

State Level Environment Impact Assessment Authority, Rajasthan

4, Institutional Area, Jhalana Doongri, Jaipur-302004

Phone: 0141-2705633, 2711329 Ext. 361

No: FI(4)/SEIAA/SEAC-Raj/Seect/Project/ Cat.8(a) B(247)/08-09

Jaipur, Dated:

29 APR 2010

To,

M/s Jal Mahal Resort Pvt. Ltd.,
Jal Mahal, Amer Road,
Jaipur.

Sub: EC for proposed Jal Mahal Tourism Project "Jal Tarang" at Jalmahal, Opp. Police Line, Jaipur-Amer 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 & 25/26.02.10.

2. Brief details of the Project:

1. Category: - "B-2"
2. Item No.(in the list of Schedule):- 8 (a)
3. Purpose: - Jal Mahal Tourism Resort Project
4. Location: Jalmahal, Opp. Police Line, Jaipur-Amer Road, Jaipur, Rajasthan.
5. (a) Area: 100 Acres
6. (b) Total plot area; 4,04,682.00 M²
7. Built Up Area: 1,30,446.93 M² ;
8. a) Permissible FAR: 0.1362 (i.e. 55,118.18 M²)
9. b) Proposed FAR: 0.1333 (i.e. 53,944.11 M²)
10. Parking Area :
 - > 100 Equivalent Car Spaces (ECS) are to be provided for public uses on Jaipur-Amer road.
 - > No parking lot shall be larger than 100 ECS.
 - > Public Car Parking shall work on parking charges basis
 - > Adequate shade giving trees shall be provided in the parking lots to shade the parking spaces and visually enhance the parking areas.
 - > Public Open Space shall not accommodate any other parking requirements as mention above.
11. Parking Requirement for Tourism Facilities: Parking Requirements for suggested tourism Facilities will be provided as per the parking standards applicable to particular function and provided in JDA building bye-laws.
 - > No multi Level car parking structures shall be allowed
 - > No Parking provision of this category shall be allowed in Parking for Public Space.
12. Expected Cost: Rs. 500.00 Crores.
13. Environmental Management Plan:

Description	Capital Cost (In lacs)	Recurring Cost (in lacs)
STP	120	10
Landscaping	20	2
Acoustic enclosure	8	--
Dual plumbing system and efficient fixtures	45	3
Solar energy utilization application	21	2
Energy efficient lighting	35	2
Solid waste management	10	2
Monitoring of air, water, noise & soil	5	2
Insulation of walls & roof	20	--
Other environmental friendly materials	50	--
CSR activities	1	1
TOTAL	335	24

- The sewage generated to the tune of 442 KLD will be treated in STP based on SAFF technology of cumulative capacity 500 KLD and zero discharge will be maintained in the premises. Further, storm water network will be well designed to leave no stagnant water pockets.
 - The biodegradable waste is highly susceptible to pathogenic bacterial invasion thereby causing foul odors, diseases, fire & acidic leachate. The biodegradable waste will be sent to JMC and proper sanitization will be done to prevent any disease vector.
 - The non biodegradable waste will be collected and stored at earmarked places and then will be taken by a contractor who will take the waste to the Jaipur Municipal Corporation.
 - The capital cost for EMP will be Rs. 335 lacs.
 - The annual recurring cost on EMP will around Rs. 24 lacs.
10. Water Requirement & Source: The peak water demand during the construction phase will be 33 KLD which will be met from the tanker supply.
In the post construction phase, the daily water demand will be about 805 KLD (After implementation of Environment Management Plan- 458 KLD fresh water+347 KLD recycled water for flushing (65 KLD) and make up water for chillers (282 KLD); 50 KLD water demand for plantation will be met from recycled water from STPs. The daily fresh water requirement will be met from Bisalpur Pariyojna and rain water storage.)
11. Power requirement: 4,541 KW
Source: Grid substations at site from JVVNL.
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 will ensure to implement in letter and spirit the environment management plan.
- ii. The PP will not erect any structure with height exceeding that of "Jal Mahal Palace". Besides, the PP shall not install any mobile tower/create any structure fitted with equipments which generate electromagnetic waves.
- iii. The PP shall not take-up any such activity which may disturb the existing bird habitat within and around Jal Mahal /Mansagar Lake.
- iv. Entry to the bird habitat area is restricted and only the environmentalist, researchers & enthusiasts are allowed in limited numbers at a time.
- v. "Consent to Establish" shall be obtained from Rajasthan State Pollution Control Board and a copy shall be submitted to the SELAA, Rajasthan before start of any construction work at the site.
- 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. 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.
- viii. As envisaged, the PP shall ensure the implementation of the commitments in respect of addressing Environmental issues (Rs.335.00 lakh as capital & Rs. 24.00 lakhs/year as recurring cost respectively).
- ix. 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.
- x. Adequate drinking water facilities shall be provided for construction workers at the site.
- xi. Provisions shall be made for the supply of fuel (kerosene or cooking gas); utensils such as pressure cookers etc. to the labourers.
- xii. All the labourers engaged for construction shall be screened for health and adequately treated before engaging them to work at the site.
- xiii. For disinfection of waste water, appropriate tertiary treatment may be given.
- xiv. All the topsoil excavated during the construction shall be stored for use in horticulture/landscape development within the project site.
- xv. Ready mixed concrete shall be used in building construction.

- xvi. 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 authority.
- xvii. Water demand during construction shall be reduced by the use of pre-mixed concrete, curing agents and other best practices.
- xviii. **Soil and ground water samples will be tested periodically to ascertain that, there is no threat to the ground water quality by leaching of heavy metals and other toxic contaminants.**
- xix. Treatment of 100% grey water by decentralized treatment shall be done.
- xx. 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.
- xxi. 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. 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.
- xxii. 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.
- xxiii. 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).
- xxiv. Storm water control and its re-use as per CGWA and BIS standards for various applications.
- xxv. Permission to draw ground water shall be obtained from the CGWA/CGWB prior to construction/ operation of the project.
- xxvi. Separation of grey and black water shall be done by the use of dual plumbing line for separation of grey and black water.
- xxvii. 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. Provisions to reduce water demand for e.g. use of waterless urinals, low flow faucets; dual flushing fixtures, dual plumbing etc shall be made.
- xxviii. 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.
- xxix. Roof shall meet prescriptive requirement as per Energy Conservation Building Code by using appropriate thermal insulation material to fulfill requirement.
- xxx. Adequate measures shall be taken to reduce air and noise pollution during construction keeping in mind CPCB norms on noise limits.
- xxxi. 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.
- xxxii. A First Aid Room will be provided in the project both during construction and operation of the project.
- xxxiii. 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.
- xxxiv. 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.
- xxxv. Fire fighting with water & CO₂ and foam in diesel area shall be followed
- xxxvi. Clearance from Department of Explosive shall be obtained and undertaking shall be provided to comply with Fire Protection Act.
- xxxvii. 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.
- xxxviii. Approved plan from competent Authority and position with reference to Master Plan.
- xxxix. Copy of guidelines issued by concerned ministry for water scarce area is provided.
 - xl. Ground water table to be shown along with source. Besides, permission of competent Central Ground Water Authority is obtained for withdrawal of ground water.
 - xli. Provision of solar water heating /chilling etc shall be explored.
 - xlii. 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. Zero discharge will be maintained in the premises.
- ii. **Entry to the bird habitat area is restricted and only the environmentalist, researchers & enthusiasts are allowed in limited numbers at a time.**
- iii. Effective management of *i-cornia* (जल कुशी) shall be adopted.
- iv. As envisaged, the PP shall ensure the implementation of the commitments in respect of addressing Environmental issues (Rs.335.00 lakh as capital & Rs. 24.00 lakhs per year as recurring cost respectively).
- v. The sludge from sedimentation tank shall be disposed as per prevailing HWM Rules.
- vi. **Soil and ground water samples will be tested periodically to ascertain that, there is no threat to the ground water quality by leaching of heavy metals and other toxic contaminants.**
- vii. As committed during meeting with SEAC, the PP shall allocate separately a sum of Rs. 50.00 Lakhs as initial investment for socio economic and CSR activities pertaining to education, health and/ or habitat of the community and subsequently Rs. 15.00 Lakhs per year as recurring investment for addressing social issues in the adjoining

- area. A compliance report of the same shall be made part of social monitoring and six monthly actions taken reports submitted to RPCB and MoEF, Regional Office, Lucknow.
- viii. 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.
 - ix. 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 volt.
 - x. Rain Water harvesting (RWH) for roof run-off and surface run-off, as per 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 be as per GoI manual.
 - xi. 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.
 - xii. 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.
 - xiii. Adequate measures shall be taken to reduce air and noise pollution keeping in mind CPCB norms on noise limits. 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.
 - xiv. Justify with calculations the heavy water requirement in the chillers and make efforts to reduce it through water conservation measures and technologies.
 - xv. The native trees shall be planted in 70 % area and the ornamental trees in 30% area. It shall be ensured that, "*Alstonia scholaris*" (Devil's Tree) shall not be planted as no bird "nests" on it because of its allelopathic effects.
 - xvi. Comply with all environmental and social issues pertaining to the project proponent as per the bid document and subsequent agreement with the government and also ensure compliance to the responsibility pertaining to Lake restoration plan/NLCP
 - xvii. Plantation, construction and subsequent operations shall take adequate care of nesting and other requirements of avifauna in the lake including no use heavy lighting near habitat such as flood lights etc
 - xviii. The D. G. sets to be operated with stack height as per RPCB norms. There shall be no underground storage of diesel and other lubricants
 - xix. Carry out regular avifauna monitoring study by experts to records changes in numbers , species etc of avifauna to monitor the impact of the project positive or otherwise
 - xx. Incremental pollution loads on the ambient air quality noise and water quality shall be periodically monitored after commissioning of the project.
 - xxi. 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.
 - xxii. 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.
 - xxiii. A Report on the energy conservation measures confirming to energy conservation norms finalized by Bureau of Energy Efficiency shall be prepared incorporating details about building materials & technology, R & U Factors etc. Quantify energy saving measures.
 - xxiv. Proper system of channelizing excess storm water shall be provided. *
 - xxv. The power factor shall be maintained near unity.
 - xxvi. Trees and shrubs of local species shall be planted to allow habitat for birds with appropriate distance from the boundary.
 - xxvii. No puzzle parking shall be allowed.
 - xxviii. Re-cycled water to match standards for cooling water system.
 - xxix. 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,


(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. Principal Secretary, Environment Department, Rajasthan, Jaipur.
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.
- ✓ 6. Member 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)