# MEMBER SECRETARY SEIAA (GUJARAT)



# STATE LEVEL ENVIRONMENT IMPACT ASSESSMENT AUTHORITY GUJARAT

Government of Gujarat

No. SEIAA/GUJ/EC/7(f)/312\_/2009

Date: 1 8 DEC 2009

Sub: Environment Clearance for construction of additional two lanes i.e widening and upgradation of Bagodara-Bhavnagar Road (Km 61.400 to 113.000 of SH-1 & Km 113.333 to 189.100 of SH-36) located in south central part of Gujarat state falling in Ahmedabad & Bhavnagar districts by M/s. Gujarat State Road Development Corporation Ltd [GSRDC].... in category 7 (f) of Schedule annexed with EIA Notification dated 14/9/2006.

Dear Sir,

This has reference to your application made along with Application Form 1, and Final EIA report submitted to SEAC, seeking Environmental Clearance under Environment Impact Assessment Notification, 2006.

The SEAC had prescribed Terms of Reference and subsequently public hearing was held on 21/01/2009 in Ahmedabad and on 10/02/2009 in Bhavnagar as the project is passing through both these districts. The project proponent submitted the final EIA of the project to this office in March-2009.

It is noted that the proposal is for Environmental Clearance for construction of additional two lanes (widening and upgradation) for Bagodara-Bhavnagar Road (Km 61.400 to 113.000 of SH-1 & Km 113.333 to 189.100 of SH-36) to make it four lane divided carriage way. The road located in south central part of Gujarat state falling in Ahmedabad & Bhavnagar districts. Bagodara - Dhandhuka - Vallabhipur - Bhavnagar road comprises of two state highways i.e. SH-1 & SH-36 having total length 127.7 Km. State highway -1 starts from Bagodara junction with NH-8 at Km 61.4 and ends near Tagadi village at Km 113 having total length of 51.6 Km. State highway - 36 starts near Tagadi village at Km 113 (end point of SH-1) and ends at Bhavnagar at Km 189.1 having total length of 76.1 Km., Out of 127.7 Km total length of the road, 78.4 Km length passes through four talukas (i.e. Bavla, Dholka, Dhandhuka & Barwala) of Ahmedabad district whereas 49.3 Km length passes through three talukas (i.e. Vallabhipur, Shihor & Bhavnagar) of Bhavnagar district.

It was presented that the nearest location on the project road is 13 Km away from the Velavadar Sanctuary. Further, project roads do not cross any river / creek having tidal effect and hence CRZ clearance is not required for the proposed project. The proposed carriageway of the road is at present two lanes which will be converted into the four lanes. The right of way proposed is 60 m. There will be six railway over bridges, three toll plazas, two truck laybay and 75 junctions in the project. The road passes through plain terrain and predominantly the land is barren. Each point of the TOR given was discussed in detail during the appraisal. The drainage pattern of the area and provisions made for the free flow of the surface run off during high rainy days was also discussed. The details of the Cross Drainage works-both new and the strengthening of the existing structures were also furnished. The project proponent also presented that approximately 288.23 Ha. of land will be acquired. The land for proposed project will be acquired through Land Acquisition Act and compensation will be paid as per the provisions of the Act. Flora and Fauna details of the project corridor were also discussed. It was presented that during study period rare and endangered species were not noticed. The project proponent also gave the details of top soil management and the environment management plan during construction phase of the project delineating the details of measures taken for the pollution prevention from hot mix plant, RMC plant and stone crushing plant. Measures are also proposed for prevention of fugitive emission, noise pollution control etc. in the EMP of the project. Key issues of the public hearing were also discussed at length during appraisal. The socio-economic benefits of the project were also

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presented. The Rapid Environment Impact Assessment Report of the project has been prepared which suggests that the project will have short term negative impacts during its construction phase for which detailed environment management plan has been prepared. An Environment Management Plant for the operation phase of the project has also been prepared. The project will have tangible positive impacts on surroundings. The socio-economic benefits of the project will also positive impacts.

The project activity is covered in 7 (f) and is of 'B' Category. The public hearing is carried out on 21-01-2009 at Dhandhuka, Dist.Ahmedabad and on 10-02-2009 at Vallabhipur, Dist. Bhavnagar for the respective portion of project.

The SEAC, Gujarat had recommended to the SEIAA, Gujarat, to grant the Environment Clearance to this project for the above-mentioned products. The public hearing has been conducted on 21.01.2009 and 10.02.2009 and the proposal was considered by SEIAA, Gujarat in its meeting held on 17.11.2009 at Gandhinagar. The SEIAA hereby accords Environmental Clearance to above project under the provisions of EIA Notification dated 14<sup>th</sup> September, 2006 subject to the compliance of the following Specific, Other Specific and General conditions.:

# A. SPECIFIC CONDITIONS:

#### A.1 WATER:

- 1. No groundwater shall be tapped for the construction of the project. Water for construction works shall not be drawn from community water sources.
- 2. Domestic waste water shall be discharged into septic tank/ soak pit system and shall not be drained to nallas, rivers, creeks or any other water bodies.

#### A.2 AIR:

- 3. Water sprinkling shall be carried out at mixing sites, temporary diversions, unpaved roads as well as haulage roads to control dust emission.
- 4. The gaseous emissions and particulate matter from the project construction shall conform to the standards prescribed by the GPCB. At no time, the emission levels shall go beyond the stipulated standards.
- 5. The project proponent shall obtain the requisite permissions for Asphalt plant, Hot-Mix Plants, Wet-Mix Plants and Concrete Batching Plants from the statutory authority before commencing any activity.

# A.3 SOLID WASTE:

- 6. Excavated bituminous pavement as well as other bituminous waste shall be utilized only in filling of the median.
- 7. Demolition/construction waste shall be utilized in road construction wherever possible.
- 8. Surplus material generated during the road construction work shall be utilized for backfilling the borrow areas and for resurfacing the surrounding low lying land area along the road.
- 9. The project proponent must strictly comply with the rules and regulations with regards to handling and disposal of Hazardous waste in accordance with the Hazardous Waste (Management and Handing) Rules 2003. Authorization from the GPCB must be obtained for collection / treatment /storage /disposal of hazardous wastes.
- 10. Discarded asphalt/bitumen drums shall be sold only to the registered recyclers after decontamination.
- 11. Used oil / waste oil shall be sold to only to the registered recyclers.

### A.4 SAFETY:

- 12. Storage and use of toxic / hazardous chemicals/materials shall be minimized to the extent possible.
- 13. During transfer/usage of fuel, lubricants, bitumen etc, leakages/spillages shall be avoided and garland drain shall be constructed to avoid mixing of accidental spillages with water sources including lakes/ponds/streams/nallah and rivers.
- 14. Oil interceptors shall be provided wherever petroleum, oil, lubricants are handled / utilized /stored to

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- avoid soil contamination.
- 15. Personal Protective Equipment shall be provided to workers and its usage shall be ensured and supervised.
- 16. First Aid Box at the site shall be made readily available in at all the times.
- 17. Training shall be given to all workers on safety and health aspects.
- 18. Adequate safety measures including warning signs to be provided at the accident prone sites.
- 19. Occupational health surveillance of the workers shall be carried out on a regular basis and proper records shall be maintained for the same. Pre-employment and periodical medical examination for all workers shall be undertaken as per statutory requirement.
- 20. The project management shall strictly comply with the provisions made in Manufacture Storage and Impact of Hazardous Chemicals Rules 1989 as amended in 2000 for handling of hazardous chemicals. Necessary approvals from the Govt Authorities shall be obtained before commissioning of the project, if applicable. All Transportation of Hazardous Chemicals shall be as per the Motor Vehicle Act & Rules. Hazardous materials storage shall be at an isolated designated location, bund/dyke walls shall be provided for storage tanks for Hazardous Chemicals. All transporting routes within the factory premise shall have paved roads to minimize splashes and spillages.

#### A.5 NOISE:

- 21. Adequate noise control/mitigation measures shall be adopted to minimize the noise from project activities
- 22. Project activities including material transportation shall be restricted to day time only in the populated areas / in the proximity of human settlements.
- 23. All vehicles and equipment used in construction shall conform to the standards prescribed under the Environment (Protection) Act and Rules.
- 24. The overall noise level in and around the construction area shall be kept well within the prescribed standards by providing noise control measures including acoustic insulation, hoods, silencers, enclosures vibration dampers etc. on all sources of noise generation. The ambient noise levels shall confirm to the standards prescribed under the Environment (Protection) Act and Rules. Workplace noise levels for workers shall be as per the Factories Act and Rules.

#### A.6 WASTE MINIMIZATION AND CLEANER PRODUCTION:

- 25. The project proponent shall undertake following waste minimization measures:
  - a) Metering and control of quantities of active ingredients to minimize waste.
  - b) Reuse of by-products as raw materials or raw materials substitutes.
  - c) Use of automated and close filling to minimize spillages.
  - d) Use of close feed system into batch hoppers.

#### A.7 GREEN BELT AND OTHER PLANTATION:

- 26. The project proponent shall carry out extensive plantation in co-ordination with the nearby schools, people of the nearby villages, gram panchayat and other voluntary agencies in and around ROW corridor.
- 27. The project proponent shall plant ten times the number of trees to be cut for the proposed project.

#### B. OTHER SPECIFIC CONDITIONS:

- 28. All the issues raised in the public hearing shall be comprehensively addressed / complied with in a time bound manner and the compliance thereof shall be informed to the SEIAA, GPCB and the District Collector from time to time.
- 29. Necessary approvals under various laws in force including the Forests Conservation Act, Wildlife (Protection) Act, etc. as may be applicable, shall be obtained before commencing the above project.
- 30. Minerals required for the project like gravel, sand etc. shall be obtained through only those quarries /mines/ leases which have valid consent of the Gujarat Pollution Control Board and the permission from the competent authority like Geology and Mining Department for mining of mineral.

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- 31. The existing alignment shall be strengthened and widened with adequate number of safety and environmental protection measures adopted.
- 32. Adequate number of underpasses and pedestrian crossings shall be provided along the congested areas and other appropriate locations along the existing alignment.
- 33. Measures such as barricades and pavements should be erected so that there is no encroachment along the road alignment.
- 34. Adequate number of underpasses for animals and underpasses for vehicles especially for the agriculture produce shall be provided as per the requirements. Thorough study through consultation process shall be done for this purpose.
- 35. Noise barriers including tree plantation shall be taken up all along the existing alignment and also along the proposed bypass.
- 36. Adequate number of bus bays, truck bays and patrolling system shall be provided along the bypass. Proper road divider with adequate plantation shall be provided for unidirectional flow and to avoid glare from the vehicle coming from the opposite direction.
- 37. The widening shall be carried out in such a way that the existing hydrology of the region is not affected adversely. Necessary cross drainage structures and culverts shall have to be provided /augmented /strengthen at appropriate places with appropriate sizes to avoid flooding of rain water and associated impacts.
- 38. It shall be ensured that the land area along the bypass is not encroached upon and ribbon development is triggered making it congested.
- 39. Service lane as well as pedestrian crossing shall be provided along the populated area.
- 40. The project proponent shall ensure total compliance of the fly ash rules and ensure maximum utilization of fly ash.
- 41. Traffic management at the temporary diversions shall be done by providing adequate warning signages, road safety devices and flagmen along the road. Warning signages shall be provided in the local language.
- 42. Accidents prone areas should be identified and all the safety measures to be provided as per IRC guidelines.
- 43. It shall be ensured that no water bodies are affected due to the project.
- 44. Pond /water body along the alignment if any shall be deepened with proper bunds. Impact on pond if any shall be adequately mitigated.
- 45. Surplus material generated during road construction shall be used to back fill / reclaim the quarries/borrow pits. All quarries and borrow area shall be restored and enhanced/rehabilitated as per their potential.
- 46. The campsite for the project shall be designed keeping in view the environmental, health and safety considerations.
- 47. Workshops, labour camp areas and storage yards shall be located at least 500 mtrs away from habitations and water bodies.
- 48. Site offices, camps, workshops, labour camp areas and storage yards shall be restored to their original status on project completion.

# C. GENERAL CONDITIONS:

- 49. The project proponent shall undertake eco-developmental measures including community welfare program most useful in the project area for the overall improvement of the environment. People belonging to the surrounding areas as well as local communities shall preferably be employed in the construction activities for the project.
- 50. The project proponent shall also comply with all the environment protection measures and risk mitigation measures/safeguards proposed by them in the EIA report.
- 51. The project proponent may consider to develop rain water harvesting structures on both sides of the road to harvest the run off water for recharge of ground water.
- 52. At no time, the emissions shall exceed the prescribed limits. In the event of failure of any pollution control system adopted by the unit, the unit shall be immediately put out of operation and shall not be restarted until the desired efficiency has been achieved.

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- 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