NI- 55/Durg/23 Date: - 12/05/2023



CHHATTISGARH ENVIRONMENT CONSERVATION BOARD

Paryavas Bhawan, Sector - 19, Nava Raipur Atal Nagar,

<u>District - Raipur (C.G.)</u> 492002

E-mail - hocecb@gmail.com

No. 857/TS/CECB/2023 Nava Raipur Atal Nagar, dated: 12/05/2023

To,

M/s Abhishek I Mishra Memorial Medical College and Research,

Junwani Road, Bhilai, **District – Durg (C.G.)**

Sub: - "Permission to Establish" for Hospital (750 Beds) at Junwani Road, Bhilai, District – Durg (C.G.).

Ref: - Your online application dated: 09/01/2023 and subsequent correspondence ending dated: 20/02/2023 (online application no. 11739991).

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Without prejudice to the powers of this Board under the Water (Prevention and Control of Pollution) Act, 1974, and the Air (Prevention and Control of Pollution) Act, 1981 and without reducing your responsibilities under the said Acts, and after going through your proposal for achieving the effluent and gaseous emission standards, it is to inform you that this Board grants you "Permission to Establish" only for Hospital (750 Beds) at Junwani Road, Bhilai, District – Durg (C.G.) subject to fulfillment of the following terms and conditions.

TERMS & CONDITIONS: -

- Hospital management shall ensure to submit proposal for ETP within 01 month from the date of issue of this letter and to establish ETP before operation.
- 2. Hospital management shall provide adequate facility for proper treatment of domestic / trade / laundry/hospital effluent etc. and shall ensure that the treated effluent quality meet the standards prescribed by Board published in Gazette Notification dated 25.03.88. Sewage collection system of adequate capacity to convey the sewage during peak hours shall be laid to collect and convey the sewage from various buildings. The augmentation of Sewage Collection System, Sewage- Pumping Station (if any) and Sewage Treatment Plant shall be ensured before the completion of the buildings. Project proponent shall operate and maintain the sewage collection / conveyance system, sewage pumping system and sewage treatment system regularly to ensure the treated effluent quality within the standards prescribed. The installation of sewage treatment plant shall be certified by an independent expert and report in this regard shall be submitted to the Board. The grey and black water shall be separated by the use of dual plumbing line. The centralized treatment system shall be provided to treat 100% grey water. Properly treated and disinfected (Ultra Violet) sewage shall be utilized in

flushing the toilets, gardening purpose, make up water in air conditioning systems etc. No treated/untreated effluent shall be discharged outside the premises under any circumstances. Zero discharge condition shall be maintained all the time. Necessary measures shall be made to mitigate the odour problems from Sewage Treatment Plant (STP). Accumulation/ stagnation of water shall avoid ensuring vector control. Appropriate arrangement shall be made for treatment and reuse of backwash water of filtration plant (if any). Project management shall make arrangement of suitable drains/pipe networks to ensure adequate flow for full utilization of treated effluent inside the premises. The major parameters of treated effluent shall not exceed the following limits: -

| S. No. | Parameters | Limits |
|--------|------------------|-------------------------|
| 1. | pH | 5.5 - 9.0 |
| 2. | Suspended Solids | 100 Milligram per Liter |
| 3. | BOD | 30 Milligram per Liter |
| 4. | COD | 250 Milligram per Liter |
| 5. | Oil and Grease | 10 Milligram per Liter |

Chhattisgarh Environment Conservation Board may further stipulate stringent limit depending upon environmental conditions.

- 3. The infectious liquid wastes and other non- infectious liquid wastes shall be collected and treated separately. Bio Medical Wastes for laboratory, washing, cleaning, housekeeping and disinfecting activity shall be properly disinfected by chemical treatment and sent to effluent treatment plant (ETP). All the night soil and waste pipelines from the toilets, kitchen, pantries, and internal toilets shall be connected to the Sewage Treatment Plant. The Sewage Treatment Plant (STP) shall comprise of primary, secondary and tertiary treatment facility. Sewage Treatment Plant shall be installed for treatment of domestic waste water from various units. Treated wastewater from the STP which shall be 100% utilized within the project premises and thus, no wastewater shall be discharged outside the hospital premises under any circumstances. Sewage collection system of adequate capacity to convey the sewage during peak hours shall be laid to collect and convey the sewage from various buildings. The augmentation of Sewage Collection System, Sewage-Pumping Station (if any) and Sewage Treatment Plant shall be ensured before the completion of the buildings.
- 4. Delay tanks, which shall store the fecal matter generated from the isolation ward, where patients are exposed to radioactive therapy (if any), shall be provided within hospital complex as per the standard prescribed by Atomic Energy Regulatory Board (AERB). The tanks shall be provided with non-corrosive double lining to protect against any damage. The time for each tank shall not be less than 48 hours. The outlet of delay tank shall be located higher than the main sewer line. After this retention time the soil shall be transferred to the STP for further biological treatment. Delay tank facility shall be fenced from all sides with lock and key, in order to restrict any entry of general public in that area.
- 5. Project proponent shall provide adequate measuring arrangement for the measurement of water utilized in different categories and effluent generated.
- 6. Provision of drinking water, wastewater disposal, solid wastes management and primary health facilities shall be ensured for labour camps. Proper sanitation facilities shall be provided at the construction site to prevent health related problem. Domestic as well as sanitary wastes from construction camps shall be cleared regularly. Provision shall be made for mobile toilets.

- 7. The safe disposal of wastewater and solid wastes generated during construction phase shall be ensured. Water usage during construction shall be optimized to avoid any wastage. Adequate safely measures shall be adopted to the construction workers.
- 8. Hospital management provide adequate air pollution control arrangements at all point and non point sources. Project proponent shall install suitable air pollution control equipments to ensure particulate matter emission less than 50 mg/Nm³. At no time the emission level shall go beyond the prescribed limits/standards. In the event of failure of any pollution control system adopted by hospital management, the respective unit shall not be restarted until the control measures are rectified to achieve the desired efficiency. Chhattisgarh Environment Conservation Board may further stipulate stringent particulate matter and air pollutants emission limit depending upon environmental conditions.
- 9. The height of all stacks attached with various particulate matter, air pollutants emission units shall be maximum of the following:
 - a. Based on H=14(Q) $^{0.3}$ (where Q is emission rate of SO₂ in Kg/Hr., and H is Stack height in meters) or;
 - b. Based on calculation to ensure the ground level concentration of pollutants in ambient air in the nearby residential, rural and other areas including the areas where maximum ground level concentration are predicted (due to establishment/ commissioning of the project within prescribed limits or;
 - c. Based on guidelines of Ministry of Environment & Forests, Government of India/Central Pollution Control Board or;
 - Minimum height of other stack shall not be less than 30 meters. Adequate arrangement of stack monitoring shall be provided for all the stacks.
- 10. Construction material shall be stored in covered godowns / sheds. Truck carrying soil, sand and other construction materials shall be duly covered to prevent spillage and dust emission. Project management shall provide adequate measures to control air pollution during the constructions. Adequate dust suppression measures shall be undertaken to control fugitive dust emission. Regular water sprinkling for dust suppression shall be ensured. Ambient air quality shall not exceed the standards prescribed by Board.
- 11. Monitoring facilities shall be provided for the measurement of quality of ambient air, noise level and effluent to determine the incremental pollution load on air, noise and water quality after the commissioning of the project.
- 12. Three bin collecting system shall be implemented within hospital area. Two-chambered container (one for recyclable wastes and other for all organic and compostable wastes) shall be placed at appropriate distance/places on the roadside and inside the other buildings. Covered dustbins / garbage collector in convenient places to collect the municipal solid wastes shall be provided. Modern trucks capable of using hydraulic lifting as well as safe covered garbage containers shall be provided for transportation. The municipal solid wastes shall be disposed in sanitary landfill through municipal council. All municipal solid wastes shall be segregated, collected, transported, treated and disposed as per provisions of the Municipal Solid Wastes (Management and Handling) Rules, 2016 (As amended).
- 13. Hospital management shall install separate digital water meter for measurement of ground & surface water used.

- 14. Hospital management shall submit appraisal report for usage of water from competent authority.
- 15. Hospital management shall ensure maximum reuse of non-potable water.
- Hospital management shall ensure the Plastic Waste Management Rules, 2016, inter-alia, mandated banning of identified Single use Plastic (SUP) items with effect from 01/07/2022, CPCB provided the technical guidelines issued by the CPCB in this regard is available at https://cpcb.nic.in/technical-guidelines-3/. hospital management are hereby requested to sensitize and create awareness among people working within the Hospital area as well as its surrounding area on the ban of SUP in order to ensure the compliance of Notification published by this Ministry on 12/08/2021. A report, along with photographs, on the measures taken shall also be included in the compliance report being submitted by the hospital management at the time consent to operate application.
- 17. Use of fly ash based bricks/blocks/tiles/products shall be ensured. Blended cement with fly ash shall be used. The provisions of Ministry of Environment and Forests, Government of India Notification No. 763(E) dated 14/09/1999 [as amended] regarding use of fly ash must be complied with. Appropriate usage of other industrial wastes shall also be explored. Soil borrow area should be filled up with ash with proper compaction and covered with topsoil kept separately. Fly ash/pond ash should be used for low-lying areas filling. In embankments / road construction etc. ash should be utilized as per guidelines of Ministry of Environment and Forests, Government of India/ Central Pollution Control Board/ Indian Road Congress etc. concerning authorities. The use of perforated brick / hollow blocks / fly ash based lightweight aerated concrete etc. should also be explored so as to reduce load on natural resources.
- 18. Construction shall conform to the requirements of local seismic regulations. Hospital management shall obtain permission for the plans and designs including structural design, standard, safety, adequacy of firefighting equipments, protection measures for lightning and specifications of all construction works from concerned authorities.
- 19. Reduce the use of glazed surface as per National Building Code 2005. Use of glass in various buildings may be reduced up to 40% to reduce the electricity consumption and load on air-conditioning. If necessary, use of high quality double glass with special reflective coating in windows shall be ensured. Roof of the various buildings shall meet prescriptive requirement as per Energy Conservation Building Code by using appropriate thermal insulation material to fulfill requirement. Opaque wall shall meet prescriptive requirement as per Energy Conservation Building Code which is proposed to be mandatory for all air conditioned spaces while it is inspirational for non-air-conditioned spaces by use of appropriate thermal insulation material to fulfill requirement.
- 20. 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 0.4 Watt /sqm / degree centigrade with appropriate modifications of specifications and building technologies. The provisions of National Building Code 2005 shall be strictly followed.
- 21. Modern electrical power transmission & distribution system shall be installed.
- 22. Street lighting shall be energy efficient. Compact Fluorescent Lamps (CFL) along the building network system shall be provided. High intensity, high mast lights to be installed at intersections, parking areas, vehicles stops and major pedestrian movement areas as per the specifications and guidelines prescribed by the Bureau of Indian Standards. Solar energy should be used

- for outdoor lighting also. All the building shall be provided with solar water heating system.
- 23. Reduce hard paving-onsite (open area surrounding building premises) and / or provide shade on hard paved surfaces to minimize heat island effect and imperviousness of the site.
- 24. All proposed air-conditioned buildings shall follow the norms proposed in the ECBC regulations framed by the Bureau of Energy Efficiency. Use of chillers shall be CFC & HCFC free.
- 25. All internal roads shall be made black topped. Good housekeeping practices shall be adopted by hospital management. Reduce hard paving-onsite (open area surrounding building premises) and/or provide shade on hard paved surfaces to minimize heat island effect and imperviousness of the site.
- 26. Improvement or rehabilitation of existing natural streams, channels / nallas falling within premises (if any) shall be carried out without disturbing the ecological habitat.
- 27. A thick green belt of broad leaf local species shall be developed all along the periphery of the project premises. As far as possible maximum area of open spaces shall be utilized for plantation purposes.
- 28. Rainwater from open spaces shall be collected and reuse for landscaping and other purposes. Rooftop rainwater harvesting shall be adopted for the buildings. Every building shall have rainwater-harvesting facilities. The storm water flowing in roadside drains shall also be recycled and reused to maintain the vegetation and discharged into natural water bodies. Before recharging the surface runoff, pre treatment must be done to remove suspended matter and oil & grease. Permeable (porous) paving in the parking areas, and walkways & patio areas should be used to control surface water runoff by allowing storm water to infiltrate the soil and return to ground water.
- 29. Low sulphur diesel type diesel generator sets shall be used during construction / operation phase. Diesel generator sets during construction / operation phase shall have acoustic enclosures and shall conform to Environment (Protection) Rules, 1986 prescribed for air and noise emission standards.
- 30. Project authority shall establish an environmental management cell to carryout function relating to environmental management under the supervision of senior executive who shall directly report to the head of organization. A full-fledged laboratory with qualified technical/scientific staffs to monitor the influent, effluent, ground water, surface water, soil, stack emission and ambient air quality etc. shall be provided.
- 31. Necessary fund shall be provided for implementation of the above-mentioned conditions. The funds earmarked for environmental protection measures shall be kept in separate account and not diverted for any other purpose.
- 32. Project authority shall obtain all necessary statutory clearances/licenses from concerned Central/State Government Departments, Boards, Bodies and Corporations etc. before start of construction activities. Project authority shall follow direction issued by Central/State Government, Central Pollution Control Board/Chhattisgarh Environment Conservation Board from time to time regarding control of water & air pollution and for environmental conservation.
- 33. The issuance of this permission to establish does not convey any property rights in either real or personal property, or any exclusive privileges, nor does not authorize any injury to private property or any invasion of personal rights, nor any infringement of Central, State or Local laws or regulations.

- 34. Project authority shall follow any other conditions given at the time of grant of consent under the Water (Prevention & Control of Pollution) Act, 1974 and the Air (Prevention & Control of Pollution) Act, 1981.
- 35. Any change in capacity, project profile etc. shall be intimated to the Board and prior permission of the Board shall be obtained for the same.
- 36. Project proponent shall comply all the provisions of Bio-Medical Waste Management Rules, 2016. All bio medical wastes shall be collected, handling, treated and disposed off strictly as per the Bio-Medical Waste Management Rules, 2016.
- 37. This permission to establish shall be valid for the period of five years effective from the date of issue of this letter. This permission to establish shall be treated as cancelled in case; no construction activity has been started on the site regarding establishment of the Hospital management during this period. Chhattisgarh Environment Conservation Board reserves the right to extend the validity period / not to extend the validity period/ cancel /withdraw the permission to establish of the Hospital management, based on the construction activities carried out on the site regarding establishment of hospital management.
- 38. Board reserves the right to amend/cancel any of the above conditions, stringent the emission/effluent limits stipulated above and add new conditions as and when deemed necessary in the interest of environmental protection, change in the project profile or non-satisfactory implementation of the stipulated conditions etc.

The consent (for operation) as required under the Water (Prevention & Control of Pollution) Act, 1974 and Air (Prevention & Control of Pollution) Act, 1981 shall be granted to your Hospital management after fulfillment of all the conditions mentioned above. For this purpose you shall have to make an application to this Board in the prescribed Performa at least two months before the expected date of commissioning of the project. The applicant shall not without valid consent (for operation) of the Board bring into use any out let for the discharge of effluent and particulate matter/gaseous emission.

For & on behalf of Chhattisgarh Environment Conservation Board

Member Secretary

Chhattisgarh Environment Conservation Board Nava Raipur Atal Nagar, District - Raipur (C.G.)

Endt. No. 858/TS/CECB/2023 Nava Raipur Atal Nagar, dated: 12/05/2023 Copy to: -

- Chief Engineer, Chhattisgarh State Electricity Board, Durg (C.G.), for information and necessary action please. The Power supply to the unit shall be released only after submission of the copy of "Consent to Operate" issued by Chhattisgarh Environment Conservation Board, Raipur (C.G).
- 2. Regional Officer, Regional Office, Chhattisgarh Environment Conservation Board, Durg (C.G.). Please ensure compliance and report, if any condition/conditions are violated by the hospital management.

Member Secretary

Chhattisgarh Environment Conservation Board Nava Raipur Atal Nagar, District - Raipur (C.G.)