State Level Environment Impact Assessment Authority, Rajasthan

4, Institutional Area, Jhalana Doongri, Jaipur-302004
Phone: 0141-2705633, 2711329 Ext. 361

No: F1 (4)/SEIAA/SEAC-Raj/Sectt/Project/Cat.8 (a) B (248)/08-09 Jaipur, Dated: 30 APR 2010

To,

M/s Grass Field Fire Capital Developers Pvt. Ltd,
50-51, Guru Jambheshwar Nagar A Queens Road,
Jaipur

Sub: EC for Integrated Township Project of Grass Field Fire Capital Developers Pvt. Ltd. Mehlan, Ajmer Road, Jaipur.

Sir,

This has reference to your application dated 03.12.09 seeking environmental clearances for the above project under EIA Notification 2006. The proposal has been appraised as per prescribed procedure in the light of provisions under the EIA Notification 2006 on the basis of the mandatory documents enclosed with the application viz. the questionnaire, EIA, EMP and additional clarifications furnished in response to the observation of the State Level Expert Committee Rajasthan, in its meetings held on 29/30.12.09 & 25/26.2.10.

2. Brief details of the Project:

1. Category: - "B-1"
2. Item No.(in the list of Schedule):- 8 (b)
3. Purpose: - For Residential Township Project
4. Location At Village-Nasnota, Ajmer Road, Jaipur.
5. Total Plot Area 356.49 Acres (14, 43,279.35 M^2.)
6. Built Up Area 10, 10,323.16 M^2.

The area break up is as under

Particulars	Total plot area M^2	Built up area.
Villas, Row housing	4,45,558.50	4,43,032.53
Group Housing	3,48,570.17	3,67,810.27
Retail Commercial	28,580.22	28,580.22
Commercial	56,885.92	99,550.36
Institutional	40,771.30	71,349.78
TOTAL	**9,20,366.11**	**10,10,323.16**
Driveway & pathway	3,35,207.58	--
Open & green belt area	1,87,614.45	--
Grand total	**14,43,188.14**	**10,10,323.16**

7. Parking Area : Total ECU required: 12,042
   Total ECU provided: 13,000
8. Expected Cost: Rs. 952.72 crores.
9. Water Requirement & Source: 2521 KLD (daily water demand after water- conservation techniques)
   Source: Ground water (20 bore wells) and PHED supply.
10. Environmental Management Plan:

Description	Capital Cost (Rs. in lacs)	Recurring Cost (Rs. in lacs)
STP	900	50
Sanitary facility to construction workers	50	--
Landscaping	100	10
Ground Water Recharge Structure	300	--
Acoustic Enclosure	10	--
Dual Plumbing System	700	20
Solar Energy Utilization application	120	5
Energy Efficient Lighting	100	15
Solid waste management	30	5
Efficient Fixtures	5000	80
Monitoring of Air, Water, Noise & Soil	20	5
Insulation of walls & roof	60	--
Other Environmental friendly materials	100	--
Emergency preparedness inclusive of mock drill	50	10
TOTAL	7,540	190

11. Power requirement: *Fuel:-*

For back up in the common areas as well as for essential services 82 D.G. sets with cumulative capacity of 4857.5 kVA. D.G. sets with load sensors for automatic start will be used. The fuel requirement will be about 788.7 l/hr of HSD (as and when used) will be obtained form HPCL/IOCL/BPCL.

Energy:-

The connected power requirement for the project will be about 30 MW, which will be met through grid substations at site from JVVNL. Maximum demand considering 50 % diversity will be 15 MW 132/33 kV and 33/11 kV substations have been proposed within the project site for distribution.

3. The SEAC Rajasthan after due considerations of the relevant documents submitted by the project proponent and additional clarifications/documents furnished to it have recommended for Environmental Clearance with certain stipulations. The SEIAA Rajasthan after considering the proposal and recommendations of the SEAC Rajasthan hereby accord Environmental Clearance to the project as per the provisions of Environmental Impact Assessment Notification 2006 and its subsequent amendments, subject to strict compliance of the terms and conditions as follows:

PART A: SPECIFIC CONDITIONS

I. CONSTRUCTION PHASE

i. The PP shall ensure that, "Consent to Establish" shall be obtained from RPCB before start of any further construction work at the site and submit the following documents to RPCB at the time of applying for CTE:

- ✓ Identification of re-cycling plant with its process.
- ✓ Certificate from Structural Engineer for seismic safety.
- ✓ Copy of an efficient Electrical plan submitted to RVPNL for technical clearance to power supply and distribution scheme.
- ✓ Review the "Sag" of electrical conductors crossing the Land/space of the project vis-à-vis the Sag-Temperature Chart of the JVVN to ensure safety of the habitants in the project area and to work out an effective/suitable disaster management action plan.
- ✓ Legal undertaking / affidavit from PP and consultant with reference to MoEF circular dated 04.08.2009 that the data given in the proposal / report/ documents are factually correct.

ii. The PP shall ensure that, "The Conceptual Dam Break Study" presented before the SEAC shall be developed further and run on realistic ground data in four months of at the time of applying for CTE to RPCB whichever is earlier..

iii. The PP shall ensure that, the Management of Township is associated with Mock Drill for Hazard Management, as mandatory requirement.

iv. For conservation of electricity and to reduce energy losses the management shall ensure that the electrical voltage is stepped down from 132 KV to 33/11 KV and distributed at this level and finally brought to 440 volts. The PP shall ensure obtaining prior permission from the SE, JVVNL regarding power demand of 500 KW for the first two (2) years and total 2650 KW.

v. For better environmental safeguards, the PP shall provide sufficient number of transformers of adequate capacities for environmentally sound power distribution.

vi. The PP shall ensure that, the Green Roof Technology as suggested is implemented and put in place.

vii. The PP shall provide a System for composting of MSW within the campus and its use/disposal.

viii. The PP shall provide a System for BMW management.

ix. The PP shall take measures to ensure 10% reduction of overall power demand which shall be met by solar system including the provision of solar water heating /chilling etc.

x. The PP shall review and specify employment opportunities (direct /indirect numbers) to local persons.

xi. The PP shall ensure implementation of CSR activities, initially spending 1% of the capital cost and thereafter 1% of annual profit in the balance as recurring cost shall be provided.

xii. The PP shall ensure implementation of fire fighting plan as approved by the JNN, Jaipur.

xiii. Provision shall be made for the housing of construction labor 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.

xiv. All required sanitary and hygienic measures shall be in place before starting construction activities. The safe disposal of waste water and solid waste generated during the contraction phase shall be ensured.

xv. Adequate drinking water facilities shall be provided for construction workers at the site.

xvi. Provisions shall be made for the supply of fuel (kerosene or cooking gas); utensils such as pressure cookers etc. to the labourers.

xvii. All the labourers engaged for construction shall be screened for health and adequately treated before engaging them to work at the site.

xviii. For disinfection of waste water, appropriate tertiary treatment shall be given.

xix. All the topsoil excavated during the construction shall be stored for use in horticulture/landscape development within the project site.

xx. Disposal of muck during construction phase shall not create any adverse effect on the neighboring communities and be disposed taking the necessary precautions for general safety and health aspects of the people, only in approved sites with the approval of competent authority.

xxi. Soil and ground water samples will be tested to ascertain that, there is no threat to the ground water quality by leaching of heavy metals and other toxic contaminants.

xxii. Construction spoils, including bituminous material and other hazardous materials must not be allowed to contaminate water courses and the dump sites for such material must be secured so that they do not leach into the ground water.

xxiii. The diesel generator sets to be used during the construction phase shall be low- sulphur-diesel type and shall conform to Environment (Protection) Rules for air and noise emission standards.

xxiv. Vehicles hired for bringing construction material and labourers to the site shall be in good conditions and shall conform to applicable air and noise emission standards and shall be operated during non-peak/approved hours.

xxv. Ambient noise levels shall conform to residential standards both during day and night. Incremental pollution loads on the ambient air and noise quality shall be closely monitored during construction phase.

xxvi. Fly ash shall be used as building material in the construction as per the provisions of Fly Ash notification of September,1999 and amended as on August, 2003 (The above condition is applicable only if the project is within 100 km of Thermal Power Station).

xxvii. Ready mixed concrete must be used in building construction.

xxviii. Storm water control and its re-use as per CGWA and BIS standards for various applications.

xxix. Water demand during construction shall be reduced by the use of pre-mixed concrete, curing agents and other best practices.

xxx. Permission to draw ground water shall be obtained from the CGWA/CGWB prior to construction/ operation of the project.

xxxi. Separation of grey and black water shall be done by the use of dual plumping line for separation of grey and black water.

xxxii. Treatment of 100% grey water by decentralized treatment shall be done.

xxxiii. Fixtures for showers, toilet flushing and drinking shall be of low flow either by use of aerators of pressure reducing devices or sensor based control.

xxxiv. Use of glass may be reduced by up to 40% to reduce the electricity consumption and load in air-conditioning. If necessary, use high quality double glass with special reflective coating windows.

xxxv. Roof shall meet prescriptive requirement as per Energy Conservation Building Code by using appropriate thermal insulation material to fulfill requirement.

xxxvi. Adequate measures shall be taken to reduce air and noise pollution during construction keeping in mind CPCB norms on noise limits.

xxxvii. Opaque walls shall meet prescriptive requirement as per Energy Conservation Building Code for all air-conditioned spaces, whereas, for non- air-conditioned spaces, by use of appropriate thermal insulation material to fulfill the requirement.

xxxviii. A First Aid Room will be provided in the project both during construction and operation of the project.

xxxix. Any hazardous waste generated during construction phase shall be disposed off as per applicable rules and norms with necessary authorization of the Rajasthan Pollution Control Board.

xl. The approval of the competent authority shall be obtained for structural safety of the buildings due to earthquake, adequacy of fire fighting equipments, etc as per National Building Code 2005 including protection measures from lightening etc.

xli. Regular supervision of the above and other measures for monitoring shall be in place throughout the construction phase, so as to avoid nuisance to the surroundings.

xlii. Approved plan from competent Authority.

xliii. Copy of guidelines issued by concerned ministry for water scarce area is provided.

xliv. Ground water table to be shown along with source. Besides, permission of competent authority is obtained for withdrawal of ground water.

xlv. The PP shall abide by the provisions relating MSW handling and management rules.

xlvi. Review and revise the requirement of DG set capacities for 100% power back up through to optimization of power back up in case of power failure and emergency.

II OPERATION PHASE

i. An independent expert shall certify the installation of the Sewage Treatment Plant (STP) and a report in this regard shall be submitted to the RPCB, before the project is commissioned for operation. Discharge of treated sewage shall conform to the norms & standards of the Rajasthan State Pollution Control Board.

ii. For conservation of electricity and to reduce energy losses the management shall ensure that the electrical voltage is stepped down from 33 KV to 11 KV and distributed at this level and finally brought to 440 volts.

iii. Rain Water harvesting (RWH) for roof run-off and surface run-off, as plan submitted shall be implemented. Before recharging the surface run off, pre-treatment must be done to remove suspended matter, oil and grease. The RWH plan shall as per GOI manual

iv. The solid waste generated shall be properly collected & segregated before disposal to the City Municipal Facility. The in-vessel bio-conversion technique may be used for composting the organic waste.

v. Any hazardous waste including biomedical waste shall be disposed of as per applicable Rules & norms with necessary approvals of the Rajasthan State Pollution Control Board.

vi. The green belt design along the periphery of the plot shall achieve attenuation factor conforming to the day and night noise standards prescribed for residential land use. The open space inside the plot shall be suitably landscaped and covered with vegetation of indigenous variety.

vii. The D. G. sets to be operated with stack height as per RPCB norms.
viii. Incremental pollution loads on the ambient air quality noise and water quality shall be periodically monitored after commissioning of the project.
ix. Application of solar energy shall be incorporated to illumination of common areas, lighting for gardens and street lighting in addition to provision for solar water heating. A hybrid system or fully solar system for a portion of the apartments shall be provided.
x. Traffic congestion near the entry and exit points from the roads adjoining the proposed project site must be avoided. Parking shall be fully internalized and no public space shall be utilized.
xi. Ambient air quality monitoring stations shall be set up in consultation with RPCB in the down wind direction as well as where maximum ground level concentration of PM_{10} & PM_{25}, SO_x, NO_x, CO, CO_2, are anticipated.
xii. A Report on the energy conservation measures confirming to energy conservation norms finalize by Bureau of Energy Efficiency shall be prepared incorporating details about building materials & technology, R & U Factors etc. Quantify energy saving measures.
xiii. Proper system of channelizing excess storm water shall be provided.
xiv. The power factor shall be maintained near unity.
xv. For implementing CSR activities, initially 1% of the capital cost and thereafter 1% of annual profit in the balance as recurring cost will be provided.
xvi. Trees and shrubs of local species shall be planted to allow habitat for birds with appropriate distance from the boundary.
xvii. No puzzle parking shall be allowed.
xviii. Re-cycled water to match standards for cooling water system.
xix. Adequate measures shall be taken to prevent odor from solid waste processing and STP.

General Conditions:

1. The environmental safeguards contained in Form 1-A shall be implemented in letter and spirit.
2. Six monthly monitoring reports shall be submitted to Rajasthan and Rajasthan State Pollution Control Board.
3. Officials of the RPCB, who would be monitoring the implementation of environmental safeguards, shall be given full cooperation facilities and documents/data by the PP during their inspection. A complete set of all the documents submitted to SEIAA, Rajasthan shall be forwarded to the DoE, Rajasthan and Rajasthan State Pollution Control Board.
4. In case of any change(s) in the scope of the project, the PP requires a fresh appraisal by SEIAA/SEAC, Rajasthan.
5. The SEIAA/SEAC, Rajasthan reserves the right to add additional safeguard measures subsequently, if found necessary, and to take action including revoking of the environmental clearance under the provisions of the Environment (Protection) Act-1986, to ensure effective implementation of the suggested safeguard measures in a time bound and satisfactory manner.
6. All the other statutory clearances such as the approvals for storage of diesel from the Chief Controller of Explosives, Fire department, Civil Aviation Department, Forest Conservation Act, 1980 and Wildlife (protection) Act,1972 etc. shall be obtained, as may be applicable, by PP from the competent authority.
7. The PP shall ensure advertising in at least two local news papers widely circulated in the region, one of which shall be in vernacular language that, the project has been accorded environmental clearance and copies of the clearance letters are available with SEIAA, Rajasthan and the Rajasthan State Pollution Control Board and may also be seen on the website of the Board at www.rpcb.nic.in. The advertisement shall be made within 7(seven) days from the date of issue of the environmental clearance and a copy shall also be forwarded to the SEIAA, Rajasthan and Regional Office, Jaipur(S) of the Board.
8. These stipulations would also be enforced amongst the others under the provisions of 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 EIA Notification, 2006.
9. Under the provisions of Environment (Protection) Act, 1986, legal action shall be initiated against the proponent, if it was found that construction of the project has been started without obtaining environmental clearance.
10. Environment clearance is subject to final order of the Hon'ble Supreme Court of India in the matter of Goa Foundation Vs. Union of India in Writ Petition(Civil) No. 460 of the year 2004 as may be applicable to this project.

Yours faithfully,

Sd-

(Sankatha Prasad)
Member Secretary
SEIAA Rajasthan

Copy to following for information and necessary action:

1. Secretary, Ministry of Environment and Forest, Govt. of India, Paryavaran Bhavan, CGO Complex, Lodhi Road, New Delhi. **The SEAC, Rajasthan has observed that significant construction work of the proposed project has been completed and recommended for legal action against the proponent for violation of Environment (Protection) Act, 1986. Hence, legal action may be started against the proponent.**
2. Principal Secretary, Environment Department, Rajasthan, Jaipur. **The SEAC, Rajasthan has observed that significant construction work of the proposed project has been completed and recommended for legal action against the proponent for violation of Environment (Protection) Act, 1986. Hence, legal action may be started against the proponent.**
3. Shri S.C. Derashri, Chairman, SEIAA Rajasthan, 90, Geejgarh Vihar, Hawa Sarak, Jaipur.
4. Shri R.S. Bhandari, Member, SEIAA Rajasthan, 2- Museum Road, Ram Niwas Bagh, Jaipur.
5. Member Secretary, Rajasthan State Pollution Control Board, Jaipur. **The SEAC, Rajasthan has observed that significant construction work of the proposed project has been completed and recommended for legal action against the proponent for violation of Environment (Protection) Act, 1986. Hence, legal action may be started against the proponent.**
6. Secretary, SEAC Rajasthan.
7. The CCF, Regional Office, Ministry of Environment & Forests, RO(CZ), Kendriya Bhawan, 5th Floor, Sector 'H', Aliganj, Lucknow-226 020.
8. IA- Division, Monitoring Cell, MoEF, Paryavaran Bhavan, CGO Complex, Lodhi Road, New Delhi-110003.

M.S. SEIAA (Rajasthan)