PROCEEDINGS OF THE MEETING OF STATE LEVEL EXPERT APPRAISAL COMMITTEE, ODISHA HELD ON 22ND DECEMBER, 2021

The SEAC met on 22nd 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

In view of urgency of infrastructure development to tackle Covid 19 pandemic, the Committee decided to forward the recommendation of SCB Medical College and Hospital (Item No. 9) separately. Draft proceeding of the meeting (Item No. 9) was finalized by the members through e-mail and also final proceeding of the meeting was confirmed by the members through e-mail.

ITEM NO. 09

PROPOSAL FOR ENVIRONMENTAL CLEARANCE OF M/S. ODISHA BRIDGE & CONSTRUCTION CORPORATION LIMITED (OB&CC) FOR REDEVELOPMENT OF SRIRAM CHANDRA BHANJA (SCB), MEDICAL COLLEGE & HOSPITAL (PHASE-1), CUTTACK, ODISHA OVER AN AREA 136.36 AC OR 55.18 HA OF SRI PRADIPTA KUMAR BAL - EC

1. The proposal is for Environmental Clearance for Redevelopment of SCB medical College & Hospital, Cuttack (Phase-I) over an area 136.36 Ac or 55.18 Ha of M/s Odisha Bridge & Construction Corporation Limited of Sri Pradipta Kumar Bal.
2. The project falls under category “B” or activity 8(b) - Townships and Area Development projects under EIA Notification dated 14th September 2006 as amended from time to time.
3. Shri Ram Chandra Bhanja (SCB) Medical College and Hospital is an undergraduate as well as a postgraduate medical institution with a tertiary care referral hospital. The redevelopment and expansion of SCB medical campus is proposed to be undertaken across approximately 136 acres of land area located next to the Mahanadi River.
4. The re-development plan shall broadly include construction of 3500 bedded Multi Specialist Hospital, Research facilities, Residential Block, Hostel Block, Guest Room with Ancillary Infrastructures like Playgrounds, Parking Facilities, Open Landscaped Spaces, Five nos. of entry points and robust circulation plan, Amenities and Services for

Patients and Visitors, Extensive waiting areas, dormitory, Aahaar centre etc.

5. Terms of Reference (ToR) has been granted by SEIAA, Odisha vide letter no. 2696/SEIAA dated 16th September,2021, additional ToR granted vide Letter No: 2870/SEIAA dated 23rd September,2021 and additional ToR prescribed by SEAC on 8th November,2021.
6. Location and Connectivity - The Project Site is a part of the Survey of India Toposheet No F45T15 & F45T16. The site falls between Latitude-20° 28'48.59"N to 20° 28'10.44"N and Longitude-85° 53'51.58"E to 85° 53'26.64"E in plot no and Khata no - 142 to 651 Manglabag (full or part) 1831 to 1853 Buxi Bazar. Proposed Project Site is well connected to a network of existing Taladanda canal road at E and ring road at NW. The hospital has two entrances with a service road which connects the main entrance to the rear entrance. The same service road acts as connecting link between one part of the city with the other which is used by the patients and general public. The main entrance is through the Manglabag side which has two gates for entry and exit. SSE direction. (KTJI) Katha Jori Railway station is 13 km away from the project site towards – S direction. Charbatia Airship -13.7 km- N, Biju Pattanaik airport – 31.5 km –S, Ravenshaw University- 1.2 Km –SSE, Barabati stadium- 2.08 km-NW, Barabati Fort: 2.72 KM –NW. NH-16/NH-55 – 2.7KM.
7. The site is coming under development plan of Cuttack Development Authority.
8. The total plot area is 5, 51,865 sqmtr or 136.37 Ac. or 55.18 Ha. and proposed total built- up area for phase-1(Existing + Proposed) = 781081.48 Sqm. Maximum heigh of the building is 47m for on residential tower and for all other buildings 45m.
9. The Building Details of The Project:

Area Details - Proposed Buildings - Phase 1	
Building Name	**Total Built up Area (Sqm)**
Proposed Building	
Clinical	349543.00
Hostel	96328.93
Residential	170575.11
Other Facilities	9704.35
Total	**626151.39**

10. **Water requirement**: The water to the existing buildings is supplied by WATCO. Additionally, the application of water supply for fresh water requirement for proposed redevelopment has been submitted for the supply of the same. WATCO will supply the treated water to fulfil this requirement from its treatment plant.
    - Total Water Requirement – 5341KLD
    - Total Fresh Water Requirement – 3721KLD
    - Total Domestic Demand: 1165 KLD
    - Total Flushing Demand: 585 KLD
    - Total Landscape Demand: 155 KLD
    - HVAC water requirement: 1200 KLD
11. **Waste water Generation** - 1 No. 75KLD Effluent Treatment Plant and the domestic

waste water from Hospital and residential facilities will be treated in 2No.STP of 300KLD & 1325KLD will be used in Flushing, Landscaping and HVAC make up water requirement . It is proposed to utilize the treated water of proposed ETP to be used for cooling tower makeup water. The chemical analysis would be done once the STP is operational.

12. **Power requirement**: Total Demand Load 26.1MVA and 5.7% of total electrical demand load generated by Solar Photo voltaic Cells. Total 18 DG sets each 2000kVA capacity has been proposed in the campus for power back up purpose, out of the 18 DG sets 13 DG sets can generate required power at the time of power failure.

Items/Department	**Quantity**
Total Terrace Area for Proposed Clinical & Residential Blocks	42332.99Sq.M
Terrace Area for Solar PV Panels	20%of Total Terrace Area: 8466. 6Sq.M
Total KW of Power generated from solar PV Cells @ 1 KW/6 Sq.M	411.1KW
Power Factor	0.95
Solar Power Generated from Solar PV panel	1485.37KVA: 1.49MVA
Total Demand Load	26.1MVA
Percentage of Total Electrical Demand Load Generated by Solar Photovoltaic Cells	5.7%
Total Demand Load (KVA)	26,599 KVA (MVA)

The power generated through the Roof Top Solar Photo Voltaic panel will be connected to the supply grid for net metering. The project is proposed to have more than the minimum requirement of Odisha Development Authorities (Planning & Building Standards) Rules, 2020. No separate provision for solar power usage for the common areas. Landscaped and paved outer areas have been provisioned as the total power generated using solar power panel is connected to main panel for further distribution in the system as per the load requirement.

13. **Rain Water Harvesting**: Total 132 nos rain harvesting pits has been proposed.

14. **Parking requirement**: Total area provided 1,20,523.85sq.m (Basement,Stilt and Surface Parking). The internal traffic generated by visitors shall be regulated and managed through well laid road (more than 12 mtrs (R/W). in each side) and parking system in the campus. The road system has been designed in accordance with the ODA, NBC codes/regulations. Pavement shall be designed in accordance with the IRC standards and codes. Necessary signs and road furniture shall be provided to ensure regulation and smooth flow of traffic. Peripheral road around the building is 7.5 mtrs wide (minimum R/W).

15. **Fire fighting Installations**: Fire fighting system will be installed as per recommendation of the Fire fighting Officer, Odisha and as per the guidelines of NBC 2016. Hospital block-As per clause 3.1.4 of NBC-2016, the said Hospital is classified under group C; Institutional Buildings. Hostel block-As per clause 3.1.4 of NBC-2016, the said Hostel is classified under group A; in subdivision A-3 dormitories. Residential block:-As per clause 3.1.2 of NBC- 2016, the said Residential is classified under group A; Residential Buildings.

16. **Green Belt and public amenities**: Total Green Area and public amenties is

132454.77 sqm which will be area under tree plantation & gardening. About 3120 nos. of trees will be planted. Preference will be given to native trees. Allergy causing trees will be avoided. 155 KLD of treated waste water will be used for watering of the plants and garden. Apart from this terrace pot plantation outside the boundary and along the approach road

17. **Solid Waste Management**: MSW from Existing Residential & Academic Blocks is [Biodegrable waste = 2172 kg/day+ non-Biodegradable =1503 kg/day] and from Existing Hospital is 3129kg/day and from proposed hospital is 3087kg/day. Total Domestic waste Generated from proposed & existing Residential, Hostel & Clinical building is 12313.6 Kg/Day.Total Biomedical waste generated from proposed & Existing Clinical building will be 932.4 Kg/Day. Solid waste disposal - in Integrated Composting Plant and as per Solid Waste Management Rules 2016.Total Hospital waste will be Segregated, Stored & Disposed as per Bio-medical Waste Management Rules 2016.
18. Baseline data was collected during the period of November 2020 to January 2021.

20. The estimated project cost is ` 4286 Crores and EMP cost Setup cost ` 32.11Cr & O & M per year 9.10 Cr.
21. **M/s Visiontek Consultancy Private Limited** had been appointed as the EIA Consultant for the project of " Re - Development of the SCB Medical College and Hospital, Cuttack", and they have completed the baseline data collection, submission of Forms 1, 1A and the TOR presentation to the SEAC on the 10th August 2021.
22. Subsequently, to expedite the process for this highly prestigious project of the Government of Odisha, we have appointed a new EIA consultant **M/S Building Environment (India) Private Limited**, in place of **M/S Visiontek Consultancy Private Limited** for carrying the remaining and balance activities including preparation and submission of EIA Report & EMP, the presentation to the SEIAA / SEAC and any subsequent activities necessary for the said works. This has been done to ensure timely completion of the EIA documentation and with view to obtain Environmental Clearance (EC)
23. The proponent has submitted combined master plan of the site showing additional surface parking, locations of the proposed Sewage Treatment Plants, the Effluent Treatment Plants and the location of the Diesel Generators. Drawing Number - ACM-SCB-TD-CN-MP-09 – SITE.
24. The project proponent has submitted an undertaking that no land is under litigation for redevelopment work of SCB Medical College & Hospital, Cuttack
25. The project proponent along with the consultant **M/s Building Environment (India) Pvt Ltd., Navi Mumbai** made a detailed presentation on the proposal.

Considering the information / documents furnished by the proponent and presentation made by the consultant **M/s Building Environment (India) Pvt Ltd., Navi Mumbai**, 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 that of " SABAK/ HAAL" records as well.

ii) No of trees that are cut with due permission as stated during the process of redevelopment of the project site,necessary compensatory plantation shall be done by PP or the authority concerned or by the Forest department,Government of Odisha under deposit scheme as per the Government rules

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

iv) Parking in terms of ECS (4-wheeler, 2-wheeler and bicycles) shall be provided compatible with patience and attending visitors, 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.

v) 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 Liquid Discharge" from ETP to outside the premises shall be maintained.

vi) Under no circumstances, treated waste water discharge from ETP shall be used for dual plumbing for flushing purpose.

vii) Existing ETP outlet of present SCBMCH shall be disconnected from the Tank to which domestic effluents are put and discharged to drain without treatment. This Tank shall be connected to any one of the two STPs proposed under expansion.

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

ix) 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. Incineration of hospital/ pathological wastes etc of the proposed expanded hospital shall be done in the existing Incinerator of SCBMCH as proposed and committed by PP/ Hospital Authority.

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

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

xii) Either Bridge or foot over(s), may be two/three, be constructed over Taladanda Canal for movement of light Motor Vehicles (04 wheelers) for parking at the parking space proposed site at South-East direction of the proposed hospital Blocks on the other side of Taladanda Canal.

xiii) The space available in North-East direction of the proposed redevelopment site located at Jobra junction shall be developed and dedicated for parking, which is at

least proximate to hospital blocks. The electrical Substation (small) be shifted from the said location.

xiv) To explore possibility of increase of one floor and dedicating ground floor for Parking, confirming to by-law applicable for hospital buildings in all the four hospital blocks.

xv) Parking space may be developed & provided in between the space between the adjacent 04 hospital blocks for two wheelers only, leaving clear space for internal road between the adjacent blocks for movement of commutators and the vehicles.

xvi) Permanent Environment Management Cell with environment professionals shall be in place, both for existing and proposed expansion of SCBMCH within a definite time frame.

xvii) This EC is granted subject to strict compliance by the Authority concerned on the conditions and commitments made by PP.

xviii) This EC granted without prejudice to any order or direction from any court of competent jurisdiction or competent authority under applicable laws including that of any litigation or legal dispute on land (if any).

xix) The PP and/ or the appropriate authority for the purpose shall comply with all the conditions of EC and if anything is found/ noticed otherwise at any point of time, the EC so granted shall be deemed to have withdrawn/revoked with immediate effect besides levy of penalty or actions as deem fit under applicable laws.

xx) The PP shall prepare Biodiversity Register for the entire 136-acre land through any expert Government agency like National Museum of Natural History, MoEF&CC, GoI, Bhubaneshwar or University etc. The Study shall be repeated every 5 years thereafter to evaluate the conservation Status as per Biodiversity Act, 2003.

xxi) The provisions of Energy Conservation Act,2002 with its amendments shall be implemented by Project Proponent while deciding the installation of all types of Electrical, Electronic & any other Energy Consuming Equipments in SCB-MCH entire project area with the philosophy of Energy Conserved is Energy produced and thus protect environment.

xxii) The Campus of the project area shall be provided with Pucca Boundary Wall with an intention to Protect the Green Belt, treatment Plants, Energy Conservation Equipments and Biodiversity of the project

xxiii) **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.**

Approved by

01.01.2022

Chairman, SEAC

07/01/22

Secretary, SEAC

ANNEXURE – A

CONDITIONS TO BE STIPULATED IN ENVIRONMENTAL CLEARANCE FOR M/S. ODISHA BRIDGE & CONSTRUCTION CORPORATION LIMITED (OB&CC) FOR REDEVELOPMENT OF SRIRAM CHANDRA BHANJA (SCB), MEDICAL COLLEGE & HOSPITAL (PHASE-1), CUTTACK, ODISHA OVER AN AREA 136.36 AC OR 55.18 HA OF SRI PRADIPTA KUMAR BAL – 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 3721 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 2 No.STP of capacities 300 KLD & 1325 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 75 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 132454.77 sqm 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.

Environmental Scientist, SEAC