

Minutes of SEIAA Meeting

Subject:- 9th Meeting of SEIAA, Odisha
Venue:- SEIAA, Odisha Office
From :- 20 Sep 2019
To :- 21 Sep 2019

Date :- **07 Nov 2019**

(1.) Proposal No. :- **SIA/OR/NCP/74935/2018** File No- **74935/31-NCP/05-2018** Type- **EC**

INTRODUCTION

The proponent made online application vide proposal no. **SIA/OR/NCP/74935/2018** dated **11 May 2018** along with copies of Form 1, Form 1A, Conceptual plan/ EMP seeking environment clearance under the provisions of the EIA Notification, 2006 for the above mentioned project. The proposed project activity is listed at SL.No.8 , under Category "8(a) " of EIA Notification 2006 and the proposal is appraised at State level.

PROJECT DETAILS

The project of M/s **BHUBANESWAR DEVELOPMENT AUTHORITY BDA** located in as follows :

State of the project				
S. No.	State	District	Tehsil	Village
(1.)	Odisha	Khordha	Khordha	Baramunda

DELIBERATION IN SEIAA and SEAC

After detailed deliberations, the committee observed:- **The SEAC in its meeting held on 20.07.2019 has recommended for grant of Environmental Clearance for the project valid for a period of 7 years with stipulated conditions. The SEIAA in its 9th meeting held on 20.09.2019 has granted EC.**

RECOMMENDATIONS OF SEIAA and SEAC

The committee's recommendation: **The SEAC in its meeting held on 20.07.2019 has recommended for grant of Environmental Clearance for the project valid for a period of 7 years with stipulated conditions. The SEIAA in its 9th meeting held on 20.09.2019 has granted EC.**

Conclusion

Recommended : The SEIAA in its 9th meeting held on 20.09.2019 has granted EC.

Condition

Part A–Conditions specific to this project :

1. Project Proponent has to obtain prior Consent to Establish under Section 25& 26 of the Water (Prevention & Control of Pollution) Act' 1974 and under Section 21 of the Air (Prevention & Control of Pollution) Act' 1981 from State Pollution Control Board before start of construction activities.
2. The approval of the Competent Authority shall be obtained for structural safety of buildings against earthquakes, on adequacy of firefighting installations 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. Risk assessment study along with Disaster Management Plan (DMP) shall be prepared. The mitigation measures for disaster prevention and control shall be prepared and get approval from competent authority. All other statutory clearances/licenses/permissions from the State Government Departments, SPCB, Odisha, concerned Boards and Corporations shall be obtained including from Central Pollution Control Board.
5. Construction shall conform to the requirements of **local seismic regulations**. The project proponent shall obtain permission for the plans and designs including structural design, standards and specifications of all construction work from the concerned authority, before execution of any construction.
6. All directions of the Airport Authority, Director of Explosives and Fire Department shall be complied. All the conditions laid down by State Pollution Control Board (SPCB) should be strictly complied with during entire life cycle of the project.

Air Quality and Noise Quality Monitoring & Preservation:

1. Baseline Environmental Condition of Project area i.e. Monitoring of AAQ as per NAAQS 2009, Monitoring of Ambient Noise Level & Analysis of Ground Water Samples should be conducted and report should be submitted to State Environment Impact Assessment Authority (SEIAA), Odisha and State Pollution Control Board, Odisha **prior to start of construction activities**.
2. All construction and demolition debris shall be stored at the site (and not dumped on the roads or open spaces outside) before they are properly disposed. All demolition and construction waste shall be managed as per the provisions of the **Construction and Demolition Waste Rules, 2016**. All workers working at the construction site and involved in loading, unloading, carriage of construction material and construction debris or working in any area with dust pollution shall be provided with **dust mask**.
3. **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.
4. It shall be ensured that the **construction debris is properly stored** on the site prior to disposal. Such requirements shall be made part of the contractor agreement.

5. Proper and prior planning, sequencing and scheduling of all major construction activities shall be done. Construction material shall be **stored in covered sheds**. Truck carrying soil, sand and other construction materials shall be duly covered to prevent spilling and dust emission. **Adequate dust suppression measures** shall be undertaken to control fugitive dust emission. **Regular water sprinkling** for dust suppression shall be ensured.
6. The height of the stack of the DG sets should be as per norms of Central Pollution Control Board (C.P.C.B.).
7. **Low Sulphur diesel generator sets** should be used during construction phase. **Diesel generator sets** during construction phase shall have **acoustic enclosures** and shall conform to Environment (Protection) Rules, 1986 prescribed for noise emission standards. **Ambient noise levels shall confirm to the standards prescribed by MoEF& CC, Govt. of India.**
8. The protective equipment such as nose mask, ear plugs etc. shall be provided to construction personnel exposed to high noise levels.
9. Back up supply shall be based on natural Gas/cleaner fuel subject to their availability.
10. Monitoring of AAQ as per NAAQS 2009, Monitoring of ambient noise level & analysis of ground water samples, monitoring of stack emissions from DG sets&treated effluents from STP should be conducted and **reports shall be submitted on monthly basis to OSPCB, Bhubaneswar.**
11. Project proponent shall install one continuous **Ambient Air Quality Monitoring Station** within the premises and meet its operation and maintenance requirements. In case of process disturbances / failure of pollution control equipment adopted by the unit, the respective unit shall be shut down and shall not be restarted until the control measures are rectified to achieve the desired efficiency.

Topography and Natural Drainage:

1. The natural system of water channels should be maintained for ensuring unrestricted drainage of rain water. No construction shall be allowed to obstruct the natural drainage through the site. Check dams, and other elements of Sustainable Urban Drainage Systems (SUDS) are allowed for maintaining the drainage pattern and to harvest rain water.
2. Water body falling within the premises (if any) shall not be lined or drained and shall be maintained in its natural condition.

Water Requirement, Conservation, Rain Water Harvesting, and Ground Water Recharge:

1. No ground water tapping through bore-well will be done without due permission from competent Authority. Water during construction phase has to be sourced from Municipal supply
2. Water saving practices such as usage of water saving devices/fixtures, low flushing systems, sensorbased fixtures, auto control walls, pressure reducing devices etc. should be adopted.
3. Water budget should be adopted as per the plan submitted in the supplementary Form IA & EMP.
4. All the generated domestic effluent should be sent to ETP/STP for treatment & further recycling & reuse.
5. Treated water recovered from STP would be used for flushing the toilets,

gardening purpose, make-up water in air conditioning systems, etc. As proposed, fluidized bed reactor (FBR) type sewage treatment plant should be installed. **The sewage treatment plant shall be ensured before the completion of Building Complex.**

6. Rainwater from open spaces shall be collected and reused for landscaping and other purposes. Roof top rain water harvesting shall be adopted for the proposed Buildings. Every building of proposed extension project shall have rain water- harvesting facilities. A complete plan for rainwater harvesting at the proposed site shall be drawn up and implemented. Before recharging the surface runoff, pre-treatment must be done to remove suspended matter and oil and grease.
7. 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 for allotment. This should be specified separately for ground water and

surface water sources, ensuring that there is no impact on other users.
8. 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.
9. Water demand during construction should be reduced by use of pre-mixed concrete, curing agents and other best practices referred.
10. Monitoring of ground water table and quality once in three months shall be carried out. **Construction of tubewells, borewells shall be strictly regulated.**
11. **Permeable (porous) paving** in the parking areas, and walkways should be used to control surface runoff by allowing storm water to infiltrate the soil and return to groundwater. The storm water management plan shall be implemented in such a manner that the storm water is discharged through an existing dedicated storm water outfall only.
12. 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.
13. 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:

1. Municipal solid wastes generated in the proposed extension buildings shall be managed and handled in accordance with the provisions of the Solid Waste (Management) Rules, 2016, E-Waste (Management) Rules, 2016, and the Plastics Waste (Management) Rules, 2016.
2. Disposal of muck during construction phase shall not create any adverse effect on the neighbouring communities and be disposed taking the

necessary precautions for general safety and health aspects of people, only in approved sites with the approval of competent authority.

3. Two chambered container or two separate containers (one for recyclable wastes and other for all organic and compostable wastes) shall be placed at appropriate distance on the road sides and inside the building. Covered dustbin / garbage collector in convenient places to collect the Municipal solid wastes shall be provided.
4. Proper composting / vermi-composting of municipal solid wastes shall be carried out. All municipal solid wastes shall be segregated, collected, transported, treated and disposed as per provisions of the Solid Waste Management Rules, 2016. Provision of vermin-composting for the biodegradable solid wastes generated from the proposed extension buildings as well as the large amount of biomass that shall be available from the tree plantation shall be made.
5. The use of hand gloves, shoes and safety dress for all waste collectors and sorters shall be enforced.
6. Any hazardous waste generated during construction phase, shall be disposed off as per applicable rules and norms with necessary approvals of the State Pollution Control Board.
7. Construction spoils, including bituminous material and other hazardous materials including oil from 'construction equipment' must not be allowed to contaminate soil/ground water. The dump sites for such material must be secured so that they shall not leach into the ground water.
8. 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.
9. Recycling of all recyclable wastes such as newspaper, aluminium cans, glass bottles, iron scrap and plastics etc. shall be encouraged through private participation. Project proponent shall take appropriate action to ensure minimum utilization of plastic carry bags and plastic small containers etc. within the proposed buildings.
10. Properly treated and disinfected (Ultra Violet Treatment) sewage shall be utilized in flushing the toilets, gardening purpose, make up water in air conditioning systems etc. Non-mixing of faecal matter with the municipal solid wastes shall be strictly ensured.
11. Non-mixing of sewage/sludge with rainwater shall be strictly ensured.

Sewage Treatment Plant & Maintenance:

12. Approval of 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.
13. No sewage or untreated effluent water shall be discharged through storm water drains. Accumulation/stagnation of water shall be avoided ensuring vector control.
14. 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.

15. Project proponent shall operate and maintain the sewage collection/conveyance system, sewage pumping system and sewage treatment system regularly to ensure the treatedwater quality within the standards prescribed by MoEF& CC, Government of India.
16. 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 Conservation Measures:

1. Use of energy efficient construction materials to achieve the desired thermal comfort shall be incorporated. The desired level of roof assembling "U" factor and insulation "R" value must be achieved. Roof assembling "U" factor for the top roof shall not exceed 0.4watt/sq.m./degree celsius with appropriate modifications of specification and building technolosssgies. The provisions of National Building Code 2005 shall be strictly followed.
2. Street/ Corridor lighting shall be energy efficient. The highpressure sodium vapour (HPSV) Lamps & compact fluorescent lamps (CFL) along building premises shall be provided. High intensity, high mast lights to be installed at few strategic points. Solar energy shall be used for outdoor lighting.
3. Reduction of hard paving-onsite(Open area surrounding all buildings) and/or provision of shades on hard paved surfaces to minimize heating land effect and imperviousness of the site should be undertaken.
4. All proposed air/ conditioned buildings should follow the norms proposed in the Energy Conservation Building Code (ECBC) regulations framed by the Bureau of Energy Efficiency.
5. 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 shouldbe used for the project.
6. The project proponent shall resort to solar energy at least for street lighting and water heating for Proposed Building Complex, gardens/park areas.
7. During maintenance, energy efficient electric light fittings & lamps - low power ballasts, low consumption high power luminaries, lux level limiters & timers for street lighting shall be provided.
8. Provisions shall be made for the integration of solar water heating system.
9. A report on the energy conservation measures confirming to energy conservation norms finalized by Bureau of Energy Efficiency should be prepared incorporating details about building materials & technology, "R" and "U" factors etc.

Green Cover:

1. Plantation along the side of the buildings & roads and in the open spaces shall be developed to act as sinks of air pollutants. The plantation of trees shall be completed in the construction stage. The plantations shall consist of mixture of suitable indigenous, fast growing and sturdy species of trees,

shrubs and herbs. Preferential plantation of flowering trees with less timber and fruits value shall be carried out. **20% of the total plot area shall be used for plantations** and raising of green cover.

2. Layout of proposed buildings and roads within premises etc. shall be made in such a way that it shall cause minimum disturbance to existing trees. Appropriate green belt shall developed to compensate the loss by tree cutting (if any). The greening programme shall include plantation of indigenous species.

Top Soil Preservation and Reuse:

1. Topsoil excavated during construction activities should be stored for use in landscape development within the project site. Adequate erosion and sediment control measures to be adopted before ensuing construction activities. The construction debris and surplus excavated material shall be disposed of by mechanical transport through the BMC or any other authorized agency.
2. Prior permission should be obtained from the competent authority for demolition of the existing structure, if any. Waste recycling plans including topsoil should be developed prior to beginning of demolition and construction activity. The plans should identify wastes to be generated and designate handling, recycling and disposal method to be followed.

Transportation & Parking:

1. 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 and be operated only during non-peak hours.
2. Dedicated pedestrian paths shall be provided along the proposed buildings. appropriate access shall be provided for physically challenged people in the pedestrian paths.
3. The design of service roads and the entry and exit from the buildings shall conform to the norms & standards prescribed by the State Public Works Department.
4. The road system shall have the road cross sections for general traffic, exclusive ways for public mass transport (bus) system, pedestrian paths and ways, utility corridors and green strip.
5. All intersections shall be designed and developed as roundabouts.
6. All utility lines (electricity, telephone, cable, water supply, sewage drainage, etc. Shall be laid below ground level. Ducts shall be provided along and across the roads to lay the utility lines. Major trunk (water/sewerage) lines are to be laid along the utility corridor.
7. The road drainage shall be designed to enable quick runoff of surface water and prevent water logging.
8. Adequate provision shall be made to cater to the parking needs. Parking spaces standards as given in "Manual on Norms and Standards for Environmental Clearance of Large Construction Projects "issued by MoEF& CC, Government of India shall be adopted.
9. 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.

10. 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.
11. Buses having residence time 4 hours shall be parked at a different site as the available area of 15.5 acres is not sufficient.

Environment Management Plan:

1. The environmental safeguards and mitigation measures contained in the application shall be implemented in letter and spirit. The project proponent should implement environmental monitoring programme as per details submitted in EMP.
2. All the conditions, liabilities and legal provisions contained in the Environmental Clearance shall be equally applicable to the successor management of the project in the event of the project proponent transferring the ownership, maintenance of management of the project to any other entity.
3. It shall be mandatory for the project management to submit six (06) monthly compliance reports on post environmental monitoring in respect of the stipulated terms and conditions in this Environmental Clearance to the State Environment Impact Assessment Authority (SEIAA) ,Odisha , SPCB & Regional Office of the Ministry of Environment & Forest, Odisha in hard and soft copies on 1st June and 1st December of each Calendar Year.

Others:

1. 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.
2. A First Aid Room shall be provided in the project both during construction and operations of the project. Medical (First-Aid) facility and ambulance services shall be provided for visitors & employees. Para-medical staff should be attached as medical facility provider.
3. Rest room facilities shall be provided for service population.
4. Unskilled construction labourers shall be recruited from the local areas.
5. Regular supervision of the above and other measures shall be in place all through the construction phase so as to avoid disturbance to the surroundings.
6. All the labourers to be engaged for construction works shall be screened for health and adequately treated before issue of work permits. The contractor shall ensure periodic health check-up of construction workers.
7. Fencing of the project boundary shall be done before start of construction activities.
8. The company shall draw up and implement corporate social Responsibility plan as per the Company's Act of 2013.
9. The project authorities shall provide requisite funds for recurring and non-recurring expenditure to implement the conditions stipulated by SEIAA, Odisha with the implementation schedule for all the conditions stipulated herein. The funds so provided shall not be diverted for any other purpose.

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

Part B – General Conditions:

1. A copy of the Environmental Clearance letter shall also be displayed on the website of the 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. In the case of any change(s) in the scope of the project, the project would require a fresh appraisal by the SEIAA, Odisha.
4. 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.
5. 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.
6. 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.
7. 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.

8. A copy of the clearance letter shall be sent by the proponent to concerned Panchayat, ZillaParisd/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.
9. 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 also update the same on the website of MoEF& CC 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, SO₂, NO_x (ambient levels as well as stack emissions) or critical sectoral parameters, indicated for the project shall be monitored and displayed at a convenient location near the main gate of the company/premises in the public domain.
10. 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.
11. Any appeal against this Environmental Clearance shall lie with the National GreenTribunal (NGT), if preferred within a period of 30 days as prescribed under section16 of the National Green Tribunal Act, 2010.