

**PROCEEDINGS OF THE MEETING OF STATE LEVEL EXPERT APPRAISAL
COMMITTEE, ODISHA HELD ON 28th JUNE, 2021**

The SEAC met on 28th June, 2021 at 03:00 PM through Video Conferencing in Google Meet under the Chairmanship of Sri B.P. Singh. The following members were present in the meeting.

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|------------------------------|---|------------------------|
| 1. Sri. B. P. Singh | - | Chairman (through VC) |
| 2. Dr. K. Murugesan | - | secretary (through VC) |
| 3. Dr. D. Swain | - | Member (through VC) |
| 4. Prof. (Dr.) P.K. Mohanty | - | Member (through VC) |
| 5. Prof. (Dr.) H.B. Sahu | - | Member (through VC) |
| 6. Sri. J. K. Mahapatra | - | Member (through VC) |
| 7. Sri. K. R. Acharya | - | Member (through VC) |
| 8. Prof. (Dr.) B.K. Satpathy | - | Member (through VC) |
| 9. Dr. K.C.S Panigrahi | - | Member (through VC) |
| 10. Dr. Sailabala Padhi | - | Member (through VC) |

CONSIDERATION OF OLD PROPOSALS (COMPLIANCE RECEIVED):

The compliances furnished by the proponents were verified by the members through e-mail and also proceedings of the meeting were confirmed by the members through e-mail. The decision of the committee on case-to-case basis as follows:

ITEM NO. 01

PROPOSAL FOR ENVIRONMENTAL CLEARANCE OF SPRINGVILLE GREENS PVT.LTD. FOR EXPANSION OF RESIDENTIAL BUILDING COMPLEX “SPRING VILLE GREENS” AT MOUZA- BIJIPUR, BHUBANESWAR OF SRI. SURESH KUMAR SUREKA – AMENDEMENT OF EC.

1. This is a proposal for Amendment of Environmental Clearance of M/s Springville Greens Pvt. Ltd for expansion of Residential Building Complex “Springville Greens” At Mouza- Bijipur, Bhubaneswar of Sri. Suresh Kumar Sureka.
2. The project falls under Category “B”, Project or Activity 8(a) – Building Construction; Category B2 under Expansion project as per schedule of EIA Notification dated 14th Sep, 2006, as amended from time to time.
3. M/S. Spring Ville Greens LLP have Proposed Expansion of Residential Building Complex “Springville Greens” At Mouza - Bijipur, Bhubaneswar, Odisha. [for construction of 13 blocks of

S+14 multistoried (MIG) Residential buildings, 16 blocks of G+4 storey (EWS) Residential buildings, one G+1 storey Society cum club building, One G+3 storey Commercial building and one Basement Parking].

4. The site is coming under developmental Plan of Bhubaneswar Municipal Corporation. The building plan has approved by Bhubaneswar Development Authority vide letter no. 29331, Dt.31st October 2016. EC obtained for 3 Block- of (S+12,S+13 & S+14) Storied , Seven Blocks of S+14 multistoried and One Block of G+4 Storied (for EWS), One Block of S+2 Storied Club-cum-Society Building with built-up area of 104545.10 sq.mt. Vide SEIAA letter No SEIAA/No-7077/SEIAA dated 30.07.2019.
5. The Revised building plan approved by BDA Vide letter No. –30092/BDA, Bhubaneswar, Dt. 12.12.2019. In revised building plan, total built-up area will increase from 104545.10 m² to 108149.210 m². Ground Coverage will decrease from 12580.90 m² (29.4% of Plot Area) to 10919.931 m² (25.350% of Plot Area), Max building height will increase from 44.85 mt. to 44.95 mt. and Dwelling units will increase from earlier proposed 1036 units to 1048 units.
6. **Connectivity:** M/s Spring Ville Greens LLP. has proposed to construct Residential Building with club. Project is located at nearer to Tamando Police station, surrounding area is developed area. The proposed site comes under BDA (Bhubaneswar Development Authority) and land use zone of the proposed site is residential Use Zone as per land use plan of BDA land use plan. Site is located in Mouza - Bijipur adjacent to AH-45 (CHENNAI -KOLKATA).The nearest airport is Biju pattanaik Airport which is 6.7 km away from the project site towards W direction. Retang Railway junction is 3.82 km away from the project site towards West direction. Bhubaneswar Railway station is 10.45 km away from the project site towards N-E direction.
7. **Power Requirement:** The daily power requirement for the proposed project is assessed as 5218 KW (6139 KVA at 0.85 P.F).The power will be entirely supplied through CESU. There is provision of Power backup for the residential project will be through DG sets of total capacity 1870 KVA (3 X 600 KVA + 1 X 70 KVA) silent DG Set (Radiator Cooled) for residential area. Separate generator yard will be constructed for housing DG sets.
8. **Water Requirement:** During construction stage daily requirement of water will avg. 60 KLD which will be sourced from surface water through water tankers. During operation stage total water requirement will be about 726.4 KLD out of which 453.5 KLD (daily fresh water requirement will be sourced from PHED/Ground water.) Approximately, 645 KLD of wastewater will be generated during the operational phase from domestic uses and other uses. The wastewater will be treated in a Proposed STP (MBBR) Capacity = 645 KLD - Considering 5% buffer - 680 KLD. (Separate for Phase-1, 2 & EWS) 3 nos. of STP having capacity of 680 KL

(310 KLD, 240 KLD & 120 KLD) provided within the complex generating 580 KLD of recoverable treated waste water from STP. Out of which 390.4KLD (will be re-used for flushing 272.4 KLD, Gardening-60 KLD & 20 KLD for cooling water make-up & 8 KLD for car washing etc.) within the project. During dry season there will be 190 KLD treated waste water discharged into municipal sewer and 250 KLD will become surplus in monsoon season.

9. **Solid Waste Generation and Management:** The solid waste generated from the project shall be mainly domestic waste and estimated quantity of the waste shall be approx.3123 kg per day @ 0.500 kg per capita per day for residential population(@ 0.20 kg per capita per day for visitors, Staff & club area. Landscape wastes @ 0.2 kg/acre/day will be disposed in project premises).
10. **Green Belt:** The green area will be developed approx. 20 % of the plot area (8616.128 sqm). The biodiversity in the area will increase due to the proposed green areas.
11. **Parking:** Proposed total area of car parking (including commercial & EWS parking) -22500.876 M²
12. The project cost is INR ` 184 Cr [180 Cr (Existing /EC Granted) + ` 4 Cr (Expansion)].
13. The Environment consultant **M/s Visiontek Consultancy Services Pvt. Ltd., Bhubaneswar** along with the proponent made a presentation on the proposal before the Committee.
14. The SEAC in its meeting held on Dt: 11.11.2020 decided to take decision on the proposal after receipt of the certain information / documents from the proponent.
15. The project proponent has furnished compliances as desired by the committee and same has been verified as follows:

Sl. No.	Information Sought by SEAC	Compliance furnished by the proponent	Views of the SEAC
(i)	Detailed EC compliance report duly certified by MoEF&CC, Regional Office, Bhubaneswar	Six monthly EC compliance report (Oct'2019 to March 2020) submitted but not certified by MoEF&CC, Regional Office, Bhubaneswar. Letter from MoEF Regional Office for site inspection is attached as Annexure 1 & 1A	EC compliance report duly certified by MoEF&CC, Regional Office, Bhubaneswar has to be furnished.

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Sl. No.	Information Sought by SEAC	Compliance furnished by the proponent	Views of the SEAC
(ii)	A comparative statement for existing and proposed expansion in tabulated form w.r.t change in floors, greenbelt, design, drainage plan, renewable energy details, parking, water consumption, waste water generation and its management, solid waste generation etc. Show the reduced the green coverage area in the plan/map and indicate the use of it. Indicate constructional features with details constructed as per revised building plan including the construction made w.r.t environmental features. Quantification of the same as per EC granted and the basis thereof as well as per proposed/revised EC sought with quantification, basis of the same including parking in terms of ECS	Comparative statement for existing and proposed expansion had been submitted. Attached as Annexure – 2 (A-G).	They have to submit a comparative statement in one page indicating all the features of existing and proposed expansion.
(iii)	Details of construction status (percentage wise) of existing project as per Environmental Clearance granted and proposed project	Only club and community hall is being taken which is 2.41% of EC granted.	Details of construction status (percentage wise) of existing project as per Environmental Clearance granted and proposed project has to be furnished.
(iv)	Copy of approval letter of BDA along with building plan for expansion project	Attached as Annexure - 3	Complied.
(v)	Copy of approval for safety and structural stability from appropriate authority of building for expansion	Attached as Annexure - 4	Complied
(vi)	Details and plant layout showing location of drainage changed due to expansion. Also capacity	Revised drainage layout submitted along with previous plan. As number	Complied

Sl. No.	Information Sought by SEAC	Compliance furnished by the proponent	Views of the SEAC
	of drain for disposal of proposed discharge from BMC	of units increased by 12, no significant changes in drainage capacity. Attached as Annexure – 2 (C&F).	
(vii)	Details and plant layout showing location of greenbelt changed due to expansion	Previous landscape area – 8607.72Sqm. Landscape area provided for expansion 8616.128m ² .i.e. 20% of total area is green belt area is proposed and 538nos of trees will be planted. Green belt plan is attached as Annexure – 2 (B&E).	Complied
(viii)	Details and plant Layout showing location of rainwater harvesting recharging pits and quantity to be harvested taking into consideration the erratic rainfall pattern in the area	Attached as Annexure - 5	Complied
(ix)	Fire-fighting measures	Compliance as per NBC part 4 – 2016 & recommendation vide memo no. 5379 dated 29.03.2019 issued by Director General, Fire services, Cuttack has been incorporated in Fire fighting measures with NOC from Fire Officer attached as Annexure - 6	Complied
(x)	Certificate from DFO concerned that the site is not situated in eco-sensitive zone of Chandaka- Dampara wildlife sanctuary	Attached as Annexure - 7	Complied
(xi)	NOC from Airport Authority of India for increase the height of	Max. height of block is 44.95mt and maximum	Complied

Sl. No.	Information Sought by SEAC	Compliance furnished by the proponent	Views of the SEAC
	the towers	permissible height from Airport Authority of India is 84.1mt. Attached as Annexure - 8	
(xii)	Adequacy of parking in view of increased dwelling unit	Total area of parking requirement as per new BDA by law is 22500 sqmt for MIG (25%) which was earlier 26626 sqmt (30%). Parking plan and layout attached as Annexure - 9	Complied
(xiii)	To indicate the quantity of water to be drawn from PHED and ground water and the letter for PHED/ BMC their inability to supply the full requirement of water	Presently there is no scope of supply of water from BMC/PHED. Letter from PHED and application to CGWB submitted as Annexure 10 & 11.	Complied
(xiv)	Status of NOC/permission letter from CGWA/WR Deptt, Govt. of Odisha respectively for drawl of ground water	Attached as Annexure - 11	Complied
(xv)	Permission from BMC to take additional load of waste water due to the proposed expansion	Required necessary permission shall be obtained to accommodate addition waste water while constructing drainage channel to discharge waste water. BDA NOC attached as Annexure 12	Specific condition to be stipulated in EC
(xvi)	Justification why it will be not considered as a "violation"	Only club building is under construction as per EC grant, which is only 2.41% of total sanction area with no changes in layout plan – hence may please be exempted from consideration of violation.	-----

16. The SEAC in its meeting held on Dt: 04.02.2021 decided to take decision on the proposal after receipt of the certain information/ documents from the proponent followed by a site visit by sub-

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committee of SEAC. The project proponent has furnished compliances as desired by the committee and same has been verified as follows:

Sl. No.	Information Sought by SEAC	Compliance furnished by the proponent	Views of the SEAC
(i)	Detailed EC compliance report duly certified by MoEF&CC, Regional Office, Bhubaneswar	For certified compliance report the scientist B and D visited the site on dated 12.02.2021. They are asked to submit statutory documents; same has been submitted on - 18.02.2021 at Regional Office Bhubaneswar. Letter from Integrated Regional Office, Bhubaneswar for Site visit and submission of Statutory Docs at RO, Bhubaneswar attached as Annexure-A.	Decision to be taken after they submit detailed EC compliance report duly certified by MoEF&CC, Regional Office, Bhubaneswar
(ii)	A comparative statement in one / two pages for existing and proposed expansion in tabulated form w.r.t change in floors, greenbelt, design, drainage plan, renewable energy details, parking, water consumption, waste water generation and its management, solid waste generation etc. Show the reduced the green coverage area in the plan/map and indicate the use of it. Indicate constructional features with details constructed as per revised building plan including the construction made w.r.t environmental features. Quantification of the same as per EC granted and the basis thereof as well as per proposed/revised EC	A comparative statement as per previous EC and current BDA approval for Expansion. Attached as Annexure-B	-----

Sl. No.	Information Sought by SEAC	Compliance furnished by the proponent	Views of the SEAC
	sought with quantification, basis of the same including parking in terms of ECS		
(iii)	Details of construction status (percentage wise) of existing project as per Environmental Clearance granted and proposed project	Present construction Status – only club /community hall is being taken up for construction which is approximately 2.41 % of EC granted with no change in layout plan. For expansion we have not started any construction. Details are given in Annexure-C.	-----

17. The SEAC in its meeting held on Dt: 19.03.2021 decided to take decision on the proposal after receipt of detailed EC compliance report duly certified by MoEF&CC, Regional Office, Bhubaneswar from the proponent followed by a site visit of sub-committee of SEAC.
18. The project proponent has furnished detailed EC compliance report duly certified by MoEF&CC, Regional Office, Bhubaneswar vide File no. 109-1023/20/EPE dated 31.03.2021.
19. The sub-Committee of SEAC visited the site as well as the Nala at which, they plan to discharge the treated waste water on dated 31.03.2021. It was found to be about 1.5 km away from the site. After details deliberation and visit, the Sub Committee recommended to consider the proposal after the proponent furnish the following information / document.
- I) Copy of Permission letter from BDA/BMC in support of construction of drain at road side to discharge the treated waste water to the Nala considering the additional load.
 - II) More plantation in at periphery to make use of treated waste water so that the discharge load is reduced. Revised plan to be submitted.
 - III) Solar power needs to be revised to about 5% of total power consumption and a detailed calculation mentioning the items to be submitted
 - IV) Stack height to be enhanced and possible relocation may be considered. Revised plan to be submitted.
 - V) Information from the appropriate Structural engineer about the structural changes planned to take care of enhanced height of buildings.
 - VI) Revised map and plan showing above points (1-4) vs original may be submitted.

After detailed discussion, the SEAC recommended to consider the proposal after the proponent furnish the information / documents as pointed out by the Sub-Committee of SEAC at para-19 above.

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ITEM NO. 02

PROPOSAL FOR ENVIRONMENTAL CLEARANCE FOR CHROME ORE BENEFICIATION UNIT OF THROUGHPUT CAPACITY 18,500 TPA OVER AN AREA OF 2.54 ACRE AT VILLAGE: -BYREE, PO - BYREE, DIST- JAJPUR OF M/S A3 MINERALS AND EXPORT PVT LTD, SRI. AKSHAYA KUMAR SAMAL, PROPRIETOR - TOR

1. The proposal was considered by the committee to determine the “Terms of Reference (ToR)” for undertaking detailed EIA study for the purpose of obtaining environmental clearance in accordance with the provisions of the EIA Notification, 2006 and amendment thereafter.
2. The project is coming under category ‘B2 ’as the throughput capacity of the beneficiation plant is 18500 TPA (<20,000 TPA) and requires environmental clearance as per EIA notification 2006 and its amendment no. J-13012/12/2013-IA-II (I).
3. M/s A3 Minerals and Metal Export Pvt Ltd proposes for establishment of Chrome ore Beneficiation plant over an area of 2.545 Acres with throughput capacity of 18,500 TPA within the existing Chrome monolithic unit. The promoter of the project is M/s A3 Minerals and Export Pvt Ltd, and Proprietor of the project is Sri. Akshaya Kumar Samal.
4. The existing chrome monolithic unit obtained consent to establish vide letter no. 1198/IND-41 on dated 10.07.2020.
5. The existing Chrome monolithic unit was operating under the ownership of M/s R.C. Metals Industries. The consent to operate was transferred in the name of M/s A3 Minerals on 23.10.2019 for production of 625 TPM monolithics and other refractories.
6. Further M/s R.C Metal Industries obtained consent to operate for production of 30 TPM chrome concentrate which was also transferred in the name of M/s A3 Mineral.
7. The proposed unit is bounded by Latitude: 20°38’25.0”N Longitude:86°01’38.5”E and is featured under the Toposheet No.- F45 T14/F45U2. Khata No- 1268/439, Plot no: 4149/4683, Khata no: 1268/433, Plot no: 4146, Khata no: 1268/432, Plot no: 4157/4872, 4156/4871, Khata no: 1268/431, Plot no: 4152, Khata no: 1268/436, Plot no: 4158, Khata no: 1268/437, Plot no: 4149, Khata no: 1268/438, Plot no: 4159 & Kissam - Gharabari and belongs to the project proponent located at Village - Byree, Po - Byree, Dist - Jajpur, Odisha. The land area required for the project will be 2.545 Acres.
8. The mining lease area is also accessible NH-5 through Kalkala Chatia road which pass near the project site. Bairi railway station is nearest at a distance of 1.2 km from the M.L area. Nearest airport is Biju Pattnaik Bhubaneswar Airport 50 Kms from project site. Nearest river/Jor is Bansi Jor at 2.5km, Mendhakhai river at 8 km & Birupa River at 10 km and.

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Nearest town is Chatia at 5 km. Nearest forest Dalijoda Reserve forest at 0.3km. Nearest habitation is within 3km from project site. Kapilash wild life sanctuary – 11km. There is no wild life sanctuary, corridor, National park, biosphere reserve located within 10 Km buffer zone of the project site.

9. Raw material linkage has been established for the proposed plant from sukinda chromite mines of OMC, M/s B.C. Mohanty and M/s Misrilal & Sons. which is located at a distance of 35 Km from the project site. The transportation of ore from the mines to the project site will be done through covered trucks.
10. The process is a beneficiation process of conversion of low grade chrome ore having content less than 40% of Cr₂O₃ into semi high grade ore having content 50-65% of Cr₂O₃.
11. Generation of solid waste (tailings generated =6500TPA having <10% Cr₂O₃) will be properly stored in an impervious platform in earmarked area and will be blended with chrome refractory mortar and sold. So there will be no waste generation from the proposed project. However taking into consideration of maximum storage for 1 year on an area of 0.08 Acres has been demarcated for tailing storage.
12. **Employment Potential** - Proposed employment generation from proposed project will be 12 direct employment and 50 indirect employment.
13. **Power Requirement** - The electricity load of 100 kVA will be procured from CESU, Odisha. Also proposed to install 125 KVA DG set.
14. **Water Requirement** - Total water Consumption for the proposed project will be 153 KL/ day out of which 13 KLD will be the makeup water. About 95% of the water will be recirculated in the process and only 5% of the will be makeup water. There will be no waste water generation from the project. Domestic waste water will be treated through soak pit via septic tank and industrial waste water generated will be treated by settling and reused in the process.
15. The project cost is estimated to be ` 283 lakhs.
16. The project proponent along with the consultant **M/s Kalyani Laboratories (Pvt) Ltd. Pahala, Bhubaneswar** made a detailed presentation on the proposal.
17. The Committee observed the following:
 - a) The proponent has applied to consider their project as Category-B2 as per MoEF&CC, Govt. of India O.M. No. J/13012/12/2013-IA-II(I), dated 24.12.2013 as throughput of Mineral Beneficiation activity is less than 20,000 TPA involving only physical beneficiation.
 - b) The MoEF&CC, Govt. of India O.M. No. J/13012/12/2013-IA-II(I), dated 24.12.2013 stipulates the Mineral Beneficiation activity listed in the schedule as Category-B will be treated as Category-B2 with throughput ≤ 20,000 TPA, involving only physical beneficiation.

18. The SEAC in its meeting held on Dt: 14.12.2020 decided to take decision on the proposal after receipt of the following from the proponent followed by a site visit of sub-committee of SEAC.
- i. Date and year of establishment of existing unit.
 - ii. Copy of Consent to Establish and Consent to Operate from State Pollution Control Board, Odisha, Bhubaneswar for the existing plant (Chrome Monolithic Plant) to be submitted.
 - iii. Copy of conversion of land for industrial use as this is an existing unit.
 - iv. Details of Technology to be used for process of treatment of Hexavalent Chromium in waste water.
 - v. Detailed linkage of raw materials such as source and agreement copy with the party for supply of raw material i.e., low grade Chromite Ore.
 - vi. Design of tailing pond and detailed life calculation of area 0.08 acres required for tailing storage including ETP.
 - vii. Study of Waste Water Management.
 - viii. Details of ore transportation to the plant.
 - ix. Details of CSR activities already covered under the existing project.
 - x. Details of Zero discharge proposal.
 - xi. Detailed Process Technology for Chrome Ore Beneficiation.
 - xii. Water Balance for monsoon and non -monsoon period.
 - xiii. Details of leachate management.
 - xiv. Details of existing green belt and proposed with plant.
 - xv. Revised Plant layout to scale for the proposed Plant super imposing the existing setups/infrastructures.
19. The sub-Committee of SEAC visited the project site on dated 16.04.2021 and following observations and recommendations were made:
- a) It is an existing operating chrome ore beneficiation & Monolithic unit as stated by the proponent to have been operating prior to 2006 & therefore, Environmental Clearance was not required and not been obtained till now.

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- b) Now they have sought Environmental Clearance since they want to increase the production / beneficiation capacity to $\leq 18,500$ MT/ annum.

As such, they may be asked to furnish the following along with EIA report.

- i. Technical write up on process & operation.
 - ii. Current & proposed production / beneficiation.
 - iii. Production / beneficiation quantity per cycle and cycle time.
 - iv. Material balance & tailing management.
 - v. List of equipments and their capacities.
- c) Raw material (Chrome ore) was found to be in stock in heap under cover shed. To confirm maximum inventory at any time of raw material of low grade chrome ore and beneficiated high grade product & Monolithic and the corresponding area required for storage of the same with calculation including the layout with the plant layout.
- d) No garland drain / drain was found on the south side of the cover shed where the raw material / finished products are stored and was advised for the same.
- e) Four nos. water tanks (Cemented chambers) with half full/ full with water were seen and stated to be for fresh / make up water, waste water / treated waste water & water harvesting pond and found to be interconnected as well as an ETP. But their capacities & networking could not be explained well. Therefore, their capacities with dimensions and the net working along with ETP capacity (with supporting document) be submitted along with EIA study containing water management & water balance.
- f) Drain management with drain network be submitted.
- g) Water harvesting details and the use of it is be submitted.
- h) A bore well is existing and stated to be used for both process water as well drinking purpose. As such, NOC from CGWA & permission from Water Resources Deptt, Govt of Odisha is required to be submitted.
- i) One layer of Plantation was found alongside the boundary and there is enough space for further planation for required species. Thus, the proponent was advised to have two layer of plantation in hierarchy of required species in consultation with local Govt. Forest authority / botanist as per the norm to cover 33% of the local area.
- j) Only one number of gate was found both for the vehicle for goods and the employees. So, to avoid conflict between incoming & outgoing vehicles, two separate gates are requires for goods & a separate gate for employees. Accordingly, the proponent may

submit the layout of the plant with the provision of gate & their dimensions.

- k) Form the plant entry gate to the RD public road, there is a gap of about 100-200 mtrs which is presently being used for movement of vehicles by the proponent and stated to be "Anabadi" land. As such, the proponent is required to submit the 'ROW' from the concerned authority / land owner for perennial use of it.
- l) The vehicles of the plant are plying through few villages before crossing level crossing / before meeting NH. As such, necessary permission may be obtained for use of the village road from the Panchayats duly validated by concerned B.D.O.
- m) No provision of solar power found & hence to be provisioned / installed for 5% of total power consumption.

The above complies may be sought along with EIA study along with the document on conversion of land for "Industrial use"

After detailed discussion, the SEAC recommended to consider the proposal after the proponent furnish the following information / documents along with EIA study report as pointed out by the Sub-Committee of SEAC in addition to the information/ documents as sought vide SEAC letter no. 797(2)/ SEAC-(Misc)-28, dated: 24.12.2020.

- I) Technical write up on process & operation.
- II) Current & proposed production / beneficiation.
- III) Production / beneficiation quantity per cycle and cycle time.
- IV) Material balance & tailing management.
- V) List of equipments and their capacities.
- VI) Raw material (Chrome ore) was found to be in stock in heap under cover shed. To confirm maximum inventory at any time of raw material of low-grade chrome ore and beneficiated high-grade product & Monolithic and the corresponding area required for storage of the same with calculation including the layout with the plant layout.
- VII) Proposal for garland drain / drain on the south side of the cover shed where the raw material / finished products are stored.
- VIII) Four nos. water tanks (Cemented chambers) with half full/ full with water were seen and stated to be for fresh / make up water, waste water / treated waste water & water harvesting pond and found to be interconnected as well as an ETP. But their capacities & networking could not be explained well. Therefore, their capacities with dimensions and the networking along with ETP capacity (with supporting document) be submitted along with EIA study containing water management & water balance.

- IX) Drain management with drain network be submitted.
- X) Water harvesting details and the use of it is be submitted.
- XI) A bore well is existing and stated to be used for both process water as well drinking purpose. As such, NOC from CGWA & permission from Water Resources Deptt, Govt of Odisha is required to be submitted.
- XII) One layer of Plantation was found alongside the boundary and there is enough space for further plantation for required species. Thus, the proponent was advised to have two layer of plantation in hierarchy of required species in consultation with local Govt. Forest authority / botanist as per the norm to cover 33% of the local area.
- XIII) Only one number of gate was found both for the vehicle for goods and the employees. So, to avoid conflict between incoming & outgoing vehicles, two separate gates are requires for goods & a separate gate for employees. Accordingly, the proponent may submit the layout of the plant with the provision of gate & their dimensions.
- XIV) Form the plant entry gate to the RD public road, there is a gap of about 100-200 mtrs which is presently being used for movement of vehicles by the proponent and stated to be "Anabadi" land. As such, the proponent is required to submit the 'ROW' from the concerned authority / land owner for perennial use of it.
- XV) The vehicles of the plant are plying through few villages before crossing level crossing / before meeting NH. As such, necessary permission may be obtained for use of the village road from the Panchayats duly validated by concerned B.D.O.
- XVI) No provision of solar power found & hence to be provisioned / installed for 5% of total power consumption.
- XVII) The document on conversion of land for "Industrial use".

ITEM NO.3

PROPOSAL FOR ENVIRONMENTAL CLEARANCE FOR ADDITIONAL INSTALLATION OF CHROME ORE BENEFICIATION UNIT OF THROUGHPUT CAPACITY 18,500 TPA WITHIN THE EXISTING CAMPUS OF M/S SHREE MONOLITHIC PVT. LTD. OVER AN AREA OF 7.76 ACRE OR 3.14 HA. IN PLOT NO. 30/301, AT VILLAGE: JAMINIBANDHA, P.O: BHANDARIPOKHARI, DISTRICT - BHADRAK, ODISHA-756120 OF M/S SHREE MONOLITHIC PVT. LTD (TOR)

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1. The proposal was considered by the committee to determine the “Terms of Reference (ToR)” for undertaking detailed EIA study for the purpose of obtaining environmental clearance in accordance with the provisions of the EIA Notification, 2006 and amendment thereafter.
2. The project falls under Category “B2”, as the throughput capacity of the beneficiation plant is 18,500 TPA (<20,000 TPA) as per schedule of EIA Notification dated 14th Sep, 2006 as amended from time to time.
3. M/s Shree Monolithics Pvt. Ltd. proposes for establishment of Chrome Ore Beneficiation plant over an area of 7.76 Acres or 3.14 Ha with throughput capacity of 18,500 TPA within the existing Chrome Monolithic Unit.
4. The chrome monolithic unit does not attract Environment Clearance as it is only mixing of raw materials without any use of heat and chemical treatment. The present application for environment clearance is being made as the proponent is now proposing for installation of additional Chrome ore beneficiation plant within the existing premises.
5. The existing chrome monolithic unit has obtained Consent to Operate vide Consent Order No. 270/2017-18 (WPC and APC) issued vide letter no. 594/con-908 / 2000 on dated 24.02.2018.
6. **Connectivity:** The proposed unit is located at Village - Jaminibindha, P.O. Bhandaripokari, Dist: Bhadrak, Odisha. The lease area is bounded by Latitude: 20^o57'26.88"N Longitude: 86^o21'21.67"E. with Toposheet No.:73L/5 & 73K/8 having Plot No:25/285, 19, 27, 17, 18, 30, 20, 21, 96/321, 29, 30/301 and Khata No.: 9/9,92/67,9/5,92/61,9/6,92/65,92/62 and 92/64. The land area required for the project will be 7.76Ac. or 3.14 Ha. which comes under agricultural waste land category and belongs to the project proponent Nearest Railway Station is Bhadrak Railway station – 7 Km and nearest airport is Bhubaneswar Airport 180 Kms from project site. There is no wild life sanctuary, corridor, National park, biosphere reserve located within 10Km buffer zone of the project site. The project is accessible through a 50ft wide road which connect to NH – 5 is located at a distance of 0.3 Km from the project site. Nearest railway station is at Manjuri road PH located at a distance of 7Km from the project site.
7. **Power Requirement:** The electricity load of 100 kVA will be procured from NESCO, Odisha. Also proposed to install 125kVA DG set.
8. **Water Requirement:** Total water Consumption for the proposed project will be 153 KL/ day out of which 13 KLD will be the makeup water. About 95% of the water will be re-circulated in the process and only 5% of the will be makeup water. There will be no waste water generation from

the project. Domestic waste water will be treated through soak pit via septic tank and industrial waste water generated will be treated by settling and reused in the process.

9. The raw material i.e. low grade chrome ore will be sourced from mines of Odisha Mining Corporation, Sukinda which is located at a distance of 46 Km from the project site. The transportation of ore from the mines to the project site will be done through covered trucks.
10. **Green Belt:** Out of the total land 33% has been demarcated for development of green belt.
11. **Employment Potential** - The project generates employment opportunities for 12 personnel which includes operator -2, supervisor 2, 4 no of semi-skilled labour and 4no of unskilled labour.
12. **Solid Waste Generation** - The major solid waste will be the tailings generated from the beneficiation process. The quantity of tailings to be 6500TPA having <10% Cr₂O₃. The tailings will be collected & treated with Ferro-Sulphate solution and dried through a filter press. Further, the tailing will be stored in the tailing dump. After drying the tailing will be blended in the chrome refractory mortar as per the demand of the customer. An area has been demarcated for storage of tailing within the plant premises. The land allocated for tailing storage will be 0.25 Acres. However, the tailing generated from the plant will be completely utilized in the chrome refractory mortar unit and thus there will be no tailing dumping in the long term. Further, an area of 0.25 acres has been demarcated for storage of tailing in case of any adverse situation, if tailing could not be sold out by the proponent
13. The project cost is ` 283 lakhs.
14. The Environment consultant **M/s Kalyani Laboratories (Pvt) Ltd. Pahala, Bhubaneswar** along with the proponent made a presentation on the proposal before the Committee.
15. The Committee observed the following:
 - c) The proponent has applied to consider their project as Category-B2 as per MoEF&CC, Govt. of India O.M. No. J/13012/12/2013-IA-II(I), dated 24.12.2013 as throughput of Mineral Beneficiation activity is less than 20,000 TPA involving only physical beneficiation.
 - d) The MoEF&CC, Govt. of India O.M. No. J/13012/12/2013-IA-II(I), dated 24.12.2013 stipulates the Mineral Beneficiation activity listed in the schedule as Category-B will be treated as Category-B2 with throughput ≤ 20,000 TPA, involving only physical beneficiation.

16. The SEAC in its meeting held on Dt: 09.12.2020 decided to take decision on the proposal after receipt of the following from the proponent followed by a site visit of sub-committee of SEAC.

- (i) Date and year of establishment of existing unit.
- (ii) Copy of Consent to Establish and Consent to Operate from State Pollution Control Board, Odisha, Bhubaneswar to be submitted.
- (iii) Copy of conversion of land for industrial use as this is an existing unit.
- (iv) Details of Technology to be used for process of treatment of Hexavalent Chromium in waste water.
- (v) Details of existing green belt and proposed with plant layout.
- (vi) Details of solar energy to be used.
- (vii) Details calculation and plant Layout showing location of rain harvesting recharging pits and quantity to be harvested.
- (viii) Documents supporting previous water consumption in the plant.
- (ix) Undertaking by project proponent for maintenance of haulage road.
- (x) Status of NOC/permission letter from CGWAWR Deptt, Govt. of Odisha respectively for drawl of ground water.
- (xi) Details of Tailing and leaching management.
- (xii) Material Balance of the process.
- (xiii) Detailed linkage of raw materials such as source and agreement copy with the party for supply of raw material i.e., low grade Chromite Ore.
- (xiv) Revise Plant layout with all detailed features to scale super imposing the existing set ups/infrastructures/utilities/features.

17. The sub-Committee of SEAC visited the project site on dated 16.04.2021 and following observations and recommendations were made:

- a) It is an existing monolithic unit / Plant having CTO for five products namely monolithic with low grade chrome ore, slag processing for metal extractions, hot mix for road construction etc.

They stated to have installed an old beneficiation unit in 2010 and is not operating since then. Now they want to operate it with capacity \leq 18,500 MT and hence, they have sought Environmental Clearance.

As such, they may be asked to furnish the following along with EIA report:

- i. Technical write up on process & operations.
 - ii. List of old equipment's & their capacities.
 - iii. Proposal production / beneficiation quantity.
 - iv. Production / beneficiation quantity per cycle & cycle time.
 - v. Material balance & failing management.
- b) There is no separate boundary / demarcation of different products for which CTO has been obtained. As such, a composite plant layout with dimension & demarcation containing operation of all products / process be submitted.
- c) In the monolithic unit, chrome ore (the raw material) was found to be stored in heap under open sky with a tarpaulin cover having no garland drain.
- d) An old ramp in complete damaged condition was seen and so also, two water tanks in completely damaged & broken condition was found proximate to the beneficiation unit.
- e) No organized drain network / management is found to be in place.
- f) No provision for renewable energy / solar plant & water harvesting is in place.
- g) A DG set was found and in operating as and when required in open condition whose capacity could not be known, having no stack / chimney as per the norms.
- h) A single gate exists for entry & exit of incoming & outgoing vehicles.
- i) There is a gap of about 100 mtrs between NH-16 & their plant and the land belong to NH Authority as stated by the proponent & used by them for movement of their vehicles to & from the plant.
- j) A petrol pump exists just adjacent to the plant and agricultural land exist adjacent to the boundary of the plant in North, West & South side of the plant.
- k) Immense dust inside plant was found.
- l) The plant land is stated to be not converted to "Industrial use"

In the light of the above observations and recommendation the following are further recommended for compliance during EIA study / before EIA presentation.

- I. A complete drain management with network for individual operation for which CTO has been granted and the integration of the same thereof along with for proposed installation of chrome ore beneficiation unit.
- II. Location & layout of the storage for maximum inventory along with area & height of raw material i.e., chrome ore for monolithic unit & the proposed beneficiation plant. Single storage space for both will avoid duplication.
- III. Tailing management with detail design of tailing pond & the corresponding ETP and reuse of treated waste water.
- IV. Water management with water balance for the proposed unit & composite water management with water balance for the whole industrial premises having multiple operations.
- V. Water harvesting & management with use of it / recharging of it.
- VI. A bore well was found to be working and in use. 'NOC' from CGWA & permission from Water resources Deptt., Govt. of Odisha is required to be submitted.
- VII. DG set details with requisite stack height as per the norm & housing of the same to be submitted.
- VIII. Green belt as per the norm with required species in consultation with local Govt. Forest authority / botanist to be done. Only Eucalyptus plants were found around the boundary of the plant.
- IX. Separate material gate, both for entry & exit of incoming & outgoing vehicles and separate gate for employees to be installed of requisite size / dimension.
- X. No provision of solar power / renewable energy was seen. Hence, provision of solar power of at least 5% of total consumption be planned & detail worked out plan within a time frame for the same be submitted.
- XI. Internal roads inside the plant need to be concreted and provision of auto permanent water sprinkling arrangement be installed for dust suppression.
- XII. Clearance from OISD (Oil Industry Safety Directorate) of Govt. of India to be submitted in view of available petrol tank/pump adjacent to the plant on East – South side of the plant.

- XIII. Since multiple operations are happening inside one premises & a petrol pump is existing adjacent of the plant, a dedicated fire tender corridor be made and shown in the layout & submitted including clearance from fire Deptt. Govt of Odisha for the firefighting systems to be in place.
- XIV. 'ROW' from NH-16 or concerned appropriate Authority for perennial use of the land including constructed culvert on the canal for use & plying of vehicles of the proponent be submitted.
- XV. Document on conversion of the said land for "Industrial use" from appropriate authority be submitted.
- XVI. Copies of CTE/ CTO for five products / operations to be submitted.

After detailed discussion, the SEAC recommended to consider the proposal after the proponent furnish the following information / documents along with EIA study report as pointed out by the Sub-Committee of SEAC in addition to the information/ documents as sought vide SEAC letter no. 794/ SEAC-(Misc)-28, dated: 24.12.2020.

- I) Technical write up on process & operations.
- II) List of old equipment's & their capacities.
- III) Proposal production / beneficiation quantity.
- IV) Production / beneficiation quantity per cycle & cycle time.
- V) Material balance & failing management.
- VI) A complete drain management with network for individual operation for which CTO has been granted and the integration of the same thereof along with for proposed installation of chrome ore beneficiation unit.
- VII) Location & layout of the storage for maximum inventory along with area & height of raw material i.e., chrome ore for monolithic unit & the proposed beneficiation plant. Single storage space for both will avoid duplication.
- VIII) Tailing management with detail design of tailing pond & the corresponding ETP and reuse of treated waste water.
- IX) Water management with water balance for the proposed unit & composite water management with water balance for the whole industrial premises having multiple operations.

- X) Water harvesting & management with use of it / recharging of it.
- XI) A bore well was found to be working and in use. 'NOC' from CGWA & permission from Water resources Deptt., Govt. of Odisha is required to be submitted.
- XII) DG set details with requisite stack height as per the norm & housing of the same to be submitted.
- XIII) Green belt as per the norm with required species in consultation with local Govt. Forest authority / botanist to be done. Only Eucalyptus plants were found around the boundary of the plant.
- XIV) Separate material gate, both for entry & exit of incoming & outgoing vehicles and separate gate for employees to be installed of requisite size / dimension.
- XV) No provision of solar power / renewable energy was seen. Hence, provision of solar power of at least 5% of total consumption be planned & detail worked out plan within a time frame for the same be submitted.
- XVI) Internal roads inside the plant need to be concreted and provision of auto permanent water sprinkling arrangement be installed for dust suppression.
- XVII) Clearance from OISD (Oil Industry Safety Directorate) of Govt. of India to be submitted in view of available petrol tank/pump adjacent to the plant on East – South side of the plant.
- XVIII) Since multiple operations are happening inside one premises & a petrol pump is existing adjacent of the plant, a dedicated fire tender corridor be made and shown in the layout & submitted including clearance from fire Deptt. Govt of Odisha for the firefighting systems to be in place.
- XIX) 'ROW' from NH-16 or concerned appropriate Authority for perennial use of the land including constructed culvert on the canal for use & plying of vehicles of the proponent be submitted.
- XX) Document on conversion of the said land for "Industrial use" from appropriate authority be submitted.
- XXI) Copies of CTE/ CTO for five products / operations to be submitted.

ITEM NO.4

PROPOSAL FOR ENVIRONMENTAL CLEARANCE OF M/S TAPAN Z-ESTATE PVT. LTD. FOR PROPOSED HIGH RISE RESIDENTIAL APARTMENTS LOCATED AT VILLAGE - AMBAPUA, TAHASIL - BERHAMPUR, DIST- GANJAM OF SRI SATYA JYOTI MOHANTY (MD) WITH TOTAL BUILT UP AREA 30594.20 SQM. – EC

1. The proposal is for Environmental Clearance of M/s Tapan Z-Estate Pvt. Ltd. for proposed High Rise Residential Apartments located at village - Ambapua, Tahasil - Berhampur, Dist- Ganjam of Sri Satya Jyoti Mohanty (MD) with total built up area 30594.20 sqm.
2. The category of the project is 8(a) as per EIA Notification, 2006 & its amendments.
3. The Proposal site is located at Ambapua, Berhampur, District- Ganjam, Odisha over Plot No.: 721/2110, 721/6371, 721, 726,729/5405, 728, 721/7249,& 722 Khata No. 422/6805, 442/5025, 442/6813,442/3863, 442/5264 and 442/3901 at- Ambapua, Berhampur, District- Ganjam, Odisha- 760010 of M/s Tapan Z Estates Pvt. Ltd.
4. Location and Connectivity - The geographical co-ordinate of the project site is: Latitude -19° 19' 6.93" N & Longitude - 84° 51' 13.46" E. The project site is well connected with State Highway – 5(Pathara via NH-5 bypass road). The nearest railway station is Berhampur Railway station at a distance of approx 11.5 Km in South West direction. The nearest airport is Biju Pattnaik International Airport, Bhubaneswar at a distance of approx. 164 Km in North-east direction from project site.The site is located adjacent to the local landmarks SHRI Maa Dakshinakali Temple, BDA Park, Kendriya Vidyalaya Brahmapur, Income tax office Brahmapur, Ganjam Law College etc.
5. Meteorology - The maximum temperature is about 33.0o C and the minimum temperature is 22.0o C felt in the area. The average annual rainfall in the area is 1314.71 mm.

6. The Building Details Of The Project:

Total Plot Area	:	8,700.71 sqm
Kisam of Land	:	Gharabari
Residential FAR Area	:	21,415.25 sqm

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Commercial FAR Area	:	1,221.47 sqm
Total Built-up Area	:	30,594.20 sqm
Ground Coverage	:	2,960.00 sqm
Road & Paved Area	:	2,436.00 sqm
Green Belt Area	:	1,793.52 sqm
Total Parking Area	:	7,613.90 sqm
Height of the Building	:	50.00 m

7. **Water requirement** - Fresh make up of **85.0 m³/day** will be required for the project which will be sourced from Ground water. Waste water of 108.0 KLD will be treated in a STP of 120 KLD capacity, which includes primary, secondary and tertiary treatment. After treatment the treated water will be discharge to the near drain.

8. **Power requirement** - The daily power requirement for the proposed building is preliminarily assessed as 1041.0 KW. In order to meet emergency power requirements during the grid failure, there is provision of 2 nos. of DG set having 500 KVA capacities for power back up in the proposed Building Project.

Energy conservation by using Solar lighting for common area = 46.0 KW

9. **Rain Water Harvesting** - Rain Water will be harvested through 19 nos. of recharging pits.

10. **Fire fighting Installations-** Fire fighting system will be installed as per recommendation of the Fire fighting Officer, Odisha and as per the guideline of NBC (part-4).

11. **Green Belt Development** - Green belt will be developed over an area of 1740.14 sqm which is 20.0 % of the plot area; by using the local species like Neem, Karang, Golden Champa, Bakul, Bela, Bottle Palm, Cheekoo, Guava etc.

12. **Solid Waste Management** - Total Solid Waste Generation- 478.5 kg/day

Residential - From the residential complex solid waste generated will be @ 0.45 kg/person/day, which will be about 360.0 kg/day. The generated solid waste from the residential complex will be segregated as biodegradable and non-biodegradable. Proper waste management practices will be adopted during the collection, storing and disposal of the generated solid waste.

Commercial - Waste generated from Commercial people will be @ 0.15 kg/capita/day, which will be about 52.5 kg/day. The waste generated from floating population in residents will be @ 0.15 kg/day, which will be 12 kg/day. Solid waste from sweeping and Dry Garbage containing non-bio-degradable wastes like polythene bags, metal, ceramic Waste, glass etc. shall be stored

in separate garbage bin and send to approved recyclers. Around 54.0 kg/day of STP sludge will be generated.

Solid Waste from Residential Population - 360.0 kg/day

Solid Waste from Commercial Population - 52.5 kg/day

Solid Waste from Floating Population - 12.0 kg/day

STP Sludge - 54.0 kg/day

13. The estimated project cost is ` 55.0 Crores and Environment Management Cost is ` 2.2 Crores
14. The project proponent along with the consultant **M/s Centre for Envotech & Management Consultancy Pvt. Ltd. Bhubaneswar** made a detailed presentation on the proposal.
15. The SEAC in its meeting held on Dt: 16.03.2020 decided to take decision on the proposal after the proponent submits the certain information/ documents followed by site visit of sub-committee of SEAC.
16. The project proponent has furnished compliances as desired by the committee on dated 21.04.2021 and same has been verified as follows:

Sl. No.	Information Sought by SEAC	Compliance furnished by the proponent	Views of SEAC
a.	Land documents with kizam of land.	All the Kizam of land of this project is Gharabari. 8 nos. of ROR is attached as Annexure-1 .	complied
b.	Copy of approval letter along with building plan of development authority.	BMC has provisionally approved the building plan on 12-10-2020 and the letter is attached in Annexure-2 .	BMC has provisionally approved the building plan on 12-10-2020 and the letter is attached in Annexure-2 is not attached.
c.	Provision shall be kept for PH Division water supply, Berhampur in future regarding supply of water to that proposed project and abandon ground water usage.	Provision of Under Ground water tank of adequate capacity has been provided in the Building Plan which will receive the P.H water whenever it is supplied to the project	Agreed and complied
d.	Status of permission for use of ground water.	Ground water NOC is obtained from CGWA vide letter no. CGWA/NOC/INF/ORIG/2021/11482, dated 26.03.2021. NOC copy is attached in Annexure-3 .	complied
e.	NOC from drainage department for discharge of treated water to	BeMC is the approving Authority as well as the provider of all external	NOC from drainage department for

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Sl. No.	Information Sought by SEAC	Compliance furnished by the proponent	Views of SEAC
	readymade municipality drain and thereby to Rushikulya river provided near proposed location.	infrastructures including drain. Further BeMC also take 1% of the Project cost towards maintenance of this Infrastructure in future. The notification HUD Govt. of Odisha vide no. 8346, dated 21.04.2020 has provision for the same. Accordingly, our non-sewer surplus waste water will be discharged to the drain provided by BeMC for this project. The copy of Notification is attached herewith as Annexure-4 .	discharge of treated water to readymade municipality drain is not submitted.
f.	Detailed calculation for generation of waste water and its management during monsoon and non-monsoon.	Total waste water generated from the proposed project is 108.0 KLD and the waste water will be treated in STP of capacity 120 KLD. Detailed calculation for waste water generation during Monsoon & Non-monsoon is attached in Annexure-5 .	complied
g.	Detailed calculation of treated water how to be used and where it will be discharged with drainage map / drainage design.	The 102.4 KLD treated water will be recycled within the project for flushing (42.4 m ³ /day), landscaping (6.2 m ³ /day), STP loss (5.4 m ³ /day) & Dust suppression (9 m ³ /day) and 45 m ³ /day treated water will be discharged to drain. The detailed calculation is already attached in Annexure-5 and the Drainage map is attached in Annexure-5A .	complied
h.	Dimensions of underground sumps use for Municipality water storage and rain water harvesting storage with layout.	The Roof Top Rain Water will be discharged through Rain Water Harvesting Pits. The Roof Top area is 2960 sqm and the total rain water available through this area will be 303.69 cum/day during monsoon period. So, we are proposing 19 nos. of Rain Water Harvesting pit of capacity 4.71 cum. Detail calculation for Rain Water harvesting is given in Annexure-6A and Rain Water Harvesting Layout is Annexure-6B .	complied

Sl. No.	Information Sought by SEAC	Compliance furnished by the proponent	Views of SEAC
i.	Breakup percentage of green belt and landscape with detailed plan and layout. Proposal for plantation shall be carried out in 3 tier.	We propose to develop three tiers hierarchical greenbelt along the periphery of the building and the width of the Green Belt is Max. 3m and min. 1.5m. Total green belt area is 1740.14 sqm which is 20% of total plot area. Green Belt Plan is given in Annexure-7 and Site Plan showing greenbelt is given Annexure-8 .	Breakup percentage of green belt and landscape is not submitted.
j.	Details of rainwater harvesting proposed in the project and amount compensated towards water requirement/recharging as well.	The Roof Top Rain Water will be discharged through Rain Water Harvesting Pits. The Roof Top area is 2960 sqm and the total rain water available through this area will be 303.69 cum/ day during monsoon period. So, we are proposing 19 nos. of Rain Water Harvesting pit of capacity 4.71cum. Rain water available from proposed project site is 13920 m ³ and Water requirement for proposed project is 31025m ³ /year, so rain water harvesting percentage is 44.8%. Details calculation for Rain Water harvesting is given in Annexure – 6A and Rain Water Harvesting Layout is attached in Annexure-6B .	complied
k.	DG set stack height details including location and its effect w.r.t. sound and emission and wind direction in that area.	The height of the DG stack is 15m. The Site plan showing Location of the DG stack is attached in Annexure-8 . Predominate wind direction of our site is from south west to south east. The DG set has accordingly been located for dispersion of vent gases away from the building.	complied
l.	Breakup percentage of power requirement by CESU and Renewable Solar Energy (5%) with detailed plan and calculation.	The electricity installed capacity for this project is 1041 KW, accordingly to adhere to the 5% (i.e.52.05KW) norms of solar energy we have planned to install	complied

Sl. No.	Information Sought by SEAC	Compliance furnished by the proponent	Views of SEAC
		Photovoltaic cell Frame shape to be located on the terrace area. The solar power will be mainly used for open area lighting, common corridor lighting & corridor lighting. Total Energy saving is 5 % which is generated from solar System. Detail Calculation is attached in Annexure-9 . Total Power Requirement is 1041KW. Power Requirement from TPCODL is 988.95 KW. Power from Solar Energy is 52.05 KW.	
m.	Water quality analysis report of ground water in that area.	Ground Water Quality analysis report is attached in Annexure-10 .	complied
n.	Detailed calculation for ECS for parking area and parking plan.	As per BeMC, the norm for Residential housing is 30%. Accordingly, the parking space required for residential area is 6893.99 sqm (which is equivalent to 230 ECS) and we have provided 7613.9 sqm which is equivalent to 257 ECS to cover floating population and visitor. Detail Parking area calculation in ECS is attached in Annexure-11 .	complied
o.	Detailed design and specification of STP.	Detailed design and specification of STP is attached in Annexure-12 .	complied
p.	Whether treatment of ground water/Surface water / MP by Raw Water Treatment Plant (WTP) proposed for correction of pH, removal of high TSS / TDS. If so, details to be furnished.	We envisaged the provision of WTP in our project for correction of PH and removal of TDS and TSS. Based on the water report of borewell the detail of WTP will be worked out before installation & operation.	complied
q.	Whether untreated / treated	The open drain planned to be	complied

Sl. No.	Information Sought by SEAC	Compliance furnished by the proponent	Views of SEAC
	waste water drain and run off / storm water drains are separately provided? If so, this should be clearly shown in detail layout / contour of the drain and submitted.	provided in the project area shall be of adequate capacity to take care of regular non- sewer waste water and the storm water during rainy season without causing inundation of the area and preventing water logging. Detail section and layout is attached in Annexure-13 .	
r.	Whether management of periodical monitoring of quality of treated waste water and fresh water if used from ground water source or river is in place? If so, details to be furnished.	The quality of treated waste water will be monitored periodically during operation of the system to meet the discharge quality.	complied
s.	Whether Traffic Density Study Report for a detailed traffic management and traffic decongestion duly validated by State Urban Development / PWD / Competent Authority has been furnished? If so, details to be furnished.	The main artery road of the project is originating from NH-16. Where the NH road width is around 300feet. This portion of NH is traditionally recognized as by-pass Road of Silk City, Berhampur. Hence this portion of road mainly caters to the NH traffic without much load of the city Traffic. Hence, there is no Congestion in this portion of road.	Traffic Density Study Report for a detailed traffic management and traffic decongestion not furnished
t.	Whether provision of internal road, paving and pedestrian pathways have been made as per the norm? if so, details with layout to be furnished.	Provision of internal road, paving and pedestrian pathways is showing in Site Plan and Site Plan is attached in Annexure-14 .	complied

After detailed discussion, the SEAC recommended the following:

- A. Decision on grant of Environmental Clearance for the proposal shall be taken after the proponent furnish the following information / documents:
- i) Berhampur Municipal Corporation (BMC) has provisionally approved the building plan on 12-10-2020 and the letter was stated to be attached in **Annexure-2, but it is not attached. The same shall be provided.**
 - ii) NOC from drainage department for discharge of treated water to readymade municipality drain.

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- iii) Breakup percentage of green belt and landscape.
- iv) Traffic Density Study Report for a detailed traffic management and traffic decongestion .
- v) An undertaking in form of legal affidavit indicating that the construction work has not been started.

B. Environmental Clearance can be considered after receipt of information / documents from the proponent as stated above. The Sub-Committee of SEAC will visit the site within 6 months from the date of issue of Environmental Clearance to verify the progress of the project as well as implementation of conditions stipulated in Environmental Clearance. However, either during the visit of the SEAC Sub-committee and/or at any time, if it is noticed that stipulated conditions on which EC is granted is not in place or found otherwise, steps will be taken for revocation of EC granted.

ITEM NO.5

PROPOSAL OF ENVIRONMENTAL CLEARANCE OF M/S. UTKAL REALTORS PVT LTD. FOR CONSTRUCTION OF HOUSING PROJECT (RESIDENTIAL USE TYPE) LOCATED AT- PAHALA, BHUBANESWAR, DIST – KHORDHA WITH TOTAL BUILT UP AREA -30,990.21 SQM. OF SRI. PRAKASH CHAND BHURA (EC)

1. This is a proposal for Environmental Clearance of M/s. Utkal Realtors Pvt Ltd. for construction of Housing Project (Residential use type) located at- Pahala, Bhubaneswar, Dist – Khordha with total built up area -30,990.21 m². of Sri. Prakash Chand Bhura.
2. The proposal is for Environmental Clearance for proposed construction of proposed 2MLCP+Services+16 Storied Residential Apartment Building & B+G+3 Club and Convenient Shopping over Plot No. 292, 293, 294, 295, 296, 295/687 & 298, Khata No. 352/322, 352/237, 352/238 & 352/236 in Mouza- Pahala, Bhubaneswar, Dist- Khurda, Odisha of M/s Utkal Realtors Pvt. Ltd.
3. The proposed site is located at Pahala, Bhubaneswar, Odisha. The Geographical co-ordinate of the project site is: Latitude - 20° 20' 26.60" N & Longitude - 85° 53' 04.07" E. and the area comes under Survey of India Toposheet No- 73H/15. The project site is well connected with National Highway-16 (Jharpokharia-Chennai Road) at a distance of 0.13km. The nearest railway station is Bhubaneswar Railway station at a distance of approx 10.6 Km in South West direction. The nearest airport is Biju Pattnaik International Airport Bhubaneswar at a distance of approx. 13.4 Km in South-West direction from project site. The site is located adjacent to the local landmarks, Haridaspur Mosque, Jagannath Temple, Pahala Etc. There is no structure or encroachments on the site. The site is easily accessible from NH-16 Road.

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4. Meteorology - The maximum temperature is about 36.0° C and the minimum temperature is 16.0° C felt in the area. The average annual rainfall in the area is 1326.16 mm.

5. Building Details Of The Project :

Total Plot Area	:	8,457.86 sqm
Kisam of Land	:	Gharabari
Residential Built up Area	:	26,718.91 sqm
Commercial Built up Area	:	4,271.30 sqm
Total Built up Area	:	30,990.21 sqm
Ground Coverage	:	2,875.00 sqm
Road & Paved Area	:	2,368.15 sqm
Green Belt Area	:	1,776.15 sqm (21.0 % Plot Area))
Total Parking Area	:	7,709.50 sqm (30 % of Residential FAR Area + 50 % of commercial FAR Area)
Height of the Building	:	59.45 m (Residential) & 14.95 m (Commercial)

6. Requirement for the Project:

(a) **Statutory clearances Required /obtained:** BMC has provisionally Approved the builder plan vide letter no. 27719, dated 04.10.2019

Water & Sewerage connection from PH Division vide letter no. 1212, dated 21.01.2020

Ground Water application submitted to CGWA vide application no. 21-4/2492/OR/INF/2020, dated 18/05/2020. NHAI permission for Storm & Wastewater discharge.

(b) **Water requirement:**

Fresh make up of 75.0 m³/day will be required for the project which will be sourced from Ground water. Waste water of 95.6 KLD will be treated in a STP of 110 KLD capacity, which includes primary, secondary and tertiary treatment. After treatment the treated water will be discharge to the Highway Drain.

(c) **Power requirement:**

The daily power requirement for the proposed building is preliminarily assessed as 1056 KW (Solar System- 53.6 KW & CESU – 1002.4 KW). In order to meet emergency power requirements during the grid failure, there is provision of 2 nos. of DG set having 500 KVA capacities for power back up in the proposed building project.

For energy conservation, there will be 50 nos. of Solar Lighting poles (@72 Watt) has been proposed for Street & common area solar lighting, so

Energy conservation by using Solar Street Lighting = 50 x 72 = 3600 watt = 3.6 KW

Energy conservation by using Solar lighting for common area = 50 KW

Total Energy Conservation = (50+3.6) KW = 53.6 KW

Total Energy saving = $53.6/1056 = 0.050 \times 100 = 5.0 \%$

(d) Rain Water Harvesting:

Rain Water will be harvested through 4 nos. of recharging pits.

(e) Fire fighting Installations: Fire fighting system will be installed as per recommendation of the Fire fighting Officer, Odisha and as per the guideline of NBC (part-4).

7. **Green Belt Development:** Green belt will be developed over an area of 1,776.15 sqm which is 21.0 % of the plot area; by using the local species like Neem, Karang, Golden Champa, Bakul, Bela, Bottle Palm, Cheekoo, Guava etc.

8. **Solid Waste Management:** From the residential complex solid waste in form of food waste from kitchen and miscellaneous waste will be generated @ 0.45 kg/person/day, which will be about 279.0 kg/day. The generated solid waste from the residential complex will be segregated as biodegradable and non-biodegradable. This will be collected in separate coloured bins. Proper waste management practices will be adopted during the collection, storing and disposal of the generated solid waste.

Waste generated from Commercial people will be @ 0.15 kg/capita/day, which will be about 84.0 kg/day

The waste generated from floating population in residents will be @ 0.15 kg/day, which will be 12 kg/day. Solid waste from sweeping and Dry Garbage containing non-biodegradable wastes like polythene bags, metal, ceramic Waste, glass etc. shall be stored in separate garbage bin and send to approved recyclers. Around 47.8 kg/day of STP sludge will be generated.

Solid Waste from Residential Population - 279.0 kg/day

Solid Waste from Commercial Population - 84.0 kg/day

Solid Waste from Floating Population - 12.0 kg/day

STP Sludge - 47.8 kg/day

Total Solid Waste Generation - 422.8 kg/day

STP Capacity – 110 KLD

9. Total Estimated population is ` 1260.

10. The total estimated Project cost is ` 30 Crores and Environment Management Cost is ` 2.2 Lakhs.

11. The Environment Consultant **M/s Centre for Envotech & Management Consultancy Pvt. Ltd. Bhubaneswar, Odisha** along with the proponent made a detailed presentation on the proposal before the Committee.

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12. The SEAC in its meeting held on Dt: 04.06.2020 decided to take decision on the proposal after the proponent submits the certain information/ documents followed by site visit of sub-committee of SEAC.
13. The project proponent has furnished compliances as desired by the committee and same has been verified as follows:

Sl. No.	Information Sought by SEAC	Compliance furnished by the proponent	Views of SEAC
1.	Land documents with kissam of land	Total Land Area of proposed project is 8458.00Sqm/91041Sqft. (2.090Acres) and the Kissam of land is Gharabadi. Detail Land documents with kissam of land are attached in Annexure-1.	complied
2.	Copy of RoR indicating owner and type of land to be submitted	Total Land Area of proposed project is 8458.00 Sqm/91041.15 Sqft. (2.090Acres) and the Kissam of land is Gharabadi. The copy of 7 RoR is attached in Annexure-1. One plot i.e. plot no. 294 is under Utkal Builders Ltd. Which is sister concern of Utkal realtor Private Ltd. We are submitting the GPA & Development agreement in favor of Utkal Realtor Private Ltd. In Annexure-1 for your reference.	complied
3.	Detailed basement height and construction design are to be submitted since it is located in low lying areas.	As per architectural designing, we are developing 2 MLCPs (Multi level car parking) /Podium + Service + 16 storied residential apartments since it is located in low lying area. All the floors having RCC Column & beam structure of suitable dimension	complied

Sl. No.	Information Sought by SEAC	Compliance furnished by the proponent	Views of SEAC
		above Natural Ground In case of amenity building, the level of NH is approx. 3 mt. high from NGL. So, its parking floor seems as basement from NH. Detailed design of it is attached in Annexure-2 .	
4.	Exact distance of the project from NH-5 is to be submitted.	The proposed building project site is adjacent to the National Highway-16 (previously NH-5). There is one existing service road along the NH. The project boundary is on service road with 2-3 meters of access road to our plot. The details of it are attached in Annexure-3 .	complied
5.	Permission from Govt. or private owners for discharge of non-monsoon water to municipality drain.	The National Highway Authority of India is developing side drain along the service road. The monsoon rain water & non sewer waste water after treatment in Effluent Treatment Plant shall be discharged into this drain after obtaining permission from NHAI. Since the drain development work just commenced we are submitting a legal affidavit to comply with this query at the appropriate time. An affidavit is attached in Annexure – 4 .	Approval for disposal of storm water is attached. Legal affidavit in regard to this query is not attached as mentioned by PP in Annexure-4.
6.	Parking area calculation in ECS with consideration of floating population.	As per BDA, the parking requirement for Residential housing is 30% & for commercial & club complex is 50%. Accordingly the parking space required for residential area is 6021.75	Complied.

Sl. No.	Information Sought by SEAC	Compliance furnished by the proponent	Views of SEAC
		sqm/64818.12 sqft which is equivalent to 201 ECS and the parking space required for commercial shop area is 1588.10 sqm/ 17094.31 sqft which is equivalent to 53 ECS. So the total ECS is required is 254 ECS. Remaining 91.95 sqm/989.75 sqft space & 4 ECS for floating population like visitor to residential houses & visitor for commercial. Detail parking area calculation in ECS is attached in Annexure-5 .	
7.	Detailed calculation of the percentage (5%) of usage of solar/ renewable energy.	The electricity installed capacity for this project is 1237.28KW, accordingly to adhere to the 5% (61.864 KW) norms of solar energy we have planned to install Photovoltaic cell Frame shape of 73.71 sqm/793sqft to be located on the terrace area, The solar power will be mainly used for open area lighting, common corridor lighting & corridor lighting. Total Energy saving is 5% which is generated from solar System. Detail Calculation is attached in Annexure-6 .	Complied.
8.	Detailed traffic density study with traffic management and traffic decongestion plan shall be done off to ensure that the current level of service of the roads with in 0.5 km radius of the Project and the NH is maintained and improved upon after the implementation of the Project. The study must address the cumulative impact of all	The traffic study has carried on 14.09.2020 to 20.09.2020 and traffic density study report is vetted by IIT Bhubaneswar. Detail Traffic Density Study report along with IIT Bhubaneswar letter is attached in Annexure - 7	Complied.

Sl. No.	Information Sought by SEAC	Compliance furnished by the proponent	Views of SEAC
	developments and increase habitation for the next ten years.		
9.	Site is located in flood prone area. High Flood Level (HFL) data to be collected and submitted.	The nearest gauging station in the upstream is Naraj (IB). The HFL at Naraj is 27.60m which is recorded in 31-Aug-82, Flood data of Naraj (IB) is given in Annexure -8 . The project site is in the downstream, but as per the flood vulnerability Map, the site is not located in the flood prone area. (Source - BMTPC)	Complied.
10.	Distance of the project site from NH-16 is 130 meter. Ownership of land area of 130 meter from the project site (document to be submitted) for discharge of treated water to drain.	The proposed building project site is adjacent to the National Highway-16 (previously NH-S). There is one existing service road along the NH. The project boundary is on service road with 2-3 meters of access road to our plot. The details of it are attached in Annexure-3 . Treated non sewer waste water will be discharged to the National Highway (NH) side drain.	Annexure-3 comprises google layout of project plots. Permission from the NHAI is to be submitted for discharge of treated water to drain.
11.	Status of approval of the building plan by the BDA along with copy of approval letter, if any to be submitted.	Bhubaneswar Municipal Corporation (BMC) has provisionally approved the Building plan vide letter no. 27719, dated 04.10.2019. BMC provisionally letter is attached in Annexure -9 .	Complied.
12.	Sketch of the Public drain including the permission from the authority of the drain to take the additional load of discharge of the treated water of this Project.	Our above said proposed project has been vetted by drainage division BMC vide letter no. 90059, dated 14.12.2020 for discharge of excess storm water to the BMC drain.	Complied.

Sl. No.	Information Sought by SEAC	Compliance furnished by the proponent	Views of SEAC
13.	Status of permission for drawal of ground water from Water Resources Department, Govt. of Odisha.	NOC has been granted by Regional Director Central Ground Water Authority vide application no.21-4/2492/OR/INF/2020, dated 18-05-2020 Application copy is attached in Annexure - 10.	Complied.
14.	This G+16 building has projected height of 59.9 meters. Permission/ NOC from Airport authority is needed. Status of permission of Airport Authority of India.	As per conditional approval obtained from BMC, the height of building is 63.65 mt. As per Guidelines for Colour coded Zoning Map (CCZM) from Airport Authority of India on dated 18.07.2017, Height Clearance is not required from AAI. Guideline is given in Annexure- 11. However to be on safe site we have already submitted application on dated 04.03.2021 to AAI for the said permission after obtaining the survey report.	Complied.
15.	4 RWH pits is much less which shall be increased adequately. Design to be submitted.	Instead of traditional percolation pits, we are providing bore well of 200mm dia. with percolation allowed at the aquifer level. Where we are drawing water for residential use.6 Nos. of 11.3 Cu.mtr. each Rainwater Percolation pits are proposed. Hence total in-total proposed volume of pit is 67 Cu.mtr. Detailed design calculations with section of percolation pit as per BDA and BMC norms provided in Annexure-	Complied.

Sl. No.	Information Sought by SEAC	Compliance furnished by the proponent	Views of SEAC
		12.	
16.	Location of 2 DG sets along with venting height shall be justified that it will not cause air and noise pollution to inhabitants there.	For required backup power, 2 nos. of DG Sets are proposed. The exhaust shall be provided as per pollution norms laid by CPCB. Since our DG Sets location are along the compound wall, we proposed the vent pipe along the building wall to highest point of the building & vent is 3 m in highest point. Detail proposal for DG Sets is attached in Annexure- 13.	Complied.
17.	Three tier greenbelt shall be developed on periphery with more number of plants. Min, max and average width of greenbelt be furnished.	We proposed to develop three tier hierarchal greenbelt along the periphery of the building and the width of the Green Belt is max. 3m and min.1.0m. Green Belt layout is given in Annexure-14.	Complied.
18.	Water balance during monsoon and non-monsoon period to be submitted.	Total Domestic and Flushing Water Requirement of the proposed project is 87.43 KLD and 49.57 KLD respectively. We have tried to maintain zero discharge, some of the treated water is re-used for flushing purpose, car washing purpose and gardening purpose (in non-monsoon period) and surplus treated water is discharged into BMC drain adjacent to site. Storm water collected during rain will be discharged into rainwater percolation pits. The details of Rainwater recharge pit are also we are attaching in Annexure- 12. The detailed	Complied.

Sl. No.	Information Sought by SEAC	Compliance furnished by the proponent	Views of SEAC
		Water Balance during Non-monsoon & monsoon season is given in Annexure- 15	

After detailed discussion, the SEAC recommended the following:

- A. Decision on grant of Environmental Clearance for the proposal shall be taken after the proponent furnish the following information / documents:
- i) Approval for disposal of storm water is attached. Legal affidavit in regard to this query is not attached as mentioned by PP in Annexure-4.
 - ii) Permission from the NHAI is to be submitted for discharge of treated water to drain.
 - iii) An undertaking in form of legal affidavit indicating that the construction work has not been started.
- B. Environmental Clearance can be considered after receipt of information / documents from the proponent as stated above. The Sub-Committee of SEAC will visit the site within 6 months from the date of issue of Environmental Clearance to verify the progress of the project as well as conditions stipulated in Environmental Clearance. However, either during the visit of the SEAC Sub-committee and/or at any time, if it is noticed that stipulated conditions on which EC is granted is not in place or found otherwise, steps will be taken for revocation of EC granted.

ITEM NO.6

PROPOSAL OF ENVIRONMENTAL CLEARANCE FOR BHAGABANPUR DECORATIVE STONE MINES OVER AN AREA OF 4.500 HA OR 11.12AC. LOCATED IN VILLAGE- BHAGABANPUR, TAHASIL- KUKUDAKHANDI, DISTRICT- GANJAM, ODISHA (SUBMITTED UNDER CLUSTER APPROACH) OF MD. IRFAN RAZZAK – TOR

1. The proposal was considered by the committee to determine the “Terms of Reference (ToR)” for undertaking detailed EIA study for the purpose of obtaining environmental clearance in accordance with the provisions of the EIA Notification, 2006 and amendment thereafter.
2. As per EIA Notification dated 14.09.06 and its subsequent amendments S.O.141 (E) on dated 15.1.2016, the project falls under Category “B” under item No-1(a)-‘Mining of Minerals’.
3. The present proposal is mining of decorative stone from Bhagabanpur Decorative Stone Mine. The Bhagabanpur Decorative Stone Mine of over an area of 4.50 Ha or 11.12 acres located at Village-Bhagabanpur, Tehsil-Kukudakhandi, Dist- Ganjam, Odisha, is decided to

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be granted in favour of Sri Md. Irfan Razzak for a period of 30(thirty) years vide letter of Intent no.6602/SM, Bhubaneswar dated 06.09.2019 of Government of Odisha for mining of decorative stone. Subsequently, the precise area map along with boundary description & land schedule of the area has also been supplied to the lessee vide letter no.7569/DM dated 24.09.2019 of the Directorate of Mines, Odisha, Bhubaneswar.

4. The mining lease area is bounded by latitude 19° 20' 20.10" N to 19° 20' 29.20"N & longitude 84° 44' 8.90" E to 84° 44' 22.70" E in plot no-705 (part), 711 (part), 714 (part). It is a part of the area covered in the Survey of India Toposheet No. 74A/11. Lease area comes under Kukudakhandi Tahasil which is located at a distance of about 16km. Mining Lease area is accessible from Berhampur city of Ganjam District at a distance of 12 Km on Berhampur-Digapahandi road and 3 Km metal (black top) village road from the village Mahuri Kalua. Nearest railway station is located at Berhampur at a distance of 16 km. The NH-59 is at a distance of 12 Kms, SH-17 is at a distance of 3 kms and public road is accessible at a distance of 3 Kms. Ichhapuram canal is flowing at a distance of 1.50 km from northern boundary of the area which controls the drainage system in the area.
5. The Geological Reserve is 126547 Cum and Mineable Reserve is 92948 Cum. The project will have total excavation of 81,900 Cum of rock zone (ROM) out of which 12,285 Cum shall be Marketable/saleable rock and 36,855 Cum will be waste in nature. Opencast and semi mechanized method will be used for extraction of decorative stone from the quarry through the formation of safe benches which will be on single shift basis. Height and width of the benches will be kept at 6m each. Overall pit slope angle will be 45° with the horizontal. Drilling & wedging will be performed depending upon the production requirement.
6. Out of 4.50 hectares only 2.528 hectares will be use for mining of decorative stone during plan period. During plan period 36855cu.m of waste will be generated. For dumping these waste materials a proposed dump has been suggested covering an area of 0.303 Ha. A retaining wall around the dump will be constructed to prevent the wash off of dumps. Around the retaining wall a garland drain and settling tank will be provided to prevent the possible transportation of mine dust or fines
7. Water Requirement – Water requirement for the project will be 1.3 KLD. For drinking & domestic purpose water requirement will be 0.3 KLD, water requirement for Green belt development and dust suppression will be 0.8 KLD and source from water tankers.
8. Power Requirement - No use of electric power as the operation will be done in day time. However solar lights will be used for day to day living purposes.
9. Green Belt - 500 nos. of saplings along the safety zone boundary over an area of 2000m² during the five years of plan period. Local species like neem, mahaneem, mango, chakunda,

acacia, eucalyptus etc will be planted

10. Employment Potential: Total number of employee will be around 32 which includes skilled, semi-skilled & unskilled category in the mine.
11. The project cost is 90 lakhs.
12. The Environment consultant **M/s P&M Solution, Noida -201301 – U.P** along with the proponent has made a presentation on the proposal before the Committee.
13. The SEAC in its meeting held on Dt: 13.11.2020 decided to take decision on the proposal after receipt of the certain information / documents from the proponent.
14. The project proponent has furnished compliances as desired by the committee and same has been verified as follows:

Sl. No.	Information Sought by SEAC	Compliance furnished by the proponent	Views of SEAC														
1.	Engineering estimation of quality and quantity of wastes, its storage and usage.	<p>A total of 36855 m³ (In situ) or 44230m³ swollen (Swell factor of 1.2) waste/rejects is likely to be generated during the plan period. Depending upon the essentiality, about 70% of these waste/rejects will be utilized concurrently for the construction and maintenance of road in the lease area and will be disposed of as minor mineral other than decorative stone with the permission of the competent authority. The remaining wastes will be confined to be dumped on the demarcated area towards west over 0.303 hectare at an average of 4m height maintaining the overall slope of the dump at 22°.</p> <p style="text-align: center;">Year Wise Waste Generation detail</p> <table border="1" style="margin-left: auto; margin-right: auto;"> <thead> <tr> <th>Year</th> <th>Waste/rejects(M³)</th> </tr> </thead> <tbody> <tr> <td>1st</td> <td>5400</td> </tr> <tr> <td>2nd</td> <td>6435</td> </tr> <tr> <td>3rd</td> <td>7235</td> </tr> <tr> <td>4th</td> <td>8460</td> </tr> <tr> <td>5th</td> <td>9315</td> </tr> <tr> <td>Total</td> <td>36855</td> </tr> </tbody> </table> <p>Details of waste generation has been attached as Annexure-I.</p>	Year	Waste/rejects(M ³)	1 st	5400	2 nd	6435	3 rd	7235	4 th	8460	5 th	9315	Total	36855	complied
Year	Waste/rejects(M ³)																
1 st	5400																
2 nd	6435																
3 rd	7235																
4 th	8460																
5 th	9315																
Total	36855																
2.	Details on how to ensure	Details on how to ensure zero discharge	complied														

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Sl. No.	Information Sought by SEAC	Compliance furnished by the proponent	Views of SEAC						
	zero discharge from quarry.	from quarry has been attached as Annexure –II.							
3.	Nearest habitation from lease area.	Nearest habitation is Bhagbanpur Village situated at Approx.1.55Km in NW direction.	complied						
4.	Copy of minutes of public hearing.	Copy of Public hearing minutes has been attached Annexure – III.	complied						
5.	Mitigation measures to be undertaken in ecological sensitivity part.	<p>There is no ecological sensitivity part i.e., Wild life sanctuary, National park within 15 km of study area. Ramagurha RF is approx. is a distance of 4.1 Km W from the lease area. Dakhinapur Ghai Canal is at a distance of 0.10Km E from the lease area.</p> <p>However, following mitigation measures will be taken:</p> <ul style="list-style-type: none"> • Ambient Air Quality Monitoring will be conducted on regularly basis to assess the quality of ambient air. • Monitoring of water will be carried out periodically. Water analysis will be carried out seasonally. • Regular water sprinkling on haul roads & loading points will be carried out. • Garland drains provided along the UPL boundary will be diverted to settling ponds and the surface run-off from the lease area will be accumulated there for settling. 	complied						
6.	Detailed report on CSR & CER activities covered by mine owners.	<p>The proposed project will also propose to take up more activity on account of corporate environment responsibility (CER) activity as per OM F No. 22-65/2017-IA.III dated 01.05.2018 which will be 2% of the total project cost i.e., 90 Lakhs.</p> <p>Yearly expenditure for socio-economic development</p> <table border="1"> <thead> <tr> <th>S.No</th> <th>Activities</th> <th>Cost(Lakh)</th> </tr> </thead> <tbody> <tr> <td>1</td> <td>Constructing Cow shed and financial aid for</td> <td>0.30</td> </tr> </tbody> </table>	S.No	Activities	Cost(Lakh)	1	Constructing Cow shed and financial aid for	0.30	complied
S.No	Activities	Cost(Lakh)							
1	Constructing Cow shed and financial aid for	0.30							

Sl. No.	Information Sought by SEAC	Compliance furnished by the proponent		Views of SEAC
			medical camp in Bhagabanpur Village.	
		2	Financial aid for community hall and School in Ghunthabandha Village.	0.70
		3	Drinking water facility in Bhagabanpur Village.	0.50
		4	Distribution of PPE such as hand sanitizer, hand gloves and nose mask and training to villagers for precautions needed amid pandemic in Bhagabanpur Village.	0.30
		Total		1.80
7.	Certificate from the concerned Mining Officer about name and area of other mines located within 500 meter from the periphery of the lease boundary and their operational status.	500 Meter cluster certificate is attached as Annexure-IV .		complied

Considering the information / documents furnished by the proponent and presentation made by the consultant **M/s P&M Solution, Noida - 201301 – U.P**, the SEAC prescribed the following specific ToRs in addition to standard ToRs in cluster approach as per **Annexure-A** for conducting detailed EIA study.

- i) Certificate from the concerned Tahasildar about the geo-coordinates of other mines located within 500 meter from the periphery of the lease boundary.
- ii) Distance of all nearby mines in Topomap with geo coordinates i.e. latitudes and longitudes of mines.

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- iii) Any approach road existing or will be constructed?
- iv) Whether schools / colleges / hospitals / health centers / bus stops / religious places existing nearby and if so, the distances of it from the lease boundary or the road through which the vehicle will ply or existing alongside the road?
- v) Whether, any alternative mine exists or explored or can be explored if this mine is otherwise found unsuitable? Please furnish details.
- vi) No and type of vehicles to be used daily and the frequency for the purpose of transportation and the time and duration of such transportation. Whether permission taken or will be taken for the appropriate authority for the purpose.
- vii) Intersection point of the haulage roads with the main SH / NH / public road and the traffic density study at appropriate locations by domain expert with remedial measures for decongestion and road safety.
- viii) Any legal litigations pending before the Hon'ble Court or NGT, if so, detailed case no. along with a write up on the legal matter and present status.
- ix) Different areas of plantation should be indicated in map.

ITEM NO.7

PROPOSAL OF ENVIRONMENTAL CLEARANCE OF M/S PANPOSH SUB-DIVISION GOVERNMENT REVENUE EMPLOYEES HOUSING CO-OPERATIVE SOCIETY LTD. (PSGREHCS LTD)) FOR PROPOSED RESIDENTIAL BUILDING PROJECT (B+G+7) AT: MOUZA - R.T.U, NO-4, TAHASIL – ROURKELA, DIST – SUNDARGARH OF SRI SANJIT KUMAR RAY - EC

1. This is a proposal for Environmental Clearance of M/s Panposh Sub-Division Government Revenue Employees Housing Co-operative Society Ltd. (PSGREHCS Ltd)) for proposed Residential Building Project (B+G+7) At: Mouza - R.T.U, No-4, Tahasil – Rourkela, Dist – Sundargarh with total built up area – 24397.68 m².
2. The Panposh Sub- Division Government Revenue Employees Housing Co-operative Society Limited (PSGREHCS Limited) has been registered with ADM Sundargarh as a Housing Cooperative society vide registered no. 158/PN dated the 25th June 2010. The Society has deposited the premium amount and entered into a lease agreement signed through ADM. Rourkela vide lease deed no. 11711401011 dated the 7th June 2014 for an area of 1.65 Ac. As per the lease deed, the society has applied for construction of Apartment comprising of 134 flats, approved by RDA. Rourkela vide their letter no. 1910 dated 10.05.2017. Subsequently the project is registered with ORERA vide its Registration No. RP/30/2017/00012 dated the 11th December, 2017.

3. This proposed project comes under Building and Construction projects under schedule 8(a) of the EIA Notification dated 1st December, 2009 – S.O.3067 (E) - Amendment of EIA Notification dated 14th September, 2006).
4. This is an existing project of G+4 with built up area 15016.28 sqm. The project built-up area was less than 20,000 sqm and was not coming under the purview of EIA notification, 2006 and amendment thereof at that time.
5. Now the project proponent is willing to expand the project by adding floors to the existing building. Additional built-up area is 9381.4 sqm and after expansion built up area will become 24397.68 sqm. After proposed expansion, built-up area will be more than 20,000 sq m and thus attracts applicability of EIA Notification, 2006 and accordingly application has been submitted to obtain the environment clearance (as a new project).
6. Total land area of the project is 1.65 Ac. Total Built Up Area: 24397.68 m². Max. Height of Building 19.74m.
7. The proposed site is located at Mouza: Rourkela, Tahasil: Rourkela, District- Sundargarh, Odisha. The Geographical co-ordinate of the project site is: Latitude: 22° 14' 44.32"N Longitude: 84°49' 58.53"E. covering in Topo Sheet No. F45G16
8. The project area is at a distance of 90 m from Ring Road, 2.15km from Panposh Road-4km from NH-23, 4km from SH-10. Biju Pattanaik Airport which is 240km away from the project site. Panposh railway station is 3.5 km away from the project site. Koel River is about 3.5 km from the project boundary. Reserve forest nearby are Kamarpahar Reserve Forest 4.5 km away and Mudrapahar Reserve Forest 5 km away.
9. **Meteorology:** The temperature of Rourkela varies between 46.3° C during summer (April - July) to 7° C during winter (November to January). The humidity is high in the summer months. The wind flows in summer from south west with a speed of 35- 40 km/hr and in winter season from north east with a speed of 18-24 Km/hr. The annual average rainfall is 128.8 cm.
10. The Building Details Of The Project:

Sl. No.	Particulars	Area (in Sqft)	Area-sq m
1.	Plot Area	71,874.00	6677.313
2.	Total F.A.R	161,633.99	15016.289
3.	Total built up area	262,614.41	24397.677
4.	Covered Parking (25% of FAR Area)	57,384.51	5331.195

Sl. No.	Particulars	Area (in Sqft)	Area-sq m
5.	Green Belt (15.47% of Plot Area)	11119.85	1033.068
6.	Height of the Building	19.74 mt	--
7.	No. of Flats	134 Nos.	--
BUILT-UP AREA BREAK-UP			
8.	Basement Floor Built up Area	35656.66	3312.612
9.	Ground Floor Built up Area	33183.57	3082.855
10.	First Floor Built up Area	28326.26	2631.596
11.	Second Floor Built up Area	28326.26	2,631.596
12.	Third Floor Built up Area	28326.26	2,631.596
13.	Fourth Floor Built up Area	28326.26	2,631.596
14.	Fifth Floor Built up Area	28326.26	2,631.596
15.	Sixth Floor Built up Area	28398.93	2638.347
16.	Seventh Floor Built up Area	23743.95	2205.885

11. **Power Requirement:** Electricity requirement for the society building will be 550 KW which will be supplied from the WESCO, Rourkela, Odisha. In addition to this, Energy efficiency solar roof top system is proposed and solar PV cells of 1.5 KW will be installed. 1 x 500 KVA DG sets will be provided as power backup.
12. **Water Requirement:** Fresh make up of 55.35 KLD will be required for the project which will be sourced from ground water. The existing water requirement of the project is 91KLD, out of which 35.65KLD of treated water from in house STP will be reused. The freshwater demand of 55.35KLD will be met from ground water supply. Dual piping system for usage of recycled water has been provisioned
13. Rain Water will be harvested through 13 no. of recharging pits.
14. **Firefighting Installations:** Firefighting system will be installed as per recommendation of the Firefighting Officer, Odisha and as per the guideline of NBC (part-4).
15. **Solid Waste Management:** Total solid waste generation is 214 kg/day. Biodegradable/ Compostable waste generation will be 128 kg/day and 86 kg/day will be inorganic waste generation. As the project is coming under Rourkela Municipality Corporation, the inorganic waste will be segregated disposed through RMC.
16. Parking space equivalent to 169 Equivalent Car Space (ECS) is provided of which 79 ECS is in basement and 90 ECS is on ground floor parking.

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17. The total green area provided for the project is around 1111.85 Sqm i.e, approximate 15.47% of total plot area.
18. The project cost is Rs.43 Crores including taxes.
19. The Environment Consultant **M/s P and M Solutions, Ltd. Noida** along with the proponent made a detailed presentation on the proposal before the Committee.
20. The SEAC in its meeting held on Dt: 24.08.2020 decided to take decision on the proposal after receipt of the certain information / documents from the proponent followed by the site visit of the sub-Committee of SEAC.
21. The project proponent has furnished compliances as desired by the committee vide letter no. Nil dated 09.03.2021 and same has been verified as follows:

Sl. No.	Information Sought by SEAC	Compliance furnished by the proponent
(i)	Revised plantation layout is to be submitted (both existing and proposed for expansion).	Landscape Plan, Existing Floor plan and Proposed Floor plan is attached as Annexure 1
(ii)	Percentage of green cover/greenbelt excluding landscape green coverage (both existing and proposed for expansion).	Total Plot area of the project is 6677.31 Sqm of which 15.47% is provided as Green belt area i.e. 1033.1 Sq.m. The proposed plantation is also the same as mentioned above since there is no change in plot area. Key Landscape plan is attached as Annexure II.
(iii)	Revised drainage layout showing internal drains, storm water/runoff and waste water within premises connecting to municipality drain both existing and the proposed be shown.	Storm water drainage map is attached as Annexure III.
(iv)	Copy of approval letter from RMC for existing project of G+4 with built up area 15016.28 sqm.	RMC letter for existing project of G+4 is attached as Annexure IV.
(v)	Detailed usage of solar/renewable energy (percentage wise) and increase minimum to 1%	Electricity requirement for the society building will be 550 KW which will be supplied from the WESCO, Rourkela, Odisha. In addition to this, Energy efficiency solar roof top system is

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Sl. No.	Information Sought by SEAC	Compliance furnished by the proponent
		proposed and solar PV cells of 1.5 KW will be installed. Solar water heater 11000 LPD is also proposed. Lighting of the common areas by solar energy/ LED devices. Maximum use of sun light will be done and minimize the use of electricity during day time. Solar/renewable energy provisions are made as per N.B.C norms. Typical plan showing solar energy is attached as Annexure V.
(vi)	Detailed layout of existing and proposed drains and Storm Water Management	Ref. Annexure III.
(vii)	Revised layout showing DG sets location w.r.t wind direction and the sketch of installation of DG sets on the platform having the desired stack height as per the norm	Layout showing DG set location is attached as Annexure VI. Predominant wind direction on the project site is towards SW and mostly calm.
(viii)	Details of Rain water harvesting recharging pits in plant layout. Calculation of rain water harvesting taking extreme rainfall cases during the last 30 years	Rain water harvesting plan is attached as Annexure VII. Calculation of RWH pits is Attached as Annexure VII (a).
(ix)	Copy of approval letter along with approved building plan of Rourkela Development Authority	Approval letter of RDA is attached as Annexure VIII.
(x)	Baseline study report is to be submitted	Baseline Study report is attached as Annexure IX.
(xi)	Copy of land documents supporting land schedule and kissam of land	Land Document is attached as Annexure X.
(xii)	NOC from PHED for unavailability of water supply for proposed project and NOC from CGWA/permission from WR Department for ground water use in case the same in unavoidable	NOC from Public Health Department Rourkela for unavailability of water supply for proposed project is attached as Annexure XI.

Sl. No.	Information Sought by SEAC	Compliance furnished by the proponent
(xiii)	Comparative table in matrix form for existing parameters and proposed parameters w.r.t. water consumption, waste water generation, solid waste generation etc including other salient environmental and Pollution parameters	Matrix Table considering salient environmental and pollution parameters is attached as Annexure XII .
(xiv)	Details of fire safety measures taken and copy of permission for fire safety	The height of the building is up to 19.74 mts. Fire Fighting Extinguisher, Fire Sprinkling and other fire safety measures has been provided. However, an internal road of 6 mt width has been demarcated for movement of fire vehicle. Fire NOC is attached as Annexure XIII .
(xv)	A detailed write-up as to why the proposal will not be considered as a violation case	<p>M/s Panposh Sub-Division Government Revenue Employees Housing Co-operative Society Limited (PSGREHCS Ltd.) has earlier proposed to develop a G+6 floor residential building of Builtup area which is less than 20000 sq.m. Hence the project was not applicable for obtaining Environment Clearance as per EIA notification 2006,</p> <p>Now the project proponent has proposed to develop seventh floor due to which the Builtup area comes more than 20000 sqm. Hence the project is considered to be applicable for EC and the same has been applied at online portal of Parivesh via File No. SIA/OR/MIS/146514/2020</p> <p>Considering the above clarification, the project will not be considered under violation case.</p>

22. The SEAC in its meeting held on Dt: 24.08.2020 decided to take decision on the proposal after a site visit by the sub-committee of SEAC.
23. The sub-Committee of SEAC visited the project site on dated 10.03.2021 and observed the following:
- i) At the time of site visit the construction of B+G+6 floors were under construction.

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- ii) The project developers have permission from Rourkela Development Authority for B+G+6 storeyed building as per Letter No. 1910/RDA dated 10.05.2017. However, the NOC from Rourkela Municipal Corporation (Letter No. 14410 dated 03.12.2016) is for G+4 category Residential apartment.
 - iii) The project proponent has obtained the permission for discharge of surface water and drain/rain water to the existing Municipal Corporation drain. However, the Rourkela Municipal Corporation has not given the permission to connect the sewerage pipeline to the existing Municipal Corporation drain.
 - iv) The project proponent plans to construct a 30KLD Sewage Treatment Plant, based on MBBR technology, on the western side of the premises.
 - v) The project proponent has planned to put 13 nos. of Rain Water harvesting Pits each of 168.71 m³ within the premises.
 - vi) The project proponent plans to put 85 nos of trees inside the project premises that includes 22 nos of Night Blooming Jasmine, 21 nos of Mango, 21 no. of Eucalyptus and 21 Neem trees.
 - vii) The Project proponent has applied for development of road in eastern and northern side of the project along with civic amenities.
24. The sub-committee recommended to take a decision regarding grant of EC after examining all the documents.
25. The SEAC in its meeting held on Dt: 13.11.2020 decided to take decision on the proposal after receipt of the certain information / documents from the proponent.
26. The project proponent has furnished compliances as desired by the committee and same has been verified as follows:

Sl. No.	Information Sought by SEAC	Compliance furnished by the proponent	Views of SEAC
1.	Copy of permission letter issued by Rourkela Development Authority vide Letter NO.-1910IRDA dated 10.05.2017 for B+G+6 storeyed building.	RDA letter vide no.-1910IRDA dated 10.05.2017 for B+G+6 storied building is being attached.	complied
2.	Copy of NOC issued by Rourkela Municipal	NOC issued by Rourkela Municipal	complied

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SI. No.	Information Sought by SEAC	Compliance furnished by the proponent	Views of SEAC
	Corporation vide Letter no - 14410 dated 03.12.2016 for G+4 category Residential Apartment.	Corporation vide Letter no.- 14410 dated 03.12.2016 for G+4 category Residential Apartment has been attached.	
3.	Detailed built up area calculation for B+G+6 storied building.	Detailed built up area calculation for B+G+6 and B+G+7 storied building is attached.	Complied
4.	Detailed built up area calculation for B+G+ 7 storied building.		

Considering the information / documents furnished by the proponent and presentation made by the consultant **M/s P and M Solutions, Ltd. Noida** on behalf of the project proponent, the SEAC recommended grant of Environmental Clearance valid for a period of 7 years with stipulated conditions as per **Annexure-B**.

ITEM NO.8

PROPOSAL OF ENVIRONMENTAL CLEARANCE FOR PAIKADAKULGUDA SEMI PRECIOUS GARNET STONE MINES (CAT'S EYE) OVER AN AREA OF 40.946 HA. IN VILL. PAIKADAKULGUDA & KANDHADAKULGUDA, TAHASIL: BISAM CUTTACK, DIST RAYAGADA OF SRI BIJAY KUMAR BANSAL (TOR ISSUED VIDE LETTER NO. 955/SEAC-159, DATED 19.11.2018) (EC)

1. The proposal is for Environmental Clearance of Paikadakulguda Semi Precious Garnet Stone Mines (Cat's Eye) over an area of 40.946 Ha. in Vill. Paikadakulguda & Kandhadakulguda, Tahasil: Bisam Cuttack, Dist Rayagada of Sri Bijay Kumar Bansal.
2. This is a proposal for gemstone mining project with production capacity of 41 kg / annum gemstone over mining lease of 40.946 ha.
3. The grant of mining lease for semi-precious stone (Cat's Eye) in favour of Sri Bijay Kumar Bansal in villages Paikadakulguda and Kandhadakulguda for a period of fifty (50) years vide letter No.250/SM, Bhubaneswar dated 07.01.2017. Subsequently, the precise area map along with Boundary description & Land schedule of the granted area has also been issued to the lessee letter No. 2108 dated 29.05.2008, Department of Steel and Mines, Govt. of Odisha, Bhubaneswar.

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4. Previously, the mining lease area over 41.485 hectares was granted in favour of Sri Bijay Kumar Bansal vide grant proceeding No.9245 / SM dated 12.11.2007 for 20 years after receipt of approved mining plan on 03.05.2007 and Collector Rayagada requested the department of Steel & Mines, Govt. of Odisha for execution of M.L area over 40.946 hectares after final survey and demarcation vide his letter No.2108 dated 29.05.2008.
5. Previous mining plan for Paikadakuluguda Cat's Eye Deposit in the M.L area over 41.485 hectares prepared under Rule 22 of MCR, 1960 was approved by the Indian Bureau of Mines, Govt. of India for a period of five (5) years vide letter No.BBS/RGD/Cat's Eye/MP-298 dated 03.05.2007. Since extent of the M.L area over 41.485 hectares as per terms & condition letter dated 15.10.2001 has been reduced to 40.946 hectares dated 07.10.2017. Modification of Mining Plan has been prepared for 40.946 hectares under Rule 17(3) of MCR, 2016 for 5 years and approved vide letter no. MPM/OTFM/18-ORI/BHU/2018-19 dated 27.07.2018.
6. Terms of Reference (TOR) was issued vide SEAC letter. No. 955, SEAC-159 dated 19.11.2018
7. The lease area in favour of Lessee Sri Bijay Kumar Bansal for excavation of Chrysoberyl cat's Eye Gem Stone is located in village Paikadakuluguda under Bissamcuttack Tehsil of Rayagada District. Lease area is a part of Survey of India toposheet No 65 M/10 on 1:50,000 scale and is bounded by the latitudes from 19°34'37.09" to 19°35'05.51"N and longitudes from 83°32'05.35" to 83°32'31.17"E as per geodetic survey. The area is at a distance of 5 km from Muniguda town. The nearest railway siding is at Muniguda located at a distance of about 5 km from the lease area respectively.
8. The major portion of the lease area coming under waste land, water way & road. Soil-alluvium exposure is found to cover the total lease area. Mineable reserve is same to that of geological reserve as there will no loss due to M.L boundary & over all slope factors. Hence, mineable reserve for Cat's eye bearing zone is 555 kg. Keeping the maximum production of 41kg/ annum, the mineable reserve will be exhausted in 14 years time including the mining plan period.
9. Opencast method of mining will be adopted in the M.L area manually on single shift basis with deployment of equipments like hand shovels, pick axe, crow bar, baskets etc. overburden will be excavated & loaded manually and transported through 10 t capacity truck / tippers to the dumping site. The maximum production of cat's eye from the lease area will be 41 Kg/ Annum. With this rate of production the life of mine will be 14 years which include the present plan period of five years. A washing unit is proposed to be established for recovery of the Cat's eye. Mining will be carried out around the existing pit. Proposed rate of excavation varies

between 1170 m³ to 518 m³ from 1st year to 5th year of development, washing unit is located at close proximity of the quarry

10. The proposed mining project will be able to create employment opportunities for 83 personnel among which 8 will be administrative and technical personnel and rest 75 will be skilled, semiskilled and unskilled labours.
11. Tube well is the source of water for drinking purpose in nearby villages. Vasundhara & Kani Jorhi River and tanks provide water for non-domestic use. The water requirement of the washing plant is 9.8m³ / day. Out of total water used, 90% is recycled where as 10% is required as daily make up water.
12. During the plan period, 98450 m³ OB / waste will be generated. These wastes will be dumped inside the lease area over an area of 1.231 Ha. at 8m average height in one terrace of 10m height. Construction of retaining wall and plantation around proposed dump will be carried out. Waste removed from the pit will be utilized for backfilling once the pit is exhausted. Therefore, there will be no dump in the lease area during the conceptual period.
13. The existing nala near the lease area will remain untouched as it is 0.2 km far from lease area and protected stone pitching on both the banks and plantation of small grasses to restore the soil erosion. There is the proposal for construction of check dam in the nala to store water which will be utilized in the process of washing. Garland drains will be constructed along the quarries and dumps which are routed through settling pits of size 10m x5mx2m.
14. During the plan period there is the proposal for plantation of about 750 saplings over an area of 0.3 Ha and during conceptual period 6.05 Ha of the land will be covered under plantation with about 10500 saplings.
15. The Public Hearing has been conducted on 15.11.2019 at 10.30 AM at Paikadakulguda of Kutraguda R.I. Circle, in the district of Rayagada in accordance with the Ministry of Environment, Forest & Climate Change, Govt of India, EIA Notification No.SO-1533(E) on dated 14.09.2006.
16. The major issues raised by public include conservation of the forest near the mines, employment generation, developmental work like road construction, educational development in the villages. The lessee agreed to conduct the CSR activities shall be carried out in consultation with co-ordination committee formed under Gram Sabha of the local Panchayat to get local villagers involvement. Budget allocated for peripheral developmental activities will be 16.5 Lakhs

17. Baseline study was conducted in pre monsoon season (March to May 2018).
18. The cost of the project is ` 320 Lakhs.
19. The project proponent along with their consultant **M/s Kalyani Laboratories Pvt. Ltd. Plot no.-78/944, Pahala, Bhubaneswar -752101** made a detailed presentation on the proposal before the SEAC on 17.07.2020.
20. The SEAC in its meeting held on Dt: 17.07.2020 decided to take decision on the proposal after receipt of the certain information / documents from the proponent followed by a site visit by the Sub-Committee of SEAC to the proposed site.
21. The project proponent has furnished compliances as desired by the committee vide letter no. Nil dated 07.11. 2020 and same has been verified by the SEAC in its meeting held on 02.12.2020 as follows:

Sl. No.	Information Sought by SEAC	Compliance furnished by the proponent
(i)	Specific measures to be taken in case of deep mining and slope failure as the mining area is sandy soil type. Slope study to be done preferably by an Institute of National repute	The details regarding slope failure measures has been given in Annexure 1 .
(ii)	Remedial Measures to be taken so that natural drainage of nala is not affected. A detailed proposal to this effect to be submitted.	Remedial Measures to be taken so that natural drainage of nala detailed as Annexure 2
(iii)	Since the mining activity will intercept ground water table, ground water study to be undertaken and report is to be submitted	With reference to approved mining plan: Ultimate pit depth = 324 mRL (42m from top level i.e. 366 mRL. Surface level = 290 mRL Ground water table during rainy season = 15m below surface level (275mRL) Ground water table during Summer season = 20m below surface level (270mRL) Hence, there is no possibility of ground water intersection during the period of mining. Map showing ultimate pit depth and depth of ground water attached for reference.

Sl. No.	Information Sought by SEAC	Compliance furnished by the proponent
		Copy of the portion of the mining plan describing the pit limit attached. Annexure 3
(iv)	Details of proposed bench height and slope	Height and width of the benches will be maintained at 6m each. Individual benches will be maintained at 800 and overall quarry slope angle will be maintained at 34° with respect to horizontal. Benches will be formed and worked in a top downward manner. Footsteps will be provided between the pit top, bench floors and pit bottom for the movement of workers with or without loads
(v)	Type of retaining wall to be provided with design/dimensional details	Retaining wall will be constructed around the OB dump to retain the wash-off materials. Boulders / bricks of waste materials will be utilized for construction of retaining wall. Sand and cement will be used for the binding of the boulders / bricks to prevent loose waste materials. Dimension of Retaining wall, garland drain and Settling tank have been submitted.
(vi)	A natural nallah is passing inside the lease area. A detailed proposal to protect the nallah is to be submitted	As described in point no. 2 Annexure 2
(vii)	A public road passing through the lease area. A detailed proposal to be submitted to provide alternative passage to the public	The public road is passing through the lease area in the northern part. Up to the conceptual period a total area of 4.880 Ha only will be utilized for mining and allied activity. The mining activity along with dumping will be completely carried out in the South – Eastern part of the lease area. So the mining activity will not interfere the public road. Further the public road is located at a distance of 600 m from the ultimate quarry boundary. The map showing the ultimate quarry limit, location of

Sl. No.	Information Sought by SEAC	Compliance furnished by the proponent
		public road is given in Annexure- 4
(viii)	Details of the mining pits to be operated for a particular time	During the proposed period of mining one pit will be operated. During the conceptual period the area of the pit will be 2.384 Ha. The map showing the conceptual mining pit area has given in Annexure 5.

22. The SEAC in its meeting held on Dt: 02.12.2020 decided to take decision on the proposal after a site visit by the sub-committee of SEAC.

23. The sub-Committee of SEAC visited the project site on dated 29.12.2020 and following observations and recommendations were made:

- i) No water way and road was found inside the lease area as stated by the lessee.
- ii) Engineering mechanism of recycling process of 90% of used water i.e. about 9 M³/day is not explained including the source of about 1 M³/day as make up water be indicated.
- iii) Slope study done and recommendation made thereof for OB / waste dump and the pit / quarry be endorsed / authenticated by a domain expert from an Institution of national repute as the soil type is sandy to avoid any threat to safety of the workmen.
- iv) No nala (natural / perennial) was seen at a distance of 0.2 km (200 mtrs) from the lessee boundary as stated by the lessee including their proposal for stone pitching on both the banks including plantation of small grasses to restore soil erosion and construction of check dam in the nala to store water to utilize in the process of washing be clarified and explained.
- v) Minutes of meeting of public hearing be submitted and action proposed to be taken to mitigate the environmental issues raised in physical terms be submitted.
- vi) Though it is mentioned that the proposed mining activity is manual opencast without any drilling, blasting and chemical intrusion, it is also stated that detonators / blasting will be used / done and hence, a contradiction.

It was conceded by the lessee as well as the consultant that minor blasting will be done during the site visit. In such a situation, explosive license for storage and use be obtained from the appropriate authority.

- vii) Two numbers of settling tanks have been provided in the reclamation plan map of the mining plan connected to the garland drain proposed around (i) top soil & (ii) proposed OB/waste dump for settling of wastewater and recycling of clean water after settling of solid particles. In fact, one more settling tank is advised for channelizing run-off water / wash pits / washing tank in to it including run-off through rain-cuts and settling it and recycling the clean water to ensure zero discharge outside the lease boundary.
- viii) A “Seasonal Nala” has been shown in the “Reclamation Plan Map” passing from inside the lease area to beyond the lease boundary and connected to other seasonal nala in the South-East side of the lease boundary, which is not seen physically.

So, a revised Reclamation Plan Map (mining plan map) be re-submitted showing the physical features existing inside the lease boundary and beyond (nearby) including the suggestion / recommendations made above incorporating other physical features.

- ix) A heap of sandy soil was also seen inside the lease area which is probably an unauthorized mining and the management of the same also need to be submitted.
- x) Few grown trees are seen inside the lease / mining area. A proposal be submitted as to restoration of the same without damaging the same.
- xi) The exploration data / bore well location in the lease area to be submitted to ascertain the geological formation / mineralized zone.

24. The SEAC in its meeting held on Dt: 22.01.2021 decided to take decision on the proposal after receipt of the information / document as recommended by the sub-Committee of SEAC.

25. The project proponent has furnished compliances as desired by the committee vide letter no. Nil dated 10.06.2021 and same has been verified by the SEAC as follows:

Sl. No.	Information Sought by SEAC	Compliance furnished by the proponent
a.	Slope study done and recommendation made thereof for OB / waste dump and the pit /quarry be endorsed /authenticated by	a) Approved Mining Plan for this M.L, proper benching pattern, stability of bench, dump management and stability of dump has been mentioned. (Copy Attached), b) In view of the observation of the SEAC(after site visit), the original slope stability study has been reviewed by Domain Expert M/S Gemtech Consultants Private Limited, Bhubaneswar, under the supervision of former Controller of

Sl. No.	Information Sought by SEAC	Compliance furnished by the proponent
	<p>a domain expert from an Institution of national repute as the soil type is sandy to avoid any threat to safety of the workmen.</p>	<p>Mines (Central Zone)(covering the state of Odisha under his Jurisdiction), INDIAN BUREAU OF MINES, MINISTRY OF MINES, Government Of India, NAGPUR, Maharashtra, India.</p> <p>c) After review, the Domain Experts have opined that in few terrace width may be increase from 3 m to 9 m in the mine pit and maintaining 6 m as the bench height there by, flattening the slope of the mine pit from 37 degree to around 30 degree. The experts have further suggested to go for one 3 m height bench on the surface layer of the mine to provide further strength to the mine pit slope stability. Considering this feature, the overall slope angle further reduces to 28 degree as shown in the diagram which is considered to be the best possible slope recommended by INDIAN BUREAU OF MINES. The copy of the report vetted & certified by the Domain Expert is attached as ANNEXURE -1.</p> <p>d) Similarly, the external waste dump which is likely to attain a maximum height of 8 to 10 mts. Shall be maintained with a overall slope angle of 37 degree which is considered to be stable because of layer wise compaction during phase wise dumping of Over Burden (OB).</p> <p>e) Various other remedial Measures and Environment protection measures for management of Mine Pit, OB dump, Surface/Rain water has also been suggested by the Experts.</p> <p>f) These changes shall be incorporated in the Modified Mining Plan before next phase review by Regional Controller of Mines, Indian Bureau of Mines, Ministry of Mines, Government of India Bhubaneswar Region.</p> <p>A Certified Copy of Slope Stability Study attached as Annexure 1.</p>
b.	<p>No nala (natural/perennial) was seen at a distance of 0.2 km (200 mtrs.) from the lessee boundary as stated by the lessee including</p>	<p>As per the land schedule an area of 0.24 acres of the land within lease area comes under Pani nala and Pani chua Kissam (Plot no. 305/P, Plot no 319) with an area of 0.138 Ha. Land schedule attached (Annexure 2).</p> <p>This nala connect to the main nala which is located at a distance of 200m from the lease area.</p> <p>The same has been reflected in the mining plan as the nala was located and identified in the revenue map. Revenue</p>

Sl. No.	Information Sought by SEAC	Compliance furnished by the proponent
	<p>their proposal for stone pitching on both the banks including plantation of small grasses to restore soil erosion and construction of check dam in the nala to store water to utilize in the process of washing be clarified and explained.</p>	<p>map attached for reference (Annexure 3).</p> <p>However, the Nala or Chua will not be disturbed by mining activity. We are committed to protect these natural passes as It exists today rather the Nala or Chua will be strengthened further by civil work if required for harvesting of water during rainy season only for the purpose of public use.</p>
c.	<p>Minutes of meeting of public hearing to be submitted and action proposed to be taken to mitigate the environmental issues raised in physical terms be submitted.</p>	<p>Details of the compliance to the issues raised by the public and commitment made by the project proponent has been given in Annexure-4.</p>
d.	<p>A "Seasonal Nala" has been shown in the "Reclamation Plan Map" passing from inside the lease area to beyond the lease boundary and connected to other seasonal nala in the South- East side of the lease boundary, which is not seen physically. So, a revised</p>	<p>As per the land schedule, an area of 0.24 acres of the land within lease area comes under Pani nala and Pani chua Kissam (Plot no. 30S/P, Plot no. 319) with an area of 0.138 Ha. Land schedule attached (Annexure 2).</p> <p>This nala connect to the main nala which is located at a distance of 200m from the lease area.</p> <p>The same has been reflected in the mining plan as the nala was located and identified in the revenue map. Revenue map attached for reference (Annexure 3).</p> <p>During the visit of the Hon'ble Sub-Committee; it was the dry season and the seasonal nala may not identified during physical visit.</p> <p>The mining maps including the reclamation plan has been approved by Indian Bureau of Mines.</p>

Sl. No.	Information Sought by SEAC	Compliance furnished by the proponent										
	Reclamation Plan Map (mining plan map) be re-submitted showing the physical features existing inside the lease Boundary and beyond (nearby) including the suggestion / recommendations made above incorporating other physical features.											
e.	A heap of sandy soil was also seen inside the lease area which is probably an unauthorized mining and the management of the same also need to be submitted.	Before the execution of the mining activity in the lease area the heap of sandy soil (waste) of 3350 cum. Will be removed by JCB and dumped in the demarcated place for dumping over an area of 0.168 Ha. Slope of the terrace will be maintained equivalent with angle of repose of the waste materials i.e around 37° 30'. The proposal given in approved mining plan (Attached as Annexure - 6)										
f.	Few grown trees are seen inside the lease / mining area. A proposal to be submitted as to restoration of the same without damaging the same.	The trees grown within the lease area are beyond the ultimate pit limit and no mining activity will be carried out in the area so there will be no damage to the existing trees due to the mining operation. The PP is committed to transplant the existing tree from the mining zone area to the non mining area within the lease.										
g.	The exploration data / bore well location in the lease area to be submitted to ascertain the geological formation / mineralized zone.	A total of 14 trial pits were proposed to be put in the M.L area for proving the occurrence of Cat's Eye as well as the barrenness of the dumping ground in plan period as detailed below: <table border="1" data-bbox="708 1608 1315 1733"> <thead> <tr> <th data-bbox="708 1608 798 1733">Year</th> <th data-bbox="798 1608 877 1733">No. of bore trial</th> <th data-bbox="877 1608 1034 1733">Dimension</th> <th data-bbox="1034 1608 1193 1733">Rock excavation (m³)</th> <th data-bbox="1193 1608 1315 1733">Remark</th> </tr> </thead> <tbody> <tr> <td> </td> <td> </td> <td> </td> <td> </td> <td> </td> </tr> </tbody> </table>	Year	No. of bore trial	Dimension	Rock excavation (m ³)	Remark					
Year	No. of bore trial	Dimension	Rock excavation (m ³)	Remark								

Sl. No.	Information Sought by SEAC	Compliance furnished by the proponent				
			pits			
		1 st	4	2.5m x 2.5m x 5m	125	Cat's Eye proving
			2	3m x3m x 8m	72	Barren proving
		2 nd	4	2.5m x 2.5m x 5m	125	Cat's Eye proving
		3 rd	4	2.5m x 2.5m x 5m	125	-do-
		Total	14	---	447	---
The geological map showing the gemstone bearing units has been given in Annexure 5 .						

Considering the information furnished by the proponent and the presentation made by the consultant, **M/s Kalyani Laboratories Pvt. Ltd. Plot no.-78/944, Pahala, Bhubaneswar -752101** along with the project proponent, the SEAC recommended for grant of Environmental Clearance with stipulated conditions as per **Annexure – C**.

ITEM NO.9

PROPOSAL OF ENVIRONMENTAL CLEARANCE FOR DALPAHAR IRON AND MANGANESE ORE MINE OF SRI D.C JAIN FOR ENHANCEMENT IN PRODUCTION CAPACITY OF IRON ORE FROM 708 TPA TO 0.31 MTPA AND MANGANESE ORE 0.094MTPA OVER AN MINING LEASE AREA 89.961 HA IN VILLAGE - DALPAHAR, TAHASIL-BARBIL, DISTRICT - KEONJHAR OF M/S. DHARAM CHAND JAIN – EC.

1. The proposal is for environmental clearance for Dalpahar Iron and Manganese ore mine of Shri D.C. Jain for iron ore production upto 0.31 MTPA and Manganese Ore upto 0.094 MTPA along with crushing and screening plant over an area of 89.961 Ha in Baitarani R.F., Champua sub division, Barbil tehsil, Keonjhar district, Odisha.
2. This expansion project falls under category B as per MoEF&CC, Govt. of India notification in this respect, because of mining lease being less than 100 Ha.
3. SEAC recommended for specific ToR for this project and SEIAA, Odisha granted vide letter no. 20/SEIAA, SEIAA File No. 56548/32-MIMB1/09-2020 dated 15.01.2021 for the production to 0.31MTPA and Manganese up to 0.094 MTPA along with crushing & screening plant.

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4. The project proponent intimated that earlier ToR for production of Iron ore 0.31 MTPA and Manganese ore 0.094 MTPA along with crushing & screening plant was granted by MoEF&CC, Govt. of India vide letter dated 23rd September 2008. Public hearing for the proposal was held on 26th August 2011. Final EIA/EMP was submitted to MoEF&CC, Govt. of India vide letter dated 05.03.2012., and the proposal was appraised and recommended by the EAC in its meeting held on 20th to 22nd June 2012.
5. The project proponent has informed that the grant of EC was held for policy decision on NEERI carrying capacity study report. Post policy decision on the above, the project proponent appraised the proposal before MoEF&CC, Govt. of India vide its letter dated 19.01.2018, However, MoEF&CC, Govt. of India sought for additional information for compliance vide its letter dated 15th May 2018. The points raised by MoEF&CC, Govt. of India and its compliance submitted by Project Proponent to SEIAA/SEAC as its fall under category B (as per the MoEF&CC, Govt. of India EIA notification dated 14th August 2018 i.e. ≤ 100 Ha mining proposal are considered at respective SEIAA/SEAC) is as follows;
 - i. **Letter from the State Govt. of Odisha w.r.t. validity and veracity of the mine lease**
 - PP submitted that the mining lease of Dalpahar area i.e. 101.171 Ha comprises of 5 blocks i.e. Block No. A (89.961Ha), B1 (0.607 Ha), B2 (7.689 Ha), B3 (1.012 Ha) & C (1.902 Ha). The said blocks were granted over 101.171 Ha vide letter No. III (A)MG.101/846179 dated 05.06.1984 by Govt. of Orissa whereas each blocks as above were executed separately on 09.06.1986 for 20 years.
 - Further, State Govt. has declared all the blocks as lapsed u/s 4A of the MMDR Act, 1957. Whereas, Block A (89.961 Ha) got lapsed vide his letter No. 3882/III(A)AM-07/2012/SM. Bhubaneswar dated 01.05.2015.
 - Whereas, as per the direction of Hon'ble High Court of Orissa and further hearing at Steel & Mines dept., Govt. of Odisha passed the order vide no.6610/IV (AB) SM-11/2015/S&M, Bhubaneswar dated 06.09.2019 "xxxxxxx pleased to decided not to declare and record the Iron & Mn mining lease of Late D C Jain (power of attorney Sri Avin Jain) over an area of 89.961 Ha (Block-A) of Keonjhar district as lapsed" xxxxxxxxxxxx.
 - As per the section 8 A (3) of MMDR (Amendment) Act, 2015 the validity of the lease period of 89.961 Ha (Block A) is deemed to be extended up to 08.06.2036.

- Since the lease area is confined to 89.961 Ha, so as per the MoEF&CC notification dated 14th August 2018 Lessee has submitted the compliance to SEIAA/SEAC, Odisha.

ii. **Validity and veracity of Forest clearance dated 01.04.2015 from the FC division of the Ministry and status of deposition of NPV**

- Further, Project Proponent has informed that 16.464 Ha of broken up forest land (out of 101.171 Ha) was granted by MoEF&CC, Govt. of India vide letter F.No.8-103/2000-FC dated 14.09.2005 under Section-2 of FC Act earlier during the original lease period. Out of this broken up diverted area, 10.594Ha is coming within the Block – A, i.e. within 89.961Ha. NPV for the entire lease area i.e. Rs 9,49,99,569/-has been paid. The Project Proponent stated that, As per circular/guideline of MoEF&CC, Govt. of India vide letter No. 11-51/2015-FC, dated. 01.04.2015 the above forest clearance is valid till the expiry of lease i.e., up to 8th June 2036.
- For the balance forest area, general approval accorded under section 2(iii), FC act 1980 as per the MoEF&CC, Govt. of India guidelines dated 1st April 2015.
- Further, for the balance forest area, Forest diversion proposal applied under section 2(ii), FC act 1980 which is under process at MoEF&CC, Govt. of India.
- In recent past EAC/SEAC has recommended the Environmental Clearances to the project having part forest clearance under section 2 (ii) of FC Act, 1980 as per the above guideline. (Ex- Roida II iron ore Mines of K.N. Ram)

iii. **Validity of Mining Plan/Scheme**

Project Proponent submitted that, Review of Mining plan with progressive mine closure plan (PMCP) over an area **of 89.961 Ha (block A)** got approved by IBM vide letter No. RMP/A/53-ORI/BHU/2019-20 dated 01.04.2020.

6. With the above compliance, the project proponent has submitted the revised EIA/EMP with latest baseline data (October 2019-December 2019) along with compliance of NEERI recommendations at SEIAA and presented the proposal before SEAC on 13th November 2020.

7. Further, the validity of the Public Hearing (held on 26th August 2011) is concerned; since it is not older than 3 years at the time of submission of proposal (5th March 2012) for grant of Environmental Clearance as per OM dated 29th August 2017.
8. There are instances of the MoEF&CC, Govt. of India EAC exempting public hearing as it was already conducted earlier (Si. No. 2.44 of EAC minutes held on 15th – 16th November 2018). Besides, the Expert Appraisal Committee, Non-Coal Mining in its Minutes of the Meeting held during April 20-21 2020 mentioned the criteria for exemption of Public Hearing i.e.
 - i. The project must have undergone a public hearing under EIA Notification, as part of its appraisal earlier for the same capacity and ML area, during life of the project;
 - ii. The present proposal shall be with 'No increase in the production capacity and Mining lease;' and
 - iii. No change in mining namely, mining method, mining plan, mineral transportation, water requirement, reclamation plan.
 - iv. The Proposal shall not be a violation case.
9. The present proposal has undergone public hearing under EIA notification 2006 for 0.31 MTPA iron ore and 0.094 MTPA Manganese Ore along with crushing and screening plant. There is no increase in production capacity, lease area, mining method, plan for mining, transportation, water requirement. Also the proposal is not a violation case as certified by the DDM, Joda vide its letter dated 12.11.2020.
10. Further, inline to the above the clarifications on requirement of public hearing has brought out by MoEF&CC, Govt. of India vide OM dated 12th November 2020.
11. Project Proponent submitted that, in pursuance of the Supreme Court order dated 02.08.2017 in CWP no. 114/2014, there is no such demand raised by the DDM, Joda as there was no excess production and the mining operation has been discontinued since August 1995 vide its letter dated 12th November 2020. The details of the past production duly authenticated by DDM, Joda vide its letter dated 05.11.2020 has been furnished.
12. While considering the proposal SEAC recommended for specific ToR for this project and SEIAA, Odisha granted specific ToRs vide letter no. 20/SEIAA, SEIAA File No. 56548/32-MIMB1/09-2020 dated 15.01.2021 for the production to 0.31MTPA and Manganese up to 0.094 MTPA along with crushing & screening plant

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13. Project Proponent submitted that, the mine lease area is within latitude 21° 58' 05" - 21° 58' 43" N and Longitude 85° 23' 30.47" - 85° 23' 33.77" E. The highest contour within the lease hold area is 723m MSL, which is along the south eastern portion of the lease area while the lowest contour being 553m a MSL in the SW corner of the lease area. NH 215 at a distance of 6.9 kms (W) from the project area. Jaroli railway station exists at 2.7 Km (SE), Banspani is at 3.5KM (NE). Water bodies like Baitarani River is flowing at 4.6 kms from the lease area in eastern side, Suna Nadi – 0.8km (NW), Dalko Nala-3.0 (NE). Entire lease area lies in Baitarani R.F. Other forests area like Sidhamath R.F –West is at 2.1 Kms and Chamakpur R.F is at 5.1 (E). Karo-Karampada elephant corridor is located at about 16 km from the mine lease area.
14. Project Proponent submitted that, Elephant, Sloth bear and Monitor Lizard are placed under Schedule-I as per Wild Life (Protection) Act, 1972 is found in the Study area. Site specific conservation plan has been prepared and approved by the PCCF (WL) and Chief Wildlife Warden, Odisha vide Memo No. 9070/1WL (C) SSP-44/2014, dated 27th November 2014 with an estimated cost of Rs. 250.254 lakhs which includes Rs.64.374 Lakhs for activities within the project area and Rs.185.520 Lakhs for activities within the project impact area.
15. Project Proponent submitted that, as per the approved mining plan geological resource estimated as 3.80 Million Ton of iron ore & 0.420 Million Ton Mn. Mining method will be other than Fully mechanized. One 100 TPH mobile crushing and one 200 TPH mobile screening unit will be used for sizing of minerals. It has been calculated that a quantity of 553012.8 cum of waste shall be generated from both iron and manganese ore zone during conceptual period. All the waste shall be utilized for back filling at the end of the mine life. Life of the mine is 12 years as per the present exploration data. Further likely to increase after detail exploration.
16. Project Proponent submitted that, height & width of the bench will be kept at 10m & more than 10m for iron ore zone. Height & width of the bench will be kept at 6 & 10m and 9 & more than 10m in manganese ore zone. Ultimate pit slope will be 37°. NOC from CGWA for 95 m3/day is under process. Manpower is 82 persons on direct basis and more than 100 people on indirect basis. Project cost is Rs 49 crores. Further, PP mentioned that in the post mining stage, out of the total mined out area of 81.648Ha, an area of 4.79Ha will be reclaimed by means of backfilling and plantation. Plantation on dead benches will be carried out over remaining mining area. A total of 89.096Ha (99.03% of the total lease area) will be covered under vegetation in the post mining stage.

17. Project Proponent informed that, the entire mining lease area falls within the Baitarani Reserve Forest. There is no habitation inside the mine lease area. Hence the question of rehabilitation and resettlement does not arise.
18. Project Proponent also submitted the Baseline data for revised EIA/EMP carried out systematically and meticulously as per relevant IS codes, CPCB & MoEF&CC guidelines during Post monsoon Season (Oct 2019 – Dec 2019). The existing Ambient Air Quality levels for PM₁₀, PM_{2.5}, SO₂ and NO₂ are within the prescribed limits. CO values in the all locations were found to be below detectable limit (DL – 1144 µg/m³). Silica values in the study area are found to be below detectable limit (Detection limit – 0.05mg/m³). The water quality of the collected ground water samples were found to be within the prescribed permissible limits of IS: 10500:2012 Norms for Drinking in the absence of an alternative source. Noise measurements were carried out continuously for a day once in a Season at 8 locations. While comparing with the MoEF&CC Norms, the monitored ambient noise levels are within the limit values. Soil samples were collected from 5 locations to assess the soil quality in and around the mines. Results of the soil samples show that, in the buffer zone, the pH values were ranging between 5.96 – 6.54 and Electrical Conductivity values were ranging between 13.8 – 39.7µmhos/cm. Soils are clay type. In the core zone, pH values were 6.23 and Electrical Conductivity values were 15.2 µmhos/cm. Soils are generally Clay Loam type.
19. Project Proponent submitted that, the resultant added concentrations with baseline figures for PM₁₀, PM_{2.5}, after adopting necessary mitigative measures are within the prescribed NAAQ limits of 100, 60 µg/m³ for PM₁₀, PM_{2.5}, respectively. For preservation of environment in this mine strict enforcement of management schemes and regular air quality monitoring will be undertaken for taking corrective actions, as needed. By adopting the effective implementation of all the mitigative measures, no adverse impact on Air quality due to the enhanced mining operation in this lease area is expected.
20. Project Proponent submitted that, ground water table is at a depth of more than 500 m RL and mining will be carried out for a maximum 520mRL. Hence, there will be no intersection of ground water table. The rain water falling in the quarry will be harvested in the sump at the lowest level of the quarry. This sump will act as a settling pond to prevent solids escaping along with discharge, before outlet etc.
21. Project Proponent submitted that, ` 70 lakh has been allocated for various social welfare activities under their CER and CSR programmes for the upcoming 5 years. These activities will begin once the mining operation resumes.

22. Project Proponent also submitted the public hearing point wise compliance with budgetary provision. They have committed to comply the all once mine will come into operation.
23. Project Proponent committed to work towards 'Zero Harm' from their mining activities and carry out Health Risk Assessment (HRA) for identification of workplace hazards and assess their potential risks to health and determine appropriate control measures to protect the health and wellbeing of workers and nearby community. In order to prevent from the Health Hazard, various protection measures like adopting dust sprinkling, development of plantation / green belt, etc. has been proposed to reduce pollution, providing safety / PPE to workers, conducting IME, PME, covering various statutory medical examination, conducting regular awareness training programme, etc., will be provided. A total budgetary provision of ` 4 lakhs per annum under capital cost and ` 2 lakhs is allocated under recurring cost towards Occupational health and Safety Budget.
24. Project Proponent submitted that, a financial provision of ` 134 Lakhs is made for various environmental control measures proposed in this report under capital cost and ` 55.3 Lakhs per annum is allocated as the recurring cost.
25. Lessee has undertaken that "they will follow the guidelines/policy decision by the MoEF&CC, Govt. of India and State Govt. Odisha in regard to the implementation of the recommendations given by NEERI in its carrying capacity study report in respect to Odisha".
26. The project proponent along with their consultant **M/s Creative Engineers and Consultants, Chennai** made a detailed presentation on the proposal before the SEAC
27. The SEAC in its meeting held on Dt: 28.04.2021 decided to take decision on the proposal after receipt of the certain information / documents from the proponent.
28. The project proponent has furnished compliances as desired by the committee vide letter no. Nil dated 07.06.2021 and same has been verified by the SEAC as follows:

Sl. No.	Information Sought by SEAC	Compliance furnished by the proponent
a.	As per form 2 (application for prior EC), Sl no. 9 (2), Product capacity for manganese, it is indicated as quantity from 0 to 94000 TPA (total quantity), Thus, it is a new mine for which prior EC has been sought. As per NEERI recommendation (point	Dalpahar Iron & Mn mines over 89.961 Ha was granted on 05.06.1984 and executed on 09.06.1986. The mining operation started in 01.04.93 with statutory clearances at that time. The production was done only for 3 years i.e. from 1993 to 1995. During this 3 year period highest production achieved in the year 1993 i.e.

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Sl. No.	Information Sought by SEAC	Compliance furnished by the proponent
	<p>no. 2), either opening of New Manganese Ore mines or expansion is allowed only when actual production of about 80% is achieved. Therefore, the following need to be complied:</p> <p>a) Whether production of about 80% is achieved with details of capacity (s) and corresponding production be submitted duly authenticated by Department of Steel and Mines, Govt. of Odisha or appropriate Govt. authority for that matter.</p>	<p>708.5 metric Ton only. Though the mine is for both iron & Mn but there was no such production of Manganese during this production period. The certified production figure by Joint Director of Mines, Joda, Dept. of Steel & Mines, Govt. of Odisha is attached as Annexure-1A. The mine is not in operation since August 1995 for want of statutory clearances.</p> <p>The Lessee has applied for Environmental Clearance for the production of 0.31 MTPA iron ore & 94000 TPA Manganese ore in the year 2007 to the MoEF&CC, Gol and the same is further processed at SEIAA/SEAC, Odisha till date. Environmental Clearance is yet to be granted by SEIAA, Odisha.</p> <p>As per the NEERI recommendation point no.2 is concerned; neither the said mine is new one, nor the proposed Mn production is expansion case. During the NEERI study the said mine (si. No 12) is considered under "list of iron & Mn mining lease having No Environmental Clearance". The extract of the said page is attached as Annexure-1B</p>
b.	<p>Since, PM10 and PM2.5 and noise level are on the border line w.r.t prescribed limit and norm, mitigation measures in absolute form to arrest the same be submitted. Predictive models for PM10 and PM2.5 for next 5 years shall be submitted.</p>	<p>Mitigation measures towards control of PM10, PM2.5 and Noise and the predictive Models for PM10 and PM2.5 for next 5 years is attached as Annexures -2</p>
c.	<p>Year wise generation of mineral, mineral waste and OB with composition be submitted along with stack area and height be indicated in matrix form. Layout and area for dump also be submitted.</p>	<p>Year wise generation of mineral, mineral waste and Overburden with composition with area for stacking & height of the stack is attached as Annexure-3A. Map showing dump area is attached as Annexure-3B.</p>
d.	<p>Since, water table is 6m below ground level and 4.5m below ground level during pre and post monsoon respectively, if intersection with ground water table happens, dewatering management and reuse of the</p>	<p>The lease area is a hilly terrain. The highest contour within the lease hold area is 723m aMSL, which is along the south eastern portion of the lease area while the lowest contour being 553m aMSL in the SW corner of the lease area</p> <p>As per the approved Mining Plan the ultimate pit</p>

Sl. No.	Information Sought by SEAC	Compliance furnished by the proponent
	same including permission of CGWA as necessary be submitted along with disaster management thereof. An undertaking to this effect shall also be submitted.	<p>depth will be 520 mRL. Further as per the hydrogeology study Ground water table is at a depth of 500m RL. Hence there will no such intersection of ground water table.</p> <p>The water table mentioned in the EIA/EMP report i.e. 6m bgl and 4.5m bgl during pre & post monsoon are in village Tonto and Bhadrasahi which are more than 7.0 km from the lease area. The readings were taken from the open well and its generally perched water table.</p> <p>After detail exploration in future if there will be any chance of work below ground water table then detail hydrology study with dewatering management & disaster management will be prepared and permission from CGWA will be taken. The same will be intimated to the Authority.</p> <p>An undertaking in this regard is attached as Annexure-4.</p>
e.	Provision of solar power (percentage wise) along with its detail plan be submitted.	After opening of the lease, for mining and allied activities 500 KVA (400 KW) electricity will be required. We have planned to use the solar power for lighting of office area which will be 20% of total power consumption. The detail plan is attached as Annexure-5
f.	Plan for water harvesting considering the maximum rainfall and its reuse be submitted with detail design of its structure along with a) Comprehensive water management b) Pre-monsoon and post-monsoon water balance	Water harvesting details with pre & post monsoon water balance is attached as Annexure-6.
g.	Details of silt and tailing Management with Zero Liquid Discharge.	There will be no such tailing generated from the mine. Only mines run-off generated during the rainy season will be settled through surface run-off management structures. The details are attached as Annexure-7.
h.	To submit the network with dimensions of concrete cement of internal roads inside the mining lease area and the haulage road from / to of entry	At the start of the mining operation the 300m internal cement concrete road from the exit gate towards the mine will be developed as per the NEERI condition. Rs.10 Lakhs is allocated under capital cost of EMP towards construction of

Sl. No.	Information Sought by SEAC	Compliance furnished by the proponent
	and exit of the mines till the intersecting point at public road (as required in terms of NEERI recommendations).	cement concrete road. Further the haulage road (black topped) which passes near the mines connect the State Express way at Jaribahal chawk Public railway sidings like Jaroli, Banspani & Nayagarh are well connected by the State Express way. The State Expressway is further connected to NH-215 at Joda. The haulage road will be further augmented with help of local & district administrative. The detail road network with dimension is attached as Annexure-8 .
i.	Parking plaza at entry and exit point of the mines with basic amenities including the no. of vehicles that it can accommodate be submitted.	Parking plaza will be developed inside or near to the mine lease area at the time of start of Mining operation with basic amenities like Rest room, Toilet facility, Drinking water facility etc. At one time 60-70 vehicles can accommodate inside the parking plaza. Rs.7.0 Lakhs is allocated under capital cost of EMP towards construction of parking plaza.
j.	Addl. Air monitoring stations at entry, exit point and the haulage road be provisioned and detail be submitted.	As mentioned in the EIA/EMP there are 8 ambient AAQ monitoring stations i.e. one inside lease area and seven in the village area. Apart from this we will put additional AAQ monitoring station at entry & exit gate and haul road towards monitoring of fugitive emission. Further as per the NEERI condition one online AAQ monitoring station will be established inside the mine lease area.
k.	Detail provision with plan and SoP be submitted for water sprinkling inside the mines and outside the haulage road including regular vaccum cleaning and 'Zero Dust Supression' system to completely mitigate and arrest fugitive dust emission.	Fixed sprinkling system will be installed inside the permanent haul road of mine lease area. Apart from this mobile water sprinkling will be done in the face of the working quarry. Further mobile water sprinkling will be done outside the haulage road. Vacuum cleaning will be adopted as per the instruction from Authorities at the time of start of mining operation. Rs.20 Lakhs is allocated for vaccum cleaner under capital cost of EMP. Further we will abide by the directions from Authorities if any. The details with SoP is attached as Annexure-9 .
l.	Provision with detail design STP be made and submitted to address the permanent, contractual and floating population.	STP will be provided at camp area where permanent & contractual employee will be stayed. The detail design of the STP is attached as Annexure-10 .
m.	As raised during public hearing, expected estimation of tree	The expected number of trees to be cut and necessary plantation programme is attached as

Sl. No.	Information Sought by SEAC	Compliance furnished by the proponent
	cutting likely to happen and necessary plantation programme be submitted.	Annexure-11.
n.	Periodical medical check-up, at least once in six months be done for employees as well as neighboring villages through an occupational health expert.	Periodical medical check-up of employees comprising tests like Chest X rays, Vision testing (Far & Near vision, color vision and any other ocular defect), ECG, examination of blood, Blood Sugar Fasting, Serum Cholesterol, Serum Creatinine, SGOT and SGPT, Urine (Routine and Microscopic) will done by certified occupational health Doctor. Further, six monthly health camp (health check-up by Doctors & free medicine) will be done at neighbouring villages like Dalpahar, Bichhakundi, Jalahari etc.
o.	Progressive mine closure plan shall be furnished.	The progressive mine closure plan is attached as Annexure-12.
p.	Location of DG sets in a map shall be submitted.	The DG set will be located near the office area which is outside the up & down wind flow direction. Stack height will be maintained as per CPCB norm. The map showing the DG set is attached as Annexure-13.
q.	Detailed status of Stage-I and Stage-II Forest Clearance.	The detail status of Stage-I and Stage-II forest clearance is attached as Annexure-14. An area 16.464Ha of broken up forest land (out of 101.171 Ha) was granted by MoEF vide letter F.No.8-103/2000 -FC dated 14.09.2005 under Section-2 of FC Act earlier during the original lease period. NPV for the entire lease area i.e. i.e. Rs 9,49,99,569/- already paid out of this broken up diverted area, 10.594 Ha is coming within the Block – A, i.e. within 89.961Ha. Further, As per circular/guideline of MoEF&CC, Govt. of India vide letter No.11-51/2015-FC, dated. 01.04.2015 the above forest clearance is valid till the expiry of lease i.e., up to 8th June 2036. For the balance forest area, general approval accorded under section 2(iii), FC act 1980 as per the MoEF&CC, Govt. of India guidelines dated 1st April 2015. Further, for the balance forest area, Forest diversion proposal applied under section 2(ii), FC act 1980 which is under process at MoEF&CC, Govt. of India. The

Sl. No.	Information Sought by SEAC	Compliance furnished by the proponent
		stage-II clearance letter and NPV details is attached below.
r.	Detailed status of payment of balance amount for wildlife conservation plan.	<p>Site specific wildlife conservation plan has been prepared and approved by the PCCF (WL) and Chief Wildlife Warden, Odisha vide Memo No. 9070/1WL (C) SSP-44/2014, dated 27th November 2014 with an estimated cost of Rs. 250.254 lakhs which includes Rs.64.374 Lakhs for activities within the project area and Rs.185.520 Lakhs for activities within the project impact area.</p> <p>Further, updated Site Specific Conservation plan (with present data and revised wage rate) has been submitted at DFO, Keonjhar which is under process towards approval. The revised proposed cost for implementation of this plan is Rs. 308.634 lakhs out of which the lessee will take up the activities for Rs.91.614 lakhs, and the Forest Department will take up various activities for Rs.217.02 lakhs. The additional cost is Rs 58.38 Lakhs. The additional cost to be deposited at authority is Rs 31.5 Lakhs. The above amount will be deposited after the demand raised by the PCCF, Wildlife Warden, Odisha.</p>

Considering the information furnished and the presentation made by the consultant, **M/s Creative Engineers and Consultants, Chennai** along with the project proponent, the SEAC recommended for grant of Environmental Clearance with stipulated conditions as per **Annexure – D** and following additional condition.

- a) The Mining activity shall be restricted to 10.594 Ha (diverted land) for which forest clearance has been obtained. Mining activity over the rest of the lease area shall be taken only after obtaining forest clearance for the same.

ITEM NO. 10

PROPOSAL FOR ENVIRONMENTAL CLEARANCE FOR SAND MINING WITH PRODUCTION CAPACITY 94120 CUM/ANNUM OVER BAIDESWAR SAND GHAT (ML AREA 13.355 HA), VILLAGE PATUGADADHARPUR, TAHSIL BANKI, CUTTACK, ODISHA BY MINAKSHI PRADHAN, AT SAMANTRAPUR, DIST – KHURDA, ODISHA – EC

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1. The proposal is for environmental clearance for Sand Mining with production capacity 94120 Cum/Annum over Baidesar Sand Ghat (ML area 13.355 ha), village Patugadadharpur, Tahsil Banki, Cuttack, Odisha by Minakshi Pradhan, at Samantrapur, Dist – Khurda, Odisha.
2. As per EIA Notification dated 14.09.06 and its subsequent amendments S.O.141 (E) on dated 15.1.2016, the project falls under Category “B” under item No-1(a)-‘Mining of Minerals’.
3. The proposed project is for Baidesar Sand Ghat located in river Mahandi over an area of 33.00Acres (13.355 ha) in village Patugadadharpur, Tahasil-Banki, District Cuttack, Odisha of Minakshi Pradhan.
4. The lease Baidesar Sand Ghat has been granted by the Tahsildar cum-Competent Authority, Banki Odisha to Minakshi Pradhan, W/o Jagannath Pradhan at Samantarapur, PS/Dist - Khurda being the successful bidder vide letter no. 56 dated 06.01.2020 for a period of 5-Years.
5. The mining plan was approved in name of Tahsildar, Banki as per OMMC rule 2016 before the lease was taken to auction after completion of auction as per letter from Tahsildar, Banki vide no-1758, dtd: 29.0.2020 environment clearance and all other documents to be issued in name of Minakshi Pradhan.
6. The TOR was issued for this project vide letter No.8698/SEIAA on dated 14.08.2020.
7. The Public Hearing was held on 07.12.2020(11.30 am) at the Gram Panchayat Office, Baidesar in Cuttack District, Odisha.
8. Location and connectivity - The lease area is in Khata no-1, Plot no-3(P) and bounded by Latitude 20°21'33.70" N to 20°21'43.20"N & Longitude 85°23'31.30" E to 85°23'54.70" E. The quarry is well connected to District head quarter of Cuttack district. The nearest Railway Station is Raj Athagarh at a distance of 36 Km. The nearest airport is Bhubaneswar at a distance of 55 Km. All types of infrastructure facilities such as water, electricity, medical, education etc. are available at Nua Barbara within a distance of 3 Km.
9. As per the replenishment study Amount of sand deposited within the quarry area is 105130.56 T & proposed production is 150592 tonnes i.e. approx. 69.81% replenishment can be done. Therefore the areas for sand exploitation within the lease area is been divided into two zones, one for First-Third-Fifth years' mining and the other for Second-Fourth years' mining. Overall, after the planned period.
10. The Geological Reserve is 212440 cum and Mineable Reserve is 188240 cum. Total production within plan period is 470600 cum and 94120 cum per annum. Opencast manual method will be adopted for sand mining. Excavation & loading of sand into the dumpers and trucks/tractors will be done by manual means.

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11. Water Requirement – The total water requirement will be approx, 1.0 KLD for different purposes like Domestic, Dust suppression, plantation purposes.
12. Power Requirement - No use of electric power as the operation will be done in day time. However solar lights will be used for day to day living purposes.
13. Employment Potential: Total number of employee will be around 133 which includes skilled, semi-skilled & unskilled category in the mine.
14. The baseline data was collected for the pre-monsoon season i.e. Dec-19 to February 2020 in the 10 km study area results.
15. The value for PM2.5 was observed, in the range of 8.4-24.8 µg/m3. The value for PM10 was observed, in the range of 40.1 - 62.7µg/m3. The value for SO2 was observed, in the range of 4.0-19.2 µg/m3. All the villages have observed value well under the prescribed limit. The value for NOX was observed, in the range of 8.2- 19.4- µg/m3. All the villages have observed value well under the prescribed limit.
16. Total 8 Groundwater samples and 7 surface water samples were analyzed and concluded that: The ground water from all sources remains suitable for domestic purposes as all the constituents are within the limits prescribed by drinking water standards by Indian Standards IS: 10500. From the Surface water analysis it is evident that most of the parameters of the samples comply with IS-2296: 1992 Category “C” standards of CPCB, indicating their suitability for Drinking water source after conventional treatment and disinfection.
17. Soil Samples collected from identified locations indicate the soil is Loamy type and the pH value ranging from 6.28 to 6.70 which indicating that soil samples is neutral in nature.
18. The project cost is Rs 2.90 Crore. 21.3 lakh has been earmarked towards EMP cost including the compliance to Public Hearing observation. CSR Budget is Rs 6 Lacs.
19. The Environment consultant **M/s Ardra Consulting Services Pvt. Ltd., Bhubaneswar** along with the proponent has made a presentation on the proposal before the Committee.
20. The SEAC in its meeting held on Dt:28.04.2021 decided to take decision on the proposal after receipt of the following information / documents from the proponent followed by site visit of sub-committee of SEAC.
21. The project proponent has furnished compliances as desired by the committee and same has been verified as follows:

Sl. No.	Information Sought by SEAC	Compliance furnished by the proponent
a.	Width of the said	The maximum width of the river is 3000 meters (3.0 km) and width of the water

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Sl. No.	Information Sought by SEAC	Compliance furnished by the proponent												
	river and the distance of the river bank from the lease boundary be indicated vis-à-vis the safe distance as per the law / rules.	<p>area is 1800 meters (1.8.km) during rainy season. The distance of the river bank from the lease boundary is 640 meters (0.64 m) and quarrying operation will be carried out within the leased area without violating any law or obstructing any natural flow, No mining operation shall be carried out in the safety zone so worked out.</p> <p>Google image showing width of the river, width of water body and distance of lease area from the water body is attached as Annexure-1.</p>												
b.	To indicate the approx. river bank width and the stretch on both sides of the ramp (both entry and exit) of the vehicles and show through a layout with dimension.	River bank width is 7.5 meters and exit ramp slope is 35 degree, width 12 meters and length is 7 meter Map showing approx. river bank width and the stretch on both sides of the ramp (both entry and exit) of the vehicles attached as Annexure-2 .												
c.	To explore and confirm the possibility of an artificial embankment with stone patching and plantation to arrest the erosion of the river bank	<p>There is no artificial embankment available for stone patching. However plantation shall be carried out at strategic areas to arrest the erosion of river bank as per below mentioned plan. Plantation shall be carried out within 2 years of start of operation and</p> <table border="1" data-bbox="517 1509 1469 1709"> <thead> <tr> <th data-bbox="517 1509 638 1709">Year</th> <th data-bbox="638 1509 783 1709">Nos of sappling to be</th> <th data-bbox="783 1509 900 1709">Name of Species</th> <th data-bbox="900 1509 1050 1709">Budget in RS</th> <th data-bbox="1050 1509 1294 1709">Place</th> <th data-bbox="1294 1509 1469 1709">Remark</th> </tr> </thead> <tbody> <tr> <td> </td> <td> </td> <td> </td> <td> </td> <td> </td> <td> </td> </tr> </tbody> </table>	Year	Nos of sappling to be	Name of Species	Budget in RS	Place	Remark						
Year	Nos of sappling to be	Name of Species	Budget in RS	Place	Remark									

Sl. No.	Information Sought by SEAC	Compliance furnished by the proponent				
	and the time frame for the same. This is done elsewhere on the river bank.		Planted			
		1st year	1250		1,00,000/-	Haul Road Side(500 nos), Safety zone at Southern side(500nos), New Plantation
		2nd Year	1250		1,00,000/-	<ul style="list-style-type: none"> • Haul Road Side(500nos), • Safety zone at Southern side(500nos), • Baideswar College (250nos) New Plantation
		3rd year	Gap plantation		25,000/-	
		4th Year	Gap plantation		25,000/-	Maintenance
		5thYear	Gap plantation		25,000/-	Maintenance
		Total	2500		2,75,000/-	Maintenance
d.	Indicate different alternate possible haulage road (s) vis-à-vis the location of the school and the temple showing	<p>Transportation shall be carried over the approach road connecting Baideswar village to Banki towards south-west side of the lease and the nearest school (Baideswar Nodal School) is at 1.5 km towards North West direction , hence there will be no transportation in the road nearby school. Another school (Baideswar UP school) is at 2.35 km from the lease area towards South-West direction but transportation vehicle will be diverted to main road from Mini stadium to avoid school route. The Map showing transportation route and locations of the schools is attached as Annexure-3 for reference.</p> <p>However project proponent undertakes that, there will be transportation during</p>				

Sl. No.	Information Sought by SEAC	Compliance furnished by the proponent
	on a layout map (sketch) with dimension and the reason for choosing the proposed haulage road.	beginning and closing of schools. (Undertaking attached as Annexure-4)
e.	Confirmation for perennial repair and maintenance of the approach road and the haulage road under the supervision of the appropriate Govt. authority.	The haul road shall be repaired and maintained by the internal team of Proponent. The proponent also undertakes that project shall contribute for repair and maintenance of approach road under CSR scheme apart from the contribution towards DMF as per advised of appropriate Govt. authority.(undertaking regarding same attached as Annexure-5)
f.	Confirmation for required plantation on the river bank / embankment approach road and haulage road with required nos. and species during first two years and maintenance of the same in next three years as	There is no artificial embankment available for stone patching. However plantation shall be carried out at strategic areas to arrest the erosion of river bank as per below mentioned plan. Plantation shall be carried out within 2 years of start of operation and maintenance of the same in next three years as per the advice of the local state forest authority. Undertaking regarding same attached as Annexure-6 .

Sl. No.	Information Sought by SEAC	Compliance furnished by the proponent
	per the advice of the local state forest authority.	
g.	Confirmation for non-operation of plying of vehicles (empty as well carrying sand) at least one hour before and one hour after of the school opening, closing and during recreation hours based on the instruction of the local state administration.	It is envisaged that, there will be no intervention of transport route and road connecting schools . However, an undertaking regarding non-operation of plying of vehicles (empty as well carrying sand) at least one hour before and one hour after of the school opening, closing and during recreation hours based on the instruction of the local state administration is given by the proponent(copy attached as Annexure-4).
h.	To carry out a traffic density study at haulage road and meeting point of haulage road with public road by a domain expert and submit the same for operating the vehicles, their timing, requirement, frequency etc. for	Study on traffic density was carried out during the collection of baseline data and incorporated in the EIA report. The extract of same is attached as Annexure-7 .It is envisaged from the report that the existing haul road and public road is suitable for decongestion.

Sl. No.	Information Sought by SEAC	Compliance furnished by the proponent																									
	decongestion by a domain expert as per the findings and recommendations thereof.																										
i.	Perennial arrangement of water sprinkling for dust suppression along the haulage road and approach road for dust suppression with SoP be submitted.	There is 650 meter of haul road present at the mines, Water sprinkling shall be carried out at same engaging mobile water tanker on 15 KL capacity. The approach road to be used for transportation is black topped road, hence frequency of water sprinkling will be less. The SOP for dust suppression has been developed and is attached as Annexure-8 .																									
j.	Details of three other neighboring sand mines.	<p>There is no mine within 500 meter from the project. The details of neighboring mines present with Banki tahasil are is given in below table</p> <table border="1"> <thead> <tr> <th>Sl No</th> <th>Name of Sand Mine</th> <th>Area of Lease</th> <th>Sl No</th> <th>Name of Sand Mine</th> </tr> </thead> <tbody> <tr> <td>1</td> <td>Anury Sand Ghata)</td> <td>50586</td> <td>2.37</td> <td>East</td> </tr> <tr> <td>2</td> <td>Ostia sand Ghat</td> <td>50586</td> <td>24.0</td> <td>South-East</td> </tr> <tr> <td>3</td> <td>Kotad war sand Ghata)</td> <td>202347</td> <td>9.98</td> <td>North-East</td> </tr> <tr> <td>4</td> <td>Tentulia sand Ghat</td> <td>50586</td> <td>14 km</td> <td>North- East</td> </tr> </tbody> </table>	Sl No	Name of Sand Mine	Area of Lease	Sl No	Name of Sand Mine	1	Anury Sand Ghata)	50586	2.37	East	2	Ostia sand Ghat	50586	24.0	South-East	3	Kotad war sand Ghata)	202347	9.98	North-East	4	Tentulia sand Ghat	50586	14 km	North- East
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Considering the information furnished and the presentation made by the consultant, **M/s Ardra Consulting Services Pvt. Ltd., Bhubaneswar** along with the project proponent, the SEAC recommended for grant of Environmental Clearance for the proposal valid upto lease period with stipulated conditions as per **Annexure – E** in addition to the following condition.

- a) The Sub-Committee of SEAC will visit the site within 6 months from the date of issue of Environmental Clearance to verify the progress of the project as well as conditions stipulated in

Environmental Clearance. However, either during the visit of the SEAC Sub-committee and/or at any time, if it is noticed that stipulated conditions on which Environmental Clearance is granted is not in place or found otherwise, steps will be taken for revocation of EC.

Secretary, SEAC


Chairman, SEAC

TERMS OF REFERENCE FOR CONDUCTING ENVIRONMENT IMPACT ASSESSMENT STUDY IN CLUSTER APPROACH AND INFORMATION TO BE INCLUDED IN THE EIA/EMP REPORT

1. Year-wise production details since 1994 should be given, clearly stating the highest production achieved in any one year prior to 1994. It may also be categorically informed whether there had been any increase in production after the EIA Notification 1994 came into force, w.r.t. the highest production achieved prior to 1994.
2. A copy of the document in support of the fact that the Proponent is the rightful lessee of the mine should be given.
3. Name and area of other mines within 500 meter of the lease area.
4. All documents including approved mine plan, EIA and Public Hearing should be compatible with one another in terms of the mine lease area, production levels, waste generation and its management, mining technology etc. and should be in the name of the lessee.
5. All corner coordinates of the mine lease area, superimposed on a High Resolution Imagery/Topo sheet, topographic sheet, geomorphology and geology of the 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).
6. Information should be provided in Survey of India Topo sheet in 1:50,000 scale indicating geological map of the area, geomorphology of land forms of the area, existing minerals and mining history of the area, important water bodies, streams and rivers and soil characteristics.
7. Details about the land proposed for mining activities should be given with information as to whether mining conforms to the land use policy of the State; land diversion for mining should have approval from State land use board or the concerned authority.
8. It should be clearly stated whether the proponent Company has a well laid down Environment Policy approved by its Board of Directors? If so, it may be spelt out in the EIA Report with description of the prescribed operating process/procedures to bring into focus any infringement/deviation/violation of the environmental or forest norms/conditions? The hierarchical system or administrative order of the Company to deal with the environmental issues and for ensuring compliance with the EC conditions may also be given. The 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, may also be detailed in the EIA Report.
9. Issues relating to Mine Safety, including subsidence study in case of underground mining and slope study in case of open cast mining, blasting study etc. should be detailed. The proposed safeguard measures in each case should also be provided.
10. The study area will comprise of 10 km zone around the mine lease from lease periphery and the data contained in the EIA such as waste generation etc. should be for the life of the mine / lease period.

11. 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.
12. Details of the land for any Over Burden Dumps outside the mine lease, such as extent of land area, distance from mine lease, its land use, R&R issues, if any, should be given. Proposal for Common Non-Mineralized Zone for dumping of rejects / OB.
13. A Certificate from the Competent Authority in the State Forest Department should be provided, confirming the involvement of forest land, if any, in the project area. In the event of any contrary claim by the Project Proponent regarding the status of forests, the site may be inspected by the State Forest Department along with the Regional Office of the Ministry to ascertain the status of forests, based on which, the Certificate in this regard as mentioned above be issued. In all such cases, it would be desirable for representative of the State Forest Department to assist the Expert Appraisal Committees.
14. Status of forestry clearance for the broken up area and virgin forestland involved in the Project including deposition of net present value (NPV) and compensatory afforestation (CA) should be indicated. A copy of the forestry clearance should also be furnished.
15. Implementation status of recognition of forest rights under the Scheduled Tribes and other Traditional Forest Dwellers (Recognition of Forest Rights) Act, 2006 should be indicated.
16. The vegetation in the RF / PF areas in the study area, with necessary details, should be given.
17. A study shall be got done to ascertain the impact of the Mining Project on wildlife of the study area and details furnished. Impact of the project on the wildlife in the surrounding and any other protected area and accordingly, detailed mitigative measures required, should be worked out with cost implications and submitted.
18. Location of National Parks, Sanctuaries, Biosphere Reserves, Wildlife Corridors, Ramsar site Tiger/Elephant Reserves/(existing as well as proposed), if any, within 10 km of the mine lease should be clearly indicated, supported by a location map duly authenticated by Chief Wildlife Warden. Necessary clearance, as may be applicable to such projects due to proximity of the ecologically sensitive areas as mentioned above, should be obtained from the Standing Committee of National Board of Wildlife and copy furnished.
19. A detailed biological study of the study area [core zone and buffer zone (10 km radius of the periphery of the mine lease)] shall be carried out. Details of flora and fauna, endangered, endemic and RET Species duly authenticated, separately for core and buffer zone should be furnished based on such primary field survey, clearly indicating the Schedule of the fauna present. In case of any scheduled-I fauna found in the study area, the necessary plan along with budgetary provisions for their conservation should

be prepared in consultation with State Forest and Wildlife Department and details furnished. Necessary allocation of funds for implementing the same should be made as part of the project cost.

20. Proximity to Areas declared as 'Critically Polluted' or the Project areas likely to come under the 'Aravali Range', (attracting court restrictions for mining operations), should also be indicated and where so required, clearance certifications from the prescribed Authorities, such as the SPCB or State Mining Dept. Should be secured and furnished to the effect that the proposed mining activities could be considered.
21. Similarly, for coastal Projects, A CRZ map duly authenticated by one of the authorized agencies demarcating LTL, HTL, CRZ area, location of the mine lease w.r.t CRZ, coastal features such as mangroves, if any, should be furnished. (Note: The Mining Projects falling under CRZ would also need to obtain approval of the concerned Coastal Zone Management Authority).
22. R&R Plan/compensation details for the Project Affected People (PAP) should be furnished. While preparing the R&R Plan, the relevant State/National Rehabilitation & Resettlement Policy should be kept in view. In respect of SCs /STs and other weaker sections of the society in the study area, a need based sample survey, family-wise, should be undertaken to assess their requirements, and action programmes prepared and submitted accordingly, integrating the sectoral programmes of line departments of the State Government. It may be clearly brought out whether the village(s) located in the mine lease area will be shifted or not. The issues relating to shifting of village(s) including their R&R and socio-economic aspects should be discussed in the Report.
23. One season (non-monsoon) [i.e. March - May (Summer Season); October - December (post monsoon season) ; December - February (winter season)] primary baseline data on ambient air quality as per CPCB Notification of 2009, water quality, noise level, soil and flora and fauna shall be collected and the AAQ and other data so compiled presented date-wise in the EIA and EMP Report. Site-specific meteorological data should also be collected. The location of the monitoring stations should be such as to represent whole of the study area and justified keeping in view the pre-dominant downwind direction and location of sensitive receptors. There should be at least one monitoring station within 500 m of the mine lease in the pre-dominant downwind direction. The mineralogical composition of PM10, particularly for free silica, should be given.
24. Air quality modelling should be carried out for prediction of impact of the project on the air quality of the area. It should also take into account the impact of movement of vehicles for transportation of mineral. The details of the model used and input parameters used for modelling should be provided. The air quality contours may be shown on a location map clearly indicating the location of the site, location of sensitive receptors, if any, and the habitation. The wind roses showing pre-dominant wind direction may also be indicated on the map.
25. Environment Impact Assessment / Environment Management Plan document shall be in accordance with the provisions & generic structure stipulated in the EIA Notification 2006 dated 14.09.2006 & subsequent amendments.

26. EIA-EMP document shall be based on the maximum achievable mineral extraction of the mine and according to the impact of mines in cluster (within 500m) of the said mine.
27. EIA-EMP document shall include complete profile of the all the Project Proponent, implementing organization of mines in cluster (within 500m) of the said mine.
28. EIA-EMP document shall corer land description of project site (plot/survey / khasara number, village, tehsil, district, state & extent of land involved), of mines in cluster (within 500m) of the said mine.
29. EIA-EMP document shall include deposit conditions working depth mining scheme, details of machinery, backfilling of mine pit with type of blasting, drilling and explosives.
30. The general features such as surface drainage, mineral transportation and process flow of beneficiation plant, power and water supply shall be indicated.
31. The baseline environmental status within 10km radius from the boundary limit of mining lease area (buffer zone) and core zone with respect to air, water, noise and soil shall be covered of mines in cluster(within 500m) of the said mine.
32. Baseline data generation for one season (post monsoon) with respect to air, water, noise and soil shall be generated on the same sampling locations for obtaining EC
33. EIA-EMP document shall include land use pattern including agriculture, forest land, water bodies and settlements.
34. Existence of National Park, Wild Life sanctuary, migratory routes of wild animals within 10 km of mine lease area shall be brought out.
35. Topographical map of study area (core & buffer zone -10 km from the boundary of core zone) showing major topographical features shall be included.
36. EIA-EMP document shall include biological environment (flora and fauna) and socio-economic environment within the study area.
37. EIA-EMP document shall include anticipated impacts on land, air, noise and water environment and the mitigation measures of mines in cluster (within 500m) of the said mine.
38. Environmental Monitoring Programme and the environment management plan shall also be covered measures of mines in cluster (within 500m) of the said mine.
39. The water requirement for the Project, its availability and source should be furnished. A detailed water balance should also be provided. Fresh water requirement for the Project should be indicated.
40. Necessary clearance from the Competent Authority for drawl of requisite quantity of water for the Project should be provided.
41. 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.
42. Impact of the Project on the water quality, both surface and groundwater, should be assessed and necessary safeguard measures, if any required, should be provided.

43. 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. In case the working will intersect groundwater table, a detailed Hydro Geological Study should be undertaken and Report furnished. The Report inter-alia, shall include details of the aquifers present and impact of mining activities on these aquifers. Necessary permission from Central Ground Water Authority for working below ground water and for pumping of ground water should also be obtained and copy furnished.
44. Details of any stream, seasonal or otherwise, passing through the lease area and modification / diversion proposed, if any, and the impact of the same on the hydrology should be brought out.
45. Information on site elevation, working depth, groundwater table etc. Should be provided both in AMSL and BGL. A schematic diagram may also be provided for the same.
46. A time bound Progressive Greenbelt Development Plan shall be prepared in a tabular form (indicating the linear and quantitative coverage, plant species and time frame) and submitted, keeping in mind, the same will have to be executed up front on commencement of the Project. Phase-wise plan of plantation and compensatory afforestation should be charted clearly indicating the area to be covered under plantation and the species to be planted. The details of plantation already done should be given. The plant species selected for green belt should have greater ecological value and should be of good utility value to the local population with emphasis on local and native species and the species which are tolerant to pollution.
47. Impact on local transport infrastructure due to the Project should be indicated. Projected increase in truck traffic as a result of the Project in the present road network (including those outside the Project area) should be worked out, indicating whether it is capable of handling the incremental load. Arrangement for improving the infrastructure, if contemplated (including action to be taken by other agencies such as State Government) should be covered. Project Proponent shall conduct Impact of Transportation study as per Indian Road Congress Guidelines.
48. Details of the onsite shelter and facilities to be provided to the mine workers should be included in the EIA Report.
49. Conceptual post mining land use and Reclamation and Restoration of mined out areas (with plans and with adequate number of sections) should be given in the EIA report.
50. 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.
51. 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.

52. 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.
53. Detailed environmental management plan (EMP) to mitigate the environmental impacts which, should inter-alia include the impacts of change of land use, loss of agricultural and grazing land, if any, occupational health impacts besides other impacts specific to the proposed Project.
54. Public Hearing points raised and commitment 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.
55. Details of litigation pending against the project, if any, with direction /order passed by any Court of Law against the Project should be given.
56. The cost of the Project (capital cost and recurring cost) as well as the cost towards implementation of EMP should be clearly spelt out.
57. A Disaster management Plan shall be prepared and included in the EIA/EMP Report.
58. 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.
59. Besides the above, the below mentioned general points are also to be followed
 - a) All documents to be properly referenced with index and continuous page numbering.
 - b) Where data are presented in the Report especially in Tables, the period in which the data were collected and the sources should be indicated.
 - c) Project Proponent shall enclose all the analysis/testing reports of water, air, soil, noise etc. using the MoEF&CC/NABL accredited laboratories. All the original analysis/testing reports should be available during appraisal of the Project.
 - d) Where the documents provided are in a language other than English, an English translation should be provided.
 - e) The Questionnaire for environmental appraisal of mining projects as devised earlier by the Ministry shall also be filled and submitted.
 - f) While preparing the EIA report, the instructions for the Proponents and instructions for the Consultants issued by MoEF vide O.M. No. J- 11013/41/2006-IA.II(I) dated 4th August, 2009, which are available on the website of this Ministry, should be followed.
 - g) Changes, if any made in the basic scope and project parameters (as submitted in Form-I and the PFR for securing the TOR) should be brought to the attention of MoEF&CC with reasons for such changes and permission should be sought, as the TOR may also have to be altered. Post Public Hearing changes in structure and content of the draft EIA/EMP (other than modifications arising out of the P.H.

process) will entail conducting the PH again with the revised documentation.

- h) As per the circular no. J-11011/618/2010-IA.II(I) dated 30.5.2012, certified report of the status of compliance of the conditions stipulated in the environment clearance for the existing operations of the project, should be obtained from the Regional Office of Ministry of Environment, Forest and Climate Change, as may be applicable.
 - i) The EIA report should also include (i) surface plan of the area indicating contours of main topographic features, drainage and mining area, (ii) geological maps and sections and (iii) sections of the mine pit and external dumps, if any, clearly showing the land features of the adjoining area.
60. **This Terms of References (TORs) is valid for a period of four years from the date of issue of TORs for submission of the EIA/EMP report after conducting public hearing.**

CONDITIONS TO BE STIPULATED IN ENVIRONMENTAL CLEARANCE FOR M/S PANPOSH SUB-DIVISION GOVERNMENT REVENUE EMPLOYEES HOUSING CO-OPERATIVE SOCIETY LTD. (PSGREHCS LTD)) FOR PROPOSED RESIDENTIAL BUILDING PROJECT (B+G+7) AT: MOUZA - R.T.U, NO-4, TAHASIL – ROURKELA, DIST – SUNDARGARH OF SRI SANJIT KUMAR RAY (EC).

PART A - SPECIFIC CONDITIONS:

1. Consent to Establish / Operate for the project shall be obtained from the State Pollution Control Board as required under the Air (Prevention and Control of Pollution) Act, 1981 and the Water (Prevention and Control of Pollution) Act, 1974.
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 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.
4. The project proponent shall ensure that the guidelines for building and construction projects issued vide this Ministry's OM NO.19-2/2013-IA.III dated 9th June, 2015, are followed to ensure sustainable environmental management.
5. The proponent shall obtain prior clearance from the Standing Committee of the National Board for Wild Life if the project will be located within any Eco-Sensitive Zone of Wild Life Sanctuary.
6. The site is required to be revisited by the same sub-Committee of SEAC after one year of issue of Environmental Clearance order by SEIAA, Odisha to assess the status of implementation of commitment by the project proponent and conditions of Environmental Clearance order.

TOPOGRAPHY AND NATURAL DRAINAGE

7. 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 rain water. Buildings shall be designed to follow the natural topography as much as possible. Minimum cutting and filling should be done.
8. The permission from competent authority will be obtained to discharge the excess storm water to drain if any. The proponent shall renovate the existing drain to accommodate the discharge and maintain it perennially.
9. Permission for construction of drain alongside the adjacent NH under construction for allowing the proponent to discharge the treated waste water as well excess runoff water during monsoon from NH Authority shall be obtained. The construction of drains shall be synchronized with the completion of the construction of the Housing Project.

WATER REQUIREMENT, CONSERVATION, RAIN WATER HARVESTING, AND GROUND WATER RECHARGE

10. As proposed, fresh water requirement from ground water shall not exceed 169 m³ per day.
11. 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.
12. The quantity of fresh water 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 and SEIAA, Odisha along with six monthly Monitoring reports.
13. 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.
14. 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.
15. Separation of grey and black water should be done by the use of dual plumbing system. In case of single stack system separate recirculation lines for flushing by giving dual plumbing system be done.
16. Water demand during construction should be reduced by use of pre-mixed concrete, curing agents and other best practices referred.
17. The local bye-law provisions on rain water harvesting should be followed. If local bye-law provision is not available, adequate provision for storage and recharge should be followed as per the Ministry of Urban Development Model Building Byelaws, 2016. Rain water harvesting recharge pits of adequate nos. shall be provided.
18. 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. The proponent shall also obtain permission from Water Resources Department, Govt. of Odisha for drawl of water.
19. The proponent shall keep one bore well as standby domestic water source once municipal water supply is made available in the project area.

SOLID WASTE MANAGEMENT

20. The provisions of the Solid Waste (Management) Rules, 2016, E-Waste (Management) Rules, 2016, and the Plastics Waste (Management) Rules, 2016 shall be followed.
21. 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.
22. 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. Wet garbage shall be composted in Organic Waste Converter. Adequate area

shall be provided for solid waste management within the premises which will include area for segregation, composting. The inert waste from group housing project will be sent to dumping site.

23. Any hazardous waste generated during construction phase, shall be disposed off as per applicable rules and norms with necessary approvals of the State Pollution Control Board.
24. A certificate from the competent authority handling municipal solid wastes, indicating the existing civic capacities of handling and their adequacy to cater to the Municipal Solid Waste generated from project shall be obtained.

SEWAGE TREATMENT PLANT

25. Sewage shall be treated in STP of capacity 240 KLD. The treated effluent from STP shall be recycled/re-used for flushing and gardening.
26. Excess treated water shall be discharged to the drain only after getting the permission from the concerned authority. The proponent shall renovate the existing drain to accommodate the discharge and maintain it perennially. To this effect the proponent has to give a legal affidavit before going for construction activity.
27. A certificate from the competent authority shall be obtained for discharging treated effluent/ untreated effluents into the Public sewer/disposal/drainage systems along with the final disposal point.
28. Separate large recharge pits shall be constructed inside the project area to accommodate the rainwater in case the housing project period and the CDP of the Govt. does not synchronize with reference to construction of road and drain.
29. No sewage or untreated effluent water would be discharged through storm water drains.
30. 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 SEIAA, Odisha before the project is commissioned for operation. Periodical monitoring of water quality of treated sewage shall be conducted. Necessary measures should be made to mitigate the odour problem from STP.
31. Sludge from the onsite sewage treatment, including septic tanks, shall be collected, conveyed and disposed as per the Ministry of Urban Development, Central Public Health and Environmental Engineering Organization (CPHEEO) Manual on Sewerage and Sewage Treatment Systems, 2013.
32. The proponent shall obtain permission from the concerned authority to discharge the liquid waste to any drain i.e. the competent authority of the drain and "Nala" before commencement of any activity at the project site.

ENERGY

33. 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. Outdoor and common area lighting shall be LED. 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.

34. 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. Used CFLs, TFL and LED shall be properly collected and disposed off/sent for recycling as per the prevailing guidelines/rules of the regulatory authority to avoid mercury contamination.
35. Solar, wind or other Renewable Energy shall be installed to meet electricity generation equivalent to 5% of the demand load or as per the state level/ local building bye-laws requirement, whichever is higher. Follow super ECBC requirement of ECBC 2017 and provide compliance report.
36. 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 bye-laws, whichever is higher. Residential buildings are also recommended to meet its hot water demand from solar water heaters, as far as possible.
37. Use of environment friendly materials in bricks, blocks and other construction materials, shall be required for at least 20% of the construction material quantity. These include Fly Ash bricks, hollow bricks, AACs, Fly Ash Lime Gypsum blocks, compressed earth blocks, and other environment friendly materials. Fly ash should be used as building material in the construction as per the provision of Fly Ash Notification of September, 1999 and amended as on 27th August, 2003 and 25th January, 2016. Ready mixed concrete must be used in building construction.
38. A certificate of adequacy of available power from the agency supplying power to the project along with the load allowed for the project shall be submitted.

AIR QUALITY AND NOISE

39. Construction site shall be adequately barricaded before the construction begins. Dust, smoke & other air pollution prevention measures shall be provided for the building as well as the site. These measures shall include screens for the building under construction, continuous dust/ wind breaking walls all around the site (at least 3-meter height). Plastic/tarpaulin sheet covers shall be provided for vehicles bringing in sand, cement, murrum and other construction materials prone to causing dust pollution at the site as well as taking out debris from the site. Sand, murrum, loose soil, cement, stored on site shall be covered adequately so as to prevent dust pollution. Wet jet shall be provided for grinding and stone cutting. Unpaved surfaces and loose soil shall be adequately sprinkled with water to suppress dust.
40. 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. 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.

41. **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.**
42. 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. Low sulphur diesel shall be used. The location of the DG set and exhaust pipe height shall be as per the provisions of the Central Pollution Control Board (CPCB) norms.
43. For indoor air quality the ventilation provisions as per National Building Code of India shall be provided.
44. Ambient noise levels shall conform to residential standard 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.

GREEN COVER

45. No tree cutting/transplantation of existing trees has been proposed in the instant project. A minimum of 1 tree for every 80 m² 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. As proposed 1863.39 sqm (20.11 %) of plot area shall be provided for green area development.

TOP SOIL PRESERVATION AND REUSE

46. 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.

TRANSPORT

47. A comprehensive mobility plan, as per Ministry of Urban Development 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.
 - Hierarchy of roads with proper segregation of vehicular and pedestrian traffic.
 - Traffic calming measures
 - Proper design of entry and exit points.
 - Parking norms as per local regulation
48. 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.
49. 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.

50. Vehicles hired for bringing construction material to the site should be in good condition and should have a pollution check certificate and should conform to applicable air and noise emission standards be operated only during non-peak hours.
51. A dedicated entry/exit and parking shall be provided for commercial activities.
52. Barricades shall be provided around project boundary.
53. Speed of the vehicles shall be restricted upto 15 kmph by erecting speed bumps at regular intervals at project site and proper signage shall be provided for guided vehicular movement and speed restrictions.
54. Parking shall be prohibited on the access road to the proposed project site.
55. Footpath shall be seamless with sufficient width.
56. No vehicles shall be allowed to stop and stand in front of the gate on main access.
57. A buffer of minimum 10 m shall be maintained between the entry/exit gate and the road to avoid traffic congestion.
58. The Traffic Management Plan prepared by the proponent shall be duly validated and certified by the State Concerned Competent Authority and shall have also their consent before implementation.

ENVIRONMENT MANAGEMENT PLAN

59. An Environmental Management Plan (EMP) shall be prepared and implemented to ensure compliance with the environmental conditions specified above. A dedicated Environment Monitoring Cell with defined functions and responsibility shall be put in place to implement the EMP. The environmental cell shall ensure that the environment infrastructure like Sewage Treatment Plant, Landscaping, Rain Water Harvesting, Energy efficiency and conservation, water efficiency and conservation, solid waste management, renewable energy etc. are kept operational and meet the required standards. The environmental cell shall also keep the record of environment monitoring and those related to the environment infrastructure.

OTHERS

60. Provisions 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, creche etc. The housing may be in the form of temporary structures to be removed after the completion of the project.
61. A First Aid Room shall be provided in the project both during construction and operations of the project.
62. The company shall draw up and implement corporate social Responsibility plan as per the Company's Act of 2013.

63. As per the MoEF&CC, Govt. of India Office Memorandum F.No.22-65/2017-IA.III dated 1st May 2018, the project proponent is required to prepare and implement Corporate Environment Responsibility (CER) Plan. As per para 6(II) of the said O.M. appropriate funds shall be earmarked for the activities such as infrastructure creation for drinking water supply, sanitation, health, education, skill development, roads, cross drains, electrification including solar power, solid waste management facilities, scientific support and awareness to local farmers to increase yield of crop and fodder, rain water harvesting, soil moisture conservation works, avenue plantation, plantation in community areas etc. The activities proposed under CER shall be restricted to the affected area around the project. The entire activities proposed under the CER shall be treated as project and shall be monitored. The monitoring report shall be submitted to the regional office as a part of half yearly compliance report, and to the District Collector. It should be posted on the website of the project proponent.

PART B – GENERAL CONDITIONS

1. A copy of the Environmental Clearance letter shall also be displayed on the website of the concerned State Pollution Control Board. The EC letter shall also be displayed at the Regional Office, District Industries centre and Collector's Office/ Tehsildar's office for 30 days.
2. The funds earmarked for environmental protection measures shall be kept in separate account and shall not be diverted for other purpose. Year-wise expenditure shall be reported to the SEIAA, Odisha and MoEF&CC, Govt. of India and its concerned Regional Office.
3. Officials from the Regional Office of MoEF&CC, Bhubaneswar who would be monitoring the implementation of environmental safeguards should be given full cooperation, facilities and documents/data by the project proponents during their inspection.
4. In the case of any change(s) in the scope of the project, the project would require a fresh appraisal by the SEIAA, Odisha.
5. The SEIAA, Odisha reserves the right to add additional safeguard measures subsequently, if found necessary, and to take action including revoking of the environment clearance under the provisions of the Environmental (Protection) Act, 1986, to ensure effective implementation of the suggested safeguard measures in a time bound and satisfactory manner.
6. All other statutory clearances such as the approvals for storage of diesel from Chief Controller of Explosives, Fire Department, Civil Aviation Department, the Forest Conservation Act, 1980 and the Wildlife (Protection) Act, 1972 etc. shall be obtained, as applicable by project proponents from the respective competent authorities.
7. These stipulations would be enforced among others under the provisions of the Water (Prevention and Control of Pollution) Act, 1974, the Air (Prevention and Control of Pollution) Act 1981, the Environment (Protection) Act, 1986, the Public Liability (Insurance) Act, 1991 and the EIA Notification, 2006.
8. The project proponent shall advertise in at least two local Newspapers widely circulated in the region, one of which shall be in the vernacular language informing that the project has been accorded Environmental Clearance and copies of clearance letters are available with the State Pollution Control Board and may also be seen on the website of the SEIAA, Odisha. The advertisement shall be made within Seven days from the date of receipt of

the Clearance letter and a copy of the same shall be forwarded to the Regional Office of MoEF&CC, Bhubaneswar.

9. Any appeal against this clearance shall lie with the National Green Tribunal, if preferred, within a period of 30 days as prescribed under Section 16 of the National Green Tribunal Act, 2010.
10. A copy of the clearance letter shall be sent by the proponent to concerned Panchayat, Zilla Parisad / Municipal Corporation, Urban Local Body and the Local NGO, if any, from whom suggestions/ representations, if any, were received while processing the proposal. The clearance letter shall also be put on the website of the company by the proponent.
11. The proponent shall submit/upload six monthly reports on the status of compliance of the stipulated Environmental Clearance conditions, including results of monitored data on their website and shall update the same periodically. It shall simultaneously be sent to the Regional Office of MoEF&CC, Govt. of India, the respective Zonal Office of CPCB and the SPCB. The criteria pollutant levels namely; SPM, RSPM, SO₂, NO_x (ambient levels as well as stack emissions) or critical sectoral parameters, indicated for the project shall be monitored and displayed at a convenient location near the main gate of the company in the public domain.
12. The environmental statement for each financial year ending 31st March in Form-V as is mandated to be submitted by the project proponent to the concerned State Pollution Control Board as prescribed under the Environment (Protection) Rules, 1986, as amended subsequently, shall also be put on the website of the company along with the status of compliance of EC conditions and shall also be sent to the respective Regional Offices of MoEF&CC, Govt. of India by E-mail.

ANNEXURE -C

CONDITIONS TO BE STIPULATED IN ENVIRONMENTAL CLEARANCE FOR PAIKADAKULGUDA SEMI PRECIOUS GARNET STONE MINES (CAT'S EYE) OVER AN AREA OF 40.946 HA. IN VILL. PAIKADAKULGUDA & KANDHADAKULGUDA, TAHASIL: BISAM CUTTACK, DIST RAYAGADA OF SRI BIJAY KUMAR BANSAL (TOR ISSUED VIDE LETTER NO. 955/SEAC-159, DATED 19.11.2018) (EC)

A. Specific conditions

1. The Project Proponent shall obtain consent from the State Pollution Control Board, Odisha and effectively implement all the conditions stipulated therein.
2. Project Proponent shall appoint an Occupational Health Specialist for Regular and Periodical medical examination of the workers engaged in the Project and records maintained; also, Occupational health check-ups for workers having some ailments like BP, diabetes, habitual smokers, etc. shall be undertaken once in six months and necessary remedial/preventive measures taken accordingly. Recommendations of National Institute for Labour for ensuring good occupational environment for mine workers would also be adopted; All the old age people of the surrounding villages may be provided medical facilities.
3. Transport of minerals shall be done either by dedicated road or it should be ensured that the trucks/dumpers carrying the mineral should not be allowed to pass through the villages. The Project Proponent shall ensure that the road may not be damaged due to transportation of the mineral; and transport of minerals will be as per IRC Guidelines with respect to complying with traffic congestion and density.
4. Project Proponent shall ensure the safeguard and wellbeing of villagers and school, regular health monitoring of all residents in the area and the compliance Report shall be submitted to the Regional office of the Ministry and SEIAA, Odisha.

B. Standard conditions

1. A Final Mine Closure Plan along with details of Corpus Fund shall be submitted to the SEIAA, Odisha 5 years in advance of final mine closure for approval.
2. No mining activities will be allowed in forest area, if any, for which the Forest Clearance is not available.
3. No change in mining technology and scope of working should be made without prior approval of the SEIAA, Odisha.
4. No change in the calendar plan including excavation, quantum of mineral and waste should be made.
5. The project proponent shall obtain necessary prior permission of the competent authorities for drawl of requisite quantity of water (surface water and ground water) for the project.
6. Mining shall be carried out as per the provisions outlined in the approved mining plan as well as by abiding to the guidelines of Directorate General Mines Safety (DGMS).
7. Protection of vegetation in the surrounding areas, and proper storage of solid waste, subgrade ore and their use have to be given priority during mining operation.

8. Digital processing of the entire lease area using remote sensing technique shall be carried out regularly once in three years for monitoring land use pattern and report submitted to Ministry of Environment, Forest and Climate Change its Regional Office and SEIAA, Odisha.
9. Effective safeguard measures such as regular water sprinkling shall be carried out in critical areas prone to air pollution and having high levels of PM₁₀ and PM_{2.5} such as haul road, loading and unloading point and transfer points. Fugitive dust emissions from all the sources shall be controlled regularly. It shall be ensured that the Ambient Air Quality parameters conform to the norms prescribed by the Central Pollution Control Board in this regard. Monitoring of Ambient Air Quality to be carried out based on the Notification 2009, as amended from time to time by the Central Pollution Control Board.
10. Regular monitoring of ground water level and quality shall be carried out in and around the mine lease by establishing a network of existing wells and constructing new piezometers during the mining operation. The project proponent shall ensure that no natural water course and/or water resources shall be obstructed due to any mining operations. The monitoring shall be carried out four times in a year pre- monsoon (April-May), monsoon (August), post-monsoon (November) and winter (January) and the data thus collected may be sent regularly to Ministry of Environment, Forest and Climate Change and its Regional Office, Central Ground Water Authority and Regional Director, Central Ground Water Board.
11. Transportation of the minerals by road passing through the village shall not be allowed. A 'bypass' road should be constructed (say, leaving a gap of at least 200 meters) for the purpose of transportation of the minerals so that the impact of sound, dust and accidents could be mitigated. The project proponent shall bear the cost towards the widening and strengthening of existing public road network in case the same is proposed to be used for the Project. No road movement should be allowed on existing village road network without appropriately increasing the carrying capacity of such roads.
12. The illumination and sound at night at project sites disturb the villages in respect of both human and animal population. Consequent sleeping disorders and stress may affect the health in the villages located close to mining operations. Habitations have a right for darkness and minimal noise levels at night. PPs must ensure that the biological clock of the villages is not disturbed; by orienting the floodlights/ masks away from the villagers and keeping the noise levels well within the prescribed limits for day light/night hours.
13. Sufficient number of Gullies to be provided for better management of water. Regular Monitoring of pH shall be included in the monitoring plan and report shall be submitted to the Ministry of Environment, Forest and Climate Change and its Regional Office on six monthly basis.
14. There shall be planning, developing and implementing facility of rainwater harvesting measures on long term basis and implementation of conservation measures to augment ground water resources in the area in consultation with Central Ground Water Board.
15. The Project Proponent has to take care of gullies formed on slopes. Dump mass should be consolidated with proper filling/leveling with the help of dozer/compactors.
16. The reclamation at waste dump sites shall be ecologically sustainable. Scientific reclamation shall be followed. The local species may be encouraged and species are so chosen that the slope, bottom of the dumps and top of the dumps are able to sustain these

species. The aspect of the dump is also a factor which regulates some climatic parameters and allows only species adapted to that micro climate.

17. The top soil, if any, shall temporarily be stored at earmarked site(s) only and it should not be kept unutilized for long. The topsoil shall be used for land reclamation and plantation. The over burden (OB) generated during the mining operations shall be stacked at earmarked dump site(s) only and it should not be kept active for a long period of time. The maximum height of the dumps shall not exceed 8m and width 20 m and overall slope of the dumps shall be maintained to 45°. The OB dumps should be scientifically vegetated with suitable native species to prevent erosion and surface run off. In critical areas, use of geo textiles shall be undertaken for stabilization of the dump. The entire excavated area shall be backfilled and afforested. Monitoring and management of rehabilitated areas should continue until the vegetation becomes self-sustaining. Compliance status shall be submitted to the Ministry of Environment, Forest and Climate Change and its Regional Office on six monthly basis.
18. Catch drains and siltation ponds of appropriate size shall be constructed around the mine working, mineral and OB dumps to prevent run off of water and flow of sediments directly into the river and other water bodies. The water so collected should be utilized for watering the mine area, roads, green belt development etc. The drains shall be regularly desilted particularly after monsoon and maintained properly. The drains, settling tanks and check dams of appropriate size, gradient and length shall be constructed both around the mine pit and over burden dumps to prevent run off of water and flow of sediments directly into the river and other water bodies and sump capacity should be designed keeping 50% safety margin over and above peak sudden rainfall (based on 50 years data) and maximum discharge in the area adjoining the mine site. Sump capacity should also provide adequate retention period to allow proper settling of silt material. Sedimentation pits shall be constructed at the corners of the garland drains and de-silted at regular intervals.
19. Plantation shall be raised in a 7.5 m wide green belt in the safety zone around the mining lease, backfilled and reclaimed area, around water body, along the roads etc. by planting the native species in consultation with the local DFO/Agriculture Department and as per CPCB Guidelines. The density of the trees should be around 2500 plants per ha. Greenbelt shall be developed all along the mine lease area in a phased manner and shall be completed within first five years.
20. The Project Proponent shall make necessary alternative arrangements, where required, in consultation with the State Government to provide alternate areas for livestock grazing, if any. In this context, Project Proponent should implement the directions of the Hon'ble Supreme Court with regard to acquiring grazing land. The sparse trees on such grazing ground, which provide mid-day shelter from the scorching sun, should be scrupulously guarded against felling and plantation of such trees should be promoted.
21. The project proponent shall take all precautionary measures during mining operation for conservation and protection of endangered fauna, if any, spotted in the study area. Action plan for conservation of flora and fauna shall be prepared and implemented in consultation with the State Forest and Wildlife Department. A copy of action plan shall be submitted to the Ministry of Environment, Forest and Climate Change and its Regional Office.
22. As per the Company Act, the CSR cost should be 2 % of average net profit of last three years. Hence CSR expenses should be as per the Company Act/Rule for the Socio Economic Development of the neighborhood Habitats which could be planned and

executed by the Project Proponent more systematically based on the 'Need based door to door survey' by established Social Institutes/Workers. The report shall be submitted to the Ministry of Environment, Forest and Climate Change and its Regional Office on six monthly basis.

23. 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, creche etc. The housing may be in the form of temporary structures to be removed after the completion of the project.
24. 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.
25. Personnel working in dusty areas should wear protective respiratory devices and they should also be provided with adequate training and information on safety and health aspects.
26. The project authorities should inform to the Regional Office regarding date of financial closures and final approval of the project by the concerned authorities and the date of start of land development work.
27. The project proponent shall submit six monthly reports on the status of the implementation of the stipulated environmental safeguards to the Ministry of Environment, Forest and Climate Change, its Regional Office, Central Pollution Control Board and State Pollution Control Board.
28. A copy of clearance letter will be marked to concerned Panchayat / local NGO, if any, from whom suggestion / representation has been received while processing the proposal.
29. State Pollution Control Board should display a copy of the clearance letter at the Regional office, District Industry Centre and Collector's office/ Tehsildar's Office for 30 days.
30. The project authorities should advertise at least in two local newspapers widely circulated, one of which shall be in the vernacular language of the locality concerned, within 7 days of the issue of the clearance letter informing that the project has been accorded environmental clearance and a copy of the clearance letter is available with the State Pollution Control Board and also at web site of the Ministry of Environment, Forest and Climate Change at www.environmentclearance.nic.in and a copy of the same should be forwarded to the Regional Office.
31. The SEIAA, Odisha may alter/modify the above conditions or stipulate any further condition in the interest of environment protection.
32. Any appeal against this clearance shall lie with the National Green Tribunal, if preferred, within a period of 30 days as prescribed under Section 16 of the National Green Tribunal Act, 2010.
33. The above mentioned stipulated conditions shall be complied in a time-bound manner. Failure to comply with any of the conditions mentioned above may result in cancellation of this environmental clearance and attract action under the provisions of Environment (Protection) Act, 1986.

STANDARD ENVIRONMENTAL CLEARANCE CONDITIONS TO BE STIPULATED IN ENVIRONMENTAL CLEARANCE FOR DALPAHAR IRON AND MANGANESE ORE MINE OF SRI D.C JAIN FOR ENHANCEMENT IN PRODUCTION CAPACITY OF IRON ORE FROM 708 TPA TO 0.31 MTPA AND MANGANESE ORE 0.094MTPA OVER AN MINING LEASE AREA 89.961 HA IN VILLAGE - DALPAHAR, TAHASIL-BARBIL, DISTRICT - KEONJHAR OF M/S. DHARAM CHAND JAIN (EC).

A. SPECIFIC CONDITIONS:

- i) Additional air quality monitoring station shall be installed at entry and exit of mines and haulage road, buffer zone and schools and habitations
- ii) The mine shall implement the Pollution Control Measures and safeguards as proposed in the Environment Management Plan (EMP) of Environment Impact Assessment (EIA) report
- iii) The proponent shall install STP of adequate capacity for treatment of domestic waste water and treated water shall be reused.
- iv) The proponent shall obtain permission from appropriate authority including WR Deptt, Govt. of Odisha for drawl of ground water.
- v) Adequate mitigation measures shall be taken for dust suppression, environment protection in catchment area
- vi) The proponent shall carryout periodical health check-up of employees due to Occupational Health Hazards by occupational health expert, at least once in six months, both for employees as well as people of neighbouring habitation.
- vii) The transportation of mineral shall be carried out through the covered trucks. Vehicular emissions shall be kept under control and regularly monitored. The vehicles carrying the mineral shall not be overloaded.
- viii) Mineral handling area shall be provided with adequate number of high efficiency dust extraction system. Loading and unloading areas including all the transfer points should also have efficient dust control arrangements. These should be properly maintained and operated.
- ix) Garland drains with appropriate size, gradient and length shall be constructed to arrest silt and sediment flows from ore dumps and directly into the water bodies. The water so collected shall be utilized for watering the roads, green belt development etc. The drains shall be regularly desilted particularly after monsoon and maintained properly.
- x) Public Hearing for the project was conducted on 26th August 2011. The proponent shall comply to all the commitments made to the issues raised by the Public during the public hearing.
- xi) The proponent shall comply to the NEERI recommendations.

- xii) 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.

B. STANDARD CONDITIONS:

(I) Statutory compliance

- (i) This Environmental Clearance (EC) is subject to orders/ judgment of Hon'ble Supreme Court of India, Hon'ble High Court, Hon'ble NGT and any other Court of Law, Common Cause Conditions as may be applicable.
- (ii) The Project proponent complies with all the statutory requirements and judgment of Hon'ble Supreme Court dated 2nd August,2017 in Writ Petition (Civil) No. 114 of 2014 in matter of Common Cause versus Union of India & Ors before commencing the mining operations.
- (iii) The State Government concerned shall ensure that mining operation shall not be commenced till the entire compensation levied, if any, for illegal mining paid by the Project Proponent through their respective Department of Mining & Geology in strict compliance of Judgment of Hon'ble Supreme Court dated 2nd August, 2017 in Writ Petition (Civil) No. 114 of 2014 in matter of Common Cause versus Union of India & Ors.
- (iv) This Environmental Clearance shall become operational only after receiving formal NBWL Clearance from MoEF&CC subsequent to the recommendations of the Standing Committee of National Board for Wildlife, if applicable to the Project,
- (v) This Environmental Clearance shall become operational only after receiving formal Forest Clearance (FC) under the provision of Forest Conservation Act, 1980, if applicable to the project.
- (vi) Project Proponent (PP) shall obtain Consent to Operate after grant of EC and effectively implement all the conditions stipulated therein. The mining activity shall not commence prior to obtaining Consent to Establish / Consent to Operate from the concerned State Pollution Control Board.
- (vii) The PP shall adhere to the provision of the Mines Act, 1952, Mines and Mineral (Development & Regulation), Act, 2015 and rules & regulations made there under. PP shall adhere to various circulars issued by Directorate General Mines Safety (DGMS) and Indian Bureau of Mines from time to time.
- (viii) The Project Proponent shall obtain consents from all the concerned land owners, before start of mining operations, as per the provisions of MMDR Act, 1957 and rules made thereunder in respect of lands which are not owned by it.
- (ix) The Project Proponent shall follow the mitigation measures provided in MoEF&CC's Office Memorandum No. Z-I1013/57/2014-IA.II (M), dated 29th October, 2014, titled "Impact of mining activities on Habitations-Issues related to the mining Projects wherein Habitations and villages are the part of mine lease areas or Habitations and villages are surrounded by the mine lease area".

- (x) The Project Proponent shall obtain necessary prior permission of the competent authorities for drawl of requisite quantity of surface water and from CGWA for withdrawal of ground water for the project.
- (xi) A copy of EC letter will be marked to concerned Panchayat / local NGO etc. if any, from whom suggestion / representation has been received while processing the proposal.
- (xii) State Pollution Control Board shall be responsible for display of this EC letter at its Regional office, District Industries Centre and Collector's office/ Tehsildar's Office for 30 days.
- (xiii) The Project Authorities should widely advertise about the grant of this EC letter by printing the same in at least two local newspapers, one of which shall be in vernacular language of the concerned area. The advertisement shall be done within 7 days of the issue of the clearance letter mentioning that the instant project has been accorded EC and copy of the EC letter is available with the State Pollution Control Board and web site of the Ministry of Environment, Forest and Climate Change (www.environmentclearance.nic.in). A copy of the advertisement may be forwarded to the concerned MoEF&CC Regional Office for compliance and record.
- (xiv) The Project Proponent shall inform the MoEF&CC/SEIAA, Odisha for any change in ownership of the mining lease. In case there is any change in ownership or mining lease is transferred than mining operation shall only be carried out after transfer of EC as per provisions of the para 11 of EIA Notification, 2006 as amended from time to time.

(II) Air quality monitoring and preservation

- (i) The Project Proponent shall install a minimum of 3 (three) online Ambient Air Quality Monitoring Stations with 1 (one) in upwind and 2 (two) in downwind direction based on long term climatological data about wind direction such that an angle of 120° is made between the monitoring locations to monitor critical parameters, relevant for mining operations, of air pollution viz. PM₁₀, PM_{2.5}, NO₂, CO and SO₂ etc. as per the methodology mentioned in NAAQS Notification No. B-29016/20/90/PCI/I, dated 18.11.2009 covering the aspects of transportation and use of heavy machinery in the impact zone. The ambient air quality shall also be monitored at prominent places like office building, canteen etc. as per the site condition to ascertain the exposure characteristics at specific places. The above data shall be digitally displayed within 03 months in front of the main Gate of the mine site.
- (ii) Effective safeguard measures for prevention of dust generation and subsequent suppression (like regular water sprinkling, metalled road construction etc.) shall be carried out in areas prone to air pollution wherein high levels of PM₁₀ and PM_{2.5} are evident such as haul road, loading and unloading point and transfer points. The Fugitive dust emissions from all sources shall be regularly controlled by installation of required equipments/ machineries and preventive maintenance. Use of suitable water-soluble chemical dust suppressing agents may be explored for better effectiveness of dust control system. It shall be ensured that air pollution level conform to the standards prescribed by the MoEF&CC/ Central Pollution Control Board.

(III) Water quality monitoring and preservation

- (i) In case, immediate mining scheme envisages intersection of ground water table, then Environmental Clearance shall become operational only after receiving formal clearance from CGWA. In case, mining operation involves intersection of ground water table at a later stage, then PP shall ensure that prior approval from CGWA and MoEF&CC is in place before such mining operations. The permission for intersection of ground water table shall essentially be based on detailed hydro-geological study of the area.
- (ii) Regular monitoring of the flow rate of the springs and perennial nallahs flowing in and around the mine lease shall be carried out and records maintain. The natural water bodies and or streams which are flowing in an around the village, should not be disturbed. The Water Table should be nurtured so as not to go down below the pre-mining period. In case of any water scarcity in the area, the Project Proponent has to provide water to the villagers for their use. A provision for regular monitoring of water table in open dug wall located in village should be incorporated to ascertain the impact of mining over ground water table. The Report on changes in Ground water level and quality shall be submitted on six-monthly basis to the Regional Office of the Ministry, CGWA and State Groundwater Department / State Pollution Control Board.
- (iii) Project Proponent shall regularly monitor and maintain records w.r.t. ground water level and quality in and around the mine lease by establishing a network of existing wells as well as new piezo-meter installations during the mining operation in consultation with Central Ground Water Authority/ State Ground Water Department. The Report on changes in Ground water level and quality shall be submitted on six-monthly basis to the Regional Office of the Ministry, CGWA and State Groundwater Department / State Pollution Control Board.
- (iv) The Project Proponent shall undertake regular monitoring of natural water course/ water resources/ springs and perennial nallahs existing/ flowing in and around the mine lease and maintain its records. The project proponent shall undertake regular monitoring of water quality upstream and downstream of water bodies passing within and nearby/ adjacent to the mine lease and maintain its records. Sufficient number of gullies shall be provided at appropriate places within the lease for management of water. PP shall carryout regular monitoring w.r.t. pH and included the same in monitoring plan. The parameters to be monitored shall include their water quality vis-a-vis suitability for usage as per CPCB criteria and flow rate. It shall be ensured that no obstruction and/ or alteration be made to water bodies during mining operations without justification and prior approval of MoEF&CC / SEIAA, Odisha. The monitoring of water courses/ bodies existing in lease area shall be carried out four times in a year viz. pre- monsoon (April-May), monsoon (August), post-monsoon (November) and winter (January) and the record of monitored data be sent regularly to Ministry of Environment, Forest and Climate Change and its Regional Office, SEIAA, Odisha, Central Ground Water Authority and Regional Director, Central Ground Water Board, State Pollution Control Board and Central Pollution Control Board. Clearly showing the trend analysis on six-monthly basis.

- (v) Quality of polluted water generated from mining operations which include Chemical Oxygen Demand (COD) in mines run-off; acid mine drainage and metal contamination in runoff shall be monitored along with Total Suspended Solids (TDS), Dissolved Oxygen (DO), pH and Total Suspended Solids (TSS). The monitored data shall be uploaded on the website of the company as well as displayed at the project site in public domain, on a display board, at a suitable location near the main gate of the Company. The circular No. J-20012/1 /2006-IA.II (M) dated 27.05.2009 issued by Ministry of Environment, Forest and Climate Change may also be referred in this regard.
 - (vi) The project proponent shall construct retaining wall and settling pond within the lease area. Further, check dams shall be constructed at strategic locations in which rain water passes in rainy season. Finally, the excess supernatant after sedimentation shall be allowed to spill away through stone pitch structure to the nearby valley.
 - (vii) De-silting of agricultural lands in buffer zone and beyond including nearby Nalas/rivers perennially periodically and perpetually caused due to wash up of minerals/OB/dumps shall be done as per SOP submitted. A legal affidavit shall be submitted within 6 months from the date of issue of Environmental Clearance to this effect with periodicity of de-silting.
 - (viii) Detail design of the existing retaining wall and the proposed for the expansion from a chartered Civil Engineer shall be submitted within 6 months from the date of issue of Environmental Clearance to ensure that no silt after wash up is escaped from the core / buffer zone of the mines.
 - (ix) Project Proponent shall plan, develop and implement rainwater harvesting measures on long term basis to augment ground water resources in the area in consultation with Central Ground Water Board/ State Groundwater Department. A report on amount of water recharged needs to be submitted to Regional Office, MoEF&CC annually.
 - (x) Industrial waste water (workshop and waste water from the mine) should be properly collected and treated in an ETP as proposed so as to conform to the notified standards prescribed from time to time. The standards shall be prescribed through Consent to Operate (CTO) issued by concerned State Pollution Control Board (SPCB). The workshop effluent shall be treated after its initial passage through Oil and grease trap.
 - (xi) The water balance/water auditing shall be carried out and measure for reducing the consumption of water shall be taken up and reported to the Regional Office of the MoEF&CC and State Pollution Control Board.
- (IV) Noise and vibration monitoring and prevention**
- (i) The peak particle velocity at 500m distance or within the nearest habitation, whichever is closer shall be monitored periodically as per applicable DGMS guidelines.
 - (ii) The illumination and sound at night at project sites disturb the villages in respect of both human and animal population. Consequent sleeping disorders and stress may affect the health in the villages located close to mining operations. Habitations have a right for darkness and minimal noise levels at

night. PPs must ensure that the biological clock of the villages is not disturbed; by orienting the floodlights/ masks away from the villagers and keeping the noise levels well within the prescribed limits for day /night hours.

- (iii) The Project Proponent shall take measures for control of noise levels below 85 dBA in the work environment. The worker engaged in operations of HEMM, etc. should be provided with ear plugs /muffs. All personnel including laborers working in dusty areas shall be provided with protective respiratory devices along with adequate training, awareness and information on safety and health aspects. The PP shall be held responsible in case it has been found that workers/ personals/ laborers are working without personal protective equipment.

(V) Mining Plan

- (i) The Project Proponent shall adhere to the working parameters of mining plan which was submitted at the time of EC appraisal wherein year-wise plan was mentioned for total excavation i.e. quantum of mineral, waste, over burden, inter burden and top soil etc.. No change in basic mining proposal like mining technology, total excavation, mineral & waste production, lease area and scope of working (viz. method of mining, overburden & dump management, O.B & dump mining, mineral transportation mode, ultimate depth of mining etc.) shall not be carried out without prior approval of the Ministry of Environment, Forest and Climate Change, which entail adverse environmental impacts, even if it is a part of approved mining plan modified after grant of EC or granted by State Govt. in the form to Short Term Permit (STP), Query license or any other name.
- (ii) The Project Proponent shall get the Final Mine Closure Plan along with Financial Assurance approved from Indian Bureau of Mines/Department of Mining & Geology as required under the Provision of the MMDR Act, 1957 and Rules/ Guidelines made there under. A copy of approved final mine closure plan shall be submitted within 2 months of the approval of the same from the competent authority to the concerned Regional Office of the Ministry of Environment, Forest and Climate Change for record and verification.
- (iii) The land-use of the mine lease area at various stages of mining scheme as well as at the end-of-life shall be governed as per the approved Mining Plan. The excavation vis-a-vis backfilling in the mine lease area and corresponding afforestation to be raised in the reclaimed area shall be governed as per approved mining plan. PP shall ensure the monitoring and management of rehabilitated areas until the vegetation becomes self-sustaining. The compliance status shall be submitted half-yearly to the MoEF&CC and its concerned Regional Office / SEIAA, Odisha.

(VI) Land reclamation

- (i) The Overburden (O.B.) generated during the mining operations shall be stacked at earmarked OB dump site(s) only and it should not be kept active for a long period of time. The physical parameters of the OB dumps like height, width and angle of slope shall be governed as per the approved Mining Plan as per the guidelines/circulars issued by D.G.M.S w.r.t. safety in mining

operations shall be strictly adhered to maintain the stability of top soil/OB dumps. The topsoil shall be used for land reclamation and plantation.

- (ii) The reject/waste generated during the mining operations shall be stacked at earmarked waste dump site(s) only. The physical parameters of the waste dumps like height, width and angle of slope shall be governed as per the approved Mining Plan as per the guidelines/circulars issued by DGMS w.r.t. safety in mining operations shall be strictly adhered to maintain the stability of waste dumps.
- (iii) The reclamation of waste dump sites shall be done in scientific manner as per the Approved Mining Plan cum Progressive Mine Closure Plan.
- (iv) The slope of dumps shall be vegetated in scientific manner with suitable native species to maintain the slope stability, prevent erosion and surface run off. The selection of local species regulates local climatic parameters and help in adaptation of plant species to the microclimate. The gullies formed on slopes should be adequately taken care of as it impacts the overall stability of dumps. The dump mass should be consolidated with the help of dozer/ compactors thereby ensuring proper filling/ leveling of dump mass. In critical areas, use of geo textiles/ geo-membranes / clay liners / Bentonite etc. shall be undertaken for stabilization of the dump.
- (v) The Project Proponent shall carry out slope stability study in case the dump height is more than 30 meters. The slope stability report shall be submitted to concerned regional office of MoEF&CC, Govt. of India, Bhubaneswar as well as SEIAA, Odisha.
- (vi) Catch drains, settling tanks and siltation ponds of appropriate size shall be constructed around the mine working, mineral yards and topsoil / OB / waste dumps to prevent runoff of water and flow of sediments directly into the water bodies (Nallah/ River/ Pond etc.). The collected water should be utilized for watering the mine area, roads, green belt development, plantation etc. The drains/ sedimentation sumps etc. shall be de-silted regularly, particularly after monsoon season, and maintained properly.
- (vii) Check dams of appropriate size, gradient and length shall be constructed around mine pit and OB dumps to prevent storm run-off and sediment flow into adjoining water bodies. A safety margin of 50% shall be kept for designing of sump structures over and above peak rainfall (based on 50 years data) and maximum discharge in the mine and its adjoining area which shall also help in providing adequate retention time period thereby allowing proper settling of sediments/ silt material. The sedimentation pits/ sumps shall be constructed at the comers of the garland drains.
- (viii) The top soil, if any, shall temporarily be stored at earmarked site(s) within the mine lease only and should not be kept unutilized for long. The physical parameters of the top soil dumps like height, width and angle of slope shall be governed as per the approved Mining Plan and as per the guidelines framed by DGMS w.r.t. safety in mining operations shall be strictly adhered to maintain the stability of dumps. The topsoil shall be used for land reclamation and plantation purpose.

- (ix) 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.

(VII) Transportation

- (i) No Transportation of the minerals shall be allowed in case of roads passing through transportation of the minerals leaving an adequate gap (say at least 200 meters) so that the adverse impact of sound and dust along with chances of accidents could be mitigated. All costs resulting from widening and strengthening of existing public road network shall be borne by the PP in consultation with nodal State Govt. Department. Transportation of minerals through road movement in case of existing village/ rural roads shall be allowed in consultation with nodal State Govt. Department only after required strengthening such that the carrying capacity of roads is increased to handle the traffic load. The pollution due to transportation load on the environment will be effectively controlled and water sprinkling will also be done regularly. Vehicular emissions shall be kept under control and regularly monitored. Project should obtain Pollution Under Control (PUC) certificate for all the vehicles from authorized pollution testing centers.
- (ii) The Main haulage road within the mine lease should be provided with a permanent water arrangement for dust suppression. Other roads within the mine lease should be wetted regularly with tanker-mounted water sprinkling system. The other areas of dust generation like crushing zone, material transfer points, material yards etc. should invariably be provided with dust suppression arrangements. The air pollution control equipments like bag filters, vacuum suction hoods, dry fogging system etc. shall be installed at Crushers, belt-conveyors and other areas prone to air pollution. The belt conveyor should be fully covered to avoid generation of dust while transportation. PP shall take necessary measures to avoid generation of fugitive dust emissions.
- (iii) Traffic management shall be done as per recommendation of Traffic Management Study Report.
- (iv) The Project Proponent shall provide parking plaza for the heavy vehicles within the lease area as recommendation of NEERI.

(VIII) Green Belt

- (i) The Project Proponent shall develop greenbelt in 7.5m wide safety zone all along the mine lease boundary as per the guidelines of CPCB in order to arrest pollution emanating from mining operations within the lease. The whole Green belt shall be developed within first 5 years starting from windward side of the active mining area. The development of greenbelt shall be governed as per the EC granted by the Ministry irrespective of the stipulation made in approved mine plan.
- (ii) The Project Proponent shall carryout plantation/ afforestation in backfilled and reclaimed area of mining lease, around water body, along the roadsides, in community areas etc. by planting the native species in consultation with the State Forest Department/ Agriculture Department/ Rural development

department/ Tribal Welfare Department/ Gram Panchayat such that only those species be selected which are of use to the local people. The CPCB guidelines in this respect shall also be adhered. The density of the trees should be around 2500 saplings per Hectare. Adequate budgetary provision shall be made for protection and care of trees.

- (iii) The Project Proponent shall make necessary alternative arrangements for livestock feed by developing grazing land with a view to compensate those areas which are coming within the mine lease. The development of such grazing land shall be done in consultation with the State Government. In this regard, Project Proponent should essentially implement the directions of the Hon'ble Supreme Court with regard to acquisition of grazing land. The sparse trees on such grazing ground, which provide mid-day shelter from the scorching sun, should be scrupulously guarded/ protected against felling and plantation of such trees should be promoted.
- (iv) The Project Proponent shall undertake all precautionary measures for conservation and protection of endangered flora and fauna and Schedule-I species during mining operation. A Wildlife Conservation Plan shall be prepared for the same clearly delineating action to be taken for conservation of flora and fauna. The Plan shall be approved by Chief Wild Life Warden of the State Govt.
- (v) And implemented in consultation with the State Forest and Wildlife Department. A copy of Wildlife Conservation Plan and its implementation status (annual) shall be submitted to the Regional Office of the Ministry.

(IX) Public hearing and human health issues

- (i) The Project Proponent shall appoint an Occupational Health Specialist for Regular as well as Periodical medical examination of the workers engaged in the mining activities, as per the DGMS guidelines. The records shall be maintained properly. PP shall also carryout Occupational health check-ups in respect of workers which are having ailments like BP, diabetes, habitual smoking, etc. The check-ups shall be undertaken once in six months and necessary remedial/ preventive measures be taken. A status report on the same may be sent to MoEF&CC Regional Office and DGMS on half-yearly basis.
- (ii) A commitment in form of an undertaking for periodical occupational health checkup of the employee and the local people shall be done through an occupational health expert as per the detailed action plan submitted with the proposal within 6 months from the date of issue of Environmental Clearance.
- (iii) The Project Proponent must demonstrate commitment to work towards 'Zero Harm' from their mining activities and carry out Health Risk Assessment (HRA) for identification workplace hazards and assess their potential risks to health and determine appropriate control measures to protect the health and wellbeing of workers and nearby community. The proponent shall maintain accurate and systematic records of the HRA. The HRA for neighborhood has to focus on Public Health Problems like Malaria, Tuberculosis, HIV, Anaemia, Diarrhoea in children under five, respiratory infections due to bio mass cooking. The proponent shall also create awareness and educate the nearby

community and workers for Sanitation, Personal Hygiene, Hand washing, not to defecate in open, Women Health and Hygiene (Providing Sanitary Napkins), hazard of tobacco and alcohol use. The Proponent shall carry out base line HRA for all the category of workers and thereafter every five years.

- (iv) The proponent shall carry out occupational health surveillance which be a part of HRA and include Biological Monitoring where practical and feasible, and the tests and investigations relevant to the exposure (e.g. for Dust a X-Ray chest; For Noise Audiometric; for Lead Exposure Blood Lead, For Welders Full Ophthalmologic Assessment; for Manganese Miners a complete Neurological Assessment by a Certified Neurologist, and Manganese (Mn) estimation in Blood; For Inorganic Chromium- Fortnightly skin inspection of hands and forearms by a responsible person. Except routine tests all tests would be carried out in a Lab accredited by NABH. Records of Health Surveillance must be kept for 30 years, including the results of and the records of Physical examination and tests. The record of exposure due to materials like Asbestos, Hard Rock Mining, Silica, Gold, Kaolin, Aluminium, Iron, Manganese, Chromium, Lead, Uranium need to be handed over to the Mining Department of the State in case the life of the mine is less than 30 years. It would be obligatory for the State Mines Departments to make arrangements for the safe and secure storage of the records including X-Ray. Only conventional X-Ray will be accepted for record purposes and not the digital one). X-Ray must meet ILO criteria (17 x 14 inches and of good quality).
- (v) The proponent shall maintained a record of performance indicators for workers which includes (a) there should not be a significant decline in their Body Mass Index and it should stay between 18.5 -24.9, (b) the Final Chest X-Ray compared with the base line X-Ray should not show any capacities, (c) At the end of their leaving job there should be no Diminution in their Lung Functions Forced Expiratory Volume in one second (FEV1), Forced Vital Capacity (FVC), and the ratio) unless they are smokers which has to be adjusted, and the effect of age, (d) their hearing should not be affected. As a proof an Audiogram (first and last need to be presented), (e) they should not have developed any Persistent Back Pain, Neck Pain, and the movement of their Hip, Knee and other joints should have normal range of movement, (f) they should not have suffered loss of any body part. The record of the same should be submitted to the Regional Office, MoEF&CC annually along with details of the relief and compensation paid to workers having above indications.
- (vi) The project proponent shall ensure that personnel working in dusty areas should wear protective respiratory devices and they should also be provided with adequate training and information on safety and health aspects.
- (vii) Project Proponent shall make provision for the housing for workers/labors or shall construct labor camps within/outside (company owned land) with necessary basic infrastructure/ facilities like fuel for cooking, mobile toilets, mobile STP, safe drinking water, medical health care, creche for kids etc. The housing may be provided in the form of temporary structures which can be removed after the completion of the project related infrastructure. The domestic waste water should be treated with STP in order to avoid

contamination of underground water.

- (viii) The activities proposed in Action plan prepared for addressing the issues raised during the Public Hearing shall be completed as per the budgetary provisions mentioned in the Action Plan and within the stipulated time frame. The Status Report on implementation of Action Plan shall be submitted to the concerned Regional Office of the Ministry along with District Administration.
- (ix) Issues raised and recorded in proceedings of public hearing w.r.t. environment / pollution / CER shall be complied by the Mining Authority as per OM F. No. 22-65/2017-IA.III, dated 30.09.2020 of MoEF&CC, Govt. of India.

(X) Corporate Environment Responsibility (CER)

- (i) The activities and budget earmarked for Corporate Environmental Responsibility (CER) as per Ministry's O.M No 22-65/2017-IA. II (M) dated 01.05.2018 or as proposed by SEAC should be kept in a separate bank account. The activities proposed for CER shall be implemented in a time bound manner and annual report of implementation of the same along with documentary proof viz. photographs, purchase documents, latitude & longitude of infrastructure developed & road constructed needs to be submitted to Regional Office MoEF&CC annually along with audited statement.
- (ii) Project Proponent shall keep the funds earmarked for environmental protection measures in a separate account and refrain from diverting the same for other purposes. The Year wise expenditure of such funds should be reported to the MoEF&CC and its concerned Regional Office / SEIAA, Odisha.

(XI) Miscellaneous

- (i) The Project Proponent shall prepare digital map (land use & land cover) of the entire lease area once in five years purpose of monitoring land use pattern and submit a report to concerned Regional Office of the MoEF&CC.
- (ii) The Project Authorities should inform to the Regional Office regarding date of financial closures and final approval of the project by the concerned authorities and the date of start of land development work.
- (iii) The project proponent shall establish a solar power plant with 30 KVA capacity within the lease area as proposed.
- (iv) The Project Proponent shall submit six monthly compliance reports on the status of the implementation of the stipulated environmental safeguards to the MoEF&CC & its concerned Regional Office, SEIAA, Odisha, Central Pollution Control Board and State Pollution Control Board.
- (v) A separate 'Environmental Management Cell' with suitable qualified manpower should be set-up under the control of a Senior Executive. The Senior Executive shall directly report to Head of the Organization. Adequate number of qualified Environmental Scientists and Mining Engineers shall be appointed and submit a report to RO, MoEF&CC.
- (vi) The proponent shall comply all the specific conditions as recommended by CSIR-NEERI on carrying capacity study (as applicable) in time bound manner

as proposed.

- (vii) 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.
- (viii) The project proponent shall augment infrastructure on drinking water, health care and education in nearby villages as per time bound action plan submitted.
- (ix) The project proponent shall obtain permission from DGMS under 106(2b) to carry out blasting operation within the lease area.
- (x) The concerned Regional Office of the MoEF&CC shall randomly monitor compliance of the stipulated conditions. The project authorities should extend full cooperation to the MoEF&CC officer(s) by furnishing the requisite data / information / monitoring reports.
- (xi) Any appeal against this Environmental Clearance shall lie with the National Green Tribunal, if preferred, within a period of 30 days as prescribed under Section 16 of the National Green Tribunal Act, 2010.

ANNEXURE- E

STANDARD ENVIRONMENTAL CLEARANCE CONDITIONS TO BE STIPULATED IN ENVIRONMENTAL CLEARANCE FOR SAND MINING OF BAIDESWAR SAND GHAT HAVING WITH PRODUCTION CAPACITY 94120 CUM/ANNUM OVER AN MINING LEASE AREA OF 13.355 HA, LOCATED IN VILLAGE - PATUGADADHARPUR, TAHASIL - BANKI, DISTRICT - CUTTACK, ODISHA BY MINAKSHI PRADHAN, AT SAMANTRAPUR, DIST – KHURDA, ODISHA

Stipulated Conditions:

1. The Sub-Committee of SEAC will visit the site within 6 months from the date of issue of Environmental Clearance to verify the progress of the project as well as conditions stipulated in Environmental Clearance. However, either during the visit of the SEAC Sub-committee and/or at any time, if it is noticed that the purpose for which conditional Environmental Clearance is granted is not in place or found otherwise, the conditional EC granted shall be revoked.
2. In the first year i.e. before the rainy season the extraction of sand shall not exceed 94120cum, calculated by multiplying the working area in sqmtr by 2.0 meter depth of excavation.
3. The project proponent should carry out River bed sand mining manually by engaging local laborers in force to check over exploitation of sand at the source.
4. Any change in the plan or quantity to be produced shall require prior approval of SEIAA.
5. There shall be a 'no working zone' to protect the embankment on both sides, road or rail bridge in the vicinity, if any, dam, weir, water intake structure of irrigation or drinking water project, or any cross drainage structure. 10 % of the width of river shall be left intact along the embankments on both sides as 'no mining zone'. Further, no mining shall be allowed within 200 m of any existing structures dam, weir, water intake structure of irrigation or drinking water project, or any cross drainage structure. In case of River Bridge, this no mining zone shall extend upto a minimum stretch of 200 meters from the bridge and it may extend upto 500 meters in sensitive locations. The lease area shall be accordingly curtailed to carve out the actual sand mining area within the leasehold. Exact map of the lease area, and the 'no mining zone' shall be drawn to scale, showing the DGPS coordinates of all corner points, and the location of the bridge, embankment, extraction route & other structures; and such map has to be submitted to SEIAA by the project proponent through the Tahasildar within three months of the date of issue of the EC. The quantum of sand allowed to be extracted will be worked out on the basis of the actual working area.
6. The lease area and the actual working area shall be demarcated on the ground by erecting durable masonry /concrete pillars by the project proponent.

7. The project proponent shall take prior statutory and regulatory clearance as required from the concerned authorities in respect of the project, before carrying out any operation.
8. Mining is not permissible within the water channel or stream flow area. No stream shall be diverted for the purpose of mining and no natural water course shall be obstructed. The mining or any ancillary activity shall not in any way disturb the flow pattern of the river water during the non monsoon period. There shall be no sand mining in the river during the rainy season or when there is flow of water in the river.
9. Sand mining operations shall not affect the existing sources for irrigation / drinking water / industrial purpose.
10. The natural sand dunes, if any, near or surrounding the lease area shall not be disturbed.
11. No transportation of the minerals shall ordinarily be allowed on any road passing through villages/habitations/forest land without prior explicit permission. Transportation of minerals through existing rural roads can be allowed only by the concerned Govt. Department/Gram Panchayat and only after required strengthening, such that the carrying capacity of road is increased to handle the sand truck traffic. The project proponent shall bear the cost towards the widening and strengthening of existing public roads in case the same is proposed to be used for the project. No movement on any road is allowed on existing village road network without appropriately increasing the carrying capacity of such roads. Project proponent shall ensure that the road may not be damaged due to transportation of the mineral and transport of minerals will be as per IRC Guidelines with respect to complying with traffic congestion and traffic density. Plying of sand extraction trucks may be allowed on roads / path ways passing close to schools, temples, hospitals and such other public places only with prior written permission of competent authority.
12. Vehicles hired for transportation of sand from the site should be in good condition and should have pollution check certificate and should conform to applicable air and noise emission standards and should be operated only during non-peak hours.
13. The vehicles shall not be overloaded and shall be covered with Tarpaulin. The Tahasildar may collect an appropriate road maintenance levy from the lessee as part of the lease conditions on the basis of quantum of sand transported, and utilize the proceeds of the levy for proper maintenance of the extraction paths and roads to prevent their degradation on account of plying of sand trucks.
14. The project proponent shall take all precautionary measures against causing damage to flora and fauna of the locality. The PP shall plant and nurse to full establishment a minimum of 50 number of saplings of native tree species along the approach roads, river banks and in community areas in consultation with the Gram Panchayat.
15. Water spray should be made on the road/extraction paths to control dust emission during transportation of sand.

16. The Project Proponent shall undertake phased restoration, reclamation and rehabilitation of land affected by mining and completes this work before abandonment of mine.
17. Environmental Management Plan (EMP) shall be implemented by PP to ensure compliance with the environmental conditions specified above. The year wise funds earmarked for environmental protection measures shall be kept in separate account and shall be spent according to the plan proposed. Year wise progress of implementation of EMP shall be reported to the SEIAA, Odisha and OSPCB along with the compliance report.
18. The proponent shall take necessary measures to ensure that there is no adverse impact of the mining operations on the human habitation if any, existing nearby.
19. It shall be mandatory for the project management to submit quarterly compliance reports on the status of implementation of the above stipulated environmental safeguards to the SEIAA, Odisha / SPCB, Odisha/ Regional Office of the MoEF&CC, Bhubaneswar, in hard and soft copies on 1st day of January, April, July, October of each calendar year, failing which EC is liable to be revoked.
20. At the end of mine closure, the proponent shall immediately remove all the sheds put up in the quarry and all the equipment in the area before closure of the quarry.
21. The conditions stipulated in the environmental clearance will be closely monitored on the ground by the lease granting authority, i.e. the Tahasildar, who shall ensure compliance of the stipulated conditions and take corrective measures promptly in case of any non- compliance and also ensure that the project proponent submits quarterly compliance reports.
22. The concerned Regional Office of the MoEF&CC/ SPCB, Odisha shall periodically monitor compliance of the stipulated conditions as applicable for this project. The project authorities should extend full cooperation to the MoEF&CC officer(s)/SPCB officer(s) by furnishing the requisite data / information / monitoring reports.
23. A copy of the clearance letter shall be sent by the proponent to concerned Gram Panchayat /Panchayat Samiti /Zilla Parisad /Municipal Corporation / Urban Local Body as the case may be.
24. Project proponent shall obtain Consent to Operate from the OSPCB and effectively implement all the conditions stipulated therein. The mining activity shall not commence prior to obtaining Consent to Establish / Consent to Operate from the State Pollution Control Board.
25. The SEIAA, Odisha may revoke or suspend this EC, if implementation of any of the above conditions is not satisfactory. The SEIAA, Odisha reserves the right to alter /modify the above conditions or stipulate any further condition in the interest of environment protection.
26. The Project Proponent (lease holder) shall inform the SEIAA of any change in ownership of the mining lease. In case, there is any change in ownership or mining lease is transferred, then mining operation can be carried out only after transfer of EC

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as per provisions of the para 11 of EIA Notification, 2006, as amended from time to time.

27. 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 environment clearance besides attracting penal provisions in the Environment (Protection) Act, 1986.
28. The above conditions will 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 and the Public Liability Insurance Act, 1991 along with their amendments and rules made there under and also any other orders passed by the Hon'ble Supreme Court of India/ High Court and any other Court of Law relating to the subject matter.
29. This Environmental Clearance (EC) is subject to orders/judgment of Hon'ble Supreme Court of India, Hon'ble High Court, Hon'ble NGT and any other Court of Law, Common Cause Conditions as may be applicable.
30. Any appeal against this environmental clearance shall lie with the National Green Tribunal, if preferred, within a period of 30 days as prescribed under section 16 of the National Green Tribunal Act, 2010.