. **The PP shall ensure adequate green belt of 33% land area is provided within the premises.**
5. **The existing coal fired furnace shall be upgraded to electric heating furnace. PP shall complete the said task within a period of one year and furnish commitment in this regard same along with timeline.**

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6. The roof of the plant leaving the furnace area shall be covered completely with solar panels.
7. The PP shall upgrade the old machineries and modernize the plant.
8. DFO letter stating the proximity details of Reserve Forests, Protected Areas, Sanctuaries, Tiger reserve etc., up to a radius of 25 km from the proposed site and If the Anamalai Tiger Reserve and Mudhumalai Tiger Reserve are located within 10 km from the boundary of the proposed site, the PP shall include conservation measures for Anamalai Tiger Reserve and Mudhumalai Tiger Reserve in consultation with the concerned DFO.
9. The PP shall furnish the details of arrangement made for permanent water supply from NTADC/TWAD Board.
10. Efficiency study/report of the existing furnace through reputed Institution.
11. The PP shall discuss the best available technology available in this field and action plan for implementing the same.
12. The PP shall furnish action plan for harnessing 50% solar energy or shall purchase 75% renewable energy to meet the energy requirement.
13. The PP shall furnish the road map for achieving 100% green energy in 2030.
14. The PP shall furnish the action plan for 100% use of Electric Vehicles within next five years.
15. The PP shall furnish the action plan for the implementing the CER activities as committed.
16. The PP shall study in detail various operational measures to reduce the specific energy consumption in induction furnaces.
17. The proponent shall furnish details on the idling period provided.
18. The proponent shall furnish details on measures adopted for better and efficient operation of melting & charging.
19. The proponent shall furnish details on the control measures adopted during heat finishing and tapping.
20. The proponent shall study in detail about operational control measures to Minimize and control the refractory wall wearing.
21. The proponent shall explore the possibilities of utilizing state of the art

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technology with best global practice.

22. The proponent shall explore the possibilities of utilizing the treated wastewater instead of fresh water.
23. The proponent must increase the Solar and Wind Energy sources and must explore the possibilities of achieving Net Zero energy consumption.
24. The proponent shall submit the copy of the consent to operate and the latest renewal consent order obtained from the TNPCB.
25. The proponent shall submit the compliance report from TNPCB for the conditions imposed in the consent order issued by the TNPCB.
26. The Environmental pollution control measures taken to deal with Air pollution, effluent generation and slag generation should be discussed in detail.
27. The project proponent has to strengthen the air pollution control measures of the existing system and furnish an adequacy report on the revamped system from a reputed institution like Anna University or IIT, Madras along with the EIA report. The revamping of the existing air pollution control measures should include the interlinking of the position of the hood system and furnace to ensure that the emission from the furnace shall be treated and routed through wet scrubber and stack.
28. The proponent shall submit the video and photograph of the operational details with particular reference to points of pollution in the existing plant.
29. Material balance and Water balance shall be furnished in accordance with MoEF&CC guidelines.
30. A detailed report on Solid waste & hazardous waste management shall be furnished.
31. Report on AAQ survey and proposed air pollution prevention and control measures shall be furnished in the EIA report.
32. The project proponent shall do the stoichiometric analysis of all the involved reactions to assess the possible emission of air pollutants in addition to the criteria pollutants, from the proposed project.
33. Adequacy report for ETP &STP for the proposed project obtained from any reputed Government institution such as IIT, Anna University, NIT shall be

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furnished.

34. Land use classification shall be obtained from the DTCP for the Survey Numbers of this project. Further, the project proponent shall submit the planning permission obtained from the DTCP, if any.
35. The proponent shall conduct the EIA study and submit the EIA report for the entire campus along with layout and necessary documents such as "A" register and village map.
36. 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 purposes involved in the project.
37. The project proponent shall obtain clearance from the National Board for Wildlife, if applicable.
38. The project proponent shall explore the possibilities of treating and utilizing the trade effluent and sewage within the premises to achieve Zero liquid discharge.
39. The layout plan shall be furnished for the greenbelt area earmarked with GPS coordinates 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 be not less than 15 % of the total land area of the project.
40. As the plant operation involves sensitive processing, the medical officer and the supporting staff involved in the health center activities shall be trained in occupational health surveillance (OHS) aspects through outsourced training from the experts available in the field of OHS for ensuring the health standard of persons employed.
41. The proposal for Roof Top solar panel shall be included in the EIA Report.
42. 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 furnish the detailed EMP.

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Agenda No: 406-08

(File No: 10217/2023)

Existing Area Development Project at S.No:179B, 209/2B, 209B/3, 210/2B, 210/3, 213, 214, 302/2, 304, 305/1, 306/2, 307, 308, 309, 311/2A, 311/2B, 377, 379, 382, 383, 384, 385/2, 385/3, 395/1, 395/2, 395/3,396, 397/1, 397/2, 399/1, 399/2, 400, 401/1, 401/2, 402, 403, 404, 405/1, 405/2, 406, 407, 408, 409, 410/1, 410/2, 411,412,413, 414/1, 414/2, 415, 416, 420, 421/1, 422, 423,424,425/1,425/2,427, 430, 431, 432, 433, 435, 436/1, 436/2, 436/3, 436/4, 437, 438/1, 439/1, 442/1, 443/1, 443/2, 426, 428, 429 of G.Kallupatti, Ganguvarpatti Village, Periyakulam Taluk, Theni District, Tamil Nadu by M/s. Bahri Estates Private Limited– Terms of Reference for EIA study under violation category. (SIA/TN/INFRA2/MIS/436311/2023, dated: 31.08.2023)

The proposal was placed in this 406th meeting of SEAC held on 01.09.2023. The project proponent made a detailed presentation. The details of the project furnished by the proponent are available on the PARIVESH web portal (parivesh.nic.in).

The SEAC noted the following:

1. The project proponent, **M/s. Bahri Estates Private Limited** has applied seeking **Terms of Reference for EIA study under violation category for the existing Area Development Project** at S.No:179B, 209/2B, 209B/3, 210/2B, 210/3, 213, 214, 302/2, 304, 305/1, 306/2, 307, 308, 309, 311/2A, 311/2B, 377, 379, 382, 383, 384, 385/2, 385/3, 395/1, 395/2, 395/3,396, 397/1, 397/2, 399/1, 399/2, 400, 401/1, 401/2, 402, 403, 404, 405/1, 405/2, 406, 407, 408, 409, 410/1, 410/2, 411,412,413,414/1,414/2, 415, 416, 420, 421/1, 422, 423,424,425/1,425/2,427, 430, 431, 432, 433, 435, 436/1, 436/2, 436/3, 436/4, 437, 438/1, 439/1, 442/1, 443/1, 443/2, 426, 428, 429 of G.Kallupatti, Ganguvarpatti Village, Periyakulam Taluk, Theni District, Tamil Nadu.
2. The project/activity is covered under Category "B" of Item 8(b) "Township and Area Development Projects" of the Schedule to the EIA Notification, 2006 as amended.
3. T.O LrNo. SEIAA-TN/F.No.2477/2014 dated 21.07.2014 addressed to the Principal Secretary to Government, E&F Dept, Secretariat, Chennai to initiate credible action against the PP U/s 19 of Environment (Protection) Act 1986.

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4. The project site is located within the eco sensitive zone of Kodaikanal Wildlife Sanctuary. As per the ESZ Notification dated 22.11.2018 pertaining to Kodaikanal Wildlife Sanctuary, no new commercial construction of any kind shall be permitted within one Kilometre from the boundary of the Protected Area or upto extent of the Eco-sensitive Zone whichever is nearer.
5. As per the ESZ Notification dated 10.09.2018 pertaining to Megamalai Wildlife Sanctuary, no new commercial construction of any kind shall be permitted within one Kilometre from the boundary of the Protected Area or upto extent of the Eco-sensitive Zone whichever is nearer.
6. As the PP had initially applied for EC on 02.04.2014, the proposal is eligible to be considered under SoP within window period.

Previous history of the Project as furnished by the Project Proponent in PPT:

- *At 2014, We had initially applied for an EC for the extent of 803301.3 sq.mt (i.e., 80 Ha) vide Letter No. SEIAA/TN/F.No.2477 dated 02.04.2014 and seeing as the project was started before obtaining environmental clearance, the project was included in the list of cases involving violations of Environmental Protection Act, 1986 and it was delisted from the list of proposals under process in SEIAA-TN and later on 30 Ha (Phase II) has been withdrawn because of no approvals from concerned authority from DTCP and the withdrawal letter has been submitted at September 3, 2015. So, the project area was 49.31 Ha, which comes under 50 Ha, which no need of Environmental Clearance.*
- *At 2016, We had again applied for EC for group housing, educational institutions, etc., under category 8 (a) vide Letter No. SEIAA/TN/F.No.4944/2015 dated 25.01.2016. It has been placed in 72nd SEAC Meeting held on 04.02.2016, 05.02.2016 & 06.02.2016 and SEAC Committee had decided to call for the additional details like DTCP Approvals, Building Permit, Planning Permit, etc., and other concerned approvals. Because of no approvals from concerned authorities, again we had withdrawn the file in 2017 vide Lr.No. SEIAA/TN/F.No.4944/2016 dated 01.08.2017.*
- *At 2018, SEIAA had sent a reminder that, the project covers will be treated as violation category (by referencing 2014) vide Lr.No. SEIAA-*

TN/F.No.4944/2016/NGT dated 28.03.2018.

- *Then again in 2018, We had submitted a reply letter to withdrawal the project file stating that the project doesn't comes under the violation category as no activity had been started without any prior permission vide dated 28.06.2018 & 27.09.2021.*
- *But the withdraw request has not been considered by the SEIAA, we have advised to submit the application in violation category within the window period.*
- *In 2019, the MoEF & CC office memorandum dated 9th September 2019, allowed the project proponent to submit the proposal under violation category, subject to conditions that as read below.*
- *"The proposals which were submitted at SEIAA during or prior to the violation window period, but not covered under violation category and later during appraisal committee identified as violation proposal may be considered in terms of provisions of ministry notification dated 08.03.2018".*
- *In the above 2019 reference OM, We are submitting our application under Violation Terms of Reference to State Environmental Impact Assessment Authority, Tamilnadu for the above said project.*
- *And also a complaint has been filed in NGT by on Mr. Rama Subbu, against our project, were SEIAA is the fourth respondent in* ***application number 149 of 2016 (SZ) and Judgement of the Hon'ble NGT*** *in its order dated 01.08.2022.*
- *In compliance to NGT order vide the Hon'ble NGT (SZ), in O.A. No. 149 of 2016 (SZ) & M.A.No. 46 of 2017 (SZ) has passed the following direction in its order on 01.08.2022 that we are directed to pay the environmental compensation fixed by the Tribunal viz., Rs.3,00,00,000/- (Rupees Three Crores Only) to the Tamilnadu Pollution Control Board within a period of 3 Months.*
- *As of now, We had paid an amount of Rs. 95,00,000/- (Rupees Ninety-Five Lakhs Only) and remaining amount of Rs.2,05,00,000/- (Rupees Two Crore Five Lakhs) will be paid and also insisted us to get the environmental clearance from SEIAA.*

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The proposal was placed in this 406th meeting of SEAC held on 01.09.2023. Based on the proposal submitted and the presentation made, the SEAC decided to **recommend 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 for Township and Area Development Projects and the EIA/EMP report along with assessment of ecological damage, remediation plan and natural and community resource augmentation plan and it shall be prepared as an independent chapter by the accredited consultants which should be submitted within **one year** from the date of issue of ToR

1. The proponent shall furnish the detailed sewage treatment technology available and furnish the reason for selection for SBR technology for this proposal and also furnish the design details of the STP treatment system.
2. The proponent shall ensure the existing development meets green building norms and shall obtain a minimum of IGBC Gold ranking.
3. The proponent shall furnish the land ownership details for all the SF numbers mentioned and especially for 442/1, 426, 428 & 429 along with EIA Report.
4. 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 waters during the period of heavy rainfall, and (3) as a device which was crucial to the overall eco-system.

   (Sir it is submitted that no new construction is permitted as per the
5. The treated/untreated sewage water shall not be let-out from the unit premises accordingly revised water balance shall be incorporated.
6. 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.

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7. Commitment letter from competent authority for supply of water shall be furnished.
8. Copy of the village map, FMB sketch and "A" register shall be furnished.
9. Detailed Evacuation plan during emergency/natural disaster/untoward accidents shall be submitted.
10. The space allotment for solid waste disposal and sewage treatment & grey water treatment plant shall be furnished.
11. Details of the Solid waste management plan shall be pre pared as per solid waste management Rules, 2016 and shall be furnished.
12. Details of the E-waste management plan shall be prepared as per E-waste Management Rules, 2016 and shall be furnished.
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 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 OSR area should not be included in the activity area and 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.

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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.
20. The proposal for utilization of at least 50% of Solar Energy shall be included in the EIA/EMP report.
21. As per the MoEF&CC Office Memorandum F.No.22-65/2017-IA.IIIdated: 30.09.2020 and 20.10.2020, the proponent shall furnish the detailed EMP mentioning all the activities as directed by SEAC in the CER and furnish the same.

Agenda No: 406 - 09

(File No: 10223/2023)

Proposed expansion of existing Steel plant at S.F.Nos. 352, 353/1,2, 379/1pt, 379/2pt, 380pt, 382/1pt, 382/3 pt, Nallur Village & S. F. No. 50/1pt of Kunnamalai Village, Paramathi Velur Taluk, Namakkal District, Tamil Nadu by M/s. Sri Vela Smelters Private Limited - For Terms of Reference. (SIA/TN/IND1/436733/2023 dt 15.07.2023)

The proposal was placed in this 406th meeting of SEAC held on 01.09.2023. The project proponent made a detailed presentation. The details of the project furnished by the proponent are available on the PARIVESH web portal (parivesh.nic.in).

The SEAC noted the following:

1. The Project Proponent, M/s. Sri Vela Smelters Private Limited has applied seeking Terms of Reference for EIA study for the proposed expansion of existing Steel plant at S.F.Nos. 352, 353/1,2, 379/1pt, 379/2pt, 380pt, 382/1pt, 382/3 pt, Nallur Village & S. F. No. 50/1pt of Kunnamalai Village, Paramathi Velur Taluk, Namakkal District, Tamil Nadu.
2. The proposed project activity is covered under Category "B1" of Item 3(a) "Metallurgical Industries" of the Schedule to the EIA Notification, 2006, as amended.

Based on the presentation made by the project proponent and the documents furnished, the SEAC held detailed discussions and decided to defer the subject to a later date.

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Agenda No: 406 - 10

(File No: 10234/2023)

Proposed Construction Project at Plot No: S.F.Nos 547/1A2, 547/2A2, 549/1, 550/2B, 554/1, 554/2A, 554/2B, 554/3, 556/5A, 556/5B, 556/5C1 and 556/6D2 Vadavalli Village, Perur Taluk, Coimbatore District, Tamil Nadu by M/s. Sree Daksha Property Developers (India) Pvt. Ltd - For Environmental Clearance (SIA/TN/INFRA2/437430/2023 dt 08.07.2023)

The proposal was placed in this 406th meeting of SEAC held on 01.09.2023. The project proponent made a detailed presentation. The details of the project furnished by the proponent are available on the PARIVESH web portal (parivesh.nic.in).

The SEAC noted the following:

1. The environmental clearance is sought for Construction Project at Plot No: S.F.Nos 547/1A2, 547/2A2, 549/1, 550/2B, 554/1, 554/2A, 554/2B, 554/3, 556/5A, 556/5B, 556/5C1 and 556/6D2 Vadavalli Village, Perur Taluk, Coimbatore District Tamil Nadu by M/s. Sree Daksha Property Developers (India) Pvt. Ltd.
2. M/s Ecotech Labs Private Limited is the EIA Consultant for the project.
3. Total plot area of the project is 34,401.0 m^2 and built-up area is 22,462.87 m^2 respectively.
4. Maximum number of floors will be 5 floors (Block A (Residential Apartment)). The project consists of residential apartment and villas, comprises of Blocks A to J, Block A (Residential Apartment) – Stilt floor + 5 floors, Block B, D to J (Residential Villa) – G+1 Floor and Block C (Amenities Block) – G+2 Floors. The maximum height of the building will be 20.98 m.
5. Total Saleable DU's (dwelling units) is 103 nos + amenities.
6. Salient features of the project as submitted by the project proponent:

Name and Address of the PP	Name of the Consultant
M/s Sree Daksha Property Developers (India) Pvt. Ltd. Mr. M. Ganesh	M/s. Eco Tech Labs Pvt. Ltd

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Public Relations Officer M/s Sree Daksha Property Developers (India) Pvt. Ltd. No: 1, Gandhi Layout, Maruthamalai Road, Vadavalli, Coimbatore - 641046	

A.Site Location Details		
1.	Location	Vadavalli Village, Perur Taluk, Coimbatore District, Tamil Nadu
2.	Latitude & Longitude	11° 1'6.53"N & 76°52'24.55"E
3.	Survey Nos	S.Nos 547/1A2, 547/2A2, 549/1, 550/2B, 554/1, 554/2A, 554/2B, 554/3, 556/5A, 556/5B, 556/5C1 and 556/6D2
4.	Area in Hectares	3.4401
5.	Ownership Details	M/s Sree Daksha Property Developers (India) Pvt. Ltd.
6.	Any legal Disputes	Nil
7.	Waterbodies/Rivers/Canals	• Vaari - abutting the project site • Narsampathi Lake-4.25 km SE • Krishnampathi Lake – 5.32 km SE
8.	Vulnerability to Inundation	Nil
9.	Protected area nearby (Wildlife Protection Act)	Bolampatti Block 3 RF – 0.55 km N
10.	Previous EC/History in SEIAA	Nil

PROJECT SUMMARY			
Sl. No.	Description	Total Quantity	Unit
GENERAL			
1	Plot Area	34401.0	SQMT
2	Proposed Built Up Area	22462.87	SQMT

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3	Total no of Saleable DU's/Villas	103	No.
4	Max Height - (Height of tallest block)	20.98	M
5	No of Building Blocks (Residential + Community facilities)	10 blocks	
6	Max No of Floors	5	No.
7	Expected Population (XXX Residential + XXXX Floating)	631 residential+63 visitors+ 6 maintenance staffs	No.
8	Total Cost of Project	119.13	CR
9	Project Activity :	Residential	
	AREAS		
10	Permissible Ground Coverage Area (xx%)	NA	SQMT
11	Proposed Ground Coverage Area (xx%)	11479.02	SQMT
12	Permissible FSI Area (xxx)	68802	SQMT
13	Proposed FSI Area	21478.66	SQMT
14	Other Non FSI Areas - including basement area etc.	984.21	SQMT
15	Proposed Total Built Up Area	22462.87	SQMT
	WATER		
16	Total Water Requirement	136	KLD
17	Fresh water requirement	60	KLD
18	Treated Water Requirement	76	KLD
19	Wastewater Generation	80	KLD
20	Proposed Capacity of STP	95	KLD
21	Treated Water Available for Reuse	76	KLD

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22	Treated Water Recycled	76	KLD
23	Surplus treated water to be discharged in Municipal Sewer with Prior permission. if any	0	KLD
	RAINWATER HARVESTING		
24	Rainwater Harvesting - Recharge Pits	Rainwater harvesting Trench along the boundary of the project site	-
25	Rainwater Harvesting Sump Capacity	190	M^3
	PARKING		
25	Total Parking Required as / Building Bye Laws	206	ECS
26	Proposed Total Parking	206	ECS
27	Parking in Basements	-	ECS
	GREEN AREA		
28	Proposed Green Area (Minimum 15.0% of plot area)	5170 (15%)	SQMT
	Total area	34401.0	sqm
	Existing trees on plot	-	-
	Number of trees to be planted	450	nos
	Number of trees to be transplanted/cut	-	-
	SOLID WASTE MANAGEMENT		
29	Total Solid Waste Generation	393	TPD

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30	Organic waste	157	TPD
31	Mode of Treatment & Disposal	Will be treated in Organic Waste Converter and used as manure for gardening.	TPD
32	Quantity of Sludge Generated from STP & Disposal	12	KG/DAY
33	Quantity of E-Waste Generation & Disposal	-	KG/DAY
34	Quantity of Hazardous waste Generation & Disposal	-	LPD
	POWER / GREEN POWER		
34	Total Power Requirement	380	KVA
35	DG set backup	1 No. of 125 kVA 1 No. of 45 kVA	KVA
36	No of DG Sets	2	No.
37	Solar Panels – Roof Coverage	50%	%
38	Hot Water Requirement	1.8 KLD	
	Of which met by Solar Panels		

Population details:

POPULATION			
Residential	DU'S	POP/DU	TOTAL POPULATION
Total Saleable Du's	103	2 BHK – 5/ Dwelling unit 3 BHK – 6/ Dwelling unit 4 & 5 BHK – 7/ Dwelling unit	631

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Total			
Non Residential			
CLUB house (Employees etc.)	Area	-	-
Club			
Commercial			
Facility Management Staff	-	-	6
Total			
Visitors			
Residential	63	xx% of Residential Population	63
Club/Community Hall	-	xx% of Residential Population	-
Commercial	-	-	-
Total Visitors			
Total Population			700
EMP Cost		Construction phase- Rs.32.0 lakhs+ **Rs 25 Lakhs (towards maintenance of Vaari),** **Total (Construction Phase) = Rs 57 lakhs** Operation Phase Capital cost- Rs.220.58 lakh Operation Phase Recurring cost- Rs.26.32 lakh	
CER Cost		Rs. 150 lakh	
Details of CER Activities		Provision of Infrastructure & sanitation facilities such as Hygienic Toilets facilities, Classroom flooring, Furniture's, Environmental awareness books for students in library, Greenbelt development	

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		including maintenance of toilets for up to construction phase in 3 government schools at a total cost of Rs. 120 Lakhs

The proposed activity is covered under Category "B2" – of Item 8(a) "Building and Construction Projects" of the Schedule to the EIA Notification, 2006 as amended.

RECOMMENDATION OF THE COMMITTEE

The Committee discussed the matter and recommended a grant of Environmental Clearance for the project proposal as above and subject to the standard conditions as per the **Annexure II** of this minutes & normal conditions stipulated by MOEF &CC, in addition to the following specific conditions:

Additional Conditions:

1. The construction shall comply with Green Building norms and shall get minimum IGBC Gold rating.
2. The PP shall obtain fresh water supply commitment letter and disposal of excess treated water from the local body /Metro Water/TWAD.
3. The Proponent shall furnish the detailed report on emission, noise and vibration due to the operations of DG sets as proposed and the same shall be furnished to TNPCB before obtaining CTO and copy submitted to SEIAA-TN.
4. The PP shall furnish action plan for harnessing 50% solar energy or shall purchase 50% renewable green energy from TNEB to meet the energy requirement.
5. The PP shall ensure that at least 50% of the HVAC system runs on air cooling mechanism.
6. The PP shall adopt IGBC Net Zero Water System.
7. The proponent shall provide the solar canopies on the parking area as per the requirements at ground level.
8. The company shall have a well laid down environmental policy duly approved by the Board of Directors before obtaining EC.
9. The PP shall furnish NOC of Airport authority for Height Clearance (59.1m)

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10. STP shall be installed on 10-year BOOT basis, so that the construction and maintenance are combined in one single responsibility.
11. 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.
12. 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.
13. Project proponent should ensure that there will be no use of "Single use of Plastic" (SUP).
14. 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.
15. 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.
16. Project proponent should invest the CSR amount as per the proposal and submit the compliance report regularly to the concerned authority/Directorate of environment.
17. Proponent should submit the certified compliance report of previous/present EC along with action taken report to the Regional office MoEF&CC/Director of Environment and other concerning authority regularly.
18. 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

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mechanism for the same. STP treated water not to be discharged outside the premises without the permission of the concerned authority.

19. 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.

20. The proponent should provide the MoU with STPs' owner/concerned department for getting the STPs treated water for construction use.

Agenda No: 406 - 11

(File No: 9307/2023)

Proposed Change in Product Mix and Expansion within Existing Pharmaceutical Unit with a capacity of 0.26413 T/M over an extent of 0.749 ha at S.No.157 and 158, Plot No.111, SIDCO Industrial Estate, Kakkalur Village, Thiruvallur Taluk, Thiruvallur District by M/s. Nuray Chemicals Pvt. Ltd - For Environmental Clearance. (SIA/TN/MIN/436865/2023, Dated: 18.07.2023)

The proposal was placed for appraisal in this 406th SEAC meeting held on 01.09.2023. 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. Nuray Chemicals Pvt. Ltd has applied for Environmental Clearance for the Proposed Change in Product Mix and Expansion within Existing Pharmaceutical Unit with a capacity of 0.26413 T/M over an extent of 0.749 ha at S.No.157 and 158, Plot No.111, SIDCO Industrial Estate, Kakkalur Village, Thiruvallur Taluk, Thiruvallur District, Tamil Nadu.
2. The project/activity is covered under Schedule 5(f) Category 'B'- Synthetic Organic chemicals industry (dyes & dye intermediates; bulk drugs and intermediates excluding drug formulations; synthetic rubbers; basic organic synthetic organic chemicals and chemicals intermediate) of the Schedule to the EIA Notification, 2006.
3. ToR issued vide - Lr No – SEIAA - TN/ F.No. 9307 / SEAC / 5(f) / TOR-1251/2022, dated: 29.08.2022.
4. EIA Report submitted on 18.07.2023.

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<table>
<tr><th>S. No</th><th>Description</th><th>Details</th></tr>
<tr><td>1</td><td>Name of the Project</td><td>Proposed Change in Product Mix and Expansion within Existing Pharmaceutical Unit with a capacity of 0.26413 T/M by M/s. Nuray Chemicals Pvt. Ltd</td></tr>
<tr><td>2</td><td>Location</td><td>S.No.157 and 158, Plot No.111, SIDCO Industrial Estate, Kakkalur Village, Thiruvallur Taluk, Thiruvallur District, Tamil Nadu
<table>
<tr><th>S. No</th><th>Latitude</th><th>Longitude</th></tr>
<tr><td>A</td><td>13°7'53.70"N</td><td>79°55'50.59"E</td></tr>
<tr><td>B</td><td>13°7'53.34"N</td><td>79°55'52.65"E</td></tr>
<tr><td>C</td><td>13°7'49.01"N</td><td>79°55'51.87"E</td></tr>
<tr><td>D</td><td>13°7'50.35"N</td><td>79°55'50.00"E</td></tr>
</table></td></tr>
<tr><td>3</td><td>Type of Project</td><td>Schedule 5(f) - Synthetic organic chemicals industry (dyes & dye intermediates; bulk drugs and intermediates excluding drug formulations; synthetic rubbers; basic organic chemicals, other synthetic organic chemicals and chemical intermediates)</td></tr>
<tr><td>4</td><td>Total Area</td><td>(0.749 Ha)
<table>
<tr><th>S.No</th><th>Particular</th><th>Area (Ha)</th><th>% of Total Land</th></tr>
<tr><td>1</td><td>Total area</td><td>0.749</td><td>100</td></tr>
<tr><td>2</td><td>Built up area</td><td>0.411</td><td>54.87</td></tr>
<tr><td>3</td><td>Greenbelt</td><td>0.027</td><td>3.60</td></tr>
<tr><td>4</td><td>Road</td><td>0.136</td><td>18.16</td></tr>
<tr><td>5</td><td>Utility area (Cooling Tower, hot water system, Process equip, etc.)</td><td>0.175</td><td>23.36</td></tr>
</table></td></tr>
</table>

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5	Cost of Project (INR)	Rs. 5.0 Crores					
6	Brief description of the project	S. NO	Name of the Products	Existing As 2013 EC – (TPM)	Prop. Additional (TPM)	Total (TPM)	Remarks
		1	Ferric Citrate hydrate	0.01	0	0	Dropped
		2	Tramadol hydrochloride	0.01	0	0	Dropped
		3	Cetirizine dihydrochloride	0.01	0	0	Dropped
		4	Glycerol Phenyl butyrate	0.004	0.00433	0.00833	Increased
		5	Aripirazole	0.001	0	0	Dropped
		6	Vigabatrin	0.001	0	0	Dropped
		7	Alosetron Hydrochloride	0.002	-0.001958	0.000042	Reduced
		8	Atropine Sulfate Monohydrate	-	0.000833	0.000833	New

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		9	Brivudine	-	0.002083	0.002083	New
		10	Carglumic acid	-	0.002083	0.002083	New
		11	Chlorzoxazone	-	0.166667	0.166667	New
		12	Dapsone	-	0.041667	0.041667	New
		13	Diazoxide	-	0.002083	0.002083	New
		14	Dichlorphenamide	-	0.002083	0.002083	New
		15	L-Methyl Folate	-	0.002083	0.002083	New
		16	Methyl testosterone	-	0.000167	0.000167	New
		17	Nitisinone	-	0.000042	0.000042	New
		18	Oxandrolone	-	0.000833	0.000833	New
		19	Parecoxib Sodium	-	0.000833	0.000833	New
		20	Phenoxybenzamine Hydrochloride	-	0.000167	0.000167	New

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		21	Prazosin Hydrochloride	-	0.008333	0.008333	New
		22	Ramelteon	-	0.00125	0.00125	New
		23	Stiripentol	-	0.000833	0.000833	New
		24	Thiothixene	-	0.001667	0.001667	New
		25	Treprostinil Diolamine	-	0.000042	0.000042	New
		26	Treprostinil Sodium	-	0.000042	0.000042	New
		27	Trientine Hydrochloride	-	0.004167	0.004167	New
		28	Betaine Anhydrous	-	0.004167	0.004167	New
		29	Methsuximide	-	0.000417	0.000417	New
		30	Piribedil	-	0.00125	0.00125	New
		31	Fludrocortisone acetate	-	0.000042	0.000042	New
		32	Atovaquone	-	0.004167	0.004167	New

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		33	Cinacalcet Hydrochloride	-	0.000083	0.000083	New
		34	Tafamidis Meglumine	-	0.000417	0.000417	New
		35	Tafamidis	-	0.000417	0.000417	New
		36	Oxcarbazepine	-	0.000833	0.000833	New
		37	Acebutolol hydrochloride	-	0.000417	0.000417	New
		38	Pitolisant Hydrochloride	-	0.000167	0.000167	New
		39	Prucalopride Succinate	-	0.000167	0.000167	New
		40	CevimelineHydrochloride	-	0.000167	0.000167	New
		41	Levocartinie hydrochloride	-	0.004167	0.004167	New
		42	Benazepril	-	0.000417	0.000417	New

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	Hydrochloride				
43	L-Glutamine	-	0.000167	0.000167	New
44	Perampanel	-	0.000167	0.000167	New
45	Research and Development products	-	0.000167	0.000167	New
Total		0.038	0.26013	0.26413	

7 **Mass Balance Summary:**

Existing 7 Products

Sr. No.	Products	Quantity TPA	water requirement	Solvent consumption	Liquid effluent	Spent solvent	Recovered solvent	Solid Waste	Emissions and Vapour Loss	Spent carbon
1	Ferric Citrate hydrate	0.12	0.9	0.23	0.9	0.23	0	0.3	0.008916	0.3
2	Tramadol hydrochloride	0.12	0.72	0.48	0.776	0.38	0	0.4	0.062384	0.2
3	Cetirizine dihydrochloride	0.12	2.4	0.684	2.464	0.6564	0	0.42	0.020412	0.42
4	Glycerol Phenyl butyrate	0.048	1.875	0.5729	1.9091	0.5474	0	0.35	0.00906	0
5	Aripirazole	0.012	0.78	0.041	0.7864	0.0388	0	0.33	0.000672	0.06

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6	Vigabatrin	0.012	1.176	0.031	01.193	0.0294	0	0.2	0.012356	0.02
7	Alosetron	0.024	9.720	0.0816	9.892	0.078	0	0	0.0000024	0
	TOTAL	0.456	17.571	2.1205	17.9205	1.96	0	2.0	0.113802	1.0

Proposed 40 Products (after Expansion)

S.No.	Products	Quantity TPA	water	Solvent consumption	Liquid effluent	Spent solvent	Recovered	Solid Waste	Emissions and Vapour Loss	Spent carbon
1	Alosetron Hydrochloride	0.001	0.015	0.107	0.022	0.085	0	0.00014	0.00000 12	0.0009
2	Atropine Sulfate Monohydrate	0.010	0.136	1.065	0.186	0.852	0	0.00334	0.00975 6	0.0030
3	Brivudine	0.025	9.847	10.234	14.050	8.187	0	0.00732 6	0.011316	0.0133
4	Carglumic acid	0.025	1.298	0.029	1.637	0.023	0	0.00649 6	0	0.0063
5	Chlorzoxazone	2.000	31.427	32.373	39.619	25.899	0	2.01618	0.015744	0.6307
6	Dapsone	0.500	40.650	106.116	54.268	84.893	0	13.95240	0	0.4443

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7	Diazoxide	0.025	4.489	3.371	5.078	2.696	0	0.11030	0.009096	0.0070
8	Dichlorphen Amide	0.025	5.625	6.490	6.955	5.192	0	0.00000	0.024192	0.0214
9	Glycerol Phenyl Butyrate	0.100	0.443	14.301	0.663	11.441	0	0.71424	0.01812	0.0000
10	L-Methyl Folate	0.025	6.049	0.417	7.596	0.333	0	0.27346	0.008652	0.0010
11	Methyl testosterone	0.002	0.256	0.527	1.015	0.422	0	0.02400	0.000492	0.0037
12	Nitisinone	0.001	0.160	0.066	0.185	0.053	0	0.00202	0.000432	0.0010
13	Oxandrolone	0.010	2.348	1.400	2.468	1.120	0	0.02551	0.000132	0.0528
14	Parecoxib Sodium	0.010	0.378	1.479	0.468	1.183	0	0.04666	0.020412	0.0030
15	Phenoxy benzamine Hydrochloride	0.002	0.000	0.149	0.000	0.119	0	0.00520	0.000672	0.0022
16	Prazosin Hydrochloride	0.100	5.388	6.571	7.856	5.256	0	0.30929	0	0.0562

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17	Ramelteon	0.015	12.716	0.143	14.753	0.115	0	1.23840	0	0.0140
18	Stiripentol	0.010	0.331	0.144	0.350	0.115	0	0.00000	0	0.0000
19	Thiothixene	0.020	36.169	22.981	42.095	18.385	0	0.47640	0	0.5460
20	Treprostinil Diolamine	0.001	0.034	0.044	0.038	0.035	0	0.0068	0.00072	0.0013
21	Treprostinil Sodium	0.001	0.055	0.069	0.063	0.055	0	0.0110	0.0012	0.0016
22	Trientine Hydrochloride	0.050	17.546	0.165	19.259	0.132	0	0.10558	0.162384	0.0106
23	Betaine Anhydrous	0.050	14.143	2.198	15.906	1.758	0	0.05257	0	0.0210
24	Methsuximide	0.005	0.498	0.020	0.677	0.016	0	0.00820	0	0.0042
25	Piribedil	0.015	0.814	0.412	0.904	0.330	0	0.00311	0.008916	0.0020
26	Fludrocortisone Acetate	0.001	0.170	0.061	0.242	0.049	0	0.00242	0.002424	0.0002

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27	Atovaquone	0.0500	11.003	13.086	12.561	10.469	0	0.15784	0	0.0422
28	Cinacalcet Hydrochloride	0.001	0.034	0.094	0.043	0.075	0	0.00000	0.000108	0.0000
29	Tafamidis Meglumine	0.005	0.388	1.910	0.407	1.528	0	0.00335	0.001836	0.0066
30	Tafamidis	0.005	0.388	2.305	0.407	1.844	0	0.00325	0.001836	0.0066
31	Oxcarbazepine	0.010	1.155	0.358	1.308	0.287	0	0.00000	0.00012	0.0064
32	Acebutolol hydrochloride	0.005	0.025	0.125	0.030	0.100	0	0.0 0113	0.0 015	0.0010
33	Pitolisant Hydrochloride	0.002	0.052	0.098	0.071	0.078	0	0.00000	0	0.0036
34	Benazepril Hydrochloride	0.005	0.059	0.234	0.071	0.187	0	0.00293	0.002964	0.0009
35	Levocartinie hydrochloride	0.050	15.950	4.138	18.117	3.310	0	0.00000	0.03	0.0600
36	Prucalopride Succinate	0.002	0.090	0.052	0.095	0.042	0	0.00000	0.000576	0.0008

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37	Cevimeline Hydrochloride	0.0002	0.197	1.057	0.399	0.846	0	0.005725	0	0.0025
38	L-Glutamine	0.0002	0.135	0.021	0.135	0.017	0	0.000360	0	0.0019
39	Perampanel	0.0002	0.013	0.096	0.036	0.077	0	0.000000	0	0.0009
40	Research and Development products	0.0002	2.400	0.300	2.400	0.240	0	0.000240	0.24	0.0024
	TOTAL	3.170	222.873	234.807	272.435	187.845	0	19.74115	0.57	1.9835

8 Water requirement

Section	Existing (KLD)			Prop.Add (KLD)		Total after expansion (KLD)		
	Fresh	Recycle	Total	Fresh	Recycle	Fresh	Recycle	Total
Boiler makeup	1	6.5	7.5	13.4	-6.5	14.4	0	14.4
Cooling Tower makeup	0	6	6	37.075	28.925	37.075	34.925	72
Process	10	0	10	0	0	10	0	10
Scrubber	0	0	0	4.5	0	4.5	0	4.5
Lab	0	0	0	2	0	2	0	2

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	Domestic	2.5	0	2.5	3.5	4	6	4	10
	Greenbelt	1.5	0	1.5	-1.5	5.5	0	5.5	5.5
	Total	**15**	**12.5**	**27.5**	**58.975**	**31.925**	**73.975**	**44.425**	**118.4**

	b) Source of water	Fresh Water is being sourced from SIDCO earlier. But as on date, Due to maintenance water supply to the industrial units at Kakkalur estate is stopped temporarily by SIDCO (as per Letter Rc.no.94/B/2022 dated 02.09.2022). So we are procured through Private water tankers.

9	Sewage generation, treatment and disposal	**Waste water**	**Existing (KLD)**	**Prop. Add (KLD)**	**Total (KLD)**	**Method of disposal**
		Sewage	2.0	7.5	9.5	**Existing:** Disposed through Septic Tank with dispersion Trench. **After expansion:** Existing septic tank will be discontinued and sewage will be treated through 10 KLD STP. Treated sewage will be used for greenbelt.
		Effluent	13.0	22	35	**Existing:** treated through ETP (15KLD), RO followed single effect evaporator and ATFD. RO/MEE/ATFD Permeate water is being used for cooling tower.

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						After expansion: Will be treated through Biological ETP (40 KLD), RO followed MEE and ATFD. RO/MEE/ATFD Permeate water will be used for cooling tower.

10	Quantity of Solid Waste generated per day (in Kgs), Mode of treatment and Disposal of Solid Waste	Description	Quantity (TPM)			Method of Collection	Method of Disposal
			Existing	Prop. Add	Total After Expansion		
		Packing material	0.1	0.2	0.3	Manual	Sold to recyclers/Send for Co Processing in Cement Industry
		Food waste from canteen	0.6	1.2	1.8		Disposed through Municipal Bins
		Garden waste	0.2	0.3	0.5		used as manure
		Fly Ash/ Ash from wood/Briquette	0.01	9.99	10.0		Used for in-house sludge stabilization or Sold to Cement industry / Brick manufacturer

11	Hazardous waste Management:		
		Qty (TPA)	Disposal

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Hazardous waste generated (with unit)	Actual (2022-23)	Existing as per HWA	Prop. Add	Total After Expansion	
28.3-Spent carbon	0.93	1.0	2.0	3.0	Generation, Collection, Storage, Transportation Disposal to TSDF, Gummidipoondi for incineration
28.2-Spent catalyst	1.875	2.0	21	23	Generation, Collection, Storage, Transportation Disposal to TSDF, Gummidipoondi for land filling.
5.1-Used or spent oil	0.105	0.180	0.3	0.48	Disposed to TNPCB Authorized recyclers
35.3-Chemical sludge from waste water treatment 35.3 Salt from MEE and ATFD	7.2	7.2	49.01	56.21	Generation, Collection, Storage, Transportation Disposal to TSDF, Gummidipoondi for land filling.
33.1-Empty barrels/containers/liners contaminated with hazardous chemicals /wastes	0.25	1.0	1.0	2.0	Disposed to TNPCB Authorized recyclers
28.5-Date-expired products	0	0.5	0.5	1.0	Generation, Collection, Storage, Transportation Disposal to TSDF,

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						Gummidipoondi for incineration
	28.4-Off specification products	0	0.5	0.5	1.0	
	28.6-Spent solvents	15.1	24	164	188	Disposed to TNPCB Authorized recyclers – M/s Mangal Industries has authorization for reprocessing the spent sovent total quantity of 2400 KL/Annum.

12	Power requirement	**Details**	**Existing**	**Prop. Add**	**Total after expansion**	**Source**
		Power Requirement (HP)	140	870	1010	TANGEDCO
		Back-up(kVA)	1x250 (As per CTO) *	2 X 500	2 X 500	DG sets
		Boiler (TPH)	2x 0.5**	3.0	3	Steam generation
13	Details of D.G. set with Capacity	• Existing DG sets will be removed & replaced by 2 X 500 KVA. • Existing 2x0.5 TPH Boilers will be removed & replaced by 1x3.0 TPH boiler.				

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<table>
<tr><td>14</td><td>Fuel requirement</td><td>Kind of Fuel used - Diesel, Wood and Bio-briquette
Note: After Expansion, Wood will be removed.
Quantity of fuel used
<table>
<tr><th>Fuel type</th><th>Existing</th><th>Prop. Add</th><th>Total</th><th>Source</th></tr>
<tr><td>Wood (TPM)</td><td>60</td><td>-</td><td>-</td><td>Local</td></tr>
<tr><td>Bio-briquette (TPM)</td><td>-</td><td>360</td><td>360</td><td>Local</td></tr>
<tr><td>Diesel (L/hr)</td><td>50</td><td>150</td><td>200</td><td>Local</td></tr>
</table></td></tr>
<tr><td>15</td><td>Air Pollution Control Measures (Stack)</td><td>The proposed cost of air pollution control measures is 30 Lakhs and list of proposed APC with specifications are
Sources:
• Boiler
• DG sets.
• Scrubbers
Control Measures:
➢ All air pollution control measures will be provided by the industry.
➢ Adequate stack height will be provided for DG & Boiler.
➢ Adequate scrubbers will be provided
➢ Ambient air quality monitoring will be carried out regularly at selected locations in order to check and compare the predicted concentrations with the measured concentrations. NAAQS Exceedance if any may be checked thoroughly and adequacy/Performance of Air Pollution Control measures shall be reviewed.
➢ Adequate Greenbelt width will be provided.</td></tr>
</table>

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		➢ Trucks with cargo susceptible for fugitive suspension will be covered with tarpaulin. All the vehicles will be periodically checked to ensure compliance to the emission standards. ➢ VOC emission from process vents is being control through Wet Scrubber. ➢ In addition, EMC will ensure that unit will be with essential pollution control measures as to be stated by TNPCB in their CTO.
16	Details of man power	Existing-50 Nos & Proposed- 165 Nos. Total After Expansion- 215 Nos.
17	Details of Green Belt Area	• Within the site – 0.027 Ha (3.60%) [Existing] • Outside the project site in Government higher Secondary school, Seethanjeri, Thiruvallur -0.40 HA (53.4%) [Existing] • Outside the project site in SIDCO Industrial Area (OSR 1) – 0.113 Ha (15%) [Proposed]
18	Provision for rain water harvesting	Rain water harvesting pits– 1 No.
19	EMP Cost (INR)	Capital Cost - Rs. 407 Lakhs Recurring Cost - Rs. 28 Lakhs
20	CER activity	

Sl.No	Activities	2023-2024
1	Government Higher Secondary School Kakkallur • Sanitation facility & Drinking water plant. • Avenue Plantation along the School Boundary	5,00,000

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		2	Government Higher Secondary School, Seethanjari • Sanitation facility & Drinking water plant. • Greenbelt Development	5,00,000
		Total (in Rs)		1000000

Now, the proposal was placed in the 406th SEAC meeting held on 01.09.2023. Based on the presentation made and documents furnished by the project proponent, SEAC decided **to recommend the proposal for the grant of Environmental Clearance** subject to the following specific conditions, in addition to normal conditions stipulated by MOEF &CC:

1. The project proponent shall provide ETP of capacity 22 KLD with ZLD system in addition to the existing 13 KLD such that final capacity after expansion is 35 KLD.
2. The project proponent shall provide STP of capacity 7.5 KLD with ZLD system in addition to the existing 2 KLD such that final capacity after expansion is 9.5 KLD.
3. The proponent shall obtain and maintain valid safety licenses from the concerned department for boiler, solvent/fuel/raw material storage areas etc. before obtaining CTE from TNPCB.
4. The proponent shall ensure that the Hazardous chemicals shall be stored in tanks, tank farms, drums, carboys etc. Further, flame arresters shall be provided on tank farm. Solvent transfer shall be by pumps and all the above-mentioned measures must be provided before obtaining CTE from TNPCB.
5. A full fledged laboratory facilities must be setup to carry out the Environment management and monitoring functions before obtaining CTE from TNPCB.
6. The proponent shall provide, operate and maintain adequate Air-pollution control measures for the process area.
7. 100% of the roof coverage of the admin block building should be specifically allocated for solar panels and should be used for the generation of solar energy.

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8. The proponent should continuously monitor the VOC and ensure that VOC levels are within permissible limits.
9. The proponent shall obtain permanent water commitment letter before obtaining CTE from TNPCB.
10. The proponent shall ensure that the area for boiler is earmarked, further the proponent may submit the safety measures on the same to TNPCB before obtaining CTE.
11. The proponent shall strictly follow the norms and guidelines mentioned in the Hazardous and Other Wastes (Management and Transboundary Movement) Rules, 2016 for the handling and disposal of Hazardous waste to be generated.
12. The proponent shall periodically conduct and submit fire safety study, emergency evacuation plan, risk assessment study, occupational health safety study for the worst case scenario in regard to existing safety measures/standard operating procedures adopted for the process/ equipment/utilities for operation &maintenance and the storage areas of products, raw materials, solvent, fuel, etc. in the different operating zones of the plant at least once in a year to regularly identify safety fragile areas within the plant which requires regular monitoring and the proponent shall submit the same along with timeline for implementation of the said recommendations to the concerned departments.
13. A detail report on the safety measure and health aspects including periodical audiometry, pulmonary lung function, etc., test reports once in a year for all the workers shall be submitted to TNPCB.
14. As the plant operation involves the sensitive processing, the medical officer and the supporting staff involved in the health centre activities shall be trained in occupational health surveillance (OHS) aspects through the outsourced training from the experts available in the field of OHS for ensuring the health standard of persons employed.
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 as committed.

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16. As accepted by the Project Proponent the CER cost is Rs. 10 lakhs and the amount shall be spent within 1 year and the same shall be submitted before obtaining CTO from TNPCB, for committed activities towards Government Higher Secondary School Kakkallur and Government Higher Secondary School, Seethanjari Tamil Nadu.

Agenda No: 406 - 12

(File No: 10206/2023)

Proposed Expansion of Steel Melting Shop & Rolling Mill located at S.No. 329/2, 3, 4, 5, 7 of Vellalagundam Village, Vazhappadi Taluk, Salem District by M/s. Sree Jayamurugan Alloys Private Limited - For Terms of Reference. (SIA/TN/MIN/435680/2023, Dated: 10.07.2023)

The proposal was placed for appraisal in this 406th SEAC meeting held on 01.09.2023. 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. Sree Jayamurugan Alloys Private Limited has applied for Terms of Reference for the Proposed Expansion of Steel Melting Shop & Rolling Mill located at S.No. 329/2, 3, 4, 5, 7 of Vellalagundam Village, Vazhappadi Taluk, Salem District, Tamil Nadu.
2. The project/activity is covered under Schedule 3(a), Metallurgical Industries (Ferrous & Non-Ferrous) of the Schedule to the EIA Notification, 2006.

Now, the proposal was placed in the 406th SEAC meeting held on 01.09.2023. The Committee decided to defer the proposal and take up for discussion in the ensuing meeting.

Agenda No: 406 - 13

(File No: 10230/2023)

Proposed Expansion of existing Billets manufacturing facility from 26,400 Tons/Annum to 1,57,680 Tons/Annum located at S.No. 289/1A, 1B, 1C, 342/4, 5, 6B2, 343/4B, 5B & 6 of Madharpakkam Village, Gummidipoondi Taluk, Tiruvallur District by M/s. Kevin Steels Private Limited - For Terms of Reference. (SIA/TN/MIN/436890/2023, Dated: 17.07.2023)

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The proposal was placed for appraisal in this 406th SEAC meeting held on 01.09.2023. 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. Kevin Steels Private Limited has applied for Terms of Reference for the Proposed Expansion of existing Billets manufacturing facility from 26,400 Tons/Annum to 1,57,680 Tons/Annum located at S.No. 289/1A, 1B, 1C, 342/4, 5, 6B2, 343/4B, 5B & 6 of Madharpakkam Village, Gummidipoondi Taluk, Tiruvallur District, Tamil Nadu.
2. The project/activity is covered under Schedule 3(a), Metallurgical Industries (Ferrous & Non-Ferrous) of the Schedule to the EIA Notification, 2006.

Now, the proposal was placed in the 406th SEAC meeting held on 01.09.2023. Based on the presentation and documents furnished by the proponent, committee noted the following

1. The proposed site is at a distance of 9.93 Km from Pulicat Birds Sanctuary.
2. The proposed site is at a distance of 4.59Km from Tamil Nadu – Andhra Pradesh border.

Further, as per EIA Notification 2006, projects/activities covered under 3(a) Metallurgical industries (ferrous & non-ferrous) attracts General Conditions.

Further, as per EIA Notification, 2006 S.O. 1599 (E) dated 25.06.2014, which states as follows

General Condition (GC):

Any project or activity specified in Category 'B' will be treated as Category A, if located in whole or in part within 5 km from the boundary of: (i) Protected Areas notified under the Wild Life (Protection) Act, 1972, (ii) Critically Polluted areas as identified by the Central Pollution Control Board from time to time, (iii) Eco-sensitive areas as notified under the Water (Prevention and Control of Pollution) Act, 1974 from time to time, and (iv) inter-State boundaries and international boundaries: Provided that for River Valley Projects specified in item 1(c), Thermal Power Plants specified in item 1(d), Industrial estates/parks/complexes/areas, export processing zones (EPZs), Special Economic Zones (SEZs), biotech parks, leather

complexes specified in item 7(c) and common hazardous waste treatment, storage and disposal facilities (TSDFs) specified in item 7(d), the appraisal shall be made at Central level even if located within 10km.

Provided further that the requirement regarding distance of 5Km or 10 km, as the case may be, of the inter-State boundaries can be reduced or completely done away with by an agreement between the respective States or U. Ts sharing the common boundary in case the activity does not fall within 5 Km or 10 Km, as the case may be of the areas mentioned at item (i), (ii) and (iii) above."

Based on the above facts furnished and EIA Notification, the proposed site falls within 5 Km of the inter-state boundary and hence, *any project or activity specified in Category 'B' will have to be treated as Category A.*

Hence, the committee decided to direct the proponent to approach MoEF&CC, since the proposal has to be treated as category 'A' and the current file shall be closed and recorded.

Agenda No: 406 - 14

(File No: 10249/2023)

Proposed Re-Rolling Mill with the Production capacity of 25,200 Tons/Annum to 1,57,680 Tons/Annum located at S.No. 303/1, 303/2, 303/3, 303/4, 303/5, 303/8, 303/9, 303/10, 303/11 & 303/12 of Poothagudi Village, Viralimalai Taluk, Pudukottai District by M/s. Abhinava Metaliks Private Limited - For Terms of Reference. (SIA/TN/MIN/437250/2023, Dated: 19.07.2023)

The proposal was placed for appraisal in this 406th SEAC meeting held on 01.09.2023. 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. Abhinava Metaliks Private Limited has applied for Terms of Reference for the Proposed Re-Rolling Mill with the Production capacity of 25,200 Tons/Annum to 1,57,680 Tons/Annum located at S.No. 303/1, 303/2, 303/3, 303/4, 303/5, 303/8, 303/9, 303/10, 303/11 & 303/12 of Poothagudi Village, Viralimalai Taluk, Pudukottai District, Tamil Nadu.

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2. The project/activity is covered under Schedule 3(a), Metallurgical Industries (Ferrous & Non-Ferrous) of the Schedule to the EIA Notification, 2006.
3. The proponent had obtained CTE from TNPCB vide consent order no. 2201243291959 under Air Act and Consent Order No. 2201143291959 under Water Act Dated: 15.03.2022 for the Manufacturing of 2100 TPM of Hot rolled bars with Reheating Furnace 3.50 TPH with validity up to 31.03.2026.
4. As per the MoEF&CC Notification S.O. 3250 (E) Dated: 20.07.2022,

"*All the standalone re-rolling units or cold rolling units, which are in existence and in operation as on the date of this notification, with valid Consent to Establish (CTE) and Consent to Operate (CTO) from the concerned state pollution control board or the union territory pollution control committee, as the case may be, shall apply online for grant of Terms of Reference as per item 3(a) of the said notification and shall be exempted from the requirement of public consultation:*

Provided that the application for the grant of ToR shall be made within a period of one year from the date of this notification."

Now, the proposal was placed in the 406th SEAC meeting held on 01.09.2023. Based on the presentation made by the proponent and the documents furnished by the proponent, committee noted that the proponent had obtained Consent to Establish and is yet to commence the operation of the said unit. Hence, Public Hearing exemption as per the above-mentioned Notification is not applicable in this case, as the unit is yet to be established and commence its operation. Hence, the proposed activity covered under schedule 3(a) Metallurgical Industries (Ferrous & Non-Ferrous) attracts public hearing. In the light of the above, **SEAC decided to prescribe ToR for the preparation of detailed EIA report along with Public Hearing.** The Detailed EIA shall include Standard ToR prescribed by MoEF&CC (Annexure III) for Metallurgical Industries along with the following additional ToR:

1. The PP shall conduct an 'energy audit' of the existing plant by an accredited BEE consultant and submit the report along with action plan to implement the suggestions made in the report.
2. The PP shall explore the possibilities of implementing the 'direct rolling technology' and indicate a timeline for its implementation.

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3. The proponent shall submit Disaster Management Plan along with EIA Report.
4. The PP shall furnish Green Belt plan with minimum 33% Green cover along with EIA Report.
5. The PP shall furnish panel board calculation for the existing activity.
6. The PP shall explore possibilities to utilize renewable energy with respect to total power consumption and timeline for substitution of briquette from agricultural waste/biomass instead of coal.
7. The PP shall obtain & furnish NOC from local panchayat.
8. The PP shall furnish photographs & video of the process activity, Air/Water pollution control measures, & green balt area after adopting best manufacturing methods in regard to state of art of technology.
9. Details of quantity Coal, imported/ indigenous and its quality regard to sulphur content & ash content.
10. Details of generation, handling and management & disposal of coal, fly ash, bottom ash, hot rolling mill furnace slag.
11. The proponent shall submit report of analysis with respect to air emission obtained from TNPCB along with EIA Report.
12. DFO letter stating the proximity details of Reserve Forests, Protected Areas, Sanctuaries, Tiger reserve etc., up to a radius of 25 km from the proposed site.
13. The PP shall furnish the details of arrangement made for permanent water supply from local panchayat/TWAD board/municipality.
14. Efficiency study/report of the existing furnace through reputed institution.
15. The PP shall discuss the best available technology available in this field and action plan for implementing the same.
16. The PP shall furnish action plan for harnessing 50% solar energy or shall purchase 75% renewable energy to meet the energy requirement.
17. The PP shall furnish the road map for achieving 100% green energy in 2030.
18. The PP shall furnish the action plan for 100% use of Electric Vehicles within next five years.
19. The PP shall furnish the action plan for the implementing the CER activities as committed.

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20. The PP shall study in detail various operational measures to reduce the specific energy consumption in re-heating furnaces.
21. The proponent shall furnish details on the idling period provided.
22. The proponent shall furnish details on measures adopted for better and efficient operation of melting & charging.
23. The proponent shall furnish details on the control measures adopted during heat finishing and tapping.
24. The proponent shall study in detail about operational control measures to Minimize and control the refractory wall wearing.
25. The proponent shall explore the possibilities of utilizing state of the art technology with best global practice.
26. The proponent shall explore the possibilities of utilizing the treated wastewater instead of fresh water.
27. The proponent must increase the Solar and Wind Energy sources and must explore the possibilities of achieving Net Zero energy consumption.
28. The proponent shall submit the copy of the consent to operate and the latest renewal consent order obtained from the TNPCB.
29. The proponent shall submit the compliance report from TNPCB for the conditions imposed in the consent order issued by the TNPCB.
30. The Environmental pollution control measures taken to deal with Air pollution, effluent generation and slag generation should be discussed in detail.
31. The project proponent has to strengthen the air pollution control measures of the existing system and furnish an adequacy report on the revamped system from a reputed institution like Anna University or IIT, Madras along with the EIA report. The revamping of the existing air pollution control measures should include the interlinking of the position of the hood system and furnace to ensure that the emission from the furnace shall be treated and routed through wet scrubber and stack.
32. The proponent shall submit the video and photograph of the operational details with particular reference to points of pollution in the existing plant.
33. Material balance and Water balance shall be furnished in accordance with

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MoEF&CC guidelines.

34. A detailed report on Solid waste & hazardous waste management shall be furnished.
35. Report on AAQ survey and proposed air pollution prevention and control measures shall be furnished in the EIA report.
36. The project proponent shall do the stoichiometric analysis of all the involved reactions to assess the possible emission of air pollutants in addition to the criteria pollutants, from the proposed project.
37. Adequacy report for ETP &STP for the proposed project obtained from any reputed Government institution such as IIT, Anna University, NIT shall be furnished.
38. Land use classification shall be obtained from the DTCP for the Survey Numbers of this project. Further, the project proponent shall submit the planning permission obtained from the DTCP, if any.
39. The proponent shall conduct the EIA study and submit the EIA report for the entire campus along with layout and necessary documents such as "A" register and village map.
40. Public Hearing points raised and commitments of the Project Proponent on the same along with time bound Action Plan with budgetary provisions to implement the same should be provided and also incorporated in the final EIA/EMP Report of the Project and to be submitted to SEIAA/SEAC with regard to the Office Memorandum of MoEF& CC accordingly.
41. The Public hearing advertisement shall be published in one major National daily and one most circulated Tamil daily.
42. The PP shall produce/display the EIA report, executive summary and other related information with respect to public hearing in Tamil.
43. 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 purposes involved in the project.
44. The project proponent shall obtain clearance from the National Board for Wildlife, if applicable.

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45. The project proponent shall explore the possibilities of treating and utilizing the trade effluent and sewage within the premises to achieve Zero liquid discharge.
46. The layout plan shall be furnished for the greenbelt area earmarked with GPS coordinates 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 be not less than 15 % of the total land area of the project.
47. As the plant operation involves sensitive processing, the medical officer and the supporting staff involved in the health centre activities shall be trained in occupational health surveillance (OHS) aspects through outsourced training from the experts available in the field of OHS for ensuring the health standard of persons employed.
48. The proposal for Roof Top solar panel covering all the roof except furnace shall be included in the EIA Report.
49. 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 furnish the detailed EMP.

Agenda No: 406-15

(File No.10231/2023)

Proposed Expansion of IT Park at S.F.Nos. 20-109/1 of Vallancheri Village, S.No.1-3 & 153-155 of Potheri Village & S.No.35 Thailavaram Village, Chengalpattu Taluk, Chengalpattu District, Tamil Nadu by M/s. Estancia IT Park Private Limited – For Terms of Reference (SIA/TN/INFRA2/407644/2022 dated.24.11.2022.)

The proposal was placed in the 406th meeting of SEAC held on 01.09.2023. 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. Estancia IT Park Private Limited** has applied for Terms of Reference for the Proposed Expansion of IT Park at S.F.Nos. 20-109/1 of Vallancheri Village, S.No.1-3 & 153-155 of Potheri Village & S.No.35 Thailavaram Village, Chengalpattu Taluk, Chengalpattu District, Tamil Nadu.
2. The project/activity is covered under Category "B1" of Item 8(b) "Area and Township Development Projects" of the Schedule to the EIA Notification, 2006.

3. Earlier, EC was accorded to the project proponent in the year 2008 for a land area of 11.09 Ha and a built-up area of 3,79,211.0 Sq.m.
4. **Subsequently, the proponent has acquired additional land of 4.69 Ha in the year 2018 and has carried out construction activities with built-up area up to 56569.40 Sq.m in the additionally acquired area without obtaining prior Environmental Clearance.**
5. Currently, the total land area is 15.69 Ha and the total built-up area proposed is 3,77,297.18 Sq.m out of which 1,60,765.07 is already constructed.
6. As per MoEF & CC Notification S.O. 804 (E) dated 14.03.2017,

   "...In case the project or activities requiring prior Environmental Clearance under EIA Notification 2006 from the concerned Regulatory Authority are brought for Environmental Clearance after starting the construction work, or have undertaken expansion, modernization and change in product-mix without prior EC, these projects shall be treated as cases of violations ..."

In the present case, the Committee noted that the proponent has started construction activities in the additionally acquired land area without obtaining prior Environmental Clearance and hence the proposal has to be treated as 'violation'.

Therefore, in view of the above & based on the presentation and documents furnished by the project proponent, SEAC decided to grant **Terms of Reference (TOR) under Violation category** to the project, 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 the EIA/EMP report along with assessment of ecological damage, remediation plan and natural and community resource augmentation plan and it shall be prepared as an independent chapter by the accredited consultants. **Terms of Reference issued are subject to the outcome of the final orders of the Hon'ble High Court of Madras in the matter of W.P.(MD) No. 11757 of 2021.**

1. The PP shall furnish an Independent Chapter 13 as per the MoEF & CC Violation Notification – S.O. 804 (E), dated. 14.03.2017 for the project for assessment of Ecological damage, remediation plan and natural & community resource augmentation plan to be prepared as an independent chapter in the Environment Impact assessment report by the Accredited consultant and also with collection

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and analysis of data for assessment of ecological damage, preparation of remediation plan and natural & community resource augmentation plan to be 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. As a part of procedural formalities as per the MoEF & CC Violation Notification & O.Ms, the action will be initiated by the competent authority under section 15 read with section 19 of the Environment (Protection) Act, 1986 against violation.
3. The proposal should comply with Green Building norms and should obtain minimum of IGBC Gold rating.
4. The project proponent shall submit a Certified Compliance Report as per the MoEF&CC O.M dated.08.06.2022 for the previous EC obtained earlier.
5. As a part of Corporate Environment Responsibility, the proponent shall make arrangements to teach coding to young school students in the Pudukottai District from classes 7th – 9th. Minimum of 10 Government Schools shall be selected for this purpose. Details of the same shall be furnished in the EIA Report. Further, job opportunities shall be given to transgender people, physically disabled people, and economically weaker people in the locality.
6. At least 50% of the roof area shall be covered with Solar panels and utilization of the solar energy should not be less than 10% of total energy utilization. Application of solar energy should be utilized maximum for illumination of common areas, street lighting etc. The proposal for utilization of at least 10% of Solar Energy shall be included in the EIA/EMP report.
7. The proponent shall furnish the design details of the STP treatment system.
8. The STP should be installed and maintained on BOT basis. It should be under the supervision and maintenance of the vendor for at least 10 years.
9. The PP shall explore construction of 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 structure which was crucial to the overall eco-system.

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. The space allotment for solid waste disposal and sewage treatment & grey water treatment plant shall be furnished.
14. Details of the Solid waste management plan shall be prepared as per solid waste management Rules, 2016 and shall be furnished.
15. Details of the E-waste management plan shall be prepared as per E-waste Management Rules, 2016 and shall be furnished.
16. Details of the rain water harvesting system with cost estimation should be furnished.
17. 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.
18. The layout plan shall be furnished for the greenbelt area earmarked with GPS coordinates 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.
19. The proponent shall furnish the specific plan for the plantation.

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20. 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.
21. 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.
22. The project proponent shall furnish detailed baseline monitoring data with prediction parameters for modeling for the ground water, emission, noise and traffic.
23. 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 furnish the detailed EMP.

Agenda No: 406-16

(File No.10250/2023)

Proposed Expansion of Steel Melting plant & Steel Rolling Mill at S.F.Nos.304/1, 304/2, 305/1 & 306 of Chennimalai Village, Perundurai Taluk, Erode District, Tamil Nadu by M/s. Sree Palani Andavar Alloys and Steels Private Limited – Terms of Reference. (SIA/TN/IND1/436633/2023 dated: 15.07.2023.)

The proposal was placed in the 406th meeting of SEAC held on 01.09.2023. 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. Sree Palani Andavar Alloys and Steels Private Limited** has applied for Terms of Reference for the Proposed Expansion of Steel Melting plant & Rolling Mill at S.F.Nos.304/1, 304/2, 305/1 & 306 of Chennimalai Village, Perundurai Taluk, Erode District, Tamil Nadu.
2. The project/activity is covered under Category "B" of Item 3(a) "Metallurgical Industries (Ferrous & Non-Ferrous)" of the Schedule to the EIA Notification, 2006.

The Committee decided to defer the proposal and take up for discussion in the ensuing meeting.

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ANNEXURE-I

SPECIAL MITIGATION MEASURES FOR THE QUARRIES LOCATED WITHIN 1 KM FROM THE RESERVE FORESTS

1. Since the R.F is located very close to the proposed quarry site, the PP shall develop Green Belt (Thick Tree plantation in two to three rows) along the boundary of the mine lease area before obtaining the CTO from the TNPCB.
2. The proponent shall construct and maintain proper fencing all around the boundary of the proposed working quarry adjacent to the direction of the location of the Reserved Forest before the commencement of the operation and shall furnish the photographs showing the same before obtaining the CTO from TNPCB.
3. The PP shall take steps so that the overburden, waste rock, rejects and fines generated during the mining operations shall be stored in separate dumps positioned in opposite direction to the location of the reserved forest.
4. The PP shall ensure that such waste/reject dumps shall be properly secured to prevent escape of material there from in harmful quantities which may cause degradation of environment and to prevent causation of floods.
5. The PP shall select the site for dumps on impervious ground to ensure minimum leaching effects due to precipitations.
6. The PP shall take necessary steps that wherever possible, the waste rock, overburden etc. shall be back-filled into the mine excavations with a view to restoring the land to its original use as far as possible.
7. Wherever back-filling of waste rock in the area excavated during mining operations is not feasible, the PP shall take adequate steps in discussion with the concerned DFO to suitably terrace the waste dumps ensuring the stability through vegetation to consolidate the green belt development in the areas adjacent to the reserved forest location.
8. The PP shall carry out the scientific investigations in order to keep the ground and noise vibrations caused by blasting operations and movement of HEMM such as Excavators, Trucks within safe limit.

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9. The PP shall not perform secondary breakage involving the drilling & blasting in the quarrying operations and it can be replaced with non-conventional methods such as noise-controlled rock breakers, usage of non-explosive expansive materials/chemicals, Hydraulic Splitting based on the suitable scientific studies carried out by any reputed scientific and academic institutions.
10. The PP shall take adequate steps to control the air pollution due to fines, dust, smoke or gaseous emissions during the quarrying operations within 'Permissible Limits' specified under the environmental laws.
11. The Quarrying and Mining activities shall be restricted in the Eco-sensitive Zone of 60 m from the boundary of the Reserved area and hence the PP shall not even indulge in constructing the haul roads in these areas.
12. No development on existing steep hill slopes or slopes with a high degree of erosion shall be permitted. Hence, the PP shall not carry out the quarrying on steep hill slopes with a gradient of 20° or more or areas with a high degree of erosion on forestland.
13. The PP shall give an affidavit at the time of lease execution that there will be no felling of trees (or) any encroachment will not be made on these Reserved Forest lands and also within the Eco- sensitive Zone of 60 m without the prior permission of the State Government in case of reserve forest land as per the procedures laid down by the State Government.
14. The PP shall not use plastic carry bags within the quarry area.
15. The PP shall ensure that all the haul roads within the quarry lease shall be provided with adequate number of road side drains and these drains shall be kept free form blockage for runoff disposals. This run off from the road side drainage shall relate to the natural drainage system in the area.
16. The PP shall adhere to the provisions of the MoEF had issued Notification No. S.O. 1545 dated 25th June 2009 regulating certain activities in the eco-sensitive zone to conserve and protect the reserved forest area from ecological and environmental point of view.

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GRAVEL / RED EARTH & PEBBLES QUARRY – GENERAL CONDITIONS

1. The proponent shall mandatorily appoint the statutory competent persons and commence the quarry operations within the purview of Mines Act 1952.
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. No change in basic mining proposal shall 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. 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.
6. 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.
7. 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.

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8. 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.
9. 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. 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.
10. **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.
11. 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.
12. The proponent shall provide sedimentation tank / settling tank with adequate capacity for runoff management.
13. 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.

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14. 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.
15. The Project Proponent shall comply with the provisions of the Mines Rules 1955 for ensuring safety, health and welfare of the people working in the mines and the surrounding habitants.
16. The project proponent shall ensure that the provisions of the MMDR Act, 1957, the MCDR 2017 and Tamilnadu Minor Mineral Concession Rules 1959 are compiled 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.
17. 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.
18. 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.
19. 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.
20. 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.
21. 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

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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.

22. 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.

23. 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.

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ROUGH STONE/JELLY/BLUE METAL QUARRY

1) 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.
2) 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.
3) The proponent shall appoint the statutory competent persons relevant to the proposed quarry size as per the provisions of Mines Act 1952 and Metalliferous Mines Regulations, 1961, as amended from time to time.
4) Within a period one month from the execution of lease deed, the PP shall ensure that the persons deployed in the quarry including all the contractual employees/truck drivers shall undergo initial/periodical training in the DGMS approved GVTC situated in Trichy / Salem / Hosur.
5) The PP shall construct a garland drain of size, gradient and length around the proposed quarry incorporating garland canal, silt traps, siltation pond and outflow channel connecting to a natural drain should be provided prior to the commencement of mining. Garland drain, silt-traps, siltation ponds and outflow channel should be de-silted periodically and geo-tagged photographs of the process should be included in the HYCR.
6) Monitoring of drainage water should be carried out at different seasons by an NABL accredited lab and clear water should only be discharged into the natural stream. Geo-tagged photographs of the drainage and sampling site should be submitted along with HYCR.
7) The proponent shall install 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 showing the same before obtaining the CTO from TNPCB.
8) The Proponent shall submit a conceptual 'Slope Stability Action Plan' incorporating the benches & accessible haul road approved by the concerned

AD (Mines) for the proposed quarry to the DEE/TNPCB at the time of obtaining the CTO.

9) The PP shall ensure that the persons employed in the quarry whether permanent, temporary or contractual are undergoing the initial/periodical medical examination in the DGMS approved OHS Clinics/Hospitals as per the DGMS Circular No. 01 of 2011 before they are engaged in mining activities.
10) The PP shall ensure that the persons employed in the quarry whether permanent, temporary or contractual are provided with adequate PPEs before engaged in mining operations.
11) The PP shall meticulously carry out the mitigation measures as spelt out in the approved EMP.
12) 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 should be adopted by considering the wind direction.
13) The Project Proponent shall ensure that the funds earmarked for environmental protection measures are kept in a separate bank account and should not be diverted for other purposes. Year-wise expenditure should be included in the HYCR.
14) The Project Proponent shall send a copy of the EC to the concerned Panchayat/local body.
15) Perennial maintenance of haulage road/village / Panchayat Road shall be done by the project proponent as required, in coordination with the concerned Govt. Authority.
16) Perennial sprinkling arrangements 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.
17) 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 are undertaken accordingly. The report on the periodic monitoring shall be included in the HYCR.

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18) 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.

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. 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.

20) 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. 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) **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, (ii) Noise levels should be monitored regularly (on weekly basis) near the major sources of noise generation within the core zone.

22) The PP shall carry out maximum of only one round of controlled blast per day, restricted to the maximum of 30 to 40 number of holes per round with maintaining maximum charge per delay in such a manner that the blast-induced ground vibration level (Peak Particle Velocity) measured in the houses/structures located at a distance of 500 m shall not exceed 2.0 mm/s and no fly rock shall travel beyond 20 m from the site of blasting.

23) The PP shall also ensure that the blasting operations are not carried out on a 'day after day' basis and a minimum 24 hours break should be observed between blasting days to reduce the environmental impacts effectively.

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24) If 'Deep-hole large diameter drilling and blasting' is required, then the PP shall obtain special permission from DGMS.

25) The PP shall ensure that the blasting operations shall be carried out during a prescribed time interval with a prior notice to the habitations situated around the proposed quarry after having posted the sentries/guards adequately to confirm the non-exposure of public within the danger zone of 500 m from the boundary of the quarry. The PP shall use the jack hammer drill machine fitted with the dust extractor for the drilling operations such that the fugitive dust is controlled effectively at the source.

26) The PP shall ensure that the blasting operations are carried out by the blaster/Mine Mate/Mine Foreman employed by him in accordance with the provisions of MMR 1961 and it shall not be carried out by the persons other than the above statutory personnel.

27) 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 as per the Environmental Management Plan& the approved Mine Closure Plan.

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

29) 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.

30) The proponent shall provide sedimentation tank / settling tank with adequate capacity for runoff management.

31) 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.

32)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.

33)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.

34)The project proponent shall ensure that the provisions of the MMDR Act, 1957&the MCDR 2017 and Tamilnadu Minor Mineral Concession Rules 1959 are compiled 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.

35)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) and the Director of Mines Safety (DMS), Chennai Region by the proponent without fail.

36)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.

37)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.

38)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

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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.

39) As per the directions contained in the OM F.No.22-34/2018-IA.III dated 16th January 2020 issued by MoEFCC, the Project Proponent shall, undertake re-grassing the mining area and any other area which may have been disturbed due to his mining activities and restore the land to a condition which is fit for growth of fodder, flora, fauna etc. The compliance of this direction shall be included in the Half Yearly Compliance Report which will be monitored by SEAC at regular intervals.

40) 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.

41) 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 to the EMP as committed.

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SPECIAL MITIGATION MEASURES FOR THE QUARRIES LOCATED IN CLOSE PROXIMITY TO THE WINDMILLS		
Sl. No	Existing (or) Virgin Quarry	
	Wind Mills located at a distance of 150 m to 300 m	Wind Mills located beyond 300 m Up to 500 m
1.	Appointment of I/II Class Mines Manager Certificate of Competency under MMR 1961.	Appointment of I/II Class Mines Manager Certificate of Competency under MMR 1961.
2.	Special precautions are to be taken during blasting within danger zone such as posting guards, etc.	Blast design parameters should be mentioned in mining plan/scheme. and may be reviewed by a competent mining engineer.
3.	Blast design parameters should be mentioned in mining plan/scheme.	MCPD and total charge should be fixed such that it should nott exceed 1.3 kg and 26.50 kg respectively.
4.	The recommendations of scientific organisation need to be incorporated in the mining plan/scheme before its approval.	Fresh scientific study may be conducted if mine management wants to increase the MCPD and total explosive charge above the quantity of 1.30 kg and 26.50 kg respectively. Continuous monitoring using seismograph should also be done in such cases by the mine management.
5.	Engagement of blasting in-charge having Diploma/Degree in mining engineering for day-to-day blasting.	Engagement of blasting in-charge having Diploma/Degree in mining engineering for day-to-day blasting.
6.	Training of the blasting crew on controlled blasting practices before engaged in operation.	Training of the blasting crew on controlled blasting practices before engaged in operation.

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7.	Submission of monthly report on blast design pattern and detailed explosive consumption as well as volume of rock excavation to a statutory body viz. DGMS, DMG, PESO or SPCB.	Submission of monthly report on blast design pattern and detailed explosive consumption as well as volume of rock excavation to a statutory body viz. DGMS, DMG, SPCB. Report of recorded ground vibration need to be added in monthly report.
8.	Report of recorded ground vibration need to be added in monthly report which shall be sent to all the statutory body viz. DGMS, DMG, SPCB.	Report of recorded ground vibration need to be added in monthly report which shall be sent to all the statutory body viz. DGMS, DMG, SPCB.
9.	Small diameter emulsion cartridge of 25 mm diameter (125 gm weight per cartridge) shall be used. However, ANFO explosives may also be used as main explosive charge.	Small diameter emulsion cartridge of 25 mm diameter (125 gm weight per cartridge) shall be used. However, ANFO explosives may also be used as main explosive charge.
10.	Electronic (or) Non-electric detonators (Nonel) shall be used in all the blasts for in-hole explosive initiation and surface hole-to-hole firing.	Non-electric detonators (Nonel) shall be used in all the blasts for in-hole explosive initiation and surface hole-to-hole firing.
11.	Max. number of holes in a round: 30.	Max. number of holes in a round: 40 to 60.

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TERMS OF REFERENCE (ToR) FOR GRANITE / ROUGH STONE QUARRY

1. In the case of existing/operating mines, a letter obtained from the concerned AD (Mines) shall be submitted and it shall include the following:
   - (i) Original pit dimension
   - (ii) Quantity achieved Vs EC Approved Quantity
   - (iii) Balance Quantity as per Mineable Reserve calculated.
   - (iv) Mined out Depth as on date Vs EC Permitted depth
   - (v) Details of illegal/illicit mining
   - (vi) Violation in the quarry during the past working.
   - (vii) Quantity of material mined out outside the mine lease area
   - (viii) Condition of Safety zone/benches
   - (ix) Revised/Modified Mining Plan showing the benches of not exceeding 6 m height and ultimate depth of not exceeding 50m.
2. Details of habitations around the proposed mining area and latest VAO certificate regarding the location of habitations within 300m radius from the periphery of the site.
3. The proponent is requested to carry out a survey and enumerate on the structures located within the radius of (i) 50 m, (ii) 100 m, (iii) 200 m and (iv) 300 m (v) 500m shall be enumerated with details such as dwelling houses with number of occupants, whether it belongs to the owner (or) not, places of worship, industries, factories, sheds, etc with indicating the owner of the building, nature of construction, age of the building, number of residents, their profession and income, etc.
4. The PP shall submit a detailed hydrological report indicating the impact of proposed quarrying operations on the waterbodies like lake, water tanks, etc are located within 1 km of the proposed quarry.
5. The Proponent shall carry out Bio diversity study through reputed Institution and the same shall be included in EIA Report.
6. The DFO letter stating that the proximity distance of Reserve Forests, Protected Areas, Sanctuaries, Tiger reserve etc., up to a radius of 25 km from the proposed site.

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7. In the case of proposed lease in an existing (or old) quarry where the benches are not formed (or) partially formed as per the approved Mining Plan, the Project Proponent (PP) shall the PP shall carry out the scientific studies to assess the slope stability of the working benches to be constructed and existing quarry wall, by involving any one of the reputed Research and Academic Institutions - CSIR-Central Institute of Mining & Fuel Research / Dhanbad, NIRM/Bangalore, Division of Geotechnical Engineering-IIT-Madras, NIT-Dept of Mining Engg, Surathkal, and Anna University Chennai-CEG Campus. The PP shall submit a copy of the aforesaid report indicating the stability status of the quarry wall and possible mitigation measures during the time of appraisal for obtaining the EC.
8. However, in case of the fresh/virgin quarries, the Proponent shall submit a conceptual 'Slope Stability Plan' for the proposed quarry during the appraisal while obtaining the EC, when the depth of the working is extended beyond 30 m below ground level.
9. The PP shall furnish the affidavit stating that the blasting operation in the proposed quarry is carried out by the statutory competent person as per the MMR 1961 such as blaster, mining mate, mine foreman, II/I Class mines manager appointed by the proponent.
10. The PP shall present a conceptual design for carrying out only controlled blasting operation involving line drilling and muffle blasting in the proposed quarry such that the blast-induced ground vibrations are controlled as well as no fly rock travel beyond 30 m from the blast site.
11. The EIA Coordinators shall obtain and furnish the details of quarry/quarries operated by the proponent in the past, either in the same location or elsewhere in the State with video and photographic evidences.
12. If the proponent has already carried out the mining activity in the proposed mining lease area after 15.01.2016, then the proponent shall furnish the following details from AD/DD, mines.
13. What was the period of the operation and stoppage of the earlier mines with last work permit issued by the AD/DD mines?

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14. Quantity of minerals mined out.
    - Highest production achieved in any one year
    - Detail of approved depth of mining.
    - Actual depth of the mining achieved earlier.
    - Name of the person already mined in that leases area.
    - If EC and CTO already obtained, the copy of the same shall be submitted.
    - Whether the mining was carried out as per the approved mine plan (or EC if issued) with stipulated benches.
15. All corner coordinates of the mine lease area, superimposed on a High-Resolution Imagery/Topo sheet, topographic sheet, geomorphology, lithology and geology of the mining lease area should be provided. Such an Imagery of the proposed area should clearly show the land use and other ecological features of the study area (core and buffer zone).
16. The PP shall carry out Drone video survey covering the cluster, green belt, fencing, etc.,
17. The proponent shall furnish photographs of adequate fencing, green belt along the periphery including replantation of existing trees & safety distance between the adjacent quarries & water bodies nearby provided as per the approved mining plan.
18. The Project Proponent shall provide the details of mineral reserves and mineable reserves, planned production capacity, proposed working methodology with justifications, the anticipated impacts of the mining operations on the surrounding environment, and the remedial measures for the same.
19. The Project Proponent shall provide the Organization chart indicating the appointment of various statutory officials and other competent persons to be appointed as per the provisions of the Mines Act'1952 and the MMR, 1961 for carrying out the quarrying operations scientifically and systematically in order to ensure safety and to protect the environment.

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20. The Project Proponent shall conduct the hydro-geological study considering the contour map of the water table detailing the number of groundwater pumping & open wells, and surface water bodies such as rivers, tanks, canals, ponds, etc. within 1 km (radius) along with the collected water level data for both monsoon and non-monsoon seasons from the PWD / TWAD so as to assess the impacts on the wells 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.
21. The proponent shall furnish the baseline data for the environmental and ecological parameters with regard to surface water/ground water quality, air quality, soil quality & flora/fauna including traffic/vehicular movement study.
22. The Proponent shall carry out the Cumulative impact study due to mining operations carried out in the quarry specifically with reference to the specific environment in terms of soil health, biodiversity, air pollution, water pollution, climate change and flood control & health impacts. Accordingly, the Environment Management plan should be prepared keeping the concerned quarry and the surrounding habitations in the mind.
23. Rain water harvesting management with recharging details along with water balance (both monsoon & non-monsoon) be submitted.
24. Land use of the study area delineating forest area, agricultural land, grazing land, wildlife sanctuary, national park, migratory routes of fauna, water bodies, human settlements and other ecological features should be indicated. Land use plan of the mine lease area should be prepared to encompass preoperational, operational and post operational phases and submitted. Impact, if any, of change of land use should be given.
25. Details of the land for storage of Overburden/Waste Dumps (or) Rejects outside the mine lease, such as extent of land area, distance from mine lease, its land use, R&R issues, if any, should be provided.

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26. Proximity to Areas declared as 'Critically Polluted' (or) the Project areas which attracts the court restrictions for mining operations, should also be indicated and where so required, clearance certifications from the prescribed Authorities, such as the TNPCB (or) Dept. of Geology and Mining should be secured and furnished to the effect that the proposed mining activities could be considered.
27. Description of water conservation measures proposed to be adopted in the Project should be given. Details of rainwater harvesting proposed in the Project, if any, should be provided.
28. Impact on local transport infrastructure due to the Project should be indicated.
29. A tree survey study shall be carried out (nos., name of the species, age, diameter etc.,) both within the mining lease applied area & 300m buffer zone and its management during mining activity.
30. A detailed mine closure plan for the proposed project shall be included in EIA/EMP report which should be site-specific.
31. As a part of the study of flora and fauna around the vicinity of the proposed site, the EIA coordinator shall strive to educate the local students on the importance of preserving local flora and fauna by involving them in the study, wherever possible.
32. 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-I in consultation with the DFO, State Agriculture University. 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.
33. Taller/one year old Saplings raised in appropriate size of bags, preferably ecofriendly bags should be planted 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

34. A Disaster management Plan shall be prepared and included in the EIA/EMP Report for the complete life of the proposed quarry (or) till the end of the lease period.
35. A Risk Assessment and management Plan shall be prepared and included in the EIA/EMP Report for the complete life of the proposed quarry (or) till the end of the lease period.
36. Occupational Health impacts of the Project should be anticipated and the proposed preventive measures spelt out in detail. Details of pre-placement medical examination and periodical medical examination schedules should be incorporated in the EMP. The project specific occupational health mitigation measures with required facilities proposed in the mining area may be detailed.
37. Public health implications of the Project and related activities for the population in the impact zone should be systematically evaluated and the proposed remedial measures should be detailed along with budgetary allocations.
38. The Socio-economic studies should be carried out within a 5 km buffer zone from the mining activity. Measures of socio-economic significance and influence to the local community proposed to be provided by the Project Proponent should be indicated. As far as possible, quantitative dimensions may be given with time frames for implementation.
39. Details of litigation pending against the project, if any, with direction /order passed by any Court of Law against the Project should be given.
40. Benefits of the Project if the Project is implemented should be spelt out. The benefits of the Project shall clearly indicate environmental, social, economic, employment potential, etc.
41. If any quarrying operations were carried out in the proposed quarrying site for which now the EC is sought, the Project Proponent shall furnish the detailed compliance to EC conditions given in the previous EC with the site

photographs which shall duly be certified by MoEF&CC, Regional Office, Chennai (or) the concerned DEE/TNPCB.

42. The PP shall prepare the EMP for the entire life of mine and also furnish the sworn affidavit stating to abide the EMP for the entire life of mine.

43. Concealing any factual information or submission of false/fabricated data and failure to comply with any of the conditions mentioned above may result in withdrawal of this Terms of Conditions besides attracting penal provisions in the Environment (Protection) Act, 1986.

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Annexure II

Standard Environmental Clearance Conditions prescribed by MoEF&CC for Construction Projects.

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 drawing 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 a system to carry out Ambient Air Quality monitoring for common/criterion parameters relevant to the main pollutants released (e.g., PM10 andPM25) 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, murram and other construction materials prone to causing dust pollution at the site as well as taking out debris from the site.
5. Sand, murram, loose soil, cement, stored on site should 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 should 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 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 Half Yearly Compliance Reports (HYCR).
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 freshwater requirement shall be provided. In areas where ground water recharging 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.

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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 Half Yearly Compliance Reports (HYCR).
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 taken 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.

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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 out as per the prescribed guidelines and report in this regard shall be submitted to Regional Officer of the Ministry as a part of Half Yearly Compliance Report (HYCR).
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. The proponent shall provide solar panels covering a minimum of 50% of terrace area as committed.
4. 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.
5. 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.

6. 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.
7. 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 of as per applicable rules and norms with necessary approvals of the State Pollution Control Board.
   7. Use of environmentally 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 environmentally 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 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.

5. A wide range of indigenous plant species should be planted as given in the Appendix-I, in consultation with the Government Forest/Horticulture Departments and State Agriculture University.

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 to bring 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.
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 PP shall complete the CER activities, as committed, before obtaining CTE.
2. The company shall have a well laid down environmental policy duly approved by the Board of Directors. The environmental policy should prescribe 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 Half Yearly Compliance Report (HYCR).

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 must 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 Half Yearly Compliance Reports (HYCR) 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

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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 Authority (SEIAA) of 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 and also during their presentation to the State Expert Appraisal Committee.
9. No further expansion or modifications to the plant shall be carried out without prior approval of the Authority (SEIAA).
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 Authority (SEIAA) may revoke or suspend the clearance, if implementation of any of the above conditions is not satisfactory.
12. The Authority 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 the MoEF&CC 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.

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ANNEXURE III

Standard Terms of Reference (ToR) for EIA/EMP report for projects/activities requiring environment clearance 3(a): Standard Terms of Reference for conducting Environment Impact Assessment study for Metallurgical Industries (ferrous & non-ferrous) projects and information to be included in EIA/EMP report

A. STANDARD TERMS OF REFERENCE (TOR)

1) Executive Summary

2) Introduction

   i. Details of the EIA Consultant including NABET accreditation

   ii. Information about the project proponent

   iii. Importance and benefits of the project

3) Project Description

   i. Cost of project and time of completion.

   ii. Products with capacities for the proposed project.

   iii. If expansion project, details of existing products with capacities and whether adequate land is available for expansion, reference of earlier EC if any.

   iv. List of raw materials required and their source along with mode of transportation.

   v. Other chemicals and materials required with quantities and storage capacities

   vi. Details of Emission, effluents, hazardous waste generation and their management.

   vii. Requirement of water, power, with source of supply, status of approval, water balance diagram, man-power requirement (regular and contract)

   viii. Process description along with major equipments and machineries, process flow sheet (quantative) from raw material to products to be provided

   ix. Hazard identification and details of proposed safety systems.

x. Expansion/modernization proposals:

a. Copy of all the Environmental Clearance(s) including Amendments thereto obtained for the project from MOEF/SEIAA shall be attached as an Annexure. A certified copy of the latest Monitoring Report of the Regional Office of the Ministry of Environment and Forests as per circular dated 30th May, 2012 on the status of compliance of conditions stipulated in all the existing environmental clearances including Amendments shall be provided. In addition, status of compliance of Consent to Operate for the ongoing lexisting operation of the project from SPCB shall be attached with the EIA-EMP report.

b. In case the existing project has not obtained environmental clearance, reasons for not taking EC under the provisions of the EIA Notification 1994 and/or EIA Notification 2006 shall be provided. Copies of Consent to Establish/No Objection Certificate and Consent to Operate (in case of units operating prior to EIA Notification 2006, CTE and CTO of FY 2005-2006) obtained from the SPCB shall be submitted. Further, compliance report to the conditions of consents from the SPCB shall be submitted.

4) Site Details

i. Location of the project site covering village, Taluka/Tehsil, District and State, Justification for selecting the site, whether other sites were considered.

ii. A toposheet of the study area of radius of 10km and site location on 1:50,000/1:25,000 scale

on an A3/A2 sheet. (Including all eco-sensitive areas and environmentally sensitive places)

iii. Details with respect to option analysis for selection of site

iv. GPS Co-ordinates of all four corners of the site.

v. Google map-Earth downloaded of the project site.

vi. Layout maps indicating existing unit as well as proposed unit indicating

storage area, plant area, greenbelt area, utilities etc. If located within an Industrial area/Estate/Complex, layout of Industrial Area indicating location of unit within the Industrial area/Estate.

vii. Photographs of the proposed and existing (if applicable) plant site. If existing, show photographs of plantation/greenbelt, in particular.

viii. Land use break-up of total land of the project site (identified and acquired), government/ private - agricultural, forest, wasteland, water bodies, settlements, etc shall be included. (not required for industrial area)

ix. A list of major industries with name and type within study area (10km radius) shall be incorporated. Land use details of the study area

x. Geological features and Geo-hydrological status of the study area shall be included.

xi. Details of Drainage of the project upto 5km radius of study area. If the site is within 1 km radius of any major river, peak and lean season river discharge as well as flood occurrence frequency based on peak rainfall data of the past 30 years. Details of Flood Level of the project site and maximum Flood Level of the river shall also be provided. (mega green field projects)

xii. Status of acquisition of land. If acquisition is not complete, stage of the acquisition process and expected time of complete possession of the land.

xiii. R&R details in respect of land in line with state Government policy

5) Forest and wildlife related issues (if applicable):

i. Permission and approval for the use of forest land (forestry clearance), if any, and recommendations of the State Forest Department. (if applicable)

ii. Land use map based on High resolution satellite imagery (GPS) of the proposed site delineating the forestland (in case of projects involving forest land more than 40 ha)

iii. Status of Application submitted for obtaining the stage I forestry clearance along with latest status shall be submitted.

iv. The projects to be located within 10 km of the National Parks, Sanctuaries, Biosphere Reserves, Migratory Corridors of Wild Animals, the project

proponent shall submit the map duly authenticated by Chief Wildlife Warden showing these features vis-à-vis the project location and the recommendations or comments of the Chief Wildlife Warden-thereon

v. Wildlife Conservation Plan duly authenticated by the Chief Wildlife Warden of the State Government for conservation of Schedule I fauna, if any exists in the study area

vi. Copy of application submitted for clearance under the Wildlife (Protection) Act, 1972, to the Standing Committee of the National Board for Wildlife

6) Environmental Status

i. Determination of atmospheric inversion level at the project site and site-specific micrometeorological data using temperature, relative humidity, hourly wind speed and direction and rainfall.

ii. AAQ data (except monsoon) at 8 locations for PM10, PM2.5, SO2, NOX, CO and other parameters relevant to the project shall be collected. The monitoring stations shall be based CPCB guidelines and take into account the pre-dominant wind direction, population zone and sensitive receptors including reserved forests.

iii. Raw data of all AAQ measurement for 12 weeks of all stations as per frequency given in the NAQQM Notification of Nov. 2009 along with - min., max., average and 98% values for each of the AAQ parameters from data of all AAQ stations should be provided as an annexure to the EIA Report.

iv. Surface water quality of nearby River (100m upstream and downstream of discharge point) and other surface drains at eight locations as per CPCB/MoEF&CC guidelines.

v. Whether the site falls near to polluted stretch of river identified by the CPCB/MoEF&CC, if yes give details.

vi. Ground water monitoring at minimum at 8 locations shall be included.

vii. Noise levels monitoring at 8 locations within the study area.

viii. Soil Characteristic as per CPCB guidelines.

ix. Traffic study of the area, type of vehicles, frequency of vehicles for transportation of materials, additional traffic due to proposed project, parking arrangement etc.

x. Detailed description of flora and fauna (terrestrial and aquatic) existing in the study area shall be given with special reference to rare, endemic and endangered species. If Schedule-I fauna are found within the study area, a Wildlife Conservation Plan shall be prepared and furnished.

xi. Socio-economic status of the study area.

7) Impact and Environment Management Plan

i. Assessment of ground level concentration of pollutants from the stack emission based on site-specific meteorological features. In case the project is located on a hilly terrain, the AQIP Modelling shall be done using inputs of the specific terrain characteristics for determining the potential impacts of the project on the AAQ. Cumulative impact of all sources of emissions (including transportation) on the AAQ of the area shall be assessed. Details of the model used and the input data used for modelling shall also be provided. The air quality contours shall be plotted on a location map showing the location of project site, habitation nearby, sensitive receptors, if any.

ii. Water Quality modelling - in case of discharge in water body

iii. Impact of the transport of the raw materials and end products on the surrounding environment shall be assessed and provided. In this regard, options for transport of raw materials and finished products and wastes (large quantities) by rail or rail-cum road transport or conveyorcum- rail transport shall be examined.

iv. A note on treatment of wastewater from different plant operations, extent recycled and reused for different purposes shall be included. Complete scheme of effluent treatment. Characteristics of untreated and treated effluent to meet the prescribed standards of discharge under E(P) Rules.

v. Details of stack emission and action plan for control of emissions to

meet standards.

vi. Measures for fugitive emission control

vii. Details of hazardous waste generation and their storage, utilization and management. Copies of MOU regarding utilization of solid and hazardous waste in cement plant shall also be included. EMP shall include the concept of waste-minimization, recycle/reuse/recover techniques, Energy conservation, and natural resource conservation.

viii. Proper utilization of fly ash shall be ensured as per Fly Ash Notification, 2009. A detailed plan of action shall be provided.

ix. Action plan for the green belt development plan in 33 % area i.e. land with not less than 1,500 trees per ha. Giving details of species, width of plantation, planning schedule etc. shall be included. The green belt shall be around the project boundary and a scheme for greening of the roads used for the project shall also be incorporated.

x. Action plan for rainwater harvesting measures at plant site shall be submitted to harvest rainwater from the roof tops and storm water drains to recharge the ground water and also to use for the various activities at the project site to conserve fresh water and reduce the water requirement from other sources.

xi. Total capital cost and recurring cost/annum for environmental pollution control measures shall be included.

xii. Action plan for post-project environmental monitoring shall be submitted.

xiii. Onsite and Offsite Disaster (natural and Man-made) Preparedness and Emergency Management Plan including Risk Assessment and damage control. Disaster management plan should be linked with District Disaster Management Plan.

8) Occupational health

i. Plan and fund allocation to ensure the occupational health & safety of all contract and casual workers

ii. Details of exposure specific health status evaluation of worker. If the

workers' health is being evaluated by pre designed format, chest x rays, Audiometry, Spirometry, Vision testing (Far & Near vision, colour vision and any other ocular defect) ECG, during pre-placement and periodical examinations give the details of the same. Details regarding last month analyzed data of above-mentioned parameters as per age, sex, duration of exposure and department wise.

iii. Details of existing Occupational & Safety Hazards. What are the exposure levels of hazards and whether they are within Permissible Exposure level (PEL). If these are not within PEL, what measures the company has adopted to keep them within PEL so that health of the workers can be preserved,

iv. Annual report of heath status of workers with special reference to Occupational Health and Safety.

9) Corporate Environment Policy

i. Does the company have a well laid down Environment Policy approved by its Board of Directors? If so, it may be detailed in the EIA report.

ii. Does the Environment Policy prescribe for standard operating process/ procedures to bring into focus any infringement / deviation / violation of the environmental or forest norms /conditions? If so, it may be detailed in the EIA.

iii. What is the hierarchical system or administrative order of the company to deal with the environmental issues and for ensuring compliance with the environmental clearance conditions? Details of this system may be given.

iv. Does the company have system of reporting of non-compliances / violations of environmental norms to the Board of Directors of the company and / or shareholders or stakeholders at large? This reporting mechanism shall be detailed in the EIA report

10. Details regarding infrastructure facilities such as sanitation, fuel, restroom etc. to

be provided to the labour force during construction as well as to the casual workers including truck drivers during operation phase.

11. Enterprise Social Commitment (ESC)

    i. Adequate funds (at least 2.5 % of the project cost) shall be earmarked towards the Enterprise Social Commitment based on Public Hearing issues and item-wise details along with time bound action plan shall be included. Socio-economic development activities need to be elaborated upon.

12. Any litigation pending against the project and/or any direction/order passed by any Court of Law against the project, if so, details thereof shall also be included. Has the unit received any notice under the Section 5 of Environment (Protection) Act, 1986 or relevant Sections of Air and Water Acts? If so, details thereof and compliance/ATR to the notice(s) and present status of the case.

13. A tabular chart with index for points wise compliance of above TOR.

<u>B. SPECIFIC TERMS OF REFERENCE FOR EIA STUDIES FOR METALLURGICAL INDUSTRIES (FERROUS & NON-FERROUS)</u>

1. Complete process flow diagram describing each unit, its processes and operations, along with material and energy inputs & outputs (material and energy balance).
2. Details on blast furnace/ open hearth furnace/ basic oxygen furnace/ladle refining, casting and rolling plants etc.
3. Details on installation/activation of opacity meters with recording with proper calibration system
4. Details on toxic metals including mercury, arsenic and fluoride emissions
5. Details on stack height requirement for integrated steel
6. Details on ash disposal and management -Non-ferrous metal
7. Complete process flow diagram describing production of lead/zinc/copper/ aluminium, etc.
8. Raw materials substitution or elimination
9. Details on smelting, thermal refining, melting, slag fuming, and Waelz kiln operation
10. Details on Holding and de-gassing of molten metal from primary and

secondary aluminium, materials pre-treatment, and from melting and smelting of secondary aluminium

11. Details on solvent recycling
12. Details on precious metals recovery
13. Details on composition, generation and utilization of waste/fuel gases from coke oven plant and their utilization.
14. Details on toxic metal content in the waste material and its composition and end use (particularly of slag).
15. Trace metals Mercury, arsenic and fluoride emissions in the raw material.
16. Trace metals in waste material especially slag.
17. Plan for trace metal recovery
18. Trace metals in water

C. ADDITIONAL TOR FOR INTEGRATED STEEL PLANT

1. Iron ore/coal linkage documents along with the status of environmental clearance of iron ore and coal mines
2. Quantum of production of coal and iron ore from coal & iron ore mines and the projects they cater to. Mode of transportation to the plant and its impact
3. For Large ISPs, a 3-D view i.e. DEM (Digital Elevation Model) for the area in 10 km radius from the proposal site. MRL details of project site and RL of nearby sources of water shall be indicated.
4. Recent land-use map based on satellite imagery. High-resolution satellite image data having 1m-5m spatial resolution like quick bird, Ikonos, IRS P-6 pan sharpened etc. for the 10 Km radius area from proposed site. The same shall be used for land used/land-cover mapping of the area.
5. Respirable Suspended particulate matter (RSPM) present in the ambient air must be analysed for source analysis - natural dust/RSPM generated from plant operations (trace elements). The RSPM shall also be analysed for presence of poly-aromatic hydrocarbons (PAH), i.e. Benzene soluble fraction, where applicable. Chemical characterization

of RSPM and incorporating of RSPM data.

6. All stock piles will have to be on top of a stable liner to avoid leaching of materials to ground water.
7. Plan for the implementation of the recommendations made for the steel plants in the CREP guidelines.
8. Plan for slag utilization
9. Plan for utilization of energy in off gases (coke oven, blast furnace)
10. System of coke quenching adopted with justification.

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Appendix -I
List of Native Trees Suggested for Planting

No	Scientific Name	Tamil Name	Tamil Name
1	*Aegle marmelos*	Vilvam	வில்வம்
2	*Adenaanthera pavonina*	Manjadi	மஞ்சாடி, ஆனைக்குன்றிமணி
3	*Albizia lebbeck*	Vaagai	வாகை
4	*Albizia amara*	Usil	உசில்
5	*Bauhinia purpurea*	Manthaarai	மந்தாரை
6	*Bauhinia racemosa*	Aathi	ஆத்தி
7	*Bauhinia tomentos*	Iruvathi	இருவாத்தி
8	*Buchanania axillaris*	Kattuma	காட்டுமா
9	*Borassus flabellifer*	Panai	பனை
10	*Butea monosperma*	Murukkamaram	முருக்கமரம்
11	*Bobax ceiba*	Ilavu, Sevvilavu	இலவு
12	*Calophyllum inophyllum*	Punnai	புன்னை
13	*Cassia fistula*	Serakondrai	சரக்கொன்றை
14	*Cassia roxburghii*	Sengondrai	செங்கொன்றை
15	*Chloroxylon sweitenia*	Purasamaram	புரசு மரம்
16	*Cochlospermum religiosum*	Kongu, Manjalilavu	கோங்கு, மஞ்சள் இலவு
17	*Cordia dichotoma*	Naruvuli	நருவுலி.
18	*Cretova adansoni*	Mavalingum	மாவிலங்கம்
19	*Dillenia indica*	Uva, Uzha	உசா
20	*Dillenia pentagyna*	SiruUva, Sitruzha	சிறு உசா
21	*Diospyro sebenum*	Karungali	கருங்காலி
22	*Diospyro schloroxylon*	Vaganai	வாகனை
23	*Ficus amplissima*	Kalltchi	கல் இச்சி
24	*Hibiscus tiliaceou*	Aatrupoovarasu	ஆற்றுபூவரசு
25	*Hardwickia binata*	Aacha	ஆச்சா
26	*Holoptelia integrifolia*	Aayili	ஆயா மரம், ஆயில்
27	*Lannea coromandelica*	Odhiam	ஓதியம்
28	*Lagerstroemia speciosa*	Poo Marudhu	பூ மருது
29	*Lepisanthus tetraphylla*	Neikottaimaram	நெய் கொட்டை மரம்
30	*Limonia acidissima*	Vila maram	விளா மரம்
31	*Litsea glutinos*	Pisinpattai	அம்பல. பிசினப்பட்டை
32	*Madhuca longifolia*	Illuppai	இலுப்பை
33	*Manilkara hexandra*	UlakkaiPaalai	உலக்கை பாலை
34	*Mimusops elengi*	Magizhamaram	மகிழமரம்
35	*Mitragyna parvifolia*	Kadambu	கடம்பு
36	*Morinda pubescens*	Nuna	நுனா
37	*Morinda citrifolia*	Vellai Nuna	வெள்ளை நுனா
38	*Phoenix sylvestre*	Eachai	ஈச்சமரம்
39	*Pongamia pinnat*	Pungam	புங்கம்

40	*Premna mollissima*	Munnai	முன்னை
41	*Premna serratifolia*	Narumunnai	நறு முன்னை
42	*Premna tomentosa*	Malaipoovarasu	மலை பூவரசு
43	*Prosopis cinerea*	Vanni maram	வன்னி மரம்
44	*Pterocarpus marsupium*	Vengai	வேங்கை
45	*Pterospermum canescens*	Vennangu, Tada	வெண்ணாங்கு
46	*Pterospermum xylocarpum*	Polavu	பலவு
47	*Putranjiva roxburghi*	Karipala	கரிபலா
48	*Salvadora persica*	Ugaa Maram	உகா மரம்
49	*Sapindus emarginatus*	Manipungan, Soapukai	மணிபுங்கன் சோப்புக்காய்
50	*Saraca asoca*	Asoca	அசோகா
51	*Streblus asper*	Piray maram	பிரய் மரம்
52	*Strychnos nuxvomic*	Yetti	எட்டி
53	*Strychnos potatorum*	Therthang Kottai	தேற்றான் கொட்டை
54	*Syzygium cumini*	Naval	நாவல்
55	*Terminalia belleric*	Thandri	தான்றி
56	*Terminalia arjuna*	Ven marudhu	வெண் மருது
57	*Toona ciliate*	Sandhana vembu	சந்தன வேம்பு
58	*Thespesia populnea*	Puvarasu	பூவரசு
59	*Walsuratrifoliata*	valsura	வல்சுரா
60	*Wrightia tinctoria*	Veppalai	வெப்பாலை
61	*Pithecellobium dulce*	Kodukkapuli	கொடுக்காப்புளி

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Appendix –III

Display Board

(Size 6' x5' with Blue Background and White Letters)

....கரங்கம்

கரங்களில் குவாரி செயல்பாடுகளுக்கான சுற்றுச்சூழல் அனுமதி கீழ்கண்ட நிபந்தனைகளுக்கு உட்பட்டு வழங்கப்பட்டுள்ளது SEIAA/——, தேதியிடப்பட்டு, சுற்றுச்சூழல் அனுமதி _____தேதி வரை செல்லத்தக்கதாக உள்ளது

<table>
<tr><td rowspan="5">பசுமை பகுதி வளர்ச்சி
மேம்பாட்டுக்கான சுரங்கத் திட்டம்

நடப்பட்டு
பராமரிக்கப்பட வேண்டிய மரங்கள்
எண்ணிக்கை:</td><td>குவாரியின் எல்லையைச் சுற்றி வேலி அமைக்க வேண்டும்</td></tr>
<tr><td>சுரங்கப்பாதையின் ஆழம் தரைமட்டத்திலிருந்து___மீட்டர்க்கு மிகாமல் இருக்க வேண்டும்</td></tr>
<tr><td>காற்றில் மாசு ஏற்படாதவாறு சுரங்க பணிகளை மேற்கொள்ள வேண்டும்.</td></tr>
<tr><td>வாகனங்கள் செல்லும் பாதையில் மாசு ஏற்படாத அளவிற்கு தண்ணீரை முறையாக தண்ணீர் லாரிகளின் மூலமாக அவ்வப்போது தெளிக்க வேண்டும்.</td></tr>
<tr><td>இரைச்சல் அளவையும் தூசி மாசுபாட்டையும் குறைப்பதற்காக குவாரியின் எல்லையை சுற்றி அடர்த்தியான பசுமை பகுதியை ஏற்படுத்த வேண்டும்.</td></tr>
<tr><td colspan="2">சுரங்கத்தில் வெடி வைக்கும்பொழுது நிலஅதிர்வுகள் ஏற்படாதவாறும் மற்றும் கற்கள் பறக்காதவாறும் பாதுகாப்பு நடவடிக்கைகளை உரியபடி செயல்படுத்தப்பட வேண்டும்.</td></tr>
<tr><td colspan="2">சுரங்கத்தில் இருந்து ஏற்படும் இரைச்சல் அளவு 85 டெசிபல்ஸ் (dBA) அளவிற்கு மேல் ஏற்படாதவாறு தகுந்த கட்டுப்பாடுகளை மேற் கொள்ள வேண்டும்.</td></tr>
<tr><td colspan="2">சுரங்க சட்ட விதிகள் 1955ன் கீழ் சுரங்கத்தில் உள்ள பணியாளர்களுக்கு தகுந்த பாதுகாப்பு கருவிகள் வழங்குவதோடு சுகாதாரமுள்ள குடிநீர் வசதிகளை செய்து தர வேண்டும்.</td></tr>
<tr><td colspan="2">கிராமம் அல்லது பஞ்சாயத்து வழியாக வாகனங்கள் செல்லும் சாலையை தொடர்ந்து நன்கு பராமரிக்க வேண்டும்.</td></tr>
<tr><td colspan="2">சுரங்கப்பணிகளால் அருகில் உள்ள விவசாயப் பணிகள் மற்றும் நீர்நிலைகள் பாதிக்கப்படக் கூடாது.</td></tr>
<tr><td colspan="2">நீர்நிலைகள் பாதிக்கப்படாமல் இருப்பதை உறுதி செய்யும் வகையில் நிலத்தடி நீர் தரத்தினை தொடர்ந்து கண்காணிக்க வேண்டும்.</td></tr>
<tr><td colspan="2">சுரங்கத்திலிருந்து கனிம பொருட்களை எடுத்துச் செல்வது கிராம மக்களுக்கு எந்தத் சிரமத்தினையும் ஏற்படுத்தாதவாறு பாதுகாப்போடும் மற்றும் சுற்றுசூழல் பாதிக்காத வண்ணம் வாகனங்களை இயக்க வேண்டும்.</td></tr>
<tr><td colspan="2">சுரங்கப்பணிகள் முடிக்கப்பட்டவுடன் சுரங்க மூடல் திட்டத்தில் உள்ளவாறு சுரங்கத்தினை மூட வேண்டும்.</td></tr>
<tr><td colspan="2">சுரங்க நடவடிக்கைகளை முடித்தபின்னர் சுரங்கப் பகுதி மற்றும் சுரங்க நடவடிக்கைகளால் இடையூறு ஏற்பட்டுள்ள வேறு எந்தப் பகுதியையும் மறுசீரமைப்பு செய்து தாவரங்கள் விலங்குகள் ஆகியவற்றின் வளர்ச்சிக்கு ஏற்ற வகையில் பசுமைப்பகுதியை உருவாக்க வேண்டும்.</td></tr>
<tr><td colspan="2">முழுமையான நிபந்தனைகளை அறிய பரிவேஷ் (http://parivesh.nic.in) என்கிற இணையதளத்தைப் பார்வையிடவும் மேலும் எந்தவித சுற்றுசூழல் சார்ந்த புகார்களுக்கு சென்னையில் உள்ள சுற்றுச்சூழல் மற்றும் வன அமைச்சகத்தின் ஒருங்கிணைந்த வட்டார அலுவலகம்: 044 – 28222325 (அல்லது) தமிழ்நாடு மாசு கட்டுப்பாடு வாரியத்தின் மாவட்ட சுற்றுச்சூழல் பொறியாளரை அணுகவும்</td></tr>
</table>

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