PROCEEDINGS OF THE MEETING OF STATE LEVEL EXPERT APPRAISAL COMMITTEE, ODISHA HELD ON 07TH DECEMBER, 2021

The SEAC met on 07th December, 2021 at 10:30 AM through Video Conferencing in Google Meet under the Chairmanship of Sri B. P. Singh. The following members were present in the meeting.

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

Draft proceeding of the meeting was finalized by the members through e-mail and also final proceeding of the meeting was confirmed by the members through e-mail. The agenda-wise proceedings and recommendations of the committee are detailed below.

ITEM NO. 01

PROPOSAL FOR ENVIRONMENT CLEARANCE OF M/S SHANKARA CANCER FOUNDATION FOR PROPOSED CONSTRUCTION OF BAGCHI - SRI SHANKARA CANCER CENTRE AND RESEARCH CENTRE WITH 750 BEDS SPREAD OVER AN AREA - 80,937.13 SQM IN MOUZA- CHANDIHATA, TAHASIL-JATANI, DIST- KHURDA WITH TOTAL BUILT-UP AREA-52,541.05 SQM. OF DR B.S SRINATH (MANAGING TRUSTEE) – EC

1. The proposal is for Environmental Clearance of M/s Shankara Cancer Foundation for proposed construction of Bagchi - Sri Shankara Cancer Centre and Research Centre with 750 beds spread over an area - 80,937.13 sqm in Mouza- Chandihata, Tahasil-Jatani, Dist- Khurda with total built-up area-52,541.05 Sqm.
2. The project falls under category “B” or activity 8 (a) - Building and Construction projects under EIA Notification dated 14th September 2006 as amended from time to time.
3. Smt. Susmita & Sri. Subroto Bagchi has approached the Government of Odisha to establish a cancer centre in Bhubaneswar in name of Sri Shankara Cancer Foundation and has been allotted 20 acres at Info valley, about 15 kms from the centre of Bhubaneswar city.
4. **Location and Connectivity** - Total land for this proposed project is 80937.13 sqm. over Rev. Plot No- 23(P), 24(P), 25(P), 26(P), 27(P), 28(P), 34(P), 35(P), 36(P), 37(P), 38(P), 39(P), 40(P), 41(P) & 42(P), Idco Plot No- A2, In Mouza - Chandihata, Jatani, Khurda, Odisha.Present Kissam of land is Gharbari. The Geographical co-ordinate of the project site is: Latitude 20°13'52.7"N & Longitude 85°42'25.6"E. The Site is located near NH-16 and Info valley road. The nearest railway station is Retang Railway station at a distance of approx 7.7 Km from the site & Bhubaneswar Railway Station is 14.8 Km from project site.

The nearest airport is Biju Pattnaik Airport, Bhubaneswar at a distance of approx.11.5 Km from project site.

5. The site is coming under Bhubaneswar Development Authority. The project comprises of 2 No. Ground, 1 No. G+1, 6 No.G+2, 1 No. B+G+6 Bagchi-Sri Shankara Cancer Centre And Research Centre Building.
6. The total plot area is 80937.13 sq.mt. with total built-up area 52541.05 sq.mt.
7. The Building Details of the Project:

Particular	Proposed
Plot Area	80,937.13 sqm
Ground Coverage	12773.31 sqm
FAR (Floor Area Ratio)	0.65
Built up Area	52,541.05 sqm
Road Area	12,949.94 sqm
Parking Area (% of Residential Area)	16,686.34 sqm (31.7%)
Green Belt Area	17,806.17 sqm (22%)
Power/Electricity Requirement & Sources	CESU – 2962.8 KW Solar – 189.2 KW Total – 3152 KW
No. of DG sets	3x1000+1x160 KVA
Water requirement	277.0 KLD (IDCO)
Sewage Treatment Plant	STP Capacity - 350 KLD ETP Capacity - 50 KLD
Hospital Beds	750 nos.

8. **Water requirement**: Fresh make up of 277m^3/day will be required for the project which will be sourced from IDCO Water Supply. Waste water of 346 KLD will be treated in a STP of 350 KLD & total waste water generation to be treated in ETP is 34.6 KLD in ETP of Capacity 50 KLD, which includes primary, secondary and tertiary treatment.
9. **Power requirement**: The daily power requirement for the proposed complex is preliminarily assessed as 3152.0 KW (Power from GRID – 2962.8 KW and Power from Solar – 189.2 KW). The power will be entirely supplied by 11 KV source of TPCODL of Odisha. Also, in case of power cut, 100 % power backup generator will be provided in the hospital. For this purpose diesel generator having 3160 KVA DG Set (3x1000+1x160 KVA) capacities will be provided.

   For energy conservation, there will be 100 nos. of Solar Lighting poles (@72 Watt) has been proposed for Street & common area solar lighting, so

   Energy conservation by using Solar Street Lighting = 100x72 = 7200 watt = 7.2 KW

   Energy conservation by using Solar lighting for common area = 182.0 KW

   Total Energy Conservation = (182.0+7.2) KW = 189.2 KW

Total Energy saving = 189.2/3152 = 0.060 x 100 = 6.0 %

10. **Rain Water Harvesting**: Rain Water will be harvested and recharge through 41 recharge pits from the plot area.
11. **Parking Requirement**: Total parking area provided 16686 m^2 Sq.mt./667 ECS and basement parking area will be provided.
12. 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).
13. **Green Belt Development**: Green belt will be developed over an area of 17,806.17 sqm which is 22 % of the plot area; by using the local species like Radhachuda, Nageswar, Akash Neem, Ashok, Polanga, Karang, Bela, Pijuli, Kaniara, Tagar, Henna, etc.
14. **Solid Waste Management**: From the domestic uses solid waste in form of food waste from kitchen and miscellaneous waste will be generated @ 0.45 kg/capita/day, which will be about 90 kg/day. Waste generation for Floating People will be @ 0.15 kg/capita/day, which will be 210 kg/day. Waste generation for Research Centre will be @ 0.10 kg/capita/day, which will be 55.0 kg/day The generated solid waste from the hospital complex will be collected into a garbage bin located at a suitable location inside the hospital complex. Bio-medical waste generation from 750 beds @ 1.5 kg/day/bed is 1125 Kg/d. Solid waste from sweeping will also is stored into the garbage bin.

Sl. No.	**Category**	**Counts (heads)**	**Waste generated (kg/day)**
Solid Waste Generation			
1.	Domestic	200 @ 0.45 kg/day/person	90.0 kg/day
2.	Floating/ Visitor	1400 @ 0.15 kg/day/person	210.0 kg/day
3.	Research Centre	550 @ 0.10 kg/day/person	55.0 kg/day
		Total Solid Waste Generated	**355.0 kg/day**
Bio-medical waste Generation			
1.	Patient 750 beds	750 @ 1.5 kg/day/bed	1125.0 kg/day
		Total Bio-medical Waste Generated	**1125.0 kg/day**

15. The estimated project cost is ` 150 Crores and cost for EMP is ` 2.1 Crores.
16. The project proponent along with the consultant **M/s Centre for Envotech & Management Consultancy Pvt. Ltd., Bhubaneswar** made a detailed presentation on the proposal on **07.12.2021**.

Considering the information / documents furnished by the proponent and presentation made by the consultant **M/s Centre for Envotech & Management Consultancy Pvt. Ltd., Bhubaneswar**, the SEAC recommended for grant of Environmental Clearance valid for a period of 7 years with following specific conditions in addition to the conditions as per **Annexure-A.**

i) All the land kisam shall be converted to "Gharabari" before going for construction activity for the project by appropriate revenue authority including land record of "SABIK/HAAL".

ii) Plantation and solar facilities to be implemented as proposed at appropriate time.

iii) **Parking** in terms of ECS (4-wheeler,2 wheeler and bicycles) shall be provided compatible with patience and attending visitors of proposed 750 base, OPD patients and visitors with them, Doctor's and staffs, nursing sisters and at least 10% floating population in confirmative building by- law/NBC norm/ applicable laws and rules for this kind of project.

iv) The proponent shall operate STP and ETP separately as standalone system and both shall not be inter-connected. ETP outlet effluent shall not be discharged to outside the project premises i.e. "zero discharge" from ETP to outside the premises shall be maintained.

v) The Decongestion plan as given by the proponent in the traffic density study report shall be implemented for compliance with a definite time frame.

vi) The proponent shall have the provision of incinerator of adequate capacity and design must be there to handle infectious waste, organic waste and health hazardous wastes in a hospital of this magnitude. In absence of an incinerator, the proponent shall make agreement with nearby Common Bio-Medical Waste Treatment Facility having incinerator facilities for disposal of infectious waste, organic waste and health hazardous wastes.

vii) Existing waterbody shall be renovated and maintained properly. Periodic monitoring of water quality shall be taken up to ensure its upkeeping.

viii) The proponent shall obtain permission from concerned authority for discharge of surplus treated water of STP only to nearby drain & nallah.

ix) The Sub-Committee of SEAC will visit the site within six 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. 02

PROPOSAL FOR ENVIRONMENTAL CLEARANCE OF WESTERN INTEGRATED WASTE MANAGEMENT FACILITY PVT. LTD FOR ESTABLISHMENT OF COMMON HAZARDOUS WASTE TREATMENT, STORAGE AND DISPOSAL FACILITY (CHWTSDF) LOCATED AT VILLAGE: PATARAPADA, TAHASIL - PARJANG, DIST-DHENKANAL OF SRI. SWAYAM PRAKASH JENA – EC

1. The proposal is for Environmental Clearance of Western Integrated Waste Management Facility Pvt. Ltd for establishment of Common Hazardous Waste Treatment, Storage and Disposal Facility (CHWTSDF) located at Village: Patarapada, Tahasil - Parjang, Dist-Dhenkanal.

2. As per EIA Notification dated 14th Sept, 2006, as amended from time to time; this project falls under Category “B”, Project or Activity 7 (d). (EIA Notification dated 14th Sep, 2006 as amended on 2009).
3. The proposed project will be established and operated by M/s Western Integrated waste Management Facility, Odisha approached the Industrial Infrastructure Development Corporation (IDCO) and State pollution Control Board to set up TSDF in central Odisha to cater the need of Odisha industries. Common Hazardous Waste Treatment, Storage and Disposal Facility (CHWTSDF) at Village- Patarapada, Teshil- Parjang, Dist- Dhenkanal, Odisha.
4. This is the 2nd Common Hazardous Waste Treatment, Storage and Disposal Facility (CHWTSDF) coming up in the State
5. Application for Environmental Clearance has previously been recommended from SEAC to SEIAA for the location Banjari, Deogarh vide file No SIA/OR/MIS/37224/2019 dated 20th July 2019.
6. As per the MoEF&CC, Govt. of India notification dated 29th Aug, 2019 where the boundary of Badrama-Kalasuni Wildlife Santuary was extended. And as the project area fell inside the boundary, they have shifted the location from Banjari, Deogarh to Parjang, Dhenkanal.
7. ToRs was issued vide letter no. 9326/SEIAA dated 22.10.2020 by the SEIAA Odisha.
8. Public hearing was conducted on 08/09/2021.Before the public hearing the proposed plant area was 70 Acres with proposed capacity of 50,000 TPA waste disposal, TOR was issued accordingly by SEIAA. However, during the Public hearing, which was conducted at Nimatail Cricket Playground, Patarapada (Khata No. 1023, Plot No. 41) of Parjang Tahsil in the District Of Dhenkanal few issues were raised regarding the proposed project land. To comply the suggestions and issues raised during the public hearing, the proposed land area has been reduced to 27.91 Acres and consequently the project capacity reduced to 20,000 TPA. The project cost has become Rs. 26 Crores. The final EIA/EMP has been prepared accordingly for the revised project details.
9. Different Type of Industries Existing in Sambalpur, Jharsuguda, Bolangir and neighbouring districts
    - Production of Aluminium, Mining, (Districts of Jharsuguda and Sambalpur)
    - Production of Iron and steel including other ferrous alloys, steel rolling etc. (Districts of Jharsuguda, Sambalpur, Sundergarh)
    - Power plants, Cement units (Districts of Bargarh,) Present in most of the districts
    - Production/industrial use of synthetic dyes intermediates and pigments.
    - Production of Refractory Bricks (Rajgangpur) and Rourkela.
    - Electro plating, Lead acid batteries recycling units.
    - Production, use and formulation of pesticides including stock-piles.
10. **Location and Connectivity –** Total Plot Area proposed in the project is 27.91 Acres (11.294 Ha). The Geographical co-ordinates of the Project is Latitude 20°52'46.88" North and Longitude 85°20'39.82" East on Plot No- 1, village - Patrapada, District - Dhenkanal.

Project site is falling in Survey of India Toposheet No. F45T01, F45T05. Nearest Railway station Burhapanka – 9.30km. NH-53 – 5km and NH-200 at 6.3km. Biju Pattanaik International Airport – 84.60Km. Nearest river – Brahmani at 5km. Nearest habitation are Katabahal – 1.22 km.

11. **Installed Capacity**: The total Capacity of the proposed project of secured landfill and stabilization treatment will be 50000 TPA (Direct landfill: 15000TPA and Treatment/Stabilization: 10000 TPA). The Facility is located strategically at Patrapada, Dhenkanal District which is the Common Boundary of Industrial cluster like Jajpur, Angul and Keonjhar.
12. **Water Requirement** – Water will be drawn from Underground Water and maximum water consumption will be 10 KLD. The waste water will be treated and waste water will be used in dust suppression. Leachate and effluent from landfill will be treated in Effluent Treatment plant (ETP) and Solar evaporation pond (SEP). The Domestic waste water will be treated in portable STP.
13. **Power Requirement** - The power requirement will be met through 100 KVA from CESU. In case of power failure, D.G. Set shall be used (124 KVA capacity) in Emergency only.
14. **Solid waste Management -** All hazardous waste containers will be provided with a general label as given in Form - 8 in Hazardous and Other Wastes (Management and Transboundary Movement) Amendment Rules, 2021. Transportation will be done with covered vehicles (Truck, tripper, containers) with GPS online tracking. The land fill area will be covered with appropriate soil layer after dumping of hazardous waste as per requirement to prevent any bad odour. Separate rain water drains are provided to avoid contamination of surface water. During rainy season the landfill will be covered with HDPE liner to avoid water contamination. Periodic chemical analysis of nearby surface water/ground water will be conducted to monitor the water quality. During rainy period temporary cover (HDPE/Plastic sheets) shall be provided. Also there shall be plantation along the periphery for further control of odour, if any. Hazardous waste manifest (Form 10) will be implemented in line with Hazardous and Other Wastes (Management and Transboundary Movement) Amendment Rules, 2021.
15. **Green Belt**- Development of greenbelt all along the boundary and along the roads within the project i.e. 33% of total project area i.e. 9.21Acres.
16. **Employment Potential**: Total employment for the operation will be 40 including support staff, skilled and unskilled workers.
17. EIA study has been carried out collecting Baseline Data from **December 2019 to February 2020 (Winter Season)**
18. The project cost is ` 202 lakhs and recurring cost – 20.5lakhs/Annum and Environmental Monitoring programme – Capital Cost – 33lakhs, recurring cost – 5lakhs/annum.
19. The proponent along with the consultant **M/s Visiontek Consultancy Services Pvt. Ltd., Bhubaneswar** made a detailed presentation before the SEAC on the proposal on **07.12.2021**.

Considering the information / documents furnished by the proponent and presentation made by the consultant **M/s Visiontek Consultancy Services Pvt. Ltd., Bhubaneswar**, the SEAC

recommended for grant of Environmental Clearance valid for a period of 7 years with following specific conditions in addition to the conditions as per **Annexure-B**.

i. "Kissam" of the land shall be converted to "Industrial use" from appropriate Revenue Authority before going for construction activity.
ii. Transport of HW from small industries shall be ensured while keeping rate for HW facilitating with provision of rewards for safe disposal.
iii. Leachate generated from the land fill facility shall be treated properly in a well-designed ETP of adequate capacity and treated water shall be reused in the land fill facility.
iv. The proponent shall install a STP of adequate capacity for treatment of domestic effluent generated from land fill facility.
v. Specific mitigative measures shall be adopted while handling of very hazardous / toxic substances like Aluminium dross residue, spent catalyst, mercury, spent resins from Thermal powers plants, waste generated from spent pot lining (SPL) processing unit. A detailed SOP shall be prepared and kept ready at the site and a copy of the same be submitted to SEIAA/ Regional office, MOEF and CC, GOI. to educate the workers at the site, who will handle these hazardous / toxic substances.
vi. Under no circumstances, the proponent shall process any hazardous waste like spent pot lining (SPL), aluminium dross etc. at the land fill site.
vii. Disaster Management Plan shall be prepared considering rain climatology & wind climatology with 30 years data on logical climate to tackle the situation in case of heavy rain, flood & wind.
viii. The proponent shall prepare an Effluent Monitoring programme with periodicity, confirming to "Zero discharge" and use the same for future monitoring of effluent generated from the land fill facility and copy of the same submitted to SEIAA/Regional office MOEF and CC, GOI.
ix. The Sub-Committee of SEAC will visit the site within six 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. 03

PROPOSAL FOR ENVIRONMENTAL CLEARANCE OF M/S CHARIOT CEMENT COMPANY (CSPPL) (A UNIT OF CHARIOT STEEL AND POWER PVT. LTD.) FOR PROPOSED NEW CEMENT GRINDING UNIT TO BE ESTABLISHED AT KALUNGA INDUSTRIAL ESTATE, TAHASIL - LATHIKATA, DISTRICT - SUNDARGARH OF SRI SURESH JOSHI – EC

1. The proposal is for Environmental Clearance of M/s Chariot Cement Company (CSPPL) (a unit of Chariot Steel and Power Pvt. Ltd.) for proposed new Cement Grinding Unit to be established at Kalunga Industrial Estate, Tahasil-Lathikata, District-Sundargarh.
2. The project falls under schedule 3 (b) "Cement plants" Category-B as per the EIA notifications, 2006 amendments thereafter.
3. Chariot Cement Company, A unit of Chariot Steel & Power (P) Ltd. (CSPPL) has acquired the assets of M/s Saraf Agencies Pvt. Ltd. (SAPL) at Kalunga Industrial Estate. The old plant is already dismantled / disposed. Required land is already under possession of CSPPL.
4. Therefore, CSPPL will set up a new cement grinding plant at the same location for production of 0.99 Lakh TPA PSC/PPC/OPC Cement (300 TPD) over an area of 6.6 acres.
5. SEAC granted **TOR** vide Letter no. 319/SEAC-12/19 dated **19.10.2019** or conducting EIA/EMP study.
6. EIA study has been carried out collecting Baseline Data from **December 2019 to February 2020 (Winter Season).**
7. **Public Hearing** was conducted successfully on **04.12.2020** at IDC Field, Jhartarang, Near Tarini Mandir, Lathikata, Sundargarh
8. The project is located in Plot No- 202, Industrial Estate, Kalunga, Tehsil-Lathikata, District- Sundargarh, Odisha, bounded by Latitude 22^0 13' 35" N to 22^0 13' 39" N and Longitude 84^0 45' 41" E to 84^0 45' 49" E & which falls on Toposheet No- F 45 G 16 (73 B/16). The site is well connected by road (NH – 23 at 1.7km and SH – 10 at 1.1km) and by rail nearest is Kalunga Railway Station, on Kolkata – Mumbai trunk route of South Eastern Railway, is only 2.9 KM from site. Nearest Airport is Jharsuguda Airport is 90km southwest. Nearest habitation is Village Jhartarang located at distance of 1.7 KM SE. Nearest River is Koel River at 2.3 KM. No national park or sanctuary is present within 10km radius from project site. Nearby industries are Sri Trinetra Iron & Steel (P) Ltd. around 50meters, Shree Jagannath Engineers Pvt. Ltd., Kalunga around 450meters, Nixon and Steel and power around 700meters and Times Steel & Power Pvt. Ltd., Kalunga around 750meters.
9. Rake loading exists at Kalunga Railway Station which is at a distance of 2.9 km (WSW) from the site.
10. Raw materials like Clinker, Fly ash, Slag, Gypsum & Coal will be required for production of cement and the raw materials will be sourced from open market / industries.
11. Clinker, Slag, Fly Ash & gypsum will be grounded at required proportion in the Ball Mill to produce different types of cement (PSC/PPC/OPC) as per the market demand. Cement will be stored in silo for onward dispatch through road / rail. Hot air required for

the purpose of drying of slag shall be generated through coal fired Hot Air Generator (HAG) of 10 TPH capacity.

12. Water Requirement - Water will be required for equipment cooling, dust suppression, green belt, domestic & Fire fighting purposes. 8.33 KLD water (2.5 KLD Domestic & 5.83 KLD Industrial water) will be sourced from industrial water supply facilities available in Kalunga Industrial Estate.
13. Power Requirement - 1200 KVA power will be required for operation of proposed cement grinding unit. This will be sourced from WESCO's substation catering 33 KVHT line to site. In case of power failure, D.G. Set shall be used (250 KVA capacity) in Emergency only. Renewable Solar energy is about 75KW i.e 7.5% of total power consumption.
14. About 95 persons will be engaged in the plant as direct manpower and indirectly more than 200 people will be engaged due to establishment of proposed cement plant.
15. Cement grinding unit does not generate any industrial waste water. Domestic waste will be discharged to soak pit through septic tank. Back wash of Raw Water Treatment Plant shall be reused for mill spray. Dust collected by the Bag Filters will be completely reused in the cement manufacturing process. Other solid waste will be in the form of rejected conveyor belts, torn / damaged cement bags, paper / wooden / plastic waste etc. which are not hazardous in nature and will be sold to recyclers on regular basis.
16. Plantation will be carried out in 3.3 Acres out of 10 Acres of acquired land.
17. Baseline data was collected from Dec 2019 to Feb 2019 for environmental components like AAQ, Ground & surface water quality, soil quality, noise level, traffic study, ecology and socioeconomic study. Concentrations of all monitored parameters are below the permissible limits of CPCB. There is no endangered and endemic species in the 10km radius study area.
18. Environment Management Plan - Bag filters will be installed at cement grinding mill, packing plant and coal dryer to control air pollution. Water sprinkling will also be carried out to suppress fugitive dust. Cement grinding unit does not generate any industrial waste water. Domestic waste will be treated in STP and reused for green belt. Back wash of Raw Water Treatment Plant shall be reused for mill spray. Dust collected by the Bag Filters will be completely reused in the cement manufacturing process. The equipments shall be provided with acoustic shields or enclosures to limit the sound level inside the plant. The proposed green belt over 2.45 acre will also help to prevent noise and dust generated within the plant from spreading beyond the plant boundary.
19. An Environment Management Cell (EMC) will be established in the plant which will be responsible for environmental monitoring, developing greenbelt, ensuring good housekeeping, ensuring statutory compliance as well as creating environmental awareness among work forces. Regular monitoring of the important environmental parameters will be taken up.
20. Public Consultation was conducted successfully on 04.12.2020 at IDC Field, Jhartarang, Near Tarini Mandir, Lathikata, Sundargarh under the Chairmanship of Addl. District Magistrate and assisted by Regional Officer, Rourkela. Compliance to the points raised by the public and time bound action plan was prepared.

21. As per the TOR, 2.5% of the project cost i.e. about ` 31.2 Lakhs will be earmarked towards the Enterprise Social Commitment (ESC) to implement the activities complying to the points raised by public during public hearing.
22. Capital cost of the project is estimated as ` 12.47 Crores. For environment management, capital cost is estimated as ` 65 Lakhs with recurring cost of ` 11.5 Lakh/annum.
23. The Environment Consultant **M/s Centre for Envotech and Management Consultancy Pvt. Ltd. Bhubaneswar** along with the proponent made a detailed presentation on the proposal before the Committee.

Considering the information / documents furnished by the proponent and presentation made by the consultant **M/s Centre for Envotech and Management Consultancy Services Pvt. Ltd., Bhubaneswar**, the SEAC decided to take decision on the proposal after receipt of the following information / documents from the project proponent followed by a site visit by the sub-Committee of SEAC to verify the constructional status of the project.

i. "Kisam" of the land conversion to "Industrial use" from appropriate Revenue Authority to be submitted.

ii. To confirm specific measures including permanent arrangement of water sprinkling against fugitive dust emission.

iii. Provision of solar power with plan & exact calculation for consumption vis-à-vis the generation and the percentage of total power demand to be submitted.

iv. Design capacity of STP to be submitted for about 200 manpower.

v. Design of coal & Gypsum shed with garland drain to be submitted so that no fines enter into the drain. Also submit the justification why Gypsum cannot be stored in "Silo" i.e silo provision for Gypsum?

vi. "Carbon balance" with carbon neutrality be submitted as against and carbon emission furnished.

vii. Inversion / Dispersion modeling study be undertaken by domain expert and finding be submitted with mitigation measures (if required)

viii. Finding of traffic study undertaken be compared with IRC norms and accordingly, traffic decongestion plan as & if required be submitted.

ix. Water management with rain water harvesting details be submitted.

x. Cement being dust prone industry and values of $PM_{2.5}$ & PM_{10} are close to prescribed standards, detail dust suppression management be submitted.

xi. Detail "Zero Discharge" Management (specific) be submitted.

xii. Copy of Land allotment letter of IDCO for the purpose of Cement Plant.

ITEM NO. 04

PROPOSAL FOR ENVIRONMENTAL CLEARANCE OF M/S RAMCO CEMENTS LTD., FOR EXPANSION OF EXISTING STAND-ALONE CEMENT GRINDING UNIT CAPACITY FROM 0.90 MTPA TO 1.80 MTPA (LINE-II) BY INSTALLATION OF AN ADDITIONAL CEMENT MILL OF CAPACITY 165 TPH BY M/S THE RAMCO CEMENTS LIMITED (TRCL) LOCATED AT/PO: HARIDASPUR, PS/TEHSIL: DHARMASALA, DIST: JAJPUR, ODISHA OF M. SRINIVASAN (PRESIDENT) – EC

1. The proposal is for Environmental Clearance of M/s Ramco Cements Ltd., for expansion of existing stand-alone cement grinding unit capacity from 0.90 MTPA to 1.80 MTPA (Line-II) by installation of an additional Cement mill of capacity 165 TPH by M/s The Ramco Cements Limited (TRCL) located at/PO: Haridaspur, PS/Tehsil: Dharmasala, Dist: Jajpur, Odisha of M. Srinivasan (President).
2. The project falls under schedule 3 (b) “Cement Plants. All Stand-Alone Grinding Unit, listed in the schedule as Category- B2 subject to the condition that transportation of raw material and finished products shall be primarily through railways; Vide MoEF O.M. J-13012/12/2013-IA-II (I), dt. 24.12.2013.
3. The project of M/s The Ramco Cements Limited located At/PO: Haridaspur, PS/Tehsil: Dharmasala, District: Jajpur, Odisha-755024 is for Expansion of existing stand-alone cement grinding unit capacity from 0.90 MTPA to 1.80 MTPA (Line-II) by installation of an additional Cement mill of capacity 165 TPH.
4. **Location and Connectivity –** Total land is 72.84ha. and Geographical co-ordinates of the Project is Latitude – 20°44'43.9"N to 20°44'8.55"N and Longitude - 86°06'54"E to 86°07'208"E. Project site is falling in Survey of India Toposheet No - F45U1 & F45U2. Nearest national Highway is NH-200 at 3 km and NH – 5 at 2.5 km. Nearest Railway station is Haridaspur Railway Station- 0.8 Km. Nearest airport is Biju Patnaik International Airport, Bhubaneswar at a distance of approximately 75.3 km. Nearest Reserve Forest is Bischinta R.F- 9.8 Km. Nearest water body are Kumaria Nala - 3.2 Km and Brahmani River is at 4.9 km. Nearest habitation is Haridaspur – 1km. Nearby Industries are M/s. P. J. Resources Pvt Ltd. – 1.3km and M/s. P. J. Minerals International Pvt Ltd. – 1.5km.
5. The existing project was accorded environmental clearance vide Ref. No. 3731/SEIAA, dated 26.10.2017. Consent to Operate for the existing unit was accorded by State pollution Control Board, Odisha vide lr. No. 5296/IND-I-CON-6741, dated 26.03.2021. The validity of CTO is up to 31.03.2026.

6. The unit configuration and capacity of existing and proposed project is given as below:

Product	Total Quantity in MTPA
Existing of Products Manufactured	
Portland Pozzolana Cement (PPC)	0.90
Portland Slag Cement (PSC)	
Ordinary Portland Cement (OPC)	
Expansion Products & Capacity	
Portland Pozzolana Cement (PPC)	0.90
Portland Slag Cement (PSC)	
Ordinary Portland Cement (OPC)	

Masonry Cement (MC)	
Sulfate Resisting Portland Cement (SRPC)	
Composite Cement (CC)	

7. The details of the raw material requirement for the proposed project/ expansion cum proposed project along with its source and mode of transportation is given as below:

Raw material	Source	Transportation mode	Existing plant requirement TPD	Proposed plant requirement TPD	Total plant requirement TPD (existing +proposed)	Distance in km
Clinker	TRCL, Jayanthipuram, Andhra Pradesh.	Rail	1,800	1,800	3,600	950
	TRCL, Ariyalur & Alathiyur, Tamilnadu.					1700
	Imported, Paradeep Odisha.					100
Flyash	Tata Steel BSL Limited Kalinga Nagar, Odisha	Rail	1,050	1,050	2,100	35
Phospo gypsum	Paradeep Phosphates Ltd, Paradeep, Odisha	Rail	150	150	300	100
Mineral Gypsum	Imported (Oceanic Trade Minerals Pvt. ltd, Paradeep Odisha.					100
Slag	RINL, Vizag, Andhra Pradesh (In future)	Rail	1,400	1,400	2,800	550
	TATA-BSL Meramendali, Odisha (In future)					150
	Tata steel, Angul, Odisha (In future)					160
	JSPL, Angul, Odisha					160
	VISA, Kalinga Nagar,Odisha (In future)					35
	Mesco, Kalinga Nagar,Odisha (In future)					35
	NINL, Kalinga Nagar,Odisha(In future)					35
			Existing plant requirement TPA	**Proposed plant requirement TPA**	**Total plant requirement TPA (existing +proposed)**	
Coal	Imported (Adani Enterprises Ltd) ,Paradeep,	Rail	20,000	20,000	40,000	35

	Odisha.					

8. **Water Requirement** – The water requirement for the project is estimated as 200 m3/day, out of which 100 m3/day of fresh water requirement will be obtained from ground water and the remaining requirement of 100 m3/day will be met from the Sagaria Nala. The permission for drawl of groundwater Vide NOC letter No. CGWA/NOC/IND/REN/1/2021/5825, Dt. 27.03.2020 to 26.03.2023 from Central Ground Water Authority (CGWB) and Surface water nearby Sagaria Nalla permission of same obtained Vide NOC Lr.No. WT-135/104, dated 04.01.2020 from Jaraka Irrigation division.
9. **Power Requirement** - The power requirement for the project is estimated as 17,800 KVA, out of which 10000 KVA in 132 KVA supply system shall be met from NESCO Utility on chargeable basis Vide Letter No. FC/CO/936/ 56040; dt. 23.07.2020. Also for standby operation 2. Nos of 6 MW DG- Sets installed. For Proposed expansion project power requirement of 7,100 Kwh i.e. 7,800 KVA permission is under process.
10. **Waste Management** - The details of solid and hazardous waste generation along with its mode of treatment/disposal is furnished as below:

Sl. No.	Source of Generation	Source	Quantity	Management Plan
1	Dust from APC Devices		100 TPA	Will be completely reused in Cement manufacturing process.
2	Ash from HAG		5,000 TPA (approx.)	Will be completely reused in Cement manufacturing process.
3	Sludge from settling tank of Treatment System.		0.5 Ton	Will be used as manure in green belt development.
4	Garbage / food waste from canteen & guest house		0.7 Ton	Will be made vermin composting and will be used as manure for green belt development.
S. No.	**Category of Hazardous Waste as per the Schedules I, II & III of these rules**	**Waste Description**	**Quantity**	**Mode of Disposal**
1.	Schedule- I Stream- 5.1	Used Oil / used Lubricants	500 Ltrs	Will be sold to authorize Re-processors.

11. **Green Belt**- Greenbelt will be developed in 50.38 ha which is about 33% of the total project area. A 2x2 m wide greenbelt, consisting of at least 3 tiers around plant boundary will be developed as greenbelt and green cover as per CPCB/MoEF&CC, New Delhi guidelines. Local and native species will be planted with a density of 2500 trees per

hectare.

12. **Employment Potential**: The total manpower requirement during operation phase of the project is estimated to be 75 Persons; out of which, 65 persons are existing manpower and 10 persons will be employed for the expansion.
13. Total Project Cost - The capital cost of the project is Rs 837.31 Crores and the capital cost for environmental protection measures is proposed as Rs 20 Crores. The annual recurring cost towards the environmental protection measures is Rs 0.45 Crores.
14. The proponent along with the consultant **M/s Visiontek Consultancy Services Pvt. Ltd., Bhubaneswar** made a detailed presentation before the SEAC on the proposal. The project proponent has requested to consider the project as category B2 and exempt them for conducting detailed EIA study.

Considering the information / documents furnished by the proponent and presentation made by the consultant **M/s Visiontek Consultancy Services Pvt. Ltd., Bhubaneswar**, the SEAC decided to take decision on the proposal after receipt of the following information / documents from the project proponent.

i. "Kisam" of the land of the existing unit and the proposed expansion with conversion to "Industrial use" from appropriate Revenue Authority be submitted.
ii. A comparative statement in tabular form of existing physical features, natural resources and environmental parameters and the proposed expansion be submitted. In case of physical features, the existing and the proposed be shown with dimensions in the lay out map.
iii. Comparative chart showing environmental parameters (i) as per base line data, (ii) as at present and (iii) as projected after expansion along with remedial measures.
iv. Certificate of compliance to existing conditions (latest) from MoEF&CC, Regional Authority be submitted. Wherever it is "being complied / partially complied / not complied", the reason be indicated for the same and definite reasonable time from be submitted for full compliance, and so also for CTE/CTO from Sate Pollution Control Board.
v. Compression of "Base line Data" before existing EC and present be submitted with mitigation measures for the deviation if any.
vi. Details of design & capacity of STP (existing & for proposed expansion) be submitted.
vii. Detail of water management (for existing & proposed expansion) with source be submitted including NOC/ permission from CGWA/ Water Resources Deptt., Govt of Odisha as the case may be along with waste water management.
viii. Provision of Solar Power / plan with exact calculation, both generation & consumption for existing & proposed expansion be submitted indicating the percentage of the same against the total power demand.
ix. DG set details with location, no & capacity & installation drawing of Stack / exhaust pipe be submitted.
x. No of tracks plying (to & fro), (loaded & empty) – incoming & outgoing with their parking provision & dust suppression system be submitted for the existing and the proposed expansion.

xi. Details of installation of bag filters be submitted.

xii. Details of green belt (existing & expansion) around the boundary of the plant with drawing / dimension in the layout map be submitted.

xiii. Inversion / Dispersion modeling study be undertaken by a domain expert and based on the findings, mitigation measures be submitted.

xiv. Carbon balance with carbon neutrality (existing & proposed expansion) be submitted.

xv. Details of Warehousing Management of Coal & Gypsum be submitted (for existing & proposed expansion).

xvi. Detailed justification as to why the expansion proposal will be treated as category B2 project.

xvii. Existing capacity of rail corridor and whether same can be cater the need of expansion project with justification.

ITEM NO. 05

PROPOSAL FOR ENVIRONMENTAL CLEARANCE OF SHIVA CEMENT LTD., FOR KHATKURBAHAL LIMESTONE & DOLOMITE MINE (ML AREA-72.439 HA) WITH EXPANSION IN PRODUCTION CAPACITY FROM 0.3475 MILLION TPA TO 1.50 MILLION TPA LIMESTONE (INCLUDING SUB-GRADE), 0.20 MILLION M3 PER ANNUM OB/WASTE/SB/IB/LOW GRADE DOLOMITE AND 0.108 MILLION M3 PER ANNUM TOP SOIL WITH MOBILE CRUSHER WITH SCREEN OF 500 TPH CAPACITY LOCATED NEAR VILLAGES- KHATKURBAHAL & KULENBAHAL, TAHASIL – KURTA, DISTRICT- SUNDERGARH OF SRI. MANOJ KUMAR RUSTAGI (DIRECTOR) – EC

1. This is a proposal for Environmental Clearance of M/s Shiva Cement Limited for Khatkurbahal Limestone & Dolomite Mines with expansion in production capacity from 0.3475 Million TPA to 1.50 Million TPA Limestone (Including Sub-grade) with mobile crusher with screen of 500 TPH Capacity over an area of 72.439 ha near Villages- Khatkurbahal & Kulenbahal, Tehsil – Kurta, District- Sundergarh (Odisha).

2. The project falls under Category" B" Project or Activity 1(a) – 4 for "Mining of Minerals" and S. No. 2, Project or Activity 2 (b) - 3 for "Mineral Beneficiation" as per MoEF&CC, Govt. of India Notification as the Mining Lease Area is less than 100 ha (as per S.O. 3977, dt.14.08.2018).

3. **Location and Connectivity** – The mine is situated near Villages- Khatkurbahal & Kulenbahal, Tehsil – Kurta, District- Sundergarh (Odisha). The latitude is $22^0$16'42.55755" N to $22^0$16'53.70413" N and longitude is $84^0$27'35.99047" E to $84^0$29'04.10197" E. The mine is well connected with SH-10 (~5.4 Km in SSW Direction). The nearest railway is available at Sonakhan (~12.9 km in SE direction), the nearest airport is Rourkela (~33 km in East Direction) and Jhasuguda (~70 km in SW Direction) & the nearest city is Rajgangpur (~13.5 km in SE direction). There is no National Park, Wildlife Sanctuary, Biosphere Reserves, Tiger Reserves, and Wildlife Corridors, etc. within 10 km radius of the mining lease area. There are 3 Protected Forests and 13 Reserve Forests falls within 10 km radius study area.

4. The mining lease of Khatkurbahal limestone & dolomite mine over an area of 72.439 ha was executed in favor of M/s. Shiva Cement Limited on 04.11.1997 for a period of 20 years w.e.f.15.01.1992. The first renewal application was made in the year 2010, for 20

years w.e.f. 14.01.2012 but later on as per section 8A of the Mines & Mineral (Development & Regulation) Amendment Act 2015, the lease period was extended for 50 years from first grant i.e. up-to 14-01-2042. Supplementary lease deed for the same was executed on 10.11.2016.

5. Environment Clearance for expansion in limestone production capacity from 0.12 Million TPA to0.3475 Million TPA limestone was issued in the form of NGT Order vide letter dated 04.03.2014. Compliance report of the conditions stipulated in the Environment Clearance has been certified by Regional Office of Ministry of Environment, Forest and Climate Change vide their letter No. 101-642/10/EPE/GY.Y dated 13.07.2020, subsequently a letter was issued by the R.O Bhubaneshwar based upon the action taken report submitted by SCL to MoEF&CC. Consent to Operate under Air & Water Act has been obtained by OSPCB vide letter no 5344/IND-I-CON-1904 dated 27.03.2021 (valid up to 31.03.2022).

6. Demand Notice was issued to Shiva Cement Limited by DDM, Rourkela dated 30.07.2020 whereby it has been directed to pay an amount of Rs. 18,57,73,619 purportedly towards compensation under Section 21(5) of the MMDR Act for production as per the judgment of Hon'ble Supreme court dated the 2nd August 2017 in writ Petition (civil) No. 114 of 2014 in the matter of common cause versus Union of India & Ors as applicable. Company has challenged the Demand Notice dated 30.07.2020 before the Central Government (Ministry of Mines), New Delhi on. 05-10-2020 by Application No. RA/22/22/2020-RC-1 under Rule 35 of the Minerals (Other than Atomic and Hydro Carbons Energy Minerals) Concession Rules, 2016 ("Revision Application") and the interim protection was granted to company vide order dated 24.02.2021. The matter was earlier heard on 26.10.2021 and the Mines Tribunal, New Delhi directed the State Govt. to provide clarifications in this matter. Subsequently, during the hearing on 30-11-2021, the Ld. Counsel of state govt. sought time to clarify the matter. The Revision Application is pending before the Central Government (Ministry of Mines), New Delhi. Final outcome of the issue under adjudication shall be followed by the company.

7. **R&R:** This is an operating mine and expansion in limestone production capacity is proposed within existing mining lease area. Therefore, no additional land will be required. Out of total mining lease area, 1.822 ha is grazing land. An area equivalent to the grazing land will be acquired in nearby area. Budget of Rs. 1.62 crore has been allocated for acquiring the alternate grazing land under R&R plan. Out of the total Private land, company has surface rights on 19.51 ha & remaining land will be acquired under the "Right to fair Compensation and Transparency in Land Acquisition, Rehabilitation and Resettlement Act-2013 (LARR Act, 2013)".

8. The Application for Environmental Clearance was submitted to SEIAA, Odisha on 19.06.2019 and accordingly, the standard ToR was issued on 14.08.2020. Base line data were generated from October to December, 2020. The Public Hearing for the proposal has already been conducted on 24.08.2021. Accordingly, the final EIA report submitted to SEIAA, Odisha for Environmental Clearance on 24.08.2021.

9. **Method of Mining**: The Khatkurbahal Limestone & Dolomite Mine is in operation since 1992. The method of mining adopted as opencast semi mechanized as well as manual with development of bench from ground level to top. It is proposed to deploy surface miner specially designed for hard and massive rock to avoid drilling and blasting as much as

possible. Surface miner is eco-friendly mining solution for operation in the close proximity of habitants. So opencast mechanized mining by forming systematic benches of 6.0 m height with proper width of about more than 10 m and combination of surface miner as well as conventional drilling blasting will be adopted for excavation of limestone as well as waste as per requirement and site conditions/constraints due to proximity of habitations. The drilling of blast holes will be done by rig mounted hydraulic rock drills instead of existing jack hammers. This will be transformed gradually during next three years of planning; the hole diameter will be 32-55 m and the machines will be operated by compressed air. The average rate of drilling will be about 8m/hr. Staggered pattern drilling will be done with limiting of 3 rows maximum per blast. Required yield per holes will be 54.675 ton (1.5m burden x 3.0m spacing x 4.5 m average depth x 2.7 specific gravity). Blasting will be done as per MMR 1961 under the supervision of qualified blasting in-charge/Blaster certificate holder and other competent personals. Blasting will be done beyond the danger zone. The loading of limestone will be done by hydraulic excavators of 1.6 cum as well as loaders of 1.3 cum bucket capacity. The transport of blasting material is being done by 16-25-ton capacity dumpers from mine faces to mobile crusher. Mobile crusher with screening arrangement/sizer of capacity 500 TPH will be procured at the mines site to bring down the limestone to less than 50 mm to make it suitable for feeding to the grinding system. The mobile crusher with screen will be procured and placed at the location within lease area. Screening will be done in view of mineral conservation by separating the interstitial clay from the ROM. Cross belt analyzer will be installed to monitor the homogeneity of limestone and to make suitable corrections in crusher feeding from mines. The ultimate transport of limestone from mine face to the cement plant is mainly by road using tippers of 16-25-ton capacity. The distance between mining lease area and cement plant is ~19.2 kilometers.

10. **Top Soil and Solid waste generation and management** : The top soil within the applied area is Silty loam in nature and brown in color. Top soil is about 2 m thick. About 0.187 million tone (0.162 million tonnes & 0.025 million tonnes during 2018-2019 & 2019-2020 respectively) of top soil has been generated since year 1998 to 2020, part of which has been utilized for plantation and the remaining top soil temporarily stacked and will be eventually used for greenbelt/ plantation. Total 0.656 million cum of top soil will be generated. Topsoil will be used in plantation to stabilize the backfilled area. The waste materials occurring within the ore zone is intercalated/overburden and inter-burden. About 59746 cum of waste have been generated till date. All OB generated throughout the years are adjusted in our two dumps which are well stabilized by plantation and around these dumps garland drains have been provided. at the conceptual stage, Total 4.7 Million cum of material consisting of 3.28 million cum OB/IB/SB/Waste/Low grade Dolomite & 1.42 million cum mineral reject/ sub grade will be generated. Once the reserve will be exhausted in the Eastern part of the lease area then the waste accumulated will be backfilled in the pit 1 & pit 2. (Phase wise/Concurrent reclamation shall be initiated after this plan period). The backfilled area would be covered with topsoil and plantation will be done over the same to restore the environmental setup

11. **Land use:** At present 1.0 ha has been covered under greenbelt/plantation with 1800 saplings. During plan period 0.8 ha will be covered 1200 saplings. Total 21.07 ha area will be covered under Green belt and plantation (6.58 ha on backfilled area + 1.50 ha area

under greenbelt along 7.5 m lease boundary in Eastern, Western and southern direction + 5.73 ha area on safety zone of Village habitation (3.58 along Khatkurbahal and 2.15 along Malatoli) + 7.26 ha area on safety zone of roads). An area of 22.259 ha area will remain undisturbed.

12. **Water Requirement:** Existing water requirement for the project is 62 KLD. Additional water requirement for the proposed expansion project will be 10KLD therefore the total water requirement after expansion will be 72 KLD. Water will be sourced from the ground water and rainwater collected in mine sump. NOC from CGWA has been obtained vide letter no. 21-4(304)/CGWA/SER/2011/66 dated 14.02.2011 and vide NOC no CGWA/NOC/MIN/ORIG/2021/12245 dated 07.07.2021

13. **Power requirement:** The existing power requirement is 10 KW.Additional power requirement for proposed expansion will be 740 KW. Therefore, Total power requirement after proposed expansion will be 750 KW

14. **Employment Potential:** Existing manpower for the project is 100 persons which will be 142 after expansion (including 17 Persons for EMP). The Unskilled /semi-skilled manpower are being sourced from the local area whereas the skilled manpower is being sourced from local as well as outside. Preference is given to the locals as per their skills set, qualification and eligibility.

15. No forest land falls within the lease area. No schedule I species found in the study area. Letter for the same has been received from Regional Chief Conservator of Forests, Rourkela Circle vide Memo no 2852/3F-799/2021 dated 05.10.2021. There are 3 Protected Forests and 13 Reserve Forests falls within 10 km radius of the study area

16. **Baseline Data:** The primary baseline data for site specific micro meteorology data, ambient air quality, water quality, noise level, soil and flora & fauna was collected during Post Monsoon Season (October to December, 2020). The baseline monitoring results of ambient air, soil, ambient noise level and ground water have been reported and the same were compared with respective prescribed standards viz. NAAQS-2009 (for air monitoring), IS:10500-2012 (for ground water) and ambient noise limits prescribed by CPCB.–Concentrations of PM10 and PM2.5 for all the 11 AAQM stations were found between 42.3 to 94.8 µg/m^3 and 20.4 to 58.7 µg/m^3 respectively. The concentrations of SO_2 and NO_2 were found to be in range of 5.05 to 12.75 µg/m^3 and 11.95 to 27.63 µg/m^3, respectively. Noise levels varied from 48.9 to 66.2 Leq dB (A) during day time and from 40.9 to 59.5 Leq dB (A) during night time and found within the limits prescribed by CPCB. The ground water /drinking water samples were collected from 8 locations, the ground water was found potable. The pH of collected water samples varied from 6.88 to 7.58. Total hardness varied from 62 mg/l to 295 mg/l. Total dissolved solids varied from 97 mg/l to 384 mg/l. The water samples contain, chloride from 7.39 to 87.4 mg/l, SO_4 varies from BDL (DL 1.0 mg/l) to 32.4 mg/l, Ca from 10.02 to 78.16 mg/l, Mg varies from 7.29 to 19.44 mg/l. The analysis results of soil show that soil is moderately acidic to slightly acidic in nature, the pH value ranges from 4.55 to 7.12, the soil texture is silty clay loam. The impact prediction carried through modeling indicated maximum incremental concentrations w.r.t. PM10 as 3.433 µg/m^3.

17. **Public Hearing:** Public hearing for the project was conducted on 24.08.2021 at 12:00 Noon Behind Jagannath Temple, Khatkurbahal Village under Kutra Block of District

Sundergarh, Odisha under chairmanship of Shri Biswajit Mohapatra Additional District Magistrate, Sundargarh and Shri Dr. P.K. Mohapatra, Regional Officer, Rourkela, State Pollution Control Board, Odisha. Issues raised during public hearing were about Employment, health facility, education facility, land acquisition, local area development, grazing land, Noise and dust pollution, better infrastructure etc. Budget for addressing the Public Hearing issues is Rs. 2.30 Crore.

18. **Project Cost:** Total project cost is Rs. 65 Crore. Cost for Environment Protection is 7.57 Crore. Recurring Cost for EMP is Rs. Rs. 1.0 Crore per annum.

19. The proponent along with the consultant **M/s JM EnviroNet Pvt. Ltd. Gurugram (Haryana)** made a detailed presentation before the SEAC on the proposal.

Considering the information / documents furnished by the proponent and presentation made by the consultant **M/s JM EnviroNet Pvt. Ltd. Gurugram (Haryana)**, the SEAC decided to take decision on the proposal after receipt of the following information / documents from the project proponent.

i. Breakup of the land (private & Govt) with the corresponding "Kisam" of the land and conversion of the same to "Mining use" be submitted from appropriate Authority including the same in favor of Project Proponent.

ii. Status of land acquisition of the land to be submitted.

iii. Certificate of compliance to EC conditions of existing project from the Regional Office, MoEF&CC, Govt. of India and also compliance to existing CTE/CTO conditions from OSPCB be submitted.

iv. Comparison in form of tabular form for the existing & the proposed expansion towards physical features, natural resources and environmental parameters be submitted showing the physical features in the layout map with Dimension.

v. OB/SB/IB waste management for existing & proposed expansion be submitted with annual moving inventory & the corresponding area for it showing in the layout map.

vi. Detail legal status be submitted including pending in different judiciary Court (S) and appeal with Govt.

vii. Plan with time frame with technology on use of mine pit water for irrigation purpose of agriculture land as raised during public hearing and also protection of grazing land.

viii. Provision with plan & calculation of generation & consumption of solar power vis-à-vis the percentage of the same against the total demand of power.

ix. Since yearly study data indicate fluoride as very near to the prescribed standard, specific mitigation measures to arrest it and so also PM_{10} & $PM_{2.5}$.

x. To confirm with details (drawing) of the separate road (to construct) with definite time frame for transportation of mineral to avoid traffic congestion in existing haulage road.

xi. Details of haulage road (with drawing & dimension) to be submitted along with permanent sprinkler arrangement on the road & inside the mines to arrest fugitive dust emission.

xii. Details of rain water harvesting / artificial recharging including dewatering of mines seepage water along with disaster management.

xiii. To explain how the present requirement of water is 62 KLD & after expansion of about 15 times, there is usage of addl. requirement of 10 KLD of water.

xiv. Details of STP with design & capacity and re-use of treated waste water be submitted.

xv. Socio – economic, Bio-diversity & Traffic study be undertaken (if not) and action plan based on the finding be submitted.

xvi. Detailed year wise production figure from 1994 to till date duly certified by concerned DDM.

ITEM NO. 06

PROPOSAL FOR ENVIRONMENTAL CLEARANCE OF CHHEND HERITAGE HOMES PVT. LTD. FOR PROPOSED CONSTRUCTION OF (2B+G+16) STORIED 'RESIDENTIAL APARTMENT BUILDING' OVER AN AREA OF 1.75 ACRES (7081.94 SQ.MTS), PLOT NO. 288(P) & 289/432(P) KHATA NO. 9, WITH TOTAL BUILTUP AREA 47889.13 SQMT. AT MOUZA- CHHEND, R.T.U - 3, P.S. CHHEND, TEHSIL-ROURKELA, SUNDARGARH OF SRI. ALOK SHARMA (DIRECTOR) – EC

The Project Proponent didn't attend the meeting. The proposal has been deferred to next meeting.

Approved

23.12.2021

SECRETARY, SEAC

CHAIRMAN, SEAC

ANNEXURE – A

CONDITIONS TO BE STIPULATED IN ENVIRONMENTAL CLEARANCE FOR M/S SHANKARA CANCER FOUNDATION FOR PROPOSED CONSTRUCTION OF BAGCHI - SRI SHANKARA CANCER CENTRE AND RESEARCH CENTRE WITH 750 BEDS SPREAD OVER AN AREA - 80,937.13 SQM IN MOUZA-CHANDIHATA, TAHASIL-JATANI, DIST- KHURDA WITH TOTAL BUILT-UP AREA-52,541.05 SQM. OF DR B.S SRINATH (MANAGING TRUSTEE) – 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 fire fighting equipment etc. as per National Building Code including protection measures from lightening 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. Provision for electric point at each and every parking location for e- vehicle charging etc. shall be provided.

TOPOGRAPHY AND NATURAL DRAINAGE

6. 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.
7. NOC from drainage department for discharge of treated water to readymade municipality drain shall be obtained.

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

8. As proposed, fresh water requirement from Ground water / PHED water supply shall not exceed 277 KLD.
9. 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.
10. 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.

11. 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.

12. 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.

13. 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.

14. Water demand during construction should be reduced by use of pre-mixed concrete, curing agents and other best practices referred.

15. 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. As proposed 41 (forty-one) nos. of rain water harvesting recharge pits shall be provided.

16. 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 drawal of water.

SOLID WASTE MANAGEMENT

17. The provisions of the Solid Waste (Management) Rules, 2016, E-Waste (Management) Rules, 2016, and the Plastics Waste (Management) Rules, 2016 shall be followed.

18. Bio-medical waste shall be collected, treated and disposed in accordance with Bio-medical Waste Management Rules, 2016.

19. Bio-Medical waste shall be disposed off through common bio-medical waste facility as per the agreement made with the nearby Common Bio-medical waste facility.

20. 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.

21. 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.

22. 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.

23. 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

24. Sewage shall be treated in STP of capacity 350 KLD. The treated effluent from STP shall be recycled/re-used for flushing, gardening and washing purpose. Surplus treated waste water shall be discharged to the drain provided by BMC for this project.
25. Clinical waste water shall be treated in ETP of capacity 50 KLD.
26. 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.
27. No sewage or untreated effluent water would be discharged through storm water drains.
28. 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.
29. 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.

ENERGY

30. 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.
31. 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.
32. Solar, wind or other Renewable Energy shall be installed to meet electricity generation equivalent to 2-5% 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.
33. 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.

34. 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.

35. 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

36. Construction site shall be adequately barricaded before the construction begins. Dust, smoke & other air pollution prevention measures shall be provided for the building as well as the site. These measures shall include screens for the building under construction, continuous dust/ wind breaking walls all around the site (at least 3 meter height). Plastic/tarpaulin sheet covers shall be provided for vehicles bringing in sand, cement, murram and other construction materials prone to causing dust pollution at the site as well as taking out debris from the site. Sand, murram, 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.

37. AII 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.

38. **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.**

39. 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.

40. For indoor air quality the ventilation provisions as per National Building Code of India shall be provided.

41. 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

42. No tree cutting/transplantation of existing trees has been proposed in the instant project. A minimum of 1 tree for every 80 m^2 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 approx. 17,806.17 sqm (approx. 22 %) of the plot area shall be provided for green area development.

TOP SOIL PRESERVATION AND REUSE

43. 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

44. 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

45. 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.

46. 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.

47. 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.

ENVIRONMENT MANAGEMENT PLAN

48. 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

49. 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.

50. A First Aid Room shall be provided in the project both during construction and operations of the project.

51. The company shall draw up and implement corporate social Responsibility plan as per the Company's Act of 2013.

52. 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(ll) 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 EC 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, the respective Zonal Office of CPCB and the SPCB. The criteria pollutant levels namely; SPM, RSPM, SO_2, 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 by E-mail.

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ANNEXURE - B

CONDITIONS TO BE STIPULATED IN ENVIRONMENTAL CLEARANCE FOR WESTERN INTEGRATED WASTE MANAGEMENT FACILITY PVT. LTD FOR ESTABLISHMENT OF COMMON HAZARDOUS WASTE TREATMENT, STORAGE AND DISPOSAL FACILITY (CHWTSDF) LOCATED AT VILLAGE: PATARAPADA, TAHASIL - PARJANG, DIST-DHENKANAL OF SRI. SWAYAM PRAKASH JENA – EC.

A. Statutory compliance:

1. The project proponent shall obtain forest clearance under the provisions of Forest (Conservation) Act, 1986, in case of the diversion of forest land for non-forest purpose involved in the project.
2. The project proponent shall obtain clearance from the National Board for Wildlife, if applicable.
3. The project proponent shall prepare a Site-Specific Conservation Plan & Wildlife Management Plan and approved by the Chief Wildlife Warden. The recommendations of the approved Site-Specific Conservation Plan / Wildlife Management Plan shall be implemented in consultation with the State Forest Department. The implementation report shall be furnished along with the six-monthly compliance report (in case of the presence of schedule-I species in the study area).
4. The proponent shall obtain necessary permission from concerned department for felling off trees if any.
5. The project proponent shall obtain Consent to Establish / Operate under the provisions of Air (Prevention & Control of Pollution) Act, 1981 and the Water (Prevention & Control of Pollution) Act, 1974 from the concerned State Pollution Control Board.
6. The Project proponent should ensure that the TSDF fulfils all the provisions of Hazardous and other Wastes (Management and Trans-boundary Movement) Rules, 2016.
7. The project proponents shall adhere to all conditions as prescribed in the Protocol for 'Performance Evaluation and Monitoring of the Common Hazardous waste treatment, storage and disposal facilities' published by the CPCB in May, 2010.
8. The project proponent shall obtain the necessary permission from the concerned authority, in case of drawl of ground water / surface water.
9. A certificate of adequacy of available power from the agency supplying power to the project along with the load allowed for the project should be obtained.
10. All other statutory clearances such as the approvals for storage of diesel from Chief Controller of Explosives, Fire Department, Civil Aviation Department shall

be obtained, as applicable by project proponents from the respective competent authorities.

B. Air quality monitoring and preservation:

1. The project proponent shall monitor fugitive emissions in the plant premises at least once in every quarter through labs recognised under Environment (Protection) Act, 1986.
2. The project proponent shall install system to carryout Ambient Air Quality monitoring for common/criterion parameters relevant to the main pollutants released (e.g. PM_{10} and $PM_{2.5}$ in reference to PM emission, and SO_2 and NOx in reference to SO_2 and NOx emissions) within and outside the plant area at least at four locations (one within and three outside the plant area at an angle of 120°each), covering upwind and downwind directions.
3. Gas generated in the Land fill should be properly collected, monitored and flared
4. 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 02 kms radius of the project is maintained and improved upon after the implementation of the project. This plan should be based on cumulative impact of all development and increased habitation being carried out or proposed to be carried out by the project or other agencies in this 02 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.

C. Water quality monitoring and preservation:

1. The project proponent shall install Continuous Effluent Monitoring System with respect to standards prescribed in Environment (Protection) Rules 1986 and connected to SPCB and CPCB online servers and calibrate these systems from time to time according to equipment supplier specification through labs recognised under Environment (Protection) Act, 1986 or NABL accredited laboratories.
2. Sufficient number of Piezometer wells shall be installed in and around the project site to monitor the ground water quality in consultation with the State Pollution Control Board / CPCB. Trend analysis of ground water quality shall be carried out each season and information shall be submitted to the SPC Board, Odisha, the Regional Office of MoEF&CC and SEIAA, Odisha.

3. The project proponent shall submit monthly summary report of continuous effluent monitoring and results of manual effluent testing and manual monitoring of ground water quality to Regional Office of MoEF&CC, Zonal office of CPCB, Regional Office of SPCB and SEIAA, Odisha along with six-monthly monitoring report.
4. There shall be no discharge in nearby river(s)/pond(s).
5. The depth of the land fill site shall be decided based on the ground water table at the site.
6. The Company shall ensure proper handling of all spillages by introducing spill control procedures for various chemicals.
7. All leachates arising from premises should be collected and treated in the ETP followed by RO. RO rejects shall be evaporated in MEE. Toxicity Characteristic Leaching Procedure (TCLP) test to be performed on leachates.
8. The Company shall review the unit operations provided for the treatment of effluents, specially the sequencing of MEE after tertiary treatment, the source of permeate when no R.O. is recommended and the treatment of MEE condensate. The scheme for treatment of effluents shall be as permitted by the Pollution Control Board under the provisions of Consent to Establish.
9. Leachate water or wheel wash effluent shall be treated in the effluent treatment plant followed by RO to achieve Zero Liquid Discharge (ZLD).
10. Total fresh water use shall not exceed the proposed requirement as provided in the project details. Prior permission from competent authority shall be obtained for use of fresh water.
11. Sewage Treatment Plant shall be provided to treat the wastewater generated from the project. Treated water shall be reused within the project.
12. A certificate from the competent authority for discharging treated effluent/ untreated effluents into the Public sewer/ disposal/drainage systems along with the final disposal point should be obtained.
13. Rain water runoff from hazardous waste storage area shall be collected and treated in the Effluent Treatment Plant.

D. Noise monitoring and prevention:

1. Noise level survey shall be carried as per the prescribed guidelines and report in this regard shall be submitted to Regional Office of the MoEF&CC and SEIAA, Odisha as a part of six-monthly compliance report.

2. The ambient noise levels should conform to the standards prescribed under E(P)A Rules, 1986 viz. 75 dB(A) during day time and 70 dB(A) during night time.
3. Acoustic enclosures for DG sets, noise barriers for ground-run bays, ear plugs for operating personnel shall be implemented as mitigation measures for noise impact due to ground sources.

E. Energy Conservation measures:

1. Energy conservation measures like installation of LED/CFLs/TFLs for the lighting the areas outside the building should be integral part of the project design and should be in place before project commissioning.

F. Waste management:

1. The TSDF should only handle the waste generated from the member units.
2. Periodical soil monitoring to check the contamination in and around the site shall be carried out.
3. No non-hazardous wastes, as defined under the Hazardous and Other Wastes (Management and Trans-boundary Movement) Rules, 2016, shall be handled in the premises.
4. The Project proponent shall not store the Hazardous Wastes more than the quantity that has been permitted by the CPCB/SPCB.
5. The solid wastes shall be segregated, managed and disposed as per the norms of the Solid Waste Management Rules, 2016.
6. A certificate from the competent authority handling municipal solid wastes should be obtained, indicating the existing civic capacities of handling and their adequacy to cater to the M.S.W. generated from project.
7. Any wastes from construction and demolition activities related thereto shall be managed so as to strictly confirm to the Construction and Demolition Rules, 2016.

G. Greenbelt:

1. Green belt shall be developed in an area as provided in project details, with native tree species in accordance with Forest Department. The greenbelt shall inter alia cover the entire periphery of the project site.
2. Top soil shall be separately stored and used in the development of green belt.

H. Public Hearing and Health Issues

1. Traffic congestion near the entry and exit points from the roads adjoining the project site shall be avoided. Parking should be fully internalized and no public space should be utilized.
2. Emergency preparedness plan based on the Hazard identification and Risk Assessment (HIRA) and Disaster Management Plan shall be implemented.
3. Provision shall be made for the housing of construction labour within the site with all necessary infrastructure and facilities such as fuel for cooking, mobile toilets, mobile STP, safe drinking water, medical health care, crèche etc. The housing may be in the form of temporary structures to be removed after the completion of the project.
4. Occupational health surveillance of the workers shall be done on a regular basis.

I. Corporate Environment Responsibility:

1. The project proponent shall comply with the provisions contained in MoEF&CC, Govt. of India OM vide F.No. 22-65/2017-IA.III dated 1st May 2018, as applicable, regarding Corporate Environment Responsibility.
2. The company shall have a well laid down environmental policy duly approve by the Board of Directors. The environmental policy should prescribe for standard operating procedures to have proper checks and balances and to bring into focus any infringements/deviation/violation of the environmental / forest /wildlife norms/ conditions. The company shall have defined system of reporting infringements / deviation / violation of the environmental / forest / wildlife norms / conditions and / or shareholders / stake holders. The copy of the board resolution in this regard shall be submitted to the Regional Office, MoEF&CC and SEIAA, Odisha as a part of six-monthly report.
3. A separate Environmental Cell both at the project and company head quarter level, with qualified personnel shall be set up under the control of senior Executive, who will directly to the head of the organization.
4. Action plan for implementing EMP and environmental conditions along with responsibility matrix of the company shall be prepared and shall be duly approved by competent authority. The year wise funds earmarked for environmental protection measures shall be kept in separate account and not to be diverted for any other purpose. Year wise progress of implementation of action plan shall be reported to the Regional Office of MoEF&CC, Bhubaneswar along with the Six Monthly Compliance Report.
5. Self-environmental audit shall be conducted annually. Every three years third party environmental audit shall be carried out.

J. Miscellaneous:

1. The project proponent shall make public the environmental clearance granted for their project along with the environmental conditions and safeguards at their cost by prominently advertising it at least in two local newspapers of the District or State, of which one shall be in the vernacular language within seven days and in addition this shall also be displayed in the project proponent's website permanently.
2. The copies of the environmental clearance shall be submitted by the project proponents to the Heads of local bodies, Panchayats and Municipal Bodies in addition to the relevant offices of the Government who in turn has to display the same for 30 days from the date of receipt.
3. The project proponent shall upload the status of compliance of the stipulated environment clearance conditions, including results of monitored data on their website and update the same on half-yearly basis.
4. The project proponent shall submit six-monthly reports on the status of the compliance of the stipulated environmental conditions on the website of the ministry of Environment, Forest and Climate Change at environment clearance portal.
5. The project proponent shall submit the environmental statement for each financial year in Form-V to the concerned State Pollution Control Board as prescribed under the Environment (Protection) Rules, 1986, as amended subsequently and put on the website of the company.
6. The criteria pollutant levels namely; $PM_{2.5}$, PM_{10}, SO_2, NOx (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.
7. The project proponent shall inform the Regional Office of MoEF&CC, Bhubaneswar as well as the SEIAA, Odisha, the date of financial closure and final approval of the project by the concerned authorities, commencing the land development work and start of production operation by the project.
8. The project authorities must strictly adhere to the stipulations made by the State Pollution Control Board and the State Government.
9. The project proponent shall abide by all the commitments and recommendations made in the EIA/EMP report, commitment made during Public Hearing and also that during their presentation to the Expert Appraisal Committee.
10. No further expansion or modifications in the plant shall be carried out without prior approval of the SEIAA, Odisha.

11. Concealing factual data or submission of false/fabricated data may result in revocation of this environmental clearance and attract action under the provisions of Environment (Protection) Act, 1986.
12. The SEIAA, Odisha may revoke or suspend the clearance, if implementation of any of the above conditions is not satisfactory.
13. The SEIAA, Odisha reserves the right to stipulate additional conditions if found necessary. The Company in a time bound manner shall implement these conditions.
14. The Regional Office of MoEF&CC, Bhubaneswar shall monitor compliance of the stipulated conditions. The project authorities should extend full cooperation to the officer (s) of the Regional Office by furnishing the requisite data / information/monitoring reports.
15. The above conditions shall be enforced, inter-alia under the provisions of the Water (Prevention & Control of Pollution) Act, 1974, the Air (Prevention & Control of Pollution) Act, 1981, the Environment (Protection) Act, 1986, Hazardous and Other Wastes (Management and Trans-boundary Movement) Rules, 2016 and the Public Liability Insurance Act, 1991 along with their amendments and Rules and any other orders passed by the Hon'ble Supreme Court of India / High Courts/NGT and any other Court of Law relating to the subject matter.
16. Any appeal against this EC shall lie with the National Green Tribunal, if preferred, within a period of 30 days as prescribed under Section 16 of the National Green Tribunal Act, 2010.

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