

State Level Environment Impact Assessment Authority, Jharkhand.

C – 170, Road No. 4, Ashok Nagar. Ranchi. Jharkhand.834 002.

Tel #: 0651-2243488; Fax #: 0651-2243487.

E-mail: info@jseiaa.com; website: www.jseiaa.org

Letter No.-EC/ SEIAA / 2015-16 / 1096/ 2015/ 1613

Ranchi, Date: 30/09/15

To: **Mr. Ashok Kumar Agarwal,**
“Radha Gouri” Goushala Chowk,
North Market Road, Upper Bazar,
Ranchi – 834001, Jharkhand.

Sub.: Environmental Clearance for the project “B+G+XIII storied Residential & Commercial Complex” of M/s SHRIRAM OZONE HOUSING DEVELOPMENT PRIVATE LIMITED at Mouza-Chandwe, Kanke Road, Tehsil-Kanke, Dist.-Ranchi, Jharkhand.”

Sir,

It is in reference to the project “B+G+XIII storied Residential & Commercial Complex” of M/s SHRIRAM OZONE HOUSING DEVELOPMENT PRIVATE LIMITED at Mouza-Chandwe, Kanke Road, Tehsil-Kanke, Dist.-Ranchi, Jharkhand.” submitted by you for seeking prior Environmental Clearances (EC).

The proposal was appraised by State Level Expert Appraisal Committee (SEAC) and recommended for grant of Environmental Clearance in its meeting held on 10th to 15th September, 2015.

The project “B+G+XIII storied Building” is a Residential & Commercial Project by M/s Shriram Ozone Housing Development Private Limited, It is proposed on Khata No. 52, Plot No 463,464; & Khata No. 2, Plot No 319 in Mouza – Chandwe on Kanke Road, Town: Ranchi, Tehsil: Kanke, Distt: Ranchi, Jharkhand. The project cost including cost of land is 31.72 Crores.

It is located near Chandni Chowk on Kanke Road that connects Ranchi to Patratu.

The proposed development is a residential & commercial project with a range of Flats and Shops. The complex will have 117 Residential Flats and 20 Commercial Shops. The overall area of the project site is 1.98 Acres ~ 8016.79 Square Meters.

The site is located in a prominent area of Ranchi city, at Latitude: 23° 24’ 34.59” N and Longitude: 85° 18’ 55.36” E

The total plot area is 8016.79 Square Meters out of which 818.328 Square Meters of area is deducted for Road Widening by Ranchi Municipal Corporation. The effective (net) plot area of the project is 7197.72 Square Meters. Ground Coverage is 2386.781 Square Meters (33.16% of project area). The Total Built up Area is estimated to be 23697.095 Square Meters & Super built-up area 29853.618 Square Meters.

Salient Features of the proposed project:

Land Area	8016.79 Square Meters
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Gifted Area	818.328 Square Meters
Project Area (Net)	7197.72 Square Meters
Total Water Requirement	88.00 KLD (One Time)
Fresh Water Requirement	75.00 KLD (regular make-up)
Waste Water Generated	61 KLD (Available Treated Water: 55 KLD out of that 42 KLD will be reused during non-monsoon period and 13 KLD during monsoon period. And 13 KLD and 42 KLD will be discharged to municipal drain during non-monsoon and monsoon period respectively)
Solid Waste	337.5 Kg per Day (193.5 Kg/day Biodegradable and 144 Kg/day Non-bio degradable. All solid waste will be disposed through municipal authority)
Total Proposed Ground Coverage	2386.781 sqm; (@ 33.16% of project area)
Internal road area	1376.924 sqm; (@ 19.13% of project area)
Green area	839.54 sqm; (@ 11.67 % of project area)
Paved area	1733.79 sqm; (@24.08 % of project area)
Others	860.685 sq; (@ 11.96 % of project area)
Proposed FAR	2.956
Built Up Area	Total Built up Area is estimated to be 23697.095 sqm & Super built-up area 29853.618 sqm .
Total Open space	4810.94 sqm (~ 66.84 % of the area)
Parking Area	Parking Area Provided 6744.32 sqm (including open parking)
Area of STP & sewerage	843.8 sqm Sewage @ 61 KLD
Maximum height of building	46.6m
No. of Units Residential/Shops	117/20
No. of Parking Spaces Provided	213 Nos.

Total Power Requirement	100 KVA during construction phase & 1051 KVA during operational phase
Backup Power	DG Set (2 Nos.x 525 KVA during operational phase)

State Level Environment Impact Assessment Authority (SEIAA), Jharkhand in its meeting held on 22.09.2015 discussed the project proposal along with recommendations made by SEAC and decided to grant EC to the project.

Following the decision of SEIAA, as mentioned above, Environmental Clearance is hereby issued to the **“B+G+XIII storied Residential & Commercial Complex”** of M/s **SHRIRAM OZONE HOUSING DEVELOPMENT PRIVATE LIMITED** at **Mouza-Chandwe, Kanke Road, Tehsil-Kanke, Dist.-Ranchi, Jharkhand**” alongwith the following conditions-

A. Specific Conditions

Facility of labourers during construction: -

- Provision of drinking water, wastewater disposal and solid waste management should be ensured for labour camps. Water usage during construction should be optimised to avoid any wastage.
- Proper sanitation facilities should be provided for construction workers to ensure environmental sanitation. In case of non availability of the sewer system, an onsite treatment system has to be provided.
- Health and safety of the workers should be ensured during construction. Personnel protective equipment like helmets, earmuffs, earplugs etc. should be provided to the workers. For vibration control damped tools must be used.
- Prior consent-to-Establish (NOC) for the proposed project must be obtained from JSPCB by the proponent from the competent authorities before starting work at site.

Steps to avoid disturbance during construction:-

- Topsoil excavated during construction activities should be stored for use in horticulture / landscape development within the project site. Balance top soil should be disposed at in planned manner for use else where Adequate erosion and sediment control measures to be adopted before ensuing construction activities.
- Prior permission should be obtained from the competent authority for demolition of the existing structure, if any. Waste recycling plans including top soil 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.
- Disposal of muck including excavated material during construction phase should not create any adverse effects in the neighborhood and the same shall be disposed of taking the necessary precautions for general safety and health aspects.
- Diesel generator sets used during construction phase should have acoustic enclosures and should conform to Environment Protection Rules prescribed for air and noise emission standards.
- Vehicles / equipment deployed during construction phase should be in good condition and should conform to applicable air and noise emission standards and should be operated only

during non-peak hours. Adequate mitigative measures should be adopted to control dust emissions, noise and vibrations during construction activities. Vehicles and construction machineries should be properly maintained. Vehicles should conform to Pollution under control (PUC) norms. Necessary statutory clearances shall be taken.

- vi. Ambient noise levels should conform to residential standards both during day and night. Only limited necessary construction should be done during nighttime. Fortnightly monitoring of ambient air quality (PM 10 and PM 2.5, SO₂ and NO₂) and CO equivalent noise levels should be ensured during construction phase.
- vii. Construction spoils including bituminous material and other hazardous materials including oil from construction equipment must not be allowed to contaminate watercourses and the dumpsites for such material must be secured so that they should not leach into the ground water. If necessary, oil trap should be installed where there is deployment of heavy machineries.
- viii. Regular supervision of the above and other measures should be in place all through the construction phase so as to avoid disturbance to the surroundings.
- ix. Loading and unloading operations should not be carried out in open areas.
- x. Adequate measures to be adopted to avoid wastage of water for curing of concrete structures.
- xi. Locally available materials with less transportation cost should be used preferably.
- xii. Accumulation / stagnation of water should be avoided to ensure vector control.

Selection of materials for better energy efficiency:-

- i. Use of energy efficient construction materials should be ensured to achieve the desired thermal comfort.
- ii. Design layout should ensure adequate solar access and ventilation. Proper planning and window design for daylight integration should be considered.
- iii. Fly Ash is to be used for construction as per Notification No. S.O. 763(E) dated 14.09.1999 amended vide Notification No. S.O. 979(E) dated 27.8.2003 and S.O. 2804(E) dated 03.11.2009 of the Ministry of Environment & Forests, Govt. of India.
- iv. Construction should conform to the requirements of local seismic regulations. The project proponent should obtain permission for the plans and designs including structural design, standard and specifications from concerned authority.
- v. Construction technologies that require less material and possess high strength should be adopted. Materials with low embodied energy and high strength should be used preferably.
- vi. Use of alternate building materials and alternate construction techniques should be considered apart from the conventional materials and methods.
- vii. Use of energy efficient lighting systems. Solar lamps should be used for outdoor lighting. At least 40% of external lighting will be based on solar power, as proposed. Solar water heating should also be introduced in buildings requiring hot water.
- viii. Passive solar cooling to be incorporated in building design. Buildings should be oriented for ensuring natural ventilation and day lighting.
- ix. Proper insulation of roof should be provided to achieve desired thermal comfort.



- x. Use of high albedo or reflective pavements to keep parking lots, pavements and inside roads cool should be incorporated.
- xi. Guidelines to the occupants should include usage efficiency measures such as energy efficient lighting and water efficient system.
- xii. 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.
- xiii. Adequate open space, greenery and water bodies to be provided as per rules.
- xiv. Any proposed building with air conditioning facility should follow the norms proposed in the E regulations made by the Bureau of Energy Efficiency. Use of chillers will be CFC & HCFC free.
- xv. Provisions as per National Building Code 2005 should be followed.

Water supply:

Water requirement during construction phase shall be met from municipal supply. Ground water should not be abstracted without prior permission of the competent authority.

Rain Water Harvesting

Rain Water Harvesting Scheme shall be prepared and got duly approved by Ground Water Directorate, Government of Jharkhand.

Sewage Treatment Plan

As per the proposal submitted by the proponent wastewater shall be treated in STP. Treated sewage should conform to E(P)A Rules. Treatment Plants should be monitored on a regular basis. Reuse of treated wastewater should be carried out as proposed.

Emission from Diesel Generator Sets-

- i. Noise barriers will be provided at appropriate locations so as to ensure that the noise levels do not exceed the prescribed standards. Diesel generator sets should be provided with integral acoustic enclosure.
- ii. The stack height and emissions from D.G. sets should conform to the norms of Central Pollution Control Board. The certification of space design for DG sets should be done by competent authority.

Energy Efficiency:-

- i. Use of energy efficient construction materials to achieve the desired thermal comfort should be incorporated. The provisions of National Building Code should be followed.
- ii. The lighting design and the heating, ventilation and air conditioning systems should conform to the recommendations of the Energy Conservation Building Code.
- iii. Use of energy efficient electrical systems should be promoted. High efficiency lamps should be used.
- iv. Energy efficient Motors and properly rated Transformers should be installed. Manufacture certificate to this effect shall be obtained and kept on record.
- v. The power cabling shall be adequately sized as to minimize the distribution losses.
- vi. The project proponent should resort to solar energy at least for street lighting / indoor lighting and water heating.

vii. Energy Audits should be conducted on a regular basis.

Transport Management: -

- i. Both internal and external traffic planning and management should be adequate to ensure uninterrupted traffic movement in the area during construction as well as operation phase.
- ii. The design of service road and the entry and exit to /from the project area should conform to the norms & standards of competent authority for traffic management. Bell mouth type arrangement should be made at the entry & exit. Proper traffic management plan should be adopted in consultation with Traffic authorities. Necessary permission be obtained from concerned authority.
- iii. Adequate parking space should be provided. Sufficient exits are to provided and proper directions marked both for Normal and Emergency Situations.
- iv. Pathways should be covered or shadowed by tree canopy as far as practicable. Transport system should be such that traffic will be calm in neighborhoods. Traffic within the project site should be restricted by regulation. Adequate vertical and horizontal clearances of overhead electric power and telecommunication lines should be provided.

Solid Waste Management

- i. The proponent must develop the Solid Waste Management and Disposal Scheme ensuring storage and segregation of biodegradable and no biodegradable wastes. The solid waste is to be disposed off in consultation with municipal authority.
- ii. The proponent should provide different coloured bins for different categories of waste and ensure complete segregation of biodegradable and non-biodegradable wastes. The solid waste from direct collection and storage bins should be finally collected at transfer stations. Further segregation will be done at transfer stations to collect recyclables such as plastic, polythene, glass, metals, textiles, rubbers, leathers, paper etc. Separate compartments shall be provided for each type of recyclables.
- iii. The proponent should abide by the Hazardous Wastes (Management, Handling and Tran boundary Movement) Rules, 2008. Collection and storage of hazardous wastes during construction and Post construction activity should be planned properly. The expected hazardous wastes should be disposed off separately as per the Hazardous Wastes (Management, Handling and Tran boundary Movement) Rules, 2008.
- iv. Spent oil from DG Sets should be stored in HDPE drums in isolated covered facility and disposed off as per the Hazardous Wastes (Management, Handling and Tran boundary Movement) Rules, 2008. Spent oil from DG Sets should be disposed off through registered recyclers only.
- v. Various types of electrical and electronic wastes generated in the buildings, which includes PC, Xerox machine components etc. should be collected separately for transportation to the authorized recyclers approved by the State / Central Pollution Control Boards. There should also be provision for storage of these wastes in the building before transportation. The waste collected should be processed in authorized recycling unit.

B. GENERAL CONDITIONS

- i. All mandatory / statutory approvals and permissions as required from various agencies like Director of Explosives, Fire Department, and Aviation Department etc. should be obtained.
- ii. Provision of Effective Controls and Building Management Systems such as Automatic Fire Alarm and Fire Detection and Suppression System, Building Automation System for Energy Conservation, Management Information Systems etc. must be ensured.
- iii. Automatic lighting control, task lighting, occupancy sensors, heat exchanger, high efficiency chillers etc. should be provided for energy conservation, wherever applicable. Use of intelligent lighting should be considered for energy conservation.
- iv. Efficient management of indoor air quality must be ensured for health and safety of the users. The HVAC&R systems should be so designed to maintain proper Indoor Air Quality.
- v. Rest room facilities should be provided for service population.
- vi. Provisions should be kept for the integration of solar water heating system.
- vii. Adequate access to fire tenders should be provided.
- viii. CO monitoring facility with automatic alarm should be provided at basement car parking, if any.
- ix. The implementation of Environmental considerations should be carried out, as proposed. Regular monitoring should be carried out during construction and operation phases.
- x. Firefighting systems should be designed in compliance with the norms. Preventive measures should be adopted for Risk & Disaster Management as per the provisions of the National Building Code.
- xi. The compressed gas cylinders, if any, should be stored and handled as per Chief Controller of Explosives (CCOE) rules. Any hazardous materials and or radioactive materials, if any, should bear a Danger/Caution labeling.
- xii. Disaster Management Plan should be prepared and displayed at Key locations. Good housekeeping practices and preventive measures should be adopted.
- xiii. The Corporate Social Responsibility Plan with specific financial commitment should be implemented for the proposed project.
- xiv. Environmental Management Information System shall be maintained properly.
- xv. The proponent should maintain a display board at the site, providing detailed information on the salient features of the proposed project.
- xvi. The environmental safeguards should be implemented in letter and spirit.
- xvii. The project proponent should make financial provision in the total budget of the project for implementation of the suggested safeguard measures.
- xviii. Six monthly monitoring reports should be submitted to the Jharkhand State Pollution Control Board, who would be monitoring the Implementation of environmental safeguard and should be given full cooperation, facilities and documents/ data by the project proponents during their inspection.
- xix. In case of any violation of the conditions laid down in this Environmental Clearance, Section 16 of The Environment (Protection) Act, 1986, will be applicable. In case of any change(s) in the scope of the project, the project would require fresh appraisal by the SEAC,

Jharkhand.

- xx. The project proponent should inform the public that the proposed project has been accorded Environmental Clearance by the SEIAA, Jharkhand and copies of the clearance letter are available with the State Pollution Control; Board/committee and may also be seen at website of the SEIAA, Jharkhand. This should be advertised within seven days from the date of issue of the clearance letter, at least in two local newspapers that are widely circulated in the region of which one shall be in the vernacular language of the locality concerned.
- xxi. All other statutory clearances such as the approvals for storage of diesel from Chief Controller of Explosives, Civil Aviation Department (if required) etc. shall be obtained by project proponents from the competent authorities.
- xxii. Provision for incorporation of appropriate conditions in the Sale Agreement / Deed, for ensuring sustained Operation and Maintenance (O & M) of the common facilities (STP, Rainwater harvesting system, Solid waste management system, Solar street lights etc.) even after transfer of ownership of the project, should be made in explicit and transparent manner.

Others:

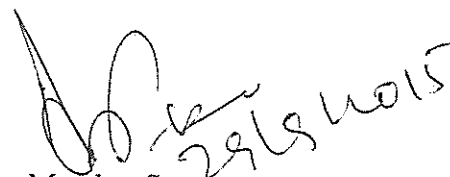
1. All the conditions, liabilities and legal provisions contained in the EC shall be equally applicable to the successor management of the project in the event of the project proponent transferring the ownership, maintenance of management of the project to any other entity.
2. Provision should be made for the supply of kerosene or cooking gas to the labourers during construction phase. All the labourers to be engaged for construction works should be screened for health and adequately treated before issue of work permits.
3. The Authority (SEIAA) reserves the right to add any stringent condition or to revoke the clearance if conditions stipulated above are not implemented to the satisfaction of the Authority or for that matter, for any other administrative reason.
4. Validity of Environment Clearance: The Environmental Clearance accorded shall be valid for a period of 5 years from the date of issuance of EC.
5. In case of any deviation or alteration in the project proposed from those submitted to this Authority for clearance, a fresh reference should be made to the Authority to assess the adequacy of the condition(s) imposed and to incorporate additional environmental protection measures required, if any.
6. The above stipulations would be enforced among others under the Water (Prevention & Control of Pollution) Act, 1974, the Air (Prevention & Control of Pollution) Act, 1981, the Environment (Protection) Act, 1986, Hazardous Wastes (Management, Handling and Transboundary Movement) Rules, 2008 and the Public Liability Insurance Act, 1991 along with their amendments and rules made there under and also any other orders passed by the Hon'ble Supreme Court of India/ High Court of Jharkhand and any other Court of Law relating to the subject matter.
7. Any Appeal against this Environmental 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.



Sd/-
Member Secretary
State Level Environment Impact
Assessment Authority, Jharkhand.

Copy to:

1. Principal Secretary, Department of Forests & Environment, Jharkhand
2. Deputy Commissioner, District- Ranchi, Ranchi, Jharkhand.
3. Director IA Division, Monitoring Cell, MoEF and Climate Change, Indira Paryavaran Bhavan, Jorbag Road, Aliganj, New Delhi – 110003.
4. CEO, Ranchi Municipal Corporation, Kutchary, Ranchi.
5. A.D.F.O (In charge), Fire Service Head Quarter, Ranchi, Jharkhand.
6. The Airport Director, AAI, B.M. Airport, Ranchi.
7. Member Secretary, Jharkhand State Pollution Control Board, Ranchi.
8. Secretary, Jharkhand State Expert Appraisal Committee, Ranchi.
9. Website.
10. Guard file.



Member Secretary
State Level Environment Impact
Assessment Authority, Jharkhand.

