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20/12/19



STATE LEVEL ENVIRONMENT IMPACT ASSESSMENT AUTHORITY,
ODISHA, BHUBANESWAR

Ref. No. 7669/SEIAA

Dt. 13.12.19

SEIAA File No: 111991/05-MIS/07-2019

To

Dr. Kshirod Chandra Brahma,
Chief Executive Officer (CEO),
Odisha Coal and Power Limited, Zone-A,
Ground Floor, Fortune Towers,
Chandrasekharpur, Bhubaneswar-751023

Sub: Proposal for proposed OCPL Mines Colony-Manoharpur township project in a plot area of 98256.92 Sq.mt over an area of 24.28 acres with built up area 37622 Sq.mt at Sarbahal Village, Tehsil Hemgiri, District-Sundargarh of M/s Odisha Coal and Power Limited -Environmental Clearance regarding.

Ref: Your online application dated 25.07.2019 for issue of EC vide File No: SIAOR/MIS/111991/2019.

Sir,

This has reference to your online application seeking environmental clearance of the project proposal mentioned above. The proposal falls in the sub category 8(a) of the schedule of EIA Notification, 2006 as amended from time to time. The proposal has been duly appraised by SEAC, Odisha on the basis of the documents enclosed with the application, such as Form-1, Form-IA, Conceptual Plan (EMP), and clarifications furnished to SEAC in response to their observations.

Background:

1. This is a proposal for Environmental Clearance of M/s. Odisha Coal and Power Limited for OCPL Mines Colony – Manoharpur Township Project in a plot area of 98256.92 sq.mt over an area of 24.28 acres with built – up area 37622 sq.mt at Sarbahal Village, Tehsil Hemgiri, District - Sundargarh.
2. The township Project is located at Khata No 52 (AJA) and 50 (Rakhit) at Village- Sarbahal, Tehsil- Hemgir and District Sundargarh. The site co-ordinates are as follows: Latitude- 21°57'56.22 "N To 21°58'5.15" N and Longitude-83°48'26.01"E to 83°48'59.03"E. The nearest airport is Jharsuguda Airport in Jharsuguda which is at an aerial distance of 25.4 km from the

project site towards SSE direction. Kanika Railway Station is 14 km away from the project site towards SSW direction which is a station in Raipur-Rourkela Railway line. Along with airways and railways, the site is also well connected through roadways; nearest National Highway is NH 200 at an aerial distance of 15 km in SE Direction.

3. The detailed Area Statement is provided below in Table:

| Sl. No. | Particulars | Area (in m ²) |
|---------|--|---------------------------|
| 1 | Plot Area | 98,256.92 m ² |
| 2 | Total Proposed Ground Coverage (@ 12 % of plot area) | 12,482 m ² |
| 3 | Proposed FAR | 0.382 |
| 4 | Built-up Area | 37,622 m ² |
| 5 | Total Open space (84.7 % of the total area) | 83,224.92 m ² |
| 6 | Landscape Area (@ 32 % of the plot area) | 31,529 |
| 7 | Parking Area (2.42 %) | 2387 m ² |
| 8 | Area of internal roads & pavement (20.76 % of total area) | 20,400 m ² |
| 9 | Maximum height of building | 12 m (G+3) |
| 10 | Units proposed | 116 units |

4. The total water requirement is approximately 217 KLD. The total fresh water requirement is 129 KLD, which will be met from Hirakud Reservoir. Approval for drawal of 5.55 cusec water from Hirakud Reservoir was obtained from Government of Odisha.
5. The STP shall be based on MBBR Technology with Ultra Filtration (aerobic) of 120 KLD (2 nos of STP will be used of capacity – 50 KLD and 70 KLD). Recovery from STP is 88 KLD.
6. Power Requirement: Maximum demand load = 892 KW, Connected load = 1MVA (Source = WESCO). Back Up by DG sets. = 349 KVA (3 nos 63 KVA one 1 nos 160 KVA) silent DG Set.
7. Green/Plantation Area = 31,529 m² (approx. 32% of the plot area (20 % tree plantation & 12 % lawn and garden)
8. The project cost is ` 117.45 Crores.
9. The consultant M/s Visiontek Consultancy Services Pvt. Ltd., Bhubaneswar along with the proponent made a detailed presentation before the SEAC on 25.09.2019.
10. The project proponent furnished additional information / documents on the project to SEAC for necessary compliance to clarification raised by SEAC on dated 21.10.2019.
11. Considering the information furnished by the proponent and presentation made by the consultant on behalf of proponent, the State Expert Appraisal Committee (SEAC) after due considerations of the relevant documents submitted by the project proponent and clarification/documents furnished to it have appraised the proposal on 31.10.2019 and recommended for grant

of Environmental Clearance for the project valid for a period of 7 years, stipulating various conditions.

The State Environment Impact Assessment Authority (SEIAA), Odisha after considering the proposal; appraisal report and recommendations of SEAC, hereby accords Environmental Clearance to the project valid for a period of 7 years under the provisions of EIA Notification 2006 and subsequent amendments thereto subject to strict compliance of all conditions stipulated as follows. Detailed compliance report of these conditions is mandatorily to be submitted by the project proponent to SEIAA at half yearly intervals by 1st June and 1st December each year.

Stipulated Conditions: -

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. The proponent shall ensure natural environmental amenities of the area preserved in the township. Elephant proof barrier 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.

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

7. As proposed, fresh water requirement from Hirakud Reservoir shall not exceed



129 KLD.

8. 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.
9. 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.
10. 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.
11. 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.
12. 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.
13. Water demand during construction should be reduced by use of pre-mixed concrete, curing agents and other best practices referred.
14. The local bye-law provisions on rain water harvesting should be followed. If local bye-law provision is not available, adequate provision for storage and recharge should be followed as per the Ministry of Urban Development Model Building Byelaws, 2016. Rain water harvesting recharge pits of adequate nos. shall be provided.
15. 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.
16. A complete plan for rainwater harvesting at the proposed site shall be drawn up and implemented before operation phase in letter and spirit to recharge ground water in the area. The complete rainwater harvesting plan after implementation shall be submitted to SEIAA.

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. 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.



19. 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.
20. The proponent shall mandatorily install Organic Waste Converter for solid waste management within the premises before start of operation phase.
21. 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.
22. 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 & Maintenance:

23. Sewage shall be treated in 2 nos. of STP of capacities 50 KLD and 70 KLD respectively. The treated effluent from STP shall be recycled/re-used for flushing, gardening and DG Cooling. STP's of two nos. of 50 KLD and 70 KLD capacity shall be installed before start of the operation phase of the building.
24. Approval 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.
25. No sewage or untreated effluent water would be discharged through storm water drains.
26. 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 and report shall be submitted to SPCB. Necessary measures should be made to mitigate the odour problem from STP.
27. 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:

28. 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.

29. 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.
30. Solar, wind or other Renewable Energy shall be mandatorily installed to meet electricity generation equivalent to 5% of the demand load or as per the state level/ local building bye-laws requirement, whichever is higher. Follow super ECBC requirement of ECBC 2017 and provide compliance report.
31. 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.
32. 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.
33. 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 Quality Monitoring & Preservation:

34. Construction site shall be adequately barricaded before the construction begins. Dust, smoke & other air pollution prevention measures shall be provided for the building as well as the site. These measures shall include screens for the building under construction, continuous dust/ wind breaking walls all around the site (at least 3 meter height). Plastic/tarpaulin sheet covers shall be provided for vehicles bringing in sand, cement, murrum and other construction materials prone to causing dust pollution at the site as well as taking out debris from the site. Sand, murrum, loose soil, cement, stored on site shall be covered adequately so as to prevent dust pollution. Wet jet shall be provided for grinding and stone cutting. Unpaved surfaces and loose soil shall be adequately sprinkled with water to suppress dust.
35. 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.

36. 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.
37. 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.
38. For indoor air quality the ventilation provisions as per National Building Code of India shall be provided.
39. 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:

40. Green-belt & avenue plantation of trees over the area of 31,529 m² (32 % of total plot area) shall be done using native tree species/shrubs improving greenery & keeping in view aesthetics considerations in the whole complex. No tree cutting/transplantation of existing trees has been proposed in the instant project. 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. The plantation of trees shall be **completed in the construction stage.**

Top Soil Preservation and Reuse:

41. 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:

42. 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
43. 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.
 44. 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.
 45. 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:

46. 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.
47. The project proponent shall implement environmental monitoring programme as per details submitted in EMP and submit monitoring reports to RO, MOEF & CC & SPCB on six monthly basis.
48. 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.

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(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:

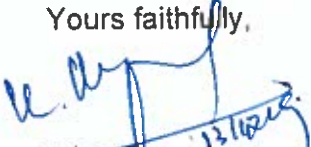
1. The project proponent shall comply with all the conditions stipulated in the building approval letter.
2. The applicant (Project proponent) will take necessary measures for prevention, control and mitigation of Air Pollution, Water Pollution, Noise Pollution and Land Pollution including solid waste management as mentioned by them in Form-1, Form-1A, and Environment Management Plan (EMP) in compliance with the prescribed statutory norms and standards.
3. 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.
4. The Project proponent has earmarked Rs.40.6 lakhs as capital cost & Rs.12.2 lakhs as recurring cost towards environmental protection measures for the project. 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, SPCB.
5. The applicant will submit half-yearly compliance report on post-environmental monitoring in respect of the stipulated terms and conditions in the Environmental Clearance to the State Environmental Impact Assessment Authority (SEIAA), Odisha, RO, MoEF & CC, BBSR, SPCB, CPCB on 1st June and 1st December of each calendar year and upload the compliance report in the website of the Ministry.
6. 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.
7. In the case of any change(s) in the scope of the project, the project would

- require a fresh appraisal by the SEIAA, Odisha.
8. 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.
 9. 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.
 10. 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.
 11. 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.
 12. A copy of the clearance letter shall be sent by the proponent to concerned Panchayat, ZillaParisad/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.
 13. The proponent shall submit/upload six monthly reports on the status of compliance of the stipulated Environmental Clearance conditions, including results of monitored data on their website and shall update the same periodically. It shall simultaneously be sent to the Regional Office of MoEF&CC, Govt. of India, the respective Zonal Office of CPCB and the SPCB. The criteria pollutant levels namely; SPM, RSPM, SO₂, NO_x (ambient levels as well as stack emissions) or critical sectoral parameters, indicated for the project shall be monitored and displayed at a convenient location near the main gate of the company in the public domain.
 14. The environmental statement for each financial year ending 31stMarch in Form-V as is mandated to be submitted by the project proponent to the concerned State Pollution Control Board as prescribed under the Environment (Protection) Rules, 1986, as amended subsequently, shall also be put on the website of the company along with the status of compliance of EC conditions and shall also be sent to the respective Regional Offices of MoEF&CC, Govt. of India by E-mail.



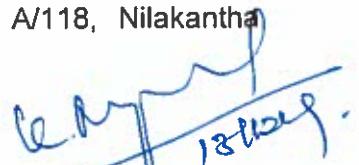
15. Any appeal against this clearance shall lie with the National Green Tribunal, if preferred, within a period of 30 days as prescribed under Section 16 of the National Green Tribunal Act, 2010.

Yours faithfully,


Member Secretary

Memo No 7670/SEIAA / Dt. 12.12.19
Copy to

1. Joint Secretary (Environment), Ministry of Environment, Forests and Climate Change Govt. of India, Indira Paryavaran Bhavan, Jor Bagh Road, Aliganj, New Delhi-110003 for information.
2. Principal Secretary, Forests & Environment Dept., Government of Odisha for information.
3. Member Secretary, State Pollution Control Board, Odisha, Paribesh Bhawan, A/118, Nilakantha Nagar, Unit-8, Bhubaneswar for information.
4. Additional Principal Conservator of Forests, Regional Office (EZ), Ministry of Environment & Forests, A-31, Chandrasekharpur, Bhubaneswar for information.
5. Chairman, Central Pollution Control Board, CBD-cum-office Complex, East Arjun Nagar, New Delhi-110032 for information.
6. Member Secretary, CGWA, 18/11, Jamnagar House, Man Singh Road, New Delhi-110011 for information.
7. Collector, District Magistrate, Sundargarh for kind information and necessary action.
8. Chairman/Member/Member Secretary, SEIAA for kind information.
9. Chairman, SEAC/Secretary, SEAC, Paribesh Bhawan, A/118, Nilakantha Nagar, Unit-VIII, Bhubaneswar for kind information.
10. Guard file for record.


Member Secretary