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)B2 (444)**/13-14 Jaipur, Dated: 22 JAN 2016

To,
M/s Adani Power Rajasthan Ltd.
Through Mr. Santosh Kumar Singh,
General Manager,& Authorized Signatory,
7A, Sambhaw Building, Judges Bungalow Road,
Bodakdev, Ahmedabad - 380015, Gujarat.

Sub:-Environment Clearanc For Expansion of Residential Complex for Kawai Thermal Power Plant at village Kawai, Tehsil Atru, District- Baran, Rajasthan

This has reference to your application dated 18.03.2015 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 Appraisal Committee Rajasthan, in its meeting held on 18-21.05.15, and 26-27.08.15

Brief details of the Project:

1.	Category / Item no. (in Schedule):	Cat.8(a)B2			
2.	Location of Project	The Project is Located at Kawai, District Baran, Rajasthan			
3.	Project Details	S.N.	Particulars	Existing	Proposed
		1.	Total plot area	176500 m²	
		2.	Gross Built up Area	49799.32 m²	25200.68 m²
		3.	Built up area	49799.32 m²	25200.68 m²
		4.	Permissible F.A.R.	-	-
		5.	Utilized F.A.R.	-	-
		6.	Permissible Ground Coverage	-	-
		7.	Utilized Ground Coverage	29900 m²	6150 m²
		8.	Permissible height	-	
		9.	Achieved height	16 m	11.85
		10.	Proposed Green Area	6800 m²	5300 m²
		11.	Total No. of Flat (1 BHK, 2 BHK etc.)	1) 1 BHK –0 2) 2 BHK –192 3) 3 BHK- 48	1) 1 BHK –228 2) 2 BHK –228 3) 3 BHK- 48
		12.	Other facilities like swimming pool, club etc.	Club House -1 Health care-1 Comm. Block -1 Villa-2	Club House -1 Health care -1 Comm. Block -1 Villa-2

4.	Parking	**Parking Details** Existing: 315 Proposed: 172 Total E.C.U.
5.	Project Cost:	Existing: Rs. 100 Crore Proposed: Rs. 54 Crore
6.	Water Requirement per day & Source	The total water requirement during Construction Phase and Operation phase will be 59.05 KLD and 234 KLD respectively. The demand of fresh water will be met from Parvan Irrigation Water Project and Treated water will be met from STP. The quantity of recycled water is 123 KLD.
7.	Fuel & Energy:-	**Electrical Load** **Power Requirement during Construction and Operation Phase**

Parameters	Existing	Proposed
Construction	50 kVA	50 kVA
Operation Phase	1500 KVA	500 kVA
Source	Adani Thermal Power Plant	Existing Township Substation

8. Environment Management Plan with budgetary provision.

Sr. No.	Measures	Capital Cost (in Rs. Lakhs)	Annual Recurring Cost (in Rs. Lakhs)
1.	Pollution Control including STP	350.00	55.00
2.	Pollution Monitoring i) Air pollution ii) Water pollution	 10.00 1.00	 5.00 2.00
3.	Occupational Health	3.00	5.00
4.	Green Belt	5.50	2.00
	Total	**369.5**	**69.0**

Capital Cost-Rs.369.50 Lacs
Recurring Cost-Rs.69.00 Lacs

9. CSR Activities

S. No	Particulars	Year wise Expenditure (in lacs)		
		1st Year	2nd Year	3rd Year
1.	Medical Facilities	11,10,000	13,50,000	8,70,000
2.	Educational facilities	8,60,000	11,60,000	6,50,000
3.	Rural development	6,70,000	7,50,000	9,10,000
5.	Charitable works	5,80,000	5,10,000	5,80,000
	Total	3220000	3770000	3010000

10	STP	Total capacity of STP 180 KLD will be installed. Technology SBR/MBR/MMBR/FAB/Conventional/Other specify
11	Green Belt/ Plantation area and % of total area in sq. mts.	**Green Belt Area Details** Existing: 6800 Proposed: 5300
12	Budgetary Breakup for Labour	

Sr.No.	Activity	Budget provided (in Rs.)
1.	Education for children	75,000

		2.	Fuel for Cooking for the labour	50,000
		3.	Health and Medicine for labour	75,000
			TOTAL	2,00,000
		Rs..2.00 Lacs per year		

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

1.This Environment Clearance is granted for Expansion in Residential Complex for Kawai Thermal Power Plant as follows-

S.N.	Particulars	Existing	Proposed	After Expansion(Total)
1.	Total plot area	176500 m²		176500 m²
2.	Gross Built up Area	49799.32 m²	25200.68 m²	75000 m²
3.	Built up area	49799.32 m²	25200.68 m²	75000 m²
4.	Proposed Green Area	6800 m²	5300 m²	12,100 m²
5.	Parking Total E.C.U.	315	172	487
6.	Project Cost:	Rs. 100 Crore	Rs. 54 Crore	Rs. 154 Crore
7.	STP	155 KLD	90 KLD	245 KLD

2."Consent to Establish" shall be obtained from RPCB before start of any construction work at the site.
3.No Mobile tower shall be installed.
4.As envisaged, the PP shall earmark an amount of Rs. 369.50 lacs as initial capital cost and Rs. 69.00 Lacs as annual recurring cost for implementing various environmental protection measures under the Environmental Management Plan.
5.Green belt/Landscaping should be developed in 12,100 Sq. m.), as proposed.
6.As committed the PP shall invest an amount of **Rs. 100,00,000** under CSR spreadover for 3 years as Rs.3220000 for 1st year, Rs.3770000 for 2nd year and Rs.3010000 for 3rd year for School Education of Children, Anganwadi Services & Nutrition, Health & Sanitation, Livestock in the Villages, Adult Education & Youth Development, Income Generation Activities & Infrastructure Support.
7.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.
8.The PP shall obtain approval of drawings of laying electrical lines from the concerned SE of AVVNL.
9.The PP shall full fill the requirements of energy regulatory commission.
10. Feasibility of underground wiring may be examined and followed.
11. Open land may be earmarked for laying 132 kV line.
12. Road width and bench should be adequate for easy movement of fire fighting vehicles.
13. The waste water drains should be of adequate capacity and be lined till the final disposal points.
14. The P.P. shall ensure taking necessary steps on urgent basis to improve the living conditions of the labour at site. The proposed Budgetary provision of Rs. **2.00 Lacs** shall be made for the housing of construction labor within the site with all necessary infrastructure and facilities such as health facility, sanitation facility, fuel/LPG for cooking, along with safe drinking water, medical camps, and toilets for women, crèche for infants. The housing may be in the form of temporary structures to be removed after

the completion of the project. Details of provisions should be submitted to RPCB at the time of obtaining CTE.

15. 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.
16. All the laborers engaged for construction shall be screened for health and adequately treated before engaging them to work at the site.
17. All the topsoil excavated during the construction shall be stored for use in horticulture/landscape development within the project site.
18. Disposal of muck during construction phase shall not create any adverse effect on the neighbouring 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.
19. 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.
20. 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.
21. 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.
22. 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.
23. 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.
24. 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).
25. Ready mixed concrete shall be used in building construction.
26. Storm water control and its re-use as per CGWA and BIS standards for various applications.
27. The responsibility of water supply to the occupants would be that of the P.P. and the P.P. should ensure supply of water to occupants before occupancy from a legal source.
28. Water demand during construction shall be reduced by the use of pre-mixed concrete, curing agents and other best practices.
29. Total domestic water requirement shall not exceed during construction phase 59.05 KLD and during operational phase 234 KLD. As proposed ,the P.P. should ensure availability of required quantity of water from Pravan Irrigation Project and disposal of sewage in an environmentally safe manner.
30. Separation of grey and black water shall be done by the use of dual plumping line for separation of grey and black water.
31. Treatment of 100% grey water by decentralized treatment shall be done.
32. Building Plan from the competent Authority shall be got approved and position cleared with reference to Master Plan.
33. Adequate measures shall be taken to reduce air and noise pollution during construction keeping in mind CPCB norms on noise limits.
34. A First Aid Room will be provided in the project both during construction and operation of the project.
35. Any hazardous waste generated during construction phase shall be disposed off as per applicable rules and norms with necessary authorization of the RPCB.
36. 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 lightening etc.
37. Regular and periodic mock-up drills shall be undertaken by the fire department at least once in a year.
38. NOC shall be obtained from National State Disaster Management Authority, wherever applicable.
39. 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.
40. Guidelines issued by concerned Ministry for water scarce areas may be followed.
41. Provision of solar water heating /chilling/street lighting etc shall be explored.
42. 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.

43. 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.
44. The project proponent shall fulfill in letter and spirit, all the commitments given/submitted to the SEAC office.
45. The P.P. will ensure that the STP of 180 KLD as proposed performs as desired efficiency. Scheme for arrangement for disposal of treated sewage in a scientific manner should be submitted after approval from an expert before completion of the project.
46. 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.
47. 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.
48. Roof shall meet prescriptive requirement as per Energy Conservation Building Code by using appropriate thermal insulation material to fulfill requirement.
49. 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.
50. 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.
51. 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.
52. Proper system of channelizing excess storm water shall be provided.
53. Trees and shrubs of local species shall be planted to allow habitat for birds with appropriate distance from the boundary.

II OPERATION PHASE

1. An independent expert shall be 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.
2. Composting of biodegradable waste shall be carried out with in the campus.
3. STP sludge will be used for composting and compost will be used as manure.
4. Rain Water harvesting (RWH) for roof top run-off and surface run-off, as planned shall be implemented. The Rain Water Harvesting plan shall be as per GoI manual.
5. Before recharging the surface run off, pre-treatment must be done to remove suspended matter, oil and grease.
6. The solid waste generated An independent expert shall be 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 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.
7. 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.
8. 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.
9. The D. G. sets to be operated with stack height as per RPCB norms.
10. Incremental pollution loads on the ambient air quality noise and water quality shall be periodically monitored after commissioning of the project.
11. 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.
12. The power factor shall be maintained near unity.
13. *Polyalthia long folia*(Ashok), *Cassia fistula* (Amaltas) and *Ficus infectoria* (Pilkhan) shall be planted.
14. 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.
15. Adequate measures shall be taken to prevent odor from solid waste processing and STP.
16. 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.

B 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 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 is found that construction of the project had been started without obtaining environmental clearance.

sd/-

(Rajesh Kumar Grover)
Member Secretary,
SEIAA Rajasthan.

No. F1 (4)/SEIAA/SEAC-Raj/Sectt/Project/Cat. **8(a)B2 (444)**/14-15

Copy to following for information and necessary action:

1. Secretary, Ministry of Environment,Forest & Climate Change,Govt. of India, Indira Paryavaran Bhawan, Jor Bagh Road, Aliganj, New Delhi-110003.
2. Addl. Chief Secretary, Environment Department, Rajasthan, Jaipur.
3. Smt. Alka Kala, Chairperson, SEIAA, Rajasthan, 69-A, Bajaj Nagar Enclave, Jaipur
4. Sh. Sankatha Prasad,(IFS Retd.),250, Gomes Defence Colony,Vaishali Nagar,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 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. Environment Management Plan- Division, Monitoring Cell, MoEF, Paryavaran Bhavan, CGO Complex, Lodhi Road, New Delhi-110003.
9. Programmer,Department of Environment, Government of Rajasthan, Jaipur with the direction to upload the copy of this environmental clearance on the website.

M.S. SEIAA (Rajasthan)