

MEMBER SECRETARY
SEIAA (GUJARAT)



STATE LEVEL ENVIRONMENT
IMPACT ASSESSMENT
AUTHORITY
GUJARAT

No. SEIAA/GUJ/EC/8(b)/ 44 /2010

Date: 20 FEB 2010
Time Limit

Sub: Environment Clearance for proposed project- township and area development project at Survey No. 141 (Part), Village : Mundra, Dist : Kutch by M/s. Adani Mundra SEZ Infrastructure Pvt. Ltd.,.....in Category 8 (b) of Schedule annexed with EIA Notification dated 14/9/2006.

Dear Sir,

This has reference to your application along with Form-I, EIA Report and Addition details submitted to SEAC, seeking Environmental Clearance under Environment Impact Assessment Notification, 2006.

The proposal is for Environmental Clearance for proposed project- township and area development by M/s Adani Mundra SEZ Infrastructure Pvt. Limited, Survey No. 141 (Part), Village : Mundra, Dist : Kutch. The proposed project is social infrastructure project consisting of housing colonies, public amenities and other physical infrastructure facilities for the industries coming up in the nearby SEZ. It has been planned to have @ 10,000 number of 1 / 2 / 3 BHK residential units with estimated population of @ 50,000 and social amenities like markets, primary health center, hospital, schools, college, community hall, library, recreation club, auditorium / theater, commercial offices / shopping etc. in the proposed social infrastructure project. The building structures proposed in the project will be low rise in nature (i.e. G+2). The power requirement of 5 MW will be met from proposed Adani Power Limited. Considering the available land area for green belt development as well as road side plantation, @ 2 MLD treated sewage will be utilized within the project area for the said purpose whereas @ 5.2 MLD balance quantity of treated sewage will be utilized in the identified area of MPSEZL for green belt development purpose. Sun path and wind direction analysis has been done. The planning has been done by considering various environmental attributes. Buildings are articulated in such a way to provide cross-ventilation to all the dwelling units. Microclimate of the development to bring down ambient temperature will be achieved through continuous greens between the buildings. Considering the flat topography, the open spaces shall be detailed out with mounds and screen plantation along the roads to ensure low noise and air pollution. The land admeasuring about 255 Ha has been earmarked for development of social infrastructure within the non-processing zone area of MPSEZ Ltd. The estimated cost of the project is Rs. 2000 Crore.

The project activity is covered in 8(b) and is of 'B' Category. Since the proposed project is in item no.8 of the EIA notification, 2006, it does not need Public Consultation as per Para 7(i) III. Stage (3) (d) – Public Consultation of EIA Notification, 2006.

The SEAC, Gujarat had recommended to the SEIAA, Gujarat, to grant the Environment Clearance to this project for the above-mentioned project. The proposal was considered by SEIAA, Gujarat in its meeting held on 25.01.2010 at Gandhinagar. Since the EIA/ EMP was found to be adequate and complete and the public consultation is not required for the project, the SEIAA hereby accords Environmental Clearance to above project under the provisions of EIA Notification dated 14th September, 2006 subject to the compliance of the following Specific and General conditions.:

A. SPECIFIC CONDITIONS:

A.1 CONSTRUCTION PHASE:

1. Minimum aerial distance of 100 m shall be kept between processing & non-processing areas of SEZ, as

proposed.

ANNEXURE A

2. All building structures in the project shall be of low rise in nature (Max. G+2) as proposed in the EIA report.
3. The project proponent shall not obstruct the flow of river Bhukhi passing through the social infrastructure area and shall not do any encroachment on the said river, as per their undertaking dated 21/07/2009. All necessary precautions and measures shall be taken in order to ensure that natural drainage of river Bhukhi passing through the project site is not altered / affected.
4. Additional bridge / walkthrough over the Bhukhi river passing through the site shall be provided between the two bridges planned to be provided so as to reduce distance to be traveled during the emergency situations.
5. If SEZ authority permits, adequate parapet / fencing shall be provided along the banks of river Bhukhi passing through the site for preventing fall of animals / humans.
6. All required sanitary and hygienic measures shall be provided before starting the construction activities and to be maintained throughout the construction phase.
7. The construction site shall be provided with adequately barricades of at least 3 m height on its periphery with adequate signage.
8. Adequate first aid facilities shall be provided in the project both during construction and operation of the project.
9. Adequate drinking water, sanitation and other amenities shall be provided for construction workers at the site. The safe disposal of wastewater and solid wastes generated during the construction phase should be ensured.
10. Provision should be made for the supply of fuel (kerosene or cooking gas), utensils such as pressure cookers etc. to the labourers during construction phase.
11. The project proponent shall ensure that the construction labours are provided with adequate amenities for lighting, drinking water, sanitation, etc. to ensure that they do not ruin the existing environmental condition.
12. Adequate personal protective equipments shall be provided to the construction workers to ensure their safety and the project proponent shall ensure its usage by the labours.
13. All topsoil excavated during construction activities should be stored separately for use in horticultural / landscape development within the project site.
14. Disposal of debris including the excavated material during construction phase shall not create adverse effect on neighbouring communities and shall be disposed off only at the approved sites with the approval of the competent authority after taking the necessary precautions for general safety and health aspects.
15. Use of diesel generator sets during construction phase should be enclosed type and confirm to EPA Rules for air and noise emission standards.
16. Ready made mix concrete should be used so far as possible.
17. Water demand during construction should be reduced by use of curing agents, plasticizers and other best practices.
18. Vehicles hired for bringing construction material at site should be in good conditions and confirm to applicable air and noise emission standards and should be operated only during non-peak hours.
19. Ambient noise levels shall conform to residential standards both during day and night. Incremental pollution load on the ambient air and noise quality should be closely monitored during construction phase.
20. Fixtures for showers, toilet, flushing and drinking should be of low flow either by use of aerators or pressure reducing devices or sensor based control.
21. Fly ash should be used as building material in the construction as per provisions of Fly Ash Notification under EPA.
22. Structural design aspects in accordance to the seismic zone shall be strictly adhered to.
23. No groundwater shall be used and the water required during construction phase shall be sourced from Gujarat Water Infrastructure Ltd.
24. The construction materials and debris shall be properly stored and handled to avoid negative impacts such as air pollution and public nuisances by blocking the roads and public passages. Appropriate barricading shall be done and signboards shall be put at such sites.
25. Ambient Air Quality Monitoring / Noise monitoring shall be carried out during the construction. The location of

Ambient Air Quality Monitoring Stations and its frequency shall be decided in consultation with GPCB.

26. The provisions of the Buildings and Other Construction Workers Rules shall be met with by the project proponent in addition to other statutory requirements under different environmental, pollution control and safely related Acts and Rules.
27. Environment Management Cell shall be formed, which will supervise and monitor the environment related aspects of the project during construction and operational phases in addition to observance of Gujarat Building and other Construction Workers Act and Rules including registration of the project under this act.

A.2 OPERATION PHASE:

28. Fresh water requirement during the operation phase shall not exceed 9 MLD and it shall be sourced from Gujarat Water Infrastructure Ltd. Metering of the water shall be done and its records shall be maintained. No ground water shall be extracted.
29. The total sewage generation from the proposed social infrastructure project shall not exceed 7.2 MLD.
30. The project proponent shall install and operate adequate sewage treatment plants (STP) comprising of 3 modules of STP (each of 2.5 MLD) to achieve ultimate capacity of 7.5 MLD, for treatment of sewage. These STP modules shall be operated regularly and effectively to achieve the GPCB norms.
31. Two modules of STP of 2.5 MLD (i.e. total 5 MLD) shall be installed on one side of the Bhukhi river and one module of STP of 2.5 MLD shall be installed on the other side of the Bhukhi river passing through the social infrastructure project. Hence no any cross drainage civil work shall be carried out.
32. Out of total 7.2 MLD of treated sewage conforming the GPCB norms, 2 MLD treated sewage shall be utilized within the project area for plantation / gardening whereas balance 5.2 MLD of treated sewage shall be utilized in the identified area of MPSEZL for plantation / gardening.
33. In no case, the wastewater / treated sewage shall be discharged in to the river Bhukhi passing through the social infrastructure project.
34. Best available technology shall be used for disinfection of treated sewage before reuse / discharge.
35. Rainwater harvesting of roof top run-off of the building to be constructed as a part of social infrastructure as per the plan submitted shall be implemented. Before recharging the rain water, pre-treatment must be done to remove suspended matter.
36. The Municipal Solid Waste (MSW) shall be properly collected and segregated at source and it shall be disposed as per the guidelines of the MSW Rules 2000, as may be amended from time to time. The dried biomass from the STP will be used as manure in gardening / plantation.
37. The bio-medical waste (BMW) shall be disposed as per guidelines of BMW Rules 1998 as may be amended from time to time.
38. Hazardous wastes, if any generated during the operation phase shall be handled as per the Hazardous Waste (Management, Handling and Transboundary Movement) Rules 2008, as may be amended from time to time.
39. 54,600 sq.m. area shall be earmarked for the parking purpose, as proposed. The area earmarked for the parking shall be used for parking only. No other activity shall be permitted in this area.
40. Necessary signage including continuous display of status of parking availability at entry, exit and all other appropriate places shall be provided which should have appropriate size of letters and shall be visible from the at least 50 meter distance from the adjacent road.
41. No public space shall be used or blocked for the parking and the trained staff shall be deployed to guide the visitors for parking and helping the senior citizens and physically challenged people.
42. Traffic congestion near the entry and exit points from the roads adjoining the proposed project site must be avoided.
43. Common utilities like drinking water facility, Toilets etc. shall be provided on each floor with adequate signage thereof. Adequate distance shall be maintained between the drinking water and toilet blocks.
44. The green belt shall be developed in 50 Hectares area in terms of peripheral green belt around the project site, road side plantation and green belt on either side of the Bhukhi river. The project proponent shall plant at least 20,000 trees in green belt, as proposed. The open spaces inside the social infrastructure project shall be suitably landscaped and covered with vegetation of indigenous variety.

ANNEXURE A

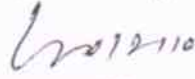
45. The area earmarked as green area shall be used only for greenbelt and shall not be altered for any other purpose. The fund earmarked for green belt development shall not be diverted for any other purpose.
46. The project proponent shall explore the application of solar energy & it shall be incorporated for illumination of common areas, lighting of internal roads and passages in addition to solar water heating, if any.
47. The acoustic enclosures shall be installed at all noise generating equipments and the noise level shall be maintained as per the MoEF / CPCB guidelines / norms both during day and night time.
48. The project proponent shall install the electric appliances, which are energy efficient and meeting with the Bureau of Energy Efficiency norms, wherever applicable.
49. The energy audit shall be conducted at regular interval for the project and the recommendations of the Audit report shall be implemented with spirit.
50. The roof should meet regulatory requirement as per Energy Conservation Building Code by using appropriate thermal insulation material to fulfill requirements.
51. Use of glass shall be minimal to reduce the electricity consumption and load on air conditioning.
52. Risk estimation shall be carried out for the project and disaster management plan shall be prepared and its recommendations shall be implemented in the time bound manner.
53. The raw water sumps will be equipped with suction differential head / partition so as to ensure that minimum 500 KL water shall remain reserved as fire water, as proposed.
54. Necessary emergency lighting system alongwith emergency power back up system shall be provided. In addition, emergency public address system arrangement and signage for emergency exit route shall be provided on each floor.
55. Necessary auto glow signage at all appropriate places shall be provided to guide the people towards exits and assembly points during the unforeseen emergency and eventuality conditions.
56. Training to the staff for the first aid and fire fighting along with regular mock drill shall be conducted regularly and shall be made an integral part of the disaster management plan of the project.
57. Ozone Depleting Substances (Regulation & Control) Rules shall be followed while designing the air conditioning system of the project.
58. Environment Management Cell shall be formed by the project proponent during operation phase which will supervise and monitor the environment related aspects of the project including incremental pollution loads on the ambient air quality, noise and water quality periodically till the management of the project remains with the project proponent.

C. GENERAL CONDITIONS:

59. The project proponent shall permit the outside people to use the social infrastructures like hospital, schools, colleges etc. coming up in the proposed project, as per their undertaking dated 21/07/2009.
60. Various provisions of the Environment (Protection) Act, 1986 and the Rules / Notifications issued thereunder by the Ministry of Environment and Forests, Government of India, from time to time shall be strictly complied with.
61. No further expansion or modifications in the plant shall be carried out without prior approval of the MoEF/ SEIAA, as the case may be. In case of deviations or alterations in the project proposal from those submitted to MoEF/ SEIAA/ SEAC for clearance, a fresh reference shall be made to the SEIAA/ SEAC to assess the adequacy of conditions imposed and to add additional environmental protection measures required, if any.
62. The project authorities shall earmark adequate funds to implement the conditions stipulated by SEIAA as well as GPCB along with the implementation schedule for all the conditions stipulated herein. The funds so provided shall not be diverted for any other purpose.
63. The applicant shall inform the public that the project has been accorded environmental clearance by the SEIAA and that the copies of the clearance letter are available with the GPCB and may also be seen at the Website of SEIAA/ SEAC/ GPCB. This shall be advertised within seven days from the date of the clearance letter, in at least two local newspapers that are widely circulated in the region, one of which shall be in the Gujarati language and the other in English. A copy each of the same shall be forwarded to the concerned Regional Office of the Ministry.

64. It shall be mandatory for the project management to submit half-yearly compliance report in respect of the stipulated prior environmental clearance terms and conditions in hard and soft copies to the regulatory authority concerned, on 1st June and 1st December of each calendar year.
65. The project authorities shall also adhere to the stipulations made by the Gujarat Pollution Control Board.
66. The project authorities shall inform the GPCB, Regional Office of MoEF and SEIAA about the date of financial closure and final approval of the project by the concerned authorities and the date of start of the project.
67. The SEIAA may revoke or suspend the clearance, if implementation of any of the above conditions is not found satisfactory.
68. The company in a time bound manner shall implement these conditions. The SEIAA reserves the right to stipulate additional conditions, if the same is found necessary. The above conditions will be enforced, inter-alia under the provisions of the Water (Prevention & Control of Pollution) Act, 1974, Air (Prevention & Control of Pollution) Act, 1981, the Environment (Protection) Act 1986, Hazardous Wastes (Management and Handling) Rules, 2003 and the Public Liability Insurance Act, 1991 along with their amendments and rules.
69. This environmental clearance is valid for five years from the date of issue.

With regards,
Yours sincerely,



(R.G.SHAH)
Member Secretary

Issued to:

M/s Adani Mundra SEZ Infrastructure Pvt. Limited,
Survey No. 141 (Part),
Village : Mundra,
Dist : Kutch.

Copy to:-

1. The Secretary, Department of Environment and Forests, Govt. of Gujarat, Secretariat, Gandhinagar-382010.
2. The Chairman, Central Pollution Control Board, Parivesh Bhavan, CBD -cum-Office Complex, East Arjun Nagar, New Delhi-110032
3. The Chief Conservator of Forests (Central), Ministry of Environment & Forests, Regional Office (WZ), E-5, Arera Colony, Link Road-3, Bhopal-462016, MP
4. Monitoring Cell, Ministry of Environment and Forests, Paryavaran Bhavan, CGO Complex, New Delhi-110003.
5. The Member Secretary, Gujarat Pollution Control Board, Paryavaran Bhavan, Sector-10 A, Gandhinagar-382010
6. Select File

(R.G.SHAH)
Member Secretary



No. SEIAA/GUJ/EC/8(b)/ 119 /2010

Date: 11 JUN 2010

Amendment to Environment Clearance Order No:-

(Under the provision of Environmental Impact Assessment (EIA) Notification, 2006)

In exercise of the power conferred under the provision of Environmental Impact Assessment (EIA) Notification, 2006 under sub-rule (3) of Rule 5 of the Environment (Protection) Rules, 1986, the Environment Clearance granted to M/s Adani Mundra SEZ Infrastructure Pvt. Ltd. vide this office order no SEIAA/GUJ/EC/8(b)/44/2010 dated 20/02/2010 is being subjected to amendment for the following conditions only.

And whereas SEIAA has granted Environment Clearance vide order no SEIAA/GUJ/EC/8(b)/44/2010 dated 20/02/2010 under the provisions of the aforesaid rules.

And whereas SEIAA has received your letter dated 5/06/2010 for the amendment of Environment Clearance under the provision of the aforesaid rules. Environment Clearance is hereby amended as under, subjected to amendment for the following condition/s only.

The Environment Clearance order no SEIAA/GUJ/EC/8(b)/44/2010 dated 20/02/2010 shall be read henceforth as under.

The following sentence as mentioned in the description of the salient features of the project on page 1 – para 2, line no.8, of the Environment Clearance order, "The building structure proposed in the project will be low rise in nature (i.e G+2)" is amended and replaced as follows

"The building structure proposed in the project will be high rise, having varied building height restricted upto 42 m."

The condition no. A.1 (2) mentioned under the heading of "A:1 Construction Phase" of the order is amended and replaced as given below :-

A.1 CONSTRUCTION PHASE

2. Height of the buildings in the project shall be restricted to 42 meter (in view of the height restriction specified by the aviation authority) or the height permissible under the bylaws prescribed the SEZ Authority, whichever is more stringent. This, however, shall not increase the total population envisaged under the EIA report prepared and submitted to the SEAC and SEIAA and shall not increase in the resource consumption like total water usage or wastes generated.
- 2(a) The requirement for fire prevention, line safety in relation to fire and fire protection of the buildings shall be fulfilled in the project, as per the National Building Code of India so as to minimize danger to life and property from fire.
- 2(b) All high rise buildings shall have atleast two staircases with a condition that the nearest staircase shall be available at every 30 m from all places in a given building.
- **The additional condition to be incorporated in the order is as given below :-**
The applicant shall carry out comparative carbon foot-print study of low rise building with large ground coverage v/s high rise building with low ground coverage through reputed institute like CEPT or GIDR and submitted to SEIAA within one year from the issuance of EC

The other conditions of the Environment Clearance order no SEIAA/GUJ/EC/8(b)/44/2010 dated 20/02/2010 shall remain unchanged.

The Environment Clearance is subject to the conditions stated below and such other conditions as may be specified in the rules from time to time under the Environmental Impact Assessment (EIA) Notification, 2006 and Environment (Protection) Rules, 1986.

With regards,

Yours sincerely,


(R.G.SHAH)

Member Secretary

Issued to:

✓ M/s Adani Mundra SEZ Infrastructure Pvt. Ltd.

Survey No. 141 (Part),

Village : Mundra,

Dist : Kutch.

Copy to:-

1. The Secretary, Department of Environment and Forests, Govt. of Gujarat, Secretariat, Gandhinagar-382010.
2. The Chairman, CPCB , Parivesh Bhavan, CBD -cum-Office Complex, East Arjun Nagar, New Delhi-110032
3. The Chief Conservator of Forests (Central), Ministry of Environment & Forests, Regional Office (WZ), E-5, Arera Colony, Link Road-3, Bhopal-462016, MP
4. Monitoring Cell, Ministry of Environment and Forests, Paryavaran Bhavan, CGO Complex, New Delhi-110003.
5. The Member Secretary, Gujarat Pollution Control Board, Paryavaran Bhavan, Sector-10 A, Gandhinagar-382010.
6. Select File.

(R.G.SHAH)

Member Secretary