

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/(498)/12-13

Jaipur, Dated: **30 NOV 2012**

To,

Project Director,
AFNHB Jaipur Project
Air Force Station,
Race Course,
New Delhi

Sub:- E.C. for Group Housing Project Air Force Naval Housing Project Plot no. 55/1 Village Boitawal Tehsil & District Jaipur State Rajasthan

Sir,

This has reference to your application dated 15.10.12 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 meeting held on 16/17.11.12.

2. Brief details of the Project:

1.	Category / Item no.(in Schedule):	8(a) B																																																																																																						
2.	Location of Project	Plot no. 55/1 Village Boitawal Tehsil & District Jaipur State Rajasthan																																																																																																						
3.	Project Details	<table><tr><th colspan="3">Area Statement</th></tr><tr><th>S. No.</th><th>Particulars</th><th>Area (in m²)</th></tr><tr><td>1</td><td>Plot Area</td><td>40,480.00</td></tr><tr><td>2</td><td>Permissible Ground Coverage (@ 35%)</td><td>14,168.00</td></tr><tr><td>3</td><td>Proposed Ground Coverage (@ 19.14%)</td><td>7749.56</td></tr><tr><td>4</td><td>Permissible FAR(@ 2.25)</td><td>91080.00</td></tr><tr><td>5</td><td>Proposed Residential FAR(@ 1.34)</td><td>54462.83</td></tr><tr><td>6</td><td>Permissible Service Area (@ 15% of FAR)</td><td>13662.00</td></tr><tr><td>7</td><td>Proposed Service Area (@ 5.70% of FAR)</td><td>5197.11</td></tr><tr><td>8</td><td>Permissible Store Area (@ 3% of FAR)</td><td>2732.40</td></tr><tr><td>9</td><td>Proposed Store Area (@ 1.46% of FAR)</td><td>1330.85</td></tr><tr><td>10</td><td>Permissible community Area (@ 5 % of FAR)</td><td>4554.00</td></tr><tr><td>11</td><td>Proposed community Area (@ 2.67 % of FAR)</td><td>2434.13</td></tr><tr><td>12</td><td>Built Up Area</td><td>98493.37</td></tr><tr><td>13</td><td>Basement area</td><td>29220.58</td></tr><tr><td>14</td><td>Stilt</td><td>5,847.87</td></tr><tr><td>15</td><td>Landscape area (@30 %)</td><td>12144.00</td></tr><tr><td>16</td><td>Tallest height of building</td><td>34.85m</td></tr><tr><th colspan="3">Block Wise Ground Coverage</th></tr><tr><th>S. No.</th><th>Blocks</th><th>Ground Coverage (m²)</th></tr><tr><td>1</td><td>A</td><td>701.276</td></tr><tr><td>2</td><td>B</td><td>701.276</td></tr><tr><td>3</td><td>C</td><td>701.276</td></tr><tr><td>4</td><td>D</td><td>701.276</td></tr><tr><td>5</td><td>E</td><td>701.276</td></tr><tr><td>6</td><td>F</td><td>701.276</td></tr><tr><td>7</td><td>G</td><td>503.160</td></tr><tr><td>8</td><td>H</td><td>503.160</td></tr><tr><td>9</td><td>J</td><td>503.160</td></tr><tr><td>10</td><td>K</td><td>572.494</td></tr><tr><td>11</td><td>L</td><td>572.494</td></tr><tr><td>12</td><td>Community Hall</td><td>878.436</td></tr><tr><td>13</td><td>Guard Room</td><td>9.000</td></tr><tr><td colspan="2">Total Ground Coverage</td><td>7749.56</td></tr></table>	Area Statement			S. No.	Particulars	Area (in m ²)	1	Plot Area	40,480.00	2	Permissible Ground Coverage (@ 35%)	14,168.00	3	Proposed Ground Coverage (@ 19.14%)	7749.56	4	Permissible FAR(@ 2.25)	91080.00	5	Proposed Residential FAR(@ 1.34)	54462.83	6	Permissible Service Area (@ 15% of FAR)	13662.00	7	Proposed Service Area (@ 5.70% of FAR)	5197.11	8	Permissible Store Area (@ 3% of FAR)	2732.40	9	Proposed Store Area (@ 1.46% of FAR)	1330.85	10	Permissible community Area (@ 5 % of FAR)	4554.00	11	Proposed community Area (@ 2.67 % of FAR)	2434.13	12	Built Up Area	98493.37	13	Basement area	29220.58	14	Stilt	5,847.87	15	Landscape area (@30 %)	12144.00	16	Tallest height of building	34.85m	Block Wise Ground Coverage			S. No.	Blocks	Ground Coverage (m ²)	1	A	701.276	2	B	701.276	3	C	701.276	4	D	701.276	5	E	701.276	6	F	701.276	7	G	503.160	8	H	503.160	9	J	503.160	10	K	572.494	11	L	572.494	12	Community Hall	878.436	13	Guard Room	9.000	Total Ground Coverage		7749.56
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4.	Water Requirement & Source	The total water requirement is approx. 437 KLD, out of which total domestic water requirement is 366 KLD. The fresh water approx. 437 KLD, out of which total domestic water requirement is 366 KLD. The fresh water requirement is approx. 256 KLD which is 70% of the domestic water demand. Source: The water supply will be met through the Ground Water.																												
5.	Fuel & Energy:-	The power supply shall be supplied by Jaipur Vidyut Vitran Nigam Limited. The total maximum demand is estimated as 3593 KW. By taking 0.9 as power factor and 90% as transformer efficiency, total load is 4436 kVA which shall be supplied by total of 2 Nos. 1000 kVA, 1 nos. 1250, 1 nos 800 and 1 nos. 630 kVA. Power Back up: There is provision of 3 no. of DG sets of 1875 kVA (3 X 625 kVA capacities each for power back up in the Group Housing Project for emergency use only.																												
6.	Solid Waste Management Plan	<table><tr><th colspan="4">Calculation of Solid Waste Generation</th></tr><tr><th>S. No.</th><th>Category</th><th>Kg per capita per day</th><th>Waste generated (kg/day)</th></tr><tr><td>1</td><td>Residents</td><td>2676@ 0.5 kg/ day</td><td>1338</td></tr><tr><td>2</td><td>Staff</td><td>15@ 0.25 kg/ day</td><td>3.75</td></tr><tr><td>3</td><td>Visitors</td><td>269@ 0.15 kg/ day</td><td>40.35</td></tr><tr><td>4</td><td>Landscape waste (3 acres)</td><td>@ 15 kg/ acre/ day</td><td>45</td></tr><tr><td colspan="3">TOTAL SOLID WASTE GENERATED</td><td>1427.1 kg/ day say 1427 kg/ day</td></tr></table>	Calculation of Solid Waste Generation				S. No.	Category	Kg per capita per day	Waste generated (kg/day)	1	Residents	2676@ 0.5 kg/ day	1338	2	Staff	15@ 0.25 kg/ day	3.75	3	Visitors	269@ 0.15 kg/ day	40.35	4	Landscape waste (3 acres)	@ 15 kg/ acre/ day	45	TOTAL SOLID WASTE GENERATED			1427.1 kg/ day say 1427 kg/ day
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7.	STP	STP of capacity 400 KLD																												

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 "Consent to Establish" shall be obtained from RPCB before start of any construction work at the site.
- ii The PP shall obtain a "No objection certificate for height clearance for the envisaged level from the Airports Authority of India.
- iii No Mobile tower shall be installed.
- iv Adequate amount of money should be earmarked for initial capital cost for projects as mentioned in Environmental Management Plan and for recurring cost for implementing various environmental protection measures under the Environmental Management Plan.
- v That the grant of this E.C. is issued from the environmental angle only, and does not absolve the project proponent from the other statutory obligations prescribed under any other law or any other instrument in force. The sole and complete responsibility, to comply with the conditions laid down in all other laws for the time-being in force, rests with the industry / unit / project proponent.
- vi 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.
- vii The PP shall obtain approval of drawings of laying electrical lines from the concerned SE of RRVN/ JVVNL.
- viii The PP shall full fill the requirements of energy regulatory commission.
- ix Feasibility of underground wiring may be examined and followed.
- x Open land may be earmarked for laying 132 kV line.
- xi Road width and bench should be adequate for easy movement of fire fighting vehicles.
- xii The Drains should be of adequate capacity and be lined till the final disposal points.
- 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 STP capacity 400 KLD will be as ensured by the P.P.
- xv 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 Construction phase shall be ensured.
- xvi Adequate drinking water facilities shall be provided for construction workers at the site.
- xvii Provisions shall be made for the supply of fuel (kerosene or cooking gas); utensils such as pressure cookers etc. to the laborers.

- xviii All the laborers engaged for construction shall be screened for health and adequately treated before engaging them to work at the site.
- xix For disinfection of waste water, appropriate tertiary treatment may be given.
- xx All the topsoil excavated during the construction shall be stored for use in horticulture/landscape development within the project site.
- xxi 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.
- xxii 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.
- xxiii 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.
- xxiv 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.
- xxv Vehicles hired for bringing construction material and laborers 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.
- xxvi 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.
- xxvii 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).
- xxviii Ready mixed concrete shall be used in building construction.
- xxix Minimum width of the road (right of way) 15 to 18 meter wide, Height of the Building 15 to 30 Meter.
- xxx Regular and periodic mock-up drills shall be undertaken by the fire department at least once in a year.
- xxxi NOC shall be obtained from National State Disaster Management Authority, wherever applicable.
- xxxii Storm water control and its re-use as per CGWA and BIS standards for various applications.
- xxxiii Water demand during construction shall be reduced by the use of pre-mixed concrete, curing agents and other best practices.
- xxxiv Total domestic water requirement shall not exceed 437 KLD. Source of Water from existing 2 bore-wells. The PP shall obtain prior permission from CGWA before withdrawing ground water through bore-well / tube wells during construction phase and post construction /operation phase of the project. Before allotment of the flats to the public, the P.P. should ensure availability of required quantity of water from a legal source and disposal of sewage in an environmentally safe manner.
- xxxv Separation of grey and black water shall be done by the use of dual plumbing line for separation of grey and black water.
- xxxvi Treatment of 100% grey water by decentralized treatment shall be done.
- xxxvii Building Plan from the competent Authority shall be got approved and position cleared with reference to Master Plan.
- xxxviii Adequate measures shall be taken to reduce air and noise pollution during construction keeping in mind CPCB norms on noise limits.
- xxxix A First Aid Room will be provided in the project both during construction and operation of the project.
- xl Any hazardous waste generated during construction phase shall be disposed off as per applicable rules and norms with necessary authorization of the RPCB.
- xli The approval of the competent authority shall be obtained for structural safety of the building due to earthquake, adequacy of fire fighting equipments, etc as per National Building Code 2005 including protection measures from lightning etc.
- xliv Regular supervision of the above and other measures for monitoring shall be in place through out the construction phase, so as to avoid nuisance to the surroundings.
- xlvi Guidelines issued by concerned Ministry for water scarce areas may be followed.
- xlvii Composting of biodegradable waste shall be carried out with in the campus.
- xlviii FAB sludge will be used for composting and compost will be used as manure.
- xlvix Provision of solar water heating /chilling/street lighting etc shall be explored.
- l Review and revise the requirement of DG set capacities for 100% power back up through optimization of power back up in case of power failure and emergency.
- li During construction phase and Post construction / operation phase of the project, the proponent shall be responsible for implementation of EIA/EMP. Commitment of proponent in this regard shall be submitted to RPCB at the time of applying for CTE.
- lii The project proponent shall fulfill in letter and spirit, all the commitments given/submitted to the SEAC office.
- lii After construction and handing over of the project, the Resident's Welfare Association or the Maintenance Agency shall be responsible for the EIA/EMP implementation. In this regard a suitable clause shall be put by the PP in the Maintenance Agreement.

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 top run-off and surface run-off, as planned shall be implemented. Before recharging the surface run off, pre-treatment must be done to remove suspended matter, oil and grease. The Rain Water Harvesting plan shall be 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 Fixtures for showers, toilet flushing and drinking shall be of low flow either by use of aerators or pressure reducing devices or sensor based control.
- x 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.
- xi Roof shall meet prescriptive requirement as per Energy Conservation Building Code by using appropriate thermal insulation material to fulfill requirement.
- xii 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.
- xiii Application of solar energy shall be incorporated for 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.
- xiv 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.
- xv 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.
- xvi Proper system of channelizing excess storm water shall be provided.
- xvii The power factor shall be maintained near unity.
- xviii Trees and shrubs of local species shall be planted to allow habitat for birds with appropriate distance from the boundary.
- xix Re-cycled water to match standards for cooling water system. MPN should be less than 5/100 ml in case of reuse of water of landscaping and flushing.
- xx Adequate measures shall be taken to prevent odor from solid waste processing and STP.
- xxi The SEIAA, Rajasthan reserve the right to add new conditions, modify/ annual any condition and/or to revoke the clearance if implementation of any of the aforesaid condition/other stipulations imposed by competent authorities is not satisfactory. Six monthly compliance status reports on project along with implementation of environmental measures shall be submitted to MoEF, Regional Office, Lucknow, SEIAA Rajasthan & RPCB.

PART - B. GENERAL CONDITIONS

1. The environmental safeguards contained in Form I-A shall be implemented in letter and spirit.
2. Six monthly compliance reports shall be submitted to Ministry of Environment and Forest, Govt. of India, Regional Office, Ministry of Environment & Forests, RO(CZ), Kendriya Bhawan, 5th Floor, Sector 'H', Aliganj, Lucknow, SEIAA, 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' 06.
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 Honb'le 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,


(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.
2. Addl. Chief Secretary, Environment Department, Rajasthan, Jaipur.
3. Smt. Alka Kala, Chairman, SEIAA, Rajasthan, 69-A, Bajaj Nagar Enclave, Jaipur
4. Shri Moti Lal Daima, Member, SEIAA, Rajasthan, 48/9, Moti Path, Mansarovar, Jaipur.
5. Member Secretary, Rajasthan State Pollution Control Board, Jaipur for information & necessary action and to display this sanction on the website of the Rajasthan State Pollution Control Board, Jaipur.
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.
9. Nodal Officer (Departmental Website), Department of Environment, Government of Rajasthan, Jaipur with the request to upload the copy of this environmental clearance on the website.

M.S. SEIAA (Rajasthan)