



**STATE ENVIRONMENT IMPACT ASSESSMENT AUTHORITY
(SEIAA), ODISHA.**

(Constituted vide Order No. S.O. 2674 (E) Date 17th Nov. 2008 of Ministry of Environment & Forest, Govt. of India,
Under Environment Protection Act, 1986.)

Qr. No. 5RF-2/1, Unit - IX, Bhubaneswar - 751022

E-mail : seiaaorissa@gmail.com

Ref. No. SEIAA/ 4669

Date 17.08.2015

From

Shri S. B. Samant, IFS
Member Secretary,
State Environment Impact Assessment Authority, (SEIAA)
Odisha, Bhubaneswar

To

Mr. Rajiv Kumar,
Vice President, Operations,
Kalinga Nagar Projects, M/s TATA Steel Ltd.
273, Bhoumaya Nagar, Unit-IV
Bhubaneswar-751001

Sub: Proposed construction of Residential Complex of M/s Tata Steel Ltd for Tata Steel Plant located at Kalinganagar Industrial Complex at Khurunti & Gadapur, Dist-Jajpur with total built up area of 1,47,380 Sq.m.- Environmental Clearance Regarding.

Sir,

This has reference to your application no. KPO/ENV/C-08/36/2015 dated 29.06.2015 seeking environmental clearances for the above project under EIA Notification, 2006 on the subject mentioned above giving clarifications. The proposal has been appraised as per the provisions under the EIA Notification 2006 and on the basis of the documents enclosed with the application and clarifications furnished in response to the observation of the State Expert Appraisal Committee, Odisha.


M/s Tata Steel Limited has Proposed Construction of Residential Complex for Tata Steel Plant located at Kalinganagar Industrial Complex at Khurunti & Gadapur, Dist – Jajpur, Odisha. This is a new building construction project with total built up area of 1,47,380 Sq.m (including parking). As the built up area is >20,000 Sqm and

<1, 50,000 Sqm, the project falls in the project activity 8(a) as per the schedule of the EIA Notification 2006.

The proposed project total plot area is 2,02,204 Sq.m with development of built up area 1,47,380 Sq.m (including parking). This is a proposal for residential complex of M/s TATA Steel employees at-Kalinganagar Industrial Complex, Jajpur, Odisha. IDCO has approved the land vide letter no. Idco/ho/p&a-la-e-3816/14, dated 17.09.2014. Surface water permission has been obtained from Jaraka Irrigation division, Jaraka. Power supply permission has been obtained from NESCO vide letter no. 1260, dated 27.02.2015. KNDA has provisionally approved the building plan. The site co-ordinates latitude- 20° 58' 13.26" N, longitude- 86° 02' 01.26" E. The maximum height of the building is 40 M. The total green area is 46616 Sq.m (23.05%), area of Softscape (Lawns, flowerbeds, children's play areas – including pathways, water bodies etc.) is 22181 Sq.m, Total parking area is 42571 Sq.m and the total no. of dwelling unit is 1004. Water requirement during the construction phase is 124.2 m³/day and the water is sourced from Tata Steel Plant Reservoir. Water requirement during the operation phase is 800 m³/day (fresh make-up) and the water for this purpose will be sourced from Kharsua River. The unit will generate around 692 m³/day of wastewater. The wastewater will be treated in the STP of capacity 730.0 KLD. The total solid waste generation is 4.72 Tons/day. Organic solid waste will be converted to manure. 2667.7 KW power is required, which will be sourced from NESCO. 2x600 KVA and 1x315 KVA DG sets will be provided for the backup of power. Total Project cost is Rs. 561/- crores and the cost of environment management is Rs. 3000/- lakhs.

Considering the information/documents furnished and additional clarifications provided during presentation made by the consultant M/s. Centre for Envotech & Management Consultancy Pvt. Ltd., Bhubaneswar on behalf of the project 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 recommended the project for Environmental Clearance with certain stipulations.

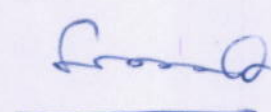
The State Environment Impact Assessment Authority (SEIAA) after considering the proposal and recommendations of SEAC, Odisha hereby accords Environmental Clearance in favour of the project for a period of 7 (seven) years under the provisions of EIA Notification 2006 and 2009 and subsequent



amendments thereto subject to strict compliance of the stipulated conditions as follows.

I. 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. The applicant will take statutory clearance/approval/permissions from the concerned authorities in respect of the project as and when required.
4. 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, SPCB & Regional Office of the Ministry of Environment & Forest, Odisha on 1st June and 1st December of each calendar year.
5. The project proponent shall obtain Periodic Occupancy Renewal Certificate from the competent authority at an interval of 3 to 5 years as per the provisions of National Building Code (NBC) 2005.
6. The project proponent shall comply to all the conditions stipulated by the Fire Prevention Officer, Odisha.
7. The applicant will adopt the prescribed norms, and standards provided in the National Building Code of India, 2005.
8. Considering the peak water consumption of the occupants, the design of the water supply system and the sewage disposal system of the project should be based on the provisions of water consumption.
9. The Project Proponent should ensure advertising in at least two local newspapers widely circulated in the region, one of which shall be in vernacular language informing the Public that, the project has been accorded environment clearance and copies of the clearance letters are available with SEIAA, Odisha and the Odisha State Pollution Control Board (OSPCB) and may also be seen on the website of the board. The advertisement shall be made within 7 (seven) days from the date of issue of the environmental clearance & a copy of the same should be forwarded to the Regional office of MoEF, Bhubaneswar.
10. A copy of the clearance letter shall be sent by the proponent to concerned Panchayat, Zila 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 upload 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, SEIAA, Odisha, the respective Zonal Office of CPCB and the SPCB.



12. The environment 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 environmental clearance conditions and shall also be sent to the respective Regional Offices of the Ministry by e-mail.
13. Any appeal against this environmental clearance shall lie with the Hon'ble National Green Tribunal, if preferred, within a period of 30 days as prescribed under section 16 of the National Green Tribunal Act, 2010.

II. SPECIAL CONDITIONS

A. CONSTRUCTION PHASE

1. No ground water shall be extracted for the project work at any stage during the construction phase. If ground water will be used during construction phase, they shall obtain permission from the Water Resource Department.
2. Provision shall be made for the housing of construction labourers within the site with all necessary infrastructure and facilities such as fuel for cooking, mobile toilets, mobile STP, safe drinking water, medical health care, crèche etc. The housing may be in the form of temporary structures to be removed after the completion of the project.
3. A First-Aid room will be provided in the project site both during construction and operation of the project.
4. All the top soil excavated during construction activities should be stored separately for use in land filling, horticulture/landscape development within the project site.
5. Disposal of muck during construction phase should not create any adverse effect on the neighboring communities and will be disposed off taking the necessary precautions for general safety and health aspects of people only in approved sites with the approval of competent authority.
6. Construction spoils, including bituminous material and other hazardous materials should not be allowed to contaminate watercourses, ground water and dump sites by following safe dumping / disposal practice as per statutory rules and norms with necessary approval of the Odisha State Pollution Control Board.
7. The fuel for diesel generator sets to be used during construction phase shall use low sulfur diesel fuel and should conform to Environment (Protection) Rules 1986 prescribed for air emission and noise standards.
8. The diesel required for operating DG sets shall be stored in underground tanks and, if required, clearance from the Chief Controller of Explosives shall be taken.
9. Vehicles used for bringing construction materials to the site should be in good condition and should have a pollution check certificate, covered and conform to statutory air and noise emission standards and should be operated only during non-peak hours of the day.
10. Ambient noise levels should conform to residential standards both during day and night. Incremental pollution loads on the ambient air and noise quality should be closely monitored during construction phase. Adequate measures should be taken to reduce ambient air and noise level during construction phase, so as to conform to the stipulated standards by CPCB/ OPCB.
11. Fly ash bricks should be used as building material in the construction as per the provisions of Fly Ash Notification of September, 1999 and as amended thereafter.



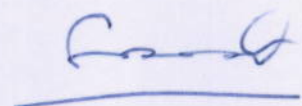
12. Ready mixed concrete would be used in building construction.
13. Storm water control and its re-use should be as per CGWB and BIS standards for these applications.
14. Water demand during construction should be optimized by adopting best practices without compromising quality. It should be brought to the site by the tanker.
15. Separation of grey and black water supplies and collection should be done by the use of dual plumbing line. Grey and black water should be adequately treated separately so as to conform to the prescribed standards before recycling/ reuse.
16. Fixtures for showers, toilet flushing and drinking water should be of low flow type and restricted to requirements by use of aerators, avoiding wastage pressure reducing devices or sensor based controls.
17. Use of glass may be maximum upto 40% of total outer wall area to reduce the energy consumption and load on air-conditioning. If necessary, high quality double glass with special reflective coating may be used in the windows.
18. Roof should meet the prescribed requirement as per Energy Conservation Building Code by using appropriate thermal insulation material.
19. Opaque wall should meet prescriptive requirements as per Energy Conservation Building Code.
20. The approval of the competent authority shall be obtained for structural safety of the buildings due to earthquake, adequacy of firefighting equipments etc. as per National Building Code of India, 2005 including protection measures from lightning etc.
21. Regular supervision of the above and other measures for monitoring should be in place all through the construction phase to avoid disturbances and pollution to the surroundings.
22. "Consent to Establish" shall be obtained from Odisha State Pollution Control Board before start of any construction work at the site.

B. OPERATION PHASE.

1. No ground water shall be used during the operation phase. If ground water will be used during operation phase, they shall obtain permission from the Water Resources Department.
2. The proponent has to install STP of 730 KLD capacity. Treated effluent from STP shall be recycled / reused to the maximum extent possible after adequate treatment. Treatment of 100% grey water by decentralized treatment should be done. Discharge of unused treated effluent shall conform to the norms and standards of the Odisha State Pollution Control Board. Necessary measures should be taken to mitigate the odour problem from STP.
3. The proponent shall provide a polishing pond inside the residential complex to store and reuse the treated waste water from STP. From the polishing pond, the treated waste water shall be diverted for industrial use for their own steel plant. In no case there should be any discharge of treated effluent to outside of the project premises.
4. The proponent shall take steps for protection of Ganda Nallah. There shall not be any discharge from the residential complex to Ganda Nallah.
5. The STP sludge should not be dried nor incinerated within the project site and should be disposed off as per the norms of SPCB, Odisha.
6. The STP must treat all kinds of pollutants present in it and its capacity should take into account the entire load of sewage generated by the inhabitants.



7. The project proponent will ensure that under no circumstances, the environment is polluted due to non-functioning / under performance of sewerage disposal system of the project.
8. The solid waste generated should be properly collected and segregated. Wet garbage should be disposed off to be composted and dry / inert solid waste should be disposed through a certified agency for safe disposal. Necessary approval / permission may be obtained from the concerned authorities. In no case it should be left in the premises untreated.
9. Diesel power generating sets proposed as source of back-up power for lifts elevators and common area illumination during operation phase should be of enclosed type and conform to Environment Protection (EP) rules 1986. The height of the stack of DG sets should be equal to the height needed for the combined capacity of all proposed DG sets put together and should be more than the highest building height. Low sulfur diesel should be used. The location of the DG sets may be decided in consultation with Odisha State Pollution Control Board. Care may be taken to avoid disposal of smoke /pollutants from DG sets in the residential area. Low sulfur diesel oil (LDO or HSD) is to be used in DG set.
10. Noise should be controlled to ensure that it does not exceed the prescribed standards. During night time, the noise levels measured at the boundary of the sites shall be restricted to the permissible levels to comply with the prevalent regulations.
11. Green-belt & avenue plantation of trees over the site area (minimum 20%) shall be done using native tree species/shrubs improving greenery & keeping in view aesthetics considerations in the whole complex. Professional landscape architects should be engaged to design the green layout to provide for multi-tier plantation and green fencing all around, mitigating various environmental pollutants like dust, noise, emissions etc. and pathway for joggers.
12. Rain water harvesting for roof runoff and surface run-off should be implemented as per submitted plan. Before recharging the run off, pre-treatment must be done to remove suspended matter, oil, grease and other soluble components as per norms. Rainwater recharge should be through specified recharge pits of required numbers. The surface runoff water should be stored suitably treated and reused for landscaping. The bore-well for rainwater recharging should be kept at least 5 meter above the highest ground water table. The technology may preferably be adopted from a registered commercial firm with performance guarantee.
13. Weep holes in the compound walls shall be provided to ensure natural drainage of excessive rain water in the project area during the monsoon period after the harvesting operations. Care must be taken so that there is no water logging in the territory and drainage is 100%.
14. Traffic congestion near the entry and exit points from the roads adjoining the proposed project site must be avoided. Traffic congestion shall be avoided inside the project site. The area ear- marked for parking shall not be used for any other purpose. Alternate entry and exit must be provided to handle excess traffic and emergency situations.
15. A report on the energy conservation measures confirming to energy conservation norms finalized by the Bureau of Energy Efficiency should be prepared incorporating details about building materials & technology, R& U Factors etc. and submitted to the SEIAA, Odisha in three months' time before operation/ habitation.
16. The proponent shall use atleast 2- 5% of non-conventional energy (solar energy) (i.e. % of total energy consumption).



17. Provisions of solar hot water storage / supplies at the roof top may be made as per statutory norms of CPCB/MoEF/SPCB, Odisha.
18. Energy conservation measures like installation of CFLs/TFLs for lighting the areas outside the building should be integral part of the project design and should be in place before project commissioning. Used CFLs and TFLs should be properly collected and disposed off/sent for recycling as per the prevailing guidelines/ rules of the regulatory authority to avoid toxic contamination. Use of solar panels be adopted to the maximum extent possible, especially for street lights.
19. The building blocks should have adequate distance between them to allow movement of fresh air and passage of natural light, air and ventilation.
20. The funds earmarked for the environment protection measures shall be judiciously utilized. Under no circumstances this fund shall be diverted for other purposes like annual allocation and maintenance / monitoring etc. and expenditure for this fund should be reported to the SEIAA, Odisha on regular basis.

The above mentioned stipulated conditions shall be complied in a time-bound manner. Failure to comply with any of the conditions mentioned above may result in cancellation of this environmental clearance and attract action under the provisions of Environment (Protection) Act, 1986.

Yours faithfully,


17.8.15
Member Secretary

Memo No 4670/SEIAA /Dt. 17.08.2015

Copy to

1. Ministry of Environment, Forests and Climate Change Govt. of India, Indira Paryavaran Bhavan, Jor Bagh Road, Aliganj, New Delhi-110003 for kind information.
2. Additional Chief Secretary, Forests & Environment Dept., Government of Odisha for kind information.
3. Chairman, State Pollution Control Board, Paribesh Bhawan, A/118, Nilakantha Nagar, Unit-8, Bhubaneswar for kind information.
4. Chief Conservator of Forests, Regional Office (EZ), Ministry of Environment & Forests, A-3, Chandrasekharapur, Bhubaneswar for kind information.
5. Chairman, Central Pollution Control Board, CBD-cum-office Complex, East Arjun Nagar, New Delhi-110032 for kind information.
6. Copy to Vice Chairman, Kalinga Nagar Development Authority, Jajpur, Dist-Jajpur for kind information.
7. Collector & District Magistrate, Jajpur, 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.


17.8.15
Member Secretary