

## Minutes

The Minutes of the 117<sup>th</sup> Meeting of the Expert Appraisal Committee for Building Construction, Coastal Regulation Zone, Infrastructure Development and Miscellaneous projects held on 18<sup>th</sup> - 19<sup>th</sup> October, 2012, Scope Complex, Lodhi Road, New Delhi.

### **1. Opening Remarks of the Chairman.**

The Chairman welcomed the members to the 116<sup>th</sup> meeting of the Expert Appraisal Committee.

### **2. Confirmation of the Minutes of the 116<sup>th</sup> Meeting of the EAC held on 19<sup>th</sup> -21<sup>st</sup> September, 2012 at New Delhi.**

Minutes of the 116<sup>th</sup> Meeting of the EAC held on 19<sup>th</sup> -21<sup>st</sup> September, 2012 at New Delhi were confirmed.

### **4. Consideration of New Proposals:**

#### **4.1 Extension of validity of the ToRs granted for foreshore facility for the construction of jetty, convey belt, sea-water (intake and outfall points pumping station and laying of 440 KV transmission line) at village Salav, District Raigad, Maharashtra by M/s Welspun Maxsteel Ltd., [F. No. 11-40/2010-IA.III]**

Proponent informed that the ToR was finalized by the EAC in its meeting held in September, 2010 and issued in October, 2010 with two year validity. The consultant engaged could not get accreditation and hence engaged another consultant which caused delay in carrying out studies. Hence, requested for extension of ToR. There is no change in the project profile.

***The Committee recommended to extend the validity of ToRs earlier granted for carrying out EIA studies on the subject to M/s Welspun Maxsteel Ltd. by another two years.***

#### **4.2 CRZ clearance for construction of Hotel on plot bearing CTS No. 997/B & C Village Juhu, F.P.No. 16 of T.P.S-II Santacruz (W) at Juhu Tara Road, Mumbai, Maharashtra [F.No. 11-89/2011-IA-III]**

***The Committee decided to defer the project, since the project proponent did not attend the meeting.***

#### **4.3 Environmental & CRZ clearance for Single Mooring Point (SMP) and allied facilities of Veera in Gulf of Kutchh for handling crude oil on BOT basis in the State of Gujarat by M/s. Kandla Port Trust [F. No. 11-27/2010-IA.III]**

As presented by the project proponent, the proposal involves setting up of Single Mooring Point (SMP) and allied facilities off Veera in Gulf of Kutch for handling crude oil on BOT basis. The location of SMP will be at Latitude 22 45'15"N and Longitude 69 57'00"E and location of LFP at Latitude 22 54'50"N and Longitude 70 01'30"E (Tentative). The size of the VLCC proposed to be handled will be 300000 DWT and length of offshore and inter-tidal pipeline from SMP to LFB will be 19 km (3.25 km inter-tidal) through put - 9 MMTPA. The Catenary Anchor Leg Mooring (CALM) has been envisaged for the proposed location considering the advantage of operational ease and the experience of such types in operation in Gulf of Kutch. The CALM type SPM system comprise of a buoy moored to the seabed by a number of Category anchor legs connected to anchor points, and a rotating part carrying the mooring and product transfer equipment. Two locations were studied for proposed Land Fall Point (LFP) on the west and east of Lerakh River. The location was finally selected based on the advantage of its falling in the KPT Water limit.

A treatment plant of capacity 20 KLD per hour is proposed for treatment of oily waste water. The total project cost is Rs. 830.00 crores.

EAC in its meeting held in June, 2010 finalized ToR for the above project including Crude Oil Terminal (COT). The proponent has informed that the proposal was submitted to the Ministry for approval of ToR includes Construction of SPM and interconnection pipeline from SPM to LFP which excludes the COT & pipeline from COT to LFP with the estimated cost of 560.6 crores. Hence, requested to exclude CoT. The EAC in its meeting held in April, 2011 recommended for the issue of amendment to exclude the COT subject to the condition that necessary clearance for the COT shall be obtained from the competent Authority as applicable before the commencement of construction of COT and other related facilities. Public Hearing conducted on 01.05.2012 at Village Veera.

HTL/LTL demarcation carried out by the IRS, Chennai. The Gujarat CZMA has recommended the project vide letter dated 24.05.2012.

During the discussion, the following points emerged:

- (i) The Kandla creek water analysis shows appreciable increase of Temperature and pH, high level of Hydrocarbon and Phenols It shall be explained with the reasons, contribution of M/s kandla Port along with the mitigation adopted/proposed.
- (ii) The EMP is general nature, it shall be revised and specific EMP shall be submitted.
- (iii) The issues raised during the Public are not presented. PP shall present the specific detailed response to all the each points raised during the public hearing.

- (iv) Submit the details of CSR activities along with the budgetary provisions.

***In view of the foregoing observations, the committee recommended to defer the proposal. The proposal shall be reconsidered after the above observations are addressed and submitted.***

#### **4.4 CRZ clearance for Versova - Bandra Sea Link, Maharashtra by M/s MSRDC [F.No. 11-84/2011-IA-III]**

As presented by the Project proponent, the proposal is for development of Versova-Bandra Sea link. MSRDC has proposed to develop sea link from Versova to Bandra in the suburbs of Mumbai. The length of the sea link is approximately 10 km with dispersal points at Juhu Koliwada and Jogger's Park. The sea link will have 4+ 4 lanes on both the sides. Govt. of Maharashtra has declared MSRDC as 'Nodal Agency' for construction of VBSLP vide G.R. dated 19.12.2009. Mumbai is the economical capital of the country. The population of Mumbai is fast expanding at a great pace and is estimated to reach around 22 million by 2011. To accommodate the large population the suburbs are fast developing with many commuters travelling to the south Mumbai. The available route is the S.V. road and the Western Express Highway. Both these roads have already reached the saturation level. It takes minimum 75-80 minutes for commuters for travelling the said length of 10 km. at present. There is no open space available for the expansion of these roads. The congestion on these roads leads to delay in travel time. So there is great need for the alternative faster transportation system, which will be achieved by this proposed sea link.

There are 5 alternatives being thoroughly studied with several criteria. It includes are:

- Alignment no. 1(A): Coastal Road on reclamation with cut and cover tunnel at Juhu Beach [Length: 10.232 km, Block Estimated Cost: 3397 Cr]
- Alignment no. 1(B): Coastal Road on Stilts with cut and cover tunnel at Juhu Beach [Length: 10.232 km, Block Estimated Cost: 3772 Cr]
- Alignment no. 2 : Coastal Bridge partly at 200m away from coast & partly along the coast with cut & cover tunnel at Juhu Beach. [Length: 10.072 km, Block Estimated Cost: 3777 Cr]
- Alignment no. 3 : Sea link entirely in Sea at 900m away from coast.[Length: 9.890 km, Block Estimated Cost: 4045 Cr]
- Alignment no.4 : Coastal Road on reclamation till Galaxy Apartment/ Band Stand and Sea link thereafter till Versova End [ Length: 10.15 km, Block Estimated Cost: 3665 Cr]

The MSRDC has selected alignment No. 3 as there is no cut and cover on the Juhu beach, no reclamation and minimum damage to the mangroves. The salient features of the said alignment No. 3 are: about 900m away from the Coast, total Length 9.890 Km, Traffic Lanes 4 + 4 lanes, Sea Link 9.500 km (Approx.), Road on Stilt 390 m with no cut and cover and reclamation, traffic dispersal at – Joggers Park and Juhu Koliwada, Cost Rs. 4045 Cr.

The construction of the sea link will be carried out using modern technology. Including single pier with max. width 2500 mm, superstructure with bridge builders/movable scaffold, Minimum span lengths to be 50 m, maximum depth of superstructure 1500 mm, Expansion joints at not less than 50 m.

MSRDC has prepared extensive EMP and DMP for the project. They have budgeted at present Rs. 44 crores towards EMP which may go up during implementation of the project. The road will be constructed on stilt in the mangroves at the Versova connector for construction of 4-5 piers.

The MCZMA has recommended the project on 5<sup>th</sup> November, 2011. The EAC in its meeting held on 9<sup>th</sup> -10<sup>th</sup> February, 2012 and committee sought addition information viz. construction on stilt in mangrove area, mangrove plantation (at least 10 times) Details shall be submitted. Marine Impact assessment study, impact on fishing activity and mitigation measures, public consultation and details of the features at connector points, likely impact due to increase in traffic and proposed mitigation measures. The information submitted and presented were examined by the Committee.

Marine Impact Assessment Studies for the project was carried out by Life Sciences Department, university of Mumbai, through Fine Envirotech Engineers. The assessment of water up to 1.5 to 2 km from shore indicates that the water quality is already deteriorated due to partly treated /untreated sewage being released in it. The alignment of the sea link crosses the navigational channel (fishing) at four location viz. Bandra, Chimbai Road, Khar danda, juhu Koliwada. Discussion was held with the fishermen and they demand for navigation span of 50 mt at bandra and 90 m each at Chimbai Road, Khar danda, juhu Koliwada. MSRDC proposed to provide 50 m at Bandra and 100 at other locations including 150 m at Juhu( Novotel hotel). The channel will be 12 m vertical clearance. Maharashtra Maritime Board has also confirmed the clearances vide letter dated 13.04.2012. The fishermen also requested (i) develop a small jetty and common area for their repairing of net and M &R activities, (ii) preference of employment, (iii) compensation to the affected fishermen, (iv) allotment of place near Bandra Fort for fishing. MSRDC informed that the requests (i) to (iii) are considered and will be included in the draft tender paper and the request at (iv) can not be considered as this land does not belong to MSRDC.

MSRDC had interaction with local people, NGOs, concerned authorities from fishing activities. The Local Residents associations & NGO's were satisfied with the project and conveyed the same in writing. There were 2 important issues raised viz. effect on existing traffic at dispersal points and disturbance for fishing activities for local fishermen. After detailed discussion, the MSRDC assured them increasing the width of existing roads if required, putting up proper signage, erecting noise barriers in case there will be increase in noise level, shift the dispersal point (intermediate connector) from Joggers Park to near Otter's Club.

During the discussion, the following points emerged:

- (i) In mangrove area only road on stilt shall be constructed. There would be permanent loss of about 150 sqm mangrove and 50 sqm temporary loss during construction in Versoava and Carter connector. As per the CRZ notification, 2011, at least five times the number of mangroves destroyed/cut during the construction process shall be replanted. The proponent has proposed 10 times mangrove plantation at bandra adjacent to the project, The identified land is government land, presently it has sparse mangrove.
- (ii) Proponent shall comply all the assurances made to the fishermen and local public regarding the provision of navigation channels, providing noise barriers at sensitive locations, Consultation with Fishermen, - demand- provision
- (iii) The project proponent should take appropriate clearance from the authorities such as Forest dept. and/or Hon. High Court as the case.
- (iv) There shall be no dredging and reclamation for the project.
- (v) The duck materials shall be analysed prior to dumping/disposal in the identified locations with the approval of the competent authority to ensure that it do not cause any impact to the environment.
- (vi) All the construction equipments shall be provided with exhaust silencer especially close to habitation.
- (vii) All the recommendation of the MCZMA shall be strictly abided.

***The Committee recommends the proposal for CRZ Clearance with the above condition in the Clearance letter for strict compliance by the project proponent***

**4.5 Environmental Clearance for 4-Lane with paved shoulder of the section Km 316/10 to Km 423 of NH-12 (Bhopal to Bioara), State of Madhya Pradesh by M/s Madhya Pradesh Road Development Corporation Limited. [F.No. 10-45/2011-IA-III]**

As presented by the project proponent, the project involves 4- laning with paved shoulder of the section Km 316/10 to Km 423 of NH-12 (Bhopal to Bioara), State of Madhya Pradesh. The road starts at km. 316/10, Bhopal Airport Junction and ends at Km. 423/4, Indore-Piaora Junction. The total length of the road is 106.40 Km and designed length is 105.6 Kms. The proposed carriageway width is 7.0 mts. It passes through mainly plain terrain except some stretch from Km. 379 to 386 with the total length of 7.0 km in rolling terrain. Land use pattern along with the road are agricultural, forests, built up in 24 villages/ towns. Existing ROW is 30 m to 45m. Service road will be provided for a length of 13.5 km. Seven numbers of vehicular under-pass and 40 no of bus laybye, three nos. of trucks lay-bye are proposed. There is one major bridge, 11 minor bridges and 79 culverts. Out of which, one minor bridge and 29 culverts will be reconstructed. Total area to be acquired is 299.40 ha. About 3020 trees are proposed to be cut for the project. The project road passes through Wild life Sanctuary (Narsinghgarh) namely 'Chidikho" from Km 378.4 to Km 390, Application for wild life clearance has been submitted to DFO, Rajgarh on 10.6.2011. State Board for Wildlife has recommended on 28.07.2011 and Chief Wild Life Wardedn forwarded the proposal to NBWL on 09.12.2011. Total cost of the project is 7.35 crores.

The EAC in its 103<sup>rd</sup> meeting held on 13<sup>th</sup> –15<sup>th</sup> July, 2011 finalised ToR including conduct of Public hearing. Public Hearing conducted on 25.03.2012 at Shyampur, District Sehore, 01.04.2012 at parwaliya, District Bhopal, 05.05.2012 at Rajgarh Collectorate, District Rajgarh. About 350 public participated the public Hearing. The major issues are compensation on land acquisition and tree cutting.

During the discussion, the following points emerged:

- (i) The project road passes through Wild life Sanctuary (Narsinghgarh) namely 'Chidikho" from Km 378.4 to Km 390, hence clearance from NBWL shall be obtained.
- (ii) It is indicated that 3020 nos. trees falls within proposed RoW, however, bare minimum, however bare minimum trees to be cut. Necessary permission from competent authority shall be obtained for tree cutting. Necessary green belt shall be provided on both side of the highway with proper central verge and cost provision should be made for regular maintenance.
- (iii) Explore the possibilities of using cold mix technology wherever possible particularly near wildlife sanctuary.
- (iv) Noise barrier of 40 m length with 1.5 m height shall be provided near the School as committed.
- (v) Rain water harvesting including oil and grease trap shall be provided. Water harvesting structures shall be located at every 500

mts along the road. Vertical drain type rainwater harvesting structures shall be set up to minimize surface runoff losses of rainwater.

- (vi) R&R shall be as per the guidelines of State/Central Government.
- (vii) IRC guidelines shall be followed for widening & up-gradation of road.
- (viii) The responses/commitments made during public hearing shall be complied with letter and spirit.
- (ix) All the recommendation of the EMP shall be complied with letter and spirit. All the mitigation measures submitted in the EIA report shall be prepared in a matrix format and the compliance for each mitigation plan shall be submitted to MoEF along with half yearly compliance report to MoEF-RO.

***The Committee recommended the proposal for Environmental Clearance with the above condition in the Clearance letter for strict compliance by the project proponent***

**4.6 Environmental Clearance for 4 laning (105.7 Km) SH -16 (Bhiwani bypass to Rohtak District Border) and SH-17 (Near Nagal Shirohi to Bhiwani), Haryana by M/s. Haryana Public Works Department. (F.No. 10-54/2011-IA.III).**

As presented by the Project proponent, the proposal involves 4 laning (105.7 Km) SH -16 (Bhiwani bypass to Rohtak District Border) and SH-17 (Near Nagal Shirohi to Bhiwani), Haryana. Project stretch starts from Narnaul bypass from km 4+500 of MDR (near km-11 of SH-17) and terminates at km 113.750 of SH-16 on Bhiwani-Rohtak district border. However, the initial 30.687 km stretch of MDR-129 is not taken into consideration since MDR is not considered for environmental clearance as per EIA notification 2006 and Amendment 2009. Total Length: Total length of SH-16 and SH-17 is 105.7 km (excluding 30.687 km of MDR-129), Bypass length= 20.63 km (3 bypasses) Narnaul bypass – km 4.500 of MDR-129 to km 18.500 of SH-17 (8 km) Nangal Shirohi bypass – km 27.600 of SH-17 to km 31.300 of SH-17 (3.7 km), Bhiwani bypass – km 101.350 of SH-17 to km 129.250 of SH-16 (8.93 km). Road under District/State: Mahendragarh and Bhiwani District (Haryana State), Realignment: 4 locations excluding bypasses. The important settlements: Nangal Shirohi, Jatuwas Mor, Mahendragarh, Sisoth, Paladi, Pali, Akoda, Mandola, Dadri, Kithlana, Nimriwali, Bamla and Kharak. There are no Major Rivers. The Terrain is Plain. Proposed ROW: 40 m, but at some isolated locations like tollplaza, wayside amenity, truck laybye, etc. More land has been proposed in order to accommodate these facilities. Existing Carriageway: 6.8-7.0 m. Proposed Configuration: 2x7.25 m c/w, 2x1.5 m paved shoulder, 2x1.5 m earthen shoulder and 2.0/4.5 m median width. Road Geometry: The

geometric design for Bypass and Mainline SH-17 and SH-16 has been done considering the design speed of 100 kmph with a maximum super elevation of 5%, except at few stretches of the bypass where it has been restricted to 80 km/hr. The preliminary vertical alignment design for project road has been done using a ruling gradient of 2% with a maximum of 3.3% at critical stretches. Major Bridges: Mainline – Nil, bypass – Nil, Minor Bridges: Mainline – 8 nos. bypass – 4 nos. Underpasses: Vehicular: Mainline: Nil, Bypass: Nil/Pedestrian Underpasses: Mainline: Nil, Bypass: Nil. Flyover/ROB: Mainline- 1, Bypass – 2. Culverts: Box culverts – 78. Slab culverts – 7. Pipe culverts – 27. No. of trees likely to be felled: About 24378 nos. of trees to be felled from protected forest within ROW against which compensatory afforestation shall be of 260000 trees. Quantum of Land Acquisition: About 125 ha of land are being acquired from title holder in Mainline and 95 ha land for Bypass. Forests Clearance for diversion of 178.64 ha was obtained vide letter no. 8-75/2011-FC dated 16.07.2012. Total basic construction cost of SH-16 and SH-17 is Rs 797 crores.

The EAC in its 103<sup>rd</sup> meeting held on 13<sup>th</sup> –15<sup>th</sup> July, 2011 finalised ToR including conduct of Public hearing. Public Hearing conducted on 01.03.2012 at Bhiwani and Mahendragarh Districts .

During the discussion, the following points emerged:

- i) The committee noted that the proposed widening is affecting 5 water bodies (ponds). The details of the each pond including catchment area, area to be occupied along with the google maps, photographs shall be submitted.
- ii) Joint tree enumeration committee with Forests department indentified as 24378 nos of trees required to be cut.
- iii) No wildlife within 10 km radius.
- iv) The response to the issues raised during Public Hearing are from consultant and not from the proponent. The proponent shall respond to the issues and submit.

***In view of the foregoing observations, the committee recommended to defer the proposal. The proposal shall be reconsidered after the above observations are addressed and submitted.***

**4.7 CRZ clearance for setting up of coal conveyor system, Captive jetty and laying intake and outfall pipeline for the proposed power plant at Perunthottam and Agaraperunthottam villages of Sirkali Taluk, Nagapattinam District by M/s Sindya Power Generated Company Ltd [F. No. 11-62/2012-IA-III]**

As presented by the project proponent, the project involves setting up of coal conveyor system, Captive jetty and laying intake and outfall pipeline for the proposed power plant at S.Nos 494(p), 495(p), 496(p), 497(p), 498(p), 501(p), Perunthottam and Agaraperunthottam villages of Sirkali Taluk, Nagapattinam. The total land requirement is 594 acres (Private Patta Land-527 acres and Govt. Land-67 acres). Undeveloped barren land will be utilized for the development of facilities. Coal will be conveyed through closed conveyor thereby ensuring no leakage/spill over. Sewage intake: 750 m Offshore, 10m depth and Quantitative-11158m<sup>3</sup>/hr. Discharge water (Outfall): 1500 m Offshore, 12.5 m depth, Qout-6647 m<sup>3</sup>/hr, ΔS-12 ppt and ΔT-4°C.

The proposed project comes under CRZ-I (B)& CRZ-III. Shore facilities for jetty operations, sea water intake pump house are located with CRZ-I (B) area. In addition coal conveyers and sea water intake & outfall pipelines pass through CRZ-I (B) area. Capital dredging will be carried out to construct intake and outfall pipelines and foundation for Trestle supporting Coal conveyor. 20 KLD of fresh water shall be used for construction works and water will be brought in tankers from nearby area. Diesel generators (500-750 kVA) will be used during construction Power for operation will be fed from the main power plant. Dredged soil will be used for filling up of the shore line.

Tamil Nadu Coastal Zone Management Authority (TNCZMA) has recommended the project vide letter no. 8391/EC3/2012-1 dated 06.08.2012.

The project was examined by the Expert Appraisal Committee (EAC) for Thermal project meeting held on 25.06.2012 and sought for additional information. Terms of Reference (ToR) issued for the project on 04.02.2012 and Public Hearing conducted on 17.02.2012.

The committee noted that there are complaints against the project alleging concealment of facts on shrimp farms, mangroves, Reserve Forests within 5 km. The Tamil Nadu Coastal Zone Management Authority has examined the issues raised in the complaint and response of the Proponent and sent its report. The Proponent has also briefed about its response on the issues raised in the complaint. Proponent informed that the intake and out fall are away from the intake of shrimp farm. The topo map produced reveals absence of mangroves, forests in the study area.

During the discussion, the following points emerged:

- (i) The proponent informed that the EC for the main power plant is under consideration of the Thermal EAC. The ToR granted by the Thermal EAC takes in to account the proposed jetty component. The Public Hearing conducted on 17.02.2012 included jetty component also.

- (ii) The Committee noted that the ToR included the jetty component, however, the proponent shall submit the document proof that the CRZ components were presented to the public during public hearing.
- (iii) In view of the above (i) committee decided that separate ToR need not be issued for the project. However, the CRZ Clearance shall be issued only after the issue of EC for Power plant.
- (iv) Submit the layout superimposed on the latest google map.
- (v) Submit the details of the soil requirement for level raise, source, permissions of competent authority if any etc.
- (vi) The shore line changes shall be monitored and the details shall be submitted once in a year to the Regional Office of the MoEF.
- (vii) Controlled cutter suction dredging shall be used along with the enclosure contain the turbidity.
- (viii) The dredged materials shall be analysed for presence of heavy metal and after confirmation of the absence of HM, it can be used for filling.
- (ix) Any one span of the trestle shall have minimum 7 m height above the HTL with 20 to 30 m width for movement of fishing vessels.
- (x) Sand by pass shall be provided from accretion areas.
- (xi) Oil Contingency Management Plan shall be put in place.
- (xii) CSR activities shall cover the villages within 10 km radius.

***In view of the foregoing observations, the committee recommend to defer the proposal. The proposal shall be reconsidered after the above observations are addressed and submitted.***

#### **4.8 CRZ clearance for setting up of assembling facility at Mundra Port & SEZ Ltd. Taluka, Mundra Dist. Kutch by M/s Anupam MHI Industries Ltd [F. No. 11-41/2012-IA-III]**

As presented by the proponent the proposal involves setting up of assembling facility at Mundra Port & SEZ Ltd. Taluka, Mundra Dist. Kutch. Adani Ports and Special Economic Zone Limited (APSEZL), formerly known as Gujarat Adani Port Limited (a company promoted by Adani Group) has a master plan of developing industrial complex requiring seafront. As a part of this plan, a port crane erection & commissioning facility has been proposed near the west port which will be constructed and operated by a

Gujarat-based firm named Anupam-MHI Industries Limited, which is a Joint Venture between Anupam Industries Limited and Mitsubishi Heavy Industries Limited, Hiroshima. The proposed Unit is an open to sky unit and does not require building construction.

The proposed seafront erection & commissioning unit is of 600 m × 200 m (1,20,000 m<sup>2</sup>) of area. This unit will be open to sky unit with supporting infrastructural facilities in 7150 m<sup>2</sup> built up area. Port cranes namely Ship to Shore, Rail Mounted Gantry and Rubber Tyred Gantry will be erected and commissioned in the proposed unit.

Port cranes weigh up to 2000 T and have a dimension of about 150 m × 100 m × 30 m. Due to magnanimous size and weight as well as its use in ports, erection & commissioning units have to be with seafront facility for transportation of the end products as there is no other option.

The proposed port crane erection & commissioning unit is an open to sky unit with ground coverage and built up area of 7150 and 6000 m<sup>2</sup> respectively. The built up area consists of Administrative block, Canteen, Gate complex, Utility Centre and Substation. The site is situated near the West Port of the APSEZL with seafront facility.

Three sites were examined viz. Dahej, Bhavnagar, Okha, Mundra. In Dahej, tidal variation of 8 meters in 4-5 hours is not at all suitable for loading these cranes on to the Ship/Barge due to its higher Center of Gravity. Bhavnagar, tidal variation of 6-8 meters in 4-5 hours is not at all suitable for loading these cranes on to the Ship/Barge, due to its higher Center of Gravity. Okha, Water Draft is substantially less to perform such load out operation. Mundra, a) Availability of suitable tidal variation of 4 M maximum, which is best suitable for such load – out operation, b) Intake channel with basin where tidal variation is minimum and most ideal for roll-on operation, c) Availability of related infrastructure like road, power and other auxiliary facilities suitable for operation, d) Suitable navigation facility, e) Most suitable marine condition for the operation.

During the discussion, the following points emerged:

- (i) The proponent claims that the activity requires water front and to be considered as activity requiring foreshore facilities. Committee suggested to justify as to why it is to be considered as foreshore facility. Can it be located away from waterfront or assemble at receiving end.
- (ii) Committee noted that the GCZM stipulated condition that the assembling unit shall not be within the CRZ area.
- (iii) The CRZ map does not show the HTL and details of intake channel, it shall be revised and submitted.

***In view of the foregoing observations, the committee recommended to defer the proposal. The proposal shall be reconsidered after the above observations are addressed and submitted.***

**4.9 CRZ clearance for installation of 400 KV D/C Transmission line from Gandhar (NTPC, Jhanor) of District Bharuch to Hazira, Dist Surat by M/s Essar Power Transmission Company Ltd [F.No.11-74/2012-IA-III]**

As presented by the project proponent, the project involves installation of 400 KV D/C Transmission line from Gandhar (NTPC, Jhanor) of Districts Bharuch to Hazira, Dist Surat, Gujarat. Total TTL length from Gandhar (NTPC, Jhanor) to 10 MTPA Steel Plant at Hazira is 97 km. Proposed TTL partly passes through CRZ (11 km), Reserve Forest and Protected Forest areas (34/275 towers). The total number of towers in CRZ is 34 (DA-20, DB-2, DC-6-DD-6). Distance between towers is 113-480 meters. The total 1.066 ha land area impacted. Tower design allows free flow of tidal water. About 150 m<sup>3</sup> soil generated/tower will be used as fill material in low lying areas at Essar Complex.

Gujarat Coastal Zone Management Authority (GCZMA) has recommended the project vide letter no ENV-10-2011-1886-E dated 18.09.2012.

The Forests Clearance for diversion of 4.7976 ha. (4.08 ha Reserve Forest and 0.7176 Protected) forest land for the proposed project has been issued vide letter no. 6-GJB 032/2012-BHO/438 dated 20.03.2012 from Regional Office, MoEF, Bhopal.

During the discussion, following point emerged:

- (i) All the conditions stipulated by the SCZMA shall be complied with.

***The Committee recommended the proposal for CRZ Clearance with the above condition in the Clearance letter for strict compliance by the project proponent.***

**4.10 Environmental Clearance for Integrated Municipal Solid Waste Management project at Kinduwal Village, Solan District, by M/s Addl. Chief Executive Officer, BBND, Baddi, Himachal Pradesh, (HP) (F. No. 10-32/2012-IA.III)**

As presented by the project proponent, the proposal is for development of integrated Municipal Solid Waste Management project at Kinduwal Village, Solan District, Baddi, Himachal Pradesh. The project is proposed for 2 major urban settlements, Baddi Municipal Council, Nalagarh Council and 41 Gram Panchayats. The Population as per 2001 census, is

Baddi -22601. Nalagarh-9443 and Gram Panchayat-1,12,520 the population growth is very high.

The project is a category 'B' however, it is treated as category 'A' since it is located within 10 km from interstate boundary (Punjab and Haryana). The proposed capacity is 40 TPD. Total area of land is 2.42 ha at Kinduwal Village. Nearest water bodies are Sirsa river 0.10 km on western side and Balad Nadi -3km at SE. Nearest forest area is Kohaidun Reserve forest -5 km at Western side. Nearest airport is Chandigarh airport at 40 km. The proposed site has been earmarked for CETP/MSW.

The proposed facilities involves segregation certification of MSW, composting and Sanitary landfill. Water requirement is estimated at 10 KLD and will be met from ground water. This waste water expected will be 16.13 KLD including 0.8 from domestic, 15 from composting leachate and 0.5 from sanitary landfill leachate. The leachate generated is proposed to be reused for maintaining moisture and temperature in composting. The cost of the project is Rs. 970 lakhs.

The EAC in its 112<sup>th</sup> meeting held on 10<sup>th</sup> – 11<sup>th</sup> May, 2012 finalised ToR including conduct of Public hearing. Public Hearing conducted on 13.08.2012 at the site. Public had welcomed the project.

During the discussion, following points emerged:

- (i) The site is about 300 m from the Sirsa River. PP to submit the layout on topo sheet with distances.
- (ii) Submit the copy of NOC from Competent Authority/PWD since the site is close to the river.

***In view of the foregoing observations, the committee recommended to defer the proposal. The proposal shall be reconsidered after the above observations are addressed and submitted.***

#### **4.11 Finalisation of ToR for proposal for setting up of incinerator at TSDF, Dobaspet, Bangalore, Karnataka by M/s Ramky Enviro Engineers Ltd. [F.No. 10-65/2012-IA-III]**

As presented by the project proponent, the project involves setting up of incinerator within the existing TSDF at Sy.No. 7,8,9,75,76,77,78,79,80,81,82,83,84 and 85 at Dobaspet, Bangalore, Karnataka. The capacity of incinerator is 5.5 million Kcal/Hr, Quantity of Hazardous Waste-1200-1500 Kg/Hr, Calorific Value-3000-5500 Kcal/Hr. The total area of 93.5 acres. Proposed area for incineration (0.33 acres). The proposed area falls in the Industrial area of Karnataka Industrial Area Development Board (KIADB). Out of 76, 569 MTA of Hazardous waste generated by various industries in the State of Karnataka, 8% of the waste is

incinerable waste (6125 TPA). To dispose these incinerable waste in a scientific manner, the incinerator is proposed.

During the discussions, the Committee finalized the following additional TOR for further study:

- i) Submit the details of environmental compliance of the existing activity including the conditions stipulated in Environmental clearance/consent orders.
- ii) Alternative technologies considered before selecting incineration system. Technical details along with efficiency of the proposed incinerator and cost of the incinerator.
- (i) Submit the details of the compliance with respect to the provisions of Hazardous Wastes (Management, Handling and Trans-boundary movement)) Rules, 2008 including collection, storage, and transportation, treatment and disposal etc All the applicable rules shall be listed and mitigation plan to comply the applicable rules shall be submitted in detail.
- iii) Submit the details of the waste generated, present mode of disposal as per the State PCB authorization etc.
- iv) Submit the MoU made between member units along with responsibilities.
- v) Examine the details of monitoring of Dioxin and Furan.
- vi) Submit the details of treatment and disposal of waste water from the scrubber.
- vii) Environmental Management Plan should be accompanied with Environmental Monitoring Plan and environmental cost and benefit assessment. Regular monitoring shall be carried out for odour control.
- viii) Submit details of a comprehensive Disaster Management Plan including emergency evacuation during natural and man-made disaster.
- ix) Site lay out clearly showing facilities, green belt, laboratory, vehicle parking etc shall be submitted.

Public hearing to be conducted for the project as per provisions of Environmental Impact Assessment Notification, 2006 and the issues raised by the public should be addressed in the Environmental Management Plan.

A detailed draft EIA/EMP report should be prepared as per the above additional TOR and should be submitted to the Ministry as per the Notification.

**4.12 Finalisation of TOR for the development of Industrial Estate at Growth Centre, Bawal, distt. Rewari, Haryana by M/s Haryana State Industrial & Infrastructure Development Corporation Ltd. [F. No 21-57/2012-IA. III]**

*The Committee decided to defer the proposal, since the project proponent has to submit the revised Form – I and EIA for the combined Phase – II, Phase – III and Phase –IV, as decided in the 117<sup>th</sup> meeting of EAC.*

**4.13 Discussion on setting up of Integrated Municipal Solid Waste management Facility at Jamalpur, Ludhiana, Punjab by Municipal Corporation, Ludhiana [F.No.10-39/2012-IA-III]**

And

**Environmental Clearance for setting up of Integrated Municipal Solid Waste management Facility at Jainpur, Ludhiana, Punjab by Municipal Corporation, Ludhiana [F.No.10-31/2012-IA-III]**

Both these projects were examined by the EAC in its meeting held on 10<sup>th</sup> -11<sup>th</sup> May, 2012 and recommended for the grant of EC. However, in a WP filled by the nearby residents of the proposed site against the proposed activity at Jamalpur, the Hon'ble High Court of Punjab directed the EAC to hear the petitioners. Accordingly, the EAC considered the project and the petitioners, presented their views in the meeting. As per the petitioners the basic objections are, site selection was not in accordance to the Rules, 2000- clause 8 and 10 not fulfilled, airport is 6.5 km from the site, habitation is close -200 yards from site, Public hearing took place 1-2 km from away the site. The EAC advised them to submit the views in writing and suggested the Ministry to communicate the same to the Municipal Corporation of Ludhiana for their comments. The Municipal Corporation has submitted its response to the issues raised by the petitioners in the meeting of EAC held on 18<sup>th</sup> – 19<sup>th</sup> October 2012.

Regarding the petitioner's plea that, setting up of MSW facility at Jamalpur by MCL is in gross violation to MSW (M&H) Rules 2000, it has been mentioned by MCL that the present dumping site confirms to rule 7 of schedule III of MSW (M&H) Rules 2000. Regarding consideration of alternate site it has been mentioned by MCL that a request was made by the MCL dated 14.08.2008 to the district administration, Ludhiana for providing appropriate land for the purpose, which has been refused by the Administration. It was also informed that the existing dumping site is being in continuous use for more than Twenty five years. Regarding habitation within 500 meters which includes more than 28 colonies it has been

mentioned by MCL that some illegal and unauthorized colonies have come up recently. A list of 23 habitations mentioning the distance from the dumping ground has been submitted by MCL. As per that the minimum distance between habitations and the project site is 500 mts. Regarding public hearing it was mentioned by MCL that a notice was published in the local news paper on 20<sup>th</sup> August, 2011 and public hearing was conducted successfully on 20<sup>th</sup> September 2011. Regarding NOC from Airport authority it was mentioned that, MCL has already applied for NOC from Airport Authority of India dated 29.09.2011.

The Committee has examined the above responses/documents in detail which are submitted by the Municipal Corporation.

During the discussion, the following points emerged:

- (i) The proposed plan should be realigned in such a way that the waste tipping area and processing area and other project components which produces maximum air and noise pollution is farthest from the habitation.
- (ii) The existing waste lying on the site shall be excavated and should be accumulated to designated place within the site and this accumulated waste shall be compacted and closed scientifically after reaching the design height.
- (iii) State of the art measures should be adopted for odor control from the plant.
- (iv) 30 meters wide green belt should be provided all along the boundary of the site.
- (v) The proponent shall ensure that the project fulfills all the provisions of Solid Wastes (Management and Handling) Rules, 2000 including collection and transportation design etc.
- (vi) The gas generated from the Landfill facility shall be collected and disposed as per rules.
- (vii) The proponent shall obtain necessary clearance from the Ground Water Authority for the use of ground water.
- (viii) The proponent shall obtain necessary NOC from the Airport Authority of India before commencement of the work.
- (ix) The depth of the land fill site shall be decided based on the ground water table at the site.
- (x) An On Site Emergency Management Plan shall be prepared and implemented.

- (xi) Periodical ground water/soil monitoring to check the contamination in and around the site shall be carried out.
- (xii) Any other condition, as stipulated in the court order, should be adhered.

***In the larger public interest the Committee recommends the proposal for Environmental Clearance with the above condition in the Clearance letter for strict compliance by the project proponent.***

**4.14 Extension of NRL Township, Phase -III, Numaligarh distt. Golaghat, Assam by M/s Numaligarh Refinery Ltd. [F.No.21-30/2012-IA.III]**

***The Committee decided to defer the project, since the project proponent has not submitted the documents.***

**4.15 Environmental Clearance for proposed New State Legislative Assembly Complex at Dispur Secretarial enclosure, Guwahati, Assam M/s Chief Engineer. PWD, Guwahati, Assam [F.No 21-53/2012-IA. III]**

***The Committee decided to defer the project, since the project proponent requested for the postponement.***

**4.16 Environmental Clearance for proposed Tezpur Medical College and Hospital at Bihaguri, Tezpur, Assam. M/s Chief Engineer. PWD, Guwahati, Assam. [F. No 21-55/2012-IA. III]**

***The Committee decided to defer the project, since the project proponent requested for the postponement.***

**4.17 Environmental Clearance for establishment of Industrial Growth Centre at SIDCO Industrial Complex, Ghati, Kathua, Jammu & Kashmir by M/s State Industrial Development Corporation Pvt. Ltd.[F.No. 21-22/2010-IA.III]**

The project involves development of "SIDCO Industrial Complex" on a plot area of 182.29 ha. located at Ghatti in Kathua District (comprising of villages – Naman, Kamah, Pandrah, Mehra and Keiana) which is 77 km on NH – 1A (3.5 km away from National Highway). Different type of industrial units are expected to be set up in the complex which may include – Food processing, cement production, chemical/pharmaceutical, textile and engineering (iron & steel), etc. It is proposed to develop 450 plots for various types of industries and it is expected that the individual units will take Environmental Clearance separately. It is proposed to set up two CETPs within the complex. Jasroat Wildlife Sanctuary is 2.5 km away from project

site. The total cost of the project is Rs.81.1537 crores. Public Hearing took place on 18<sup>th</sup> December 2010 at Ghatti.

During the discussion, the following points emerged:

- (i) Green belt of 15 meters should be provided all along the boundary of the site. The land (Green belt) should not be allotted for any unit holder and land will not be diverted to any other usage.
- (ii) Submit analysis regarding the alternate sites and reasons for selecting the particular site.
- (iii) Submit layout map of the site showing the high flood levels based on 100 year record of High Flood Levels, also contours and river on the map.
- (iv) Provide latest site photograph.
- (v) Distance between the bore wells proposed within the site should be more than 300 meters.
- (vi) Provide details on proposed waste water collection system from each industry to CETP and characteristic of the effluent proposed to be received from the industries.
- (vii) Type of pre-treatment proposed by each category of industry and proposed treatment for CETP along with proposed capacity of the plant. Also submit detailed design for the proposed plant and collection system.
- (viii) Quantity of solid waste generated and proposed design of solid waste management site.
- (ix) Submit details regarding Rain Water Harvesting System proposed to be set up by industries.
- (x) Submit details on Public Hearing in tabular format along with replies given by the proponent during the Public Hearing. A management plan for taking care of the issues raised during public hearing should also be submitted.
- (xi) ToR was issued vide letter dated 06/08/2010. As per OM dated March 22, 2010, the ToR has been expired. It has been mentioned by the project proponent that since the wildlife board was not constituted and no recommendations were received from the wildlife board, the project was not applied for EC.

***The committee noted that the ToRs for the project were issued on 06/08/2010 and the validity of ToRs has expired. However, in view of the justification given by the project proponent during the meeting at point (xi) above that since the wildlife board was not constituted and no recommendations were received from the wildlife board, the project was not applied for EC. Accordingly on the request of the proponent it has been decided by the committee to extend the ToR for a period of 1 year as per OM dated March 22, 2012. The committee decided to defer the proposal and requested proponent to present the case after incorporating above additional ToR in the revised EIA report.***

**4.18 Environmental Clearance Construction of 436 residential Quarters and 07 Nos. 120 Men Barracks at 34th BN ITBP Camp Halduchaur, P.O. Lalkuan, Dist Nainital by M/s Commandant, 34th BN ITB Police Halduchaur, P,O – Lalkuan Distt, Nainital. [F.No.21-31/2012-IA-III]**

***The Committee decided to defer the project, since the project proponent has not attended the meeting***

**4.19 Environmental Clearance for development of New Industrial Area, chak No. 123, at village – Ghiloth Dabarwas, Partapur Behror Distt. Alwar, Rajasthan by M/s. Rajasthan State Industrial Development & Investment Corporation Ltd. [F.No.21-43/2011-IA.III]**

The RIICO Unit of Neemrana has proposed Industrial Area Ghiloth catering the necessity for Phase II of Japanese Investment Zone after the success of Phase I of the same in Majrakanth Industrial Area. The Industrial area also to cater the growing demand for Ceramic and Glass industries of the State. The proposed Area is located near Villages of Ghiloth, Dabarwas, Partapur Chowk 1 & 3, Tehsil: Begror, District: Alwar, Rajasthan. The Total area of the proposed Industrial Area 749.15 ha. Industrial as well as Commercial plots are planned to be developed. 632 nos. of plots will be developed out of which 230 will be residential plot, 100 commercial plots and 302 Residential Plots. The Industrial Plots will be divided into several zones in view of better environmental Management. These zones will be Japanese Investment Zone, Solar Power Equipment Manufacturing Zone, Ceramic and Glass zone, General Industrial Zone. Separate areas are also earmarked for ST, Secured landfill, water harvesting and CETP for future. During construction phase the approximate water requirement for the project will be 200 KLD which will be supplied from groundwater abstraction and during operation phase the approximate water demand will be 9000 KLD. The power requirement for the proposed project will be 40 MVA. Grid substation will be installed by JVVNL. Construction materials will be sourced from Khairthal quarry. Road of width 60 m, 45 m, 30 m, 24 m and 12 m will be developed. 85 km open storm water drainage system will be developed. 77.44 ha area is earmarked for greenbelt. Beside 6 m wide

greenbelt around the periphery has been proposed. Total 31 no. of rainwater Harvesting structures will be developed within the project site and five villages in the vicinity. Public Hearing for the project was conducted on 8<sup>th</sup> June 2012.

- (i) Green belt of 15 meters should be provided all along the boundary of the site. The land (Green belt) should not be allotted for any unit holder and land will not be diverted to any other usage.
- (ii) Road width should be adopted as committed by the proponent in the meeting and EIA document. Minimum road width of 9 m should be adopted within the industrial area.
- (iii) Permission for ground water extraction should be obtained from the concerned authority and a copy should be submitted.
- (iv) Provide details on quantity for hazardous waste generated within the industrial area.
- (v) Demolition waste generated should be managed as per Rules 2000 and quantities should be evaluated and submitted.
- (vi) Submit details for mobile toilets to be provided for the labor camp or submit details regarding septic tanks to be constructed for the labor camp, if camps are installed.
- (vii) Provide revised color coded layout map showing details regarding the existing ponds. Water bodies should be shown in blue color and provide numerical code. Submit details on how each of the water bodies shall be preserved in tabular format.
- (viii) Revenue record for the agricultural land should be submitted.
- (ix) Submit in writing that the area does not fall under Aravali notification.
- (x) Green buffer of 40 meters should be provided all along the patch of forest land which exists inside the industrial area.
- (xi) As committed by the proponent, a parcel of land should be allocated for construction of CETP, in case effluent generating industries established in future within the industrial area. Proponent has to apply separately for obtaining EC for CETP, in case CETP is established in future.
- (xii) Internal road and external road connectivity should be provided separately.

***The Committee recommended the proposal for Environmental Clearance after submission of the above mentioned documents with the above condition in the Clearance letter for strict compliance by the project proponent.***

**4.20 ToR for the project “Windlass Affordable Housing’ at Harawala & Kuanwala, Dehradun by M/s Windlass Constructions [F.No 21-59/2012-IA. III]**

The Affordable Housing Project “Windlass Affordable Housing” involves construction on a plot area of 1,33,717.44 Sq.m (or 33.029 acres). There will be 31 LMIG, 10 LIG, 7 EWS blocks, public health center, integrated school, community area, temple along with 2 commercial blocks A (multiplex & shopping complex) & B (shopping complex). Total built up area will be 2,07,546.96 Sq.m. Parking of 2055 ECS is proposed against the requirement of 1980 ECS as per NBC norms, 1910 ECS as per Dehradun bye laws and 2050 ECS as per FAR area. The total water requirement is 2,558 KLD (Fresh water requirement = 1702 KLD). The source of the water is private water tanker during construction and Municipal Supply during operation. The waste water generation is about 2,091 KLD and capacity of STP is about 2,500 KLD. Treated water will be reused for Flushing, Horticulture and DG cooling. The total power requirement is 20,000 KVA. There is provision of DG sets of total 1250 KVA capacity for power back up in the Affordable housing project. Total solid waste generation will be 9,738 kg/day. The total cost of the project is about Rs. 200 Crores.

During the discussion, the following points emerged:

- (i) The area of the project is more than 150000 sq m, therefore EIA is required.
- (ii) Construction involves Agricultural land, obtain and submit site clearance certificate from town and country planning.
- (iii) Clearance for extraction of Ground water from the concerned department.
- (iv) Details on Water and energy conservation.
- (v) Submit MSW management plan.
- (vi) Submit details regarding effluent standards, point of disposal, sludge handling etc.
- (vii) Submit contours map for the proposed site and details regarding drainage management, maintaining the natural drainage pattern etc.
- (viii) EIA report should incorporate Disaster Management Plan/EMP.

- (ix) Corporate Environmental Responsibility shall be adhered to; as per OM dated May 18, 2012.
- (x) Green belt of minimum width of 10 meters along the periphery of the project site should be provided.
- (xi) Internal circulation plan with 9 m wide internal roads should be provided.
- (xii) Details on Rain water harvesting.
- (xiii) The committee agreed to the request of the proponent to use the site monitoring data collected during March- May, 2012.

### **General Guidelines**

- (i) The EIA document shall be printed on both sides, as far as possible.
- (ii) The status of accreditation of the EIA consultant with NABET/QCI shall be specifically mentioned. The consultant shall certify that his accreditation is for the sector for which this EIA is prepared.
- (iii) On the front page of EIA/EMP reports, the name of the consultant/consultancy firm along with their complete details including their accreditation, if any shall be indicated. The consultant while submitting the EIA/EMP report shall give an undertaking to the effect that the prescribed TORs (TOR proposed by the project proponent and additional TOR given by the MoEF) have been complied with and the data submitted is factually correct (Refer MoEF office memorandum dated 4<sup>th</sup> August, 2009).
- (iv) While submitting the EIA/EMP reports, the name of the experts associated with/involved in the preparation of these reports and the laboratories through which the samples have been got analysed should be stated in the report. It shall clearly be indicated whether these laboratories are approved under the Environment (Protection) Act, 1986 and the rules made there under (Please refer MoEF office memorandum dated 4<sup>th</sup> August, 2009). The project leader of the EIA study shall also be mentioned.
- (v) All the TOR points as presented before the Expert Appraisal Committee (EAC) shall be covered.

A detailed draft EIA/EMP report should be prepared as per the above additional TOR and should be submitted to the Ministry as per the Notification.

Any further clarification on carrying out the above studies including anticipated impacts due to the project and mitigative measure, project proponent can refer to the model ToR available on Ministry website "<http://moef.nic.in/Manual>".

**4.21 Environmental Clearance for Baggad Industrial Area at Village – Baggad, Tehsil Bhim, District – Rajsamand, Rajasthan by M/s RIICO Ltd. [F.No. SEIAA/SEAC.Raj/420].**

***The Committee decided to defer the project, since the project proponent requested for the postponement.***

**4.22 Environmental clearance for the residential project Anantara National Highways 33, Paridh Mango At Jamshedpur, Jharkhand by M/s Ashiana Housing Ltd [F.No. 21-63/2012-IA-III]**

The Residential Project "Anantara" involves construction on a plot area of 19,829.60 Sq.m (or 4.9 acres). Total built up area of the project is 54,205.00 Sq.m. Parking of 484 ECS is proposed against the requirement of 480 ECS. The total water requirement is 220 KLD (Fresh water requirement = 146 KLD). The source of the water is Private water Tanker during construction and MNAC (Mango Notified Area Committee) during operation phase. The sewage generation is about 155 KLD and capacity of STP is about 220 KLD. Treated water will be used for flushing/horticulture/DG cooling. The total power requirement is 1,400 KVA. Two number of DG sets of total capacity 375 KVA (i.e. 1x125+1x250) are proposed. Total solid waste generation will be 1,085 kg/day. The total cost of the project is about Rs. 65.23 Crores.

During the discussion, the following points emerged:

- (i) Green belt of 6-9 meters width as committed by the proponent should be provided all around the boundary of the project.
- (ii) As committed by the proponent, 5-7 year O&M of STP should be the responsibility of the contractor.
- (iii) Minimum road width of 9 m should be adopted within the project area.
- (iv) Explore the possibility of developing Kaccha road for the use of residents.
- (v) Obtain and submit permission regarding source of water from Municipality

***The Committee recommended the above proposal for Environmental Clearance after submission of the above information, with the above condition in the Clearance letter for strict compliance by the project proponent.***

**4.23 Amendment in the ToRs granted for rehabilitation and up-gradation of existing 2 lane to 4 lane from Solapur to Yedshi section of NH-211 from Km 0.000 to Km 85.000 and from Km 249.000 to Km 493.000 of NH-9 in the state of Maharashtra [F.No.10-32/2012-IA.III]**

ToRs were approved for the above road project. NHAI has requested for an amendment to convert in to following three projects:

- (i) Rehabilitation and up-gradation of existing 2 lane to 4 lane from Solapur to Yedshi section of NH-211 from Km 0.000 to Km 100.000 and from Km 249.000 to Km 255.000 of NH-9 in the state of Maharashtra [F.No.10-72/2012-IA.III]**
- (ii) Rehabilitation and up-gradation of existing 2 lane to 4 lane from Solapur (Km 255.000) to Maharashtra/Karnataka Border (Km 348.800) section of NH-9 in the state of Maharashtra [F.No.10-32/2011-IA.III]**
- (iii) Rehabilitation and up-gradation of existing 2-lane to 4-lane of Maharashtra/Karnataka Border to Sangareddy section of NH-9 from 348.800 to km.493.000 in the State of Karnataka and Andhra Pradesh.**

**4.24 Rehabilitation and up-gradation of existing 2 lane to 4 lane from Solapur to Yedshi section of NH-211 from Km 0.000 to Km 100.000 and from Km 249.000 to Km 255.000 of NH-9 in the state of Maharashtra [F.No.10-72/2012-IA.III]**

As presented by the project proponent, the project road section is Solapur to Yedshi section of NH-211 from Km 0.000 to Km 100.000 and from Km 249.000 to Km 255.000 of NH-9 and passes through Solapur and Osmanbad Districts of Maharashtra. The Existing and proposed length is 106.000 km. The major settlement en-route are Solapur, Tuljapur, Osmanabad and Yedshi. The land use pattern on either side of 10 Km of the project road is predominantly agriculture followed by built-up area. The project road does not pass through any ecological sensitive area/National Park/Sanctuaries etc. However, two (2) nos. of Wildlife Sanctuaries, namely *The Great Indian Bustard Wildlife Sanctuary* and *Yedshi Ramling Wildlife Sanctuary* boundaries are falling within 10 Km radius of the project section. The project road is located outside the Wildlife Sanctuaries and does not involve any kind of land acquisition.

The proposed land acquisition for this section is 341.995 ha. The existing Right of way is generally 30 m. The proposed right of way is 60 m

for rural and open area and 50 m in urban built-up area, except at interchanges, toll plaza and other project facilities. There are proposal for 7 nos. of bypasses/realignments. The existing road has 2 nos. of Major bridges, 24 nos. of Minor bridges, 122 nos. of Culverts and 1 no. of ROB. It is proposed for improvement with widening of all the existing Major Bridges, 21 nos. of Minor Bridges, 114 nos. of Culverts and 1 no. of ROB. Apart from these there are proposal of 4 nos. of new Minor Bridges and 17 nos. of new Culverts. All the new structures are proposed in the new bypasses/realignments.

There are proposal of 6 nos. Vehicular Underpasses, 11 nos. Cattle/Pedestrian Underpasses and 21 nos. of Bus bays. The project road will have provision of 1 no. of Truck laybys on either side of the road, 2 nos. of Rest areas cum Wayside amenities, Toll Plazas at 2 locations, High mast light at 12 locations, Street Light at 14 locations for 14.936 Km, Service roads of 27.932 Km. A total number of 13315 roadside trees are fall with proposed ROW. Tree loss will be minimized by restricting tree cutting within formation width. Avenue plantation will be carried out as per IRC SP: 21: 2009 on available ROW apart from statutory requirements. 1194 nos. of structures will be affected due to widening of this section. The NHAI shall compensate to the authorized owner as per NHAI Act, 1956. Approximately 460 KL/Day water will be required for the project during construction stage for entire project. To meet this requirement about 40 percent will be abstracted from Surface water source and rest from Ground water source with proper requisite permission from concerned department No Thermal Power Plant exists within 100 km radius of the project sections, so no use of Fly Ash is proposed in the Project. The proposed safety measures are provided as per IRC: 67 and 4 laning Manuals. The total estimated Project Civil Cost is Rs. 861.00 Crores, EMP cost is Rs. 8.31 Crores and R & R Cost is Rs. 49.04 Crores.

#### **4.24 Rehabilitation and up-gradation of existing 2 lane to 4 lane from Solapur (Km 255.000) to Maharashtra/Karnataka Border (Km 348.800) section of NH-9 in the state of Maharashtra [F.No.10-32/2011-IA.III]**

As presented by the project proponent, the project road section of National Highway-9 starts from Solapur at Km 255.000 and ends at Km 348.800 at Maharashtra/Karnataka Border and passes through Solapur and Osmanbad Districts of Maharashtra. The Existing and proposed length is 93.800 km. The major settlement en-route are Solapur, Andur, Naldurg, Jalkot, Dalimb and Umerga. The land use pattern on either side of 10 Km of the project road is predominantly agriculture followed by built-up area. The project road does not pass through any ecological sensitive area/National Park/Sanctuaries etc. Pockets of reserved forest are located along the existing RoW between Km 285.185 to Km 287.650 and Km 299.755 to Km 300.200 and a small portion at proposed Naldurg Bypass. The project involves 3.149 ha. diversion of reserved forest land.

The proposed land acquisition for this section is 435.495 ha., which includes 357.1059 ha. of private land, 75.2401 ha. of Government land, 3.149 ha. of Reserved forest land. The existing Right of way is generally 30 m. The proposed right of way is 60 m for rural and open area and 50 m in urban built-up area, except at interchanges, toll plaza and other project facilities.

There are proposal for 2 nos. of bypasses at Naldurg and Umerga. The existing road has 5 nos. of Major bridges, 24 nos. of Minor bridges and 139 nos. of Culverts. It is proposed for improvement with widening of 3 nos. existing Major Bridges, all existing Minor Bridges and 106 nos. of culverts. Apart from these there are proposal of 2 nos. of new Major Brides, 4 nos. of new Minor Bridges and 39 nos. of new Culverts. All the new structures are proposed in the new bypasses. There are proposal of 2 nos. Vehicular Underpasses, 6 nos. Cattle/ Pedestrian Underpasses and 12 nos. of Bus bays on either side of the road. The project road will have provision of 1 no. of Truck laybys, 2 nos. of Rest areas cum Wayside amenities, Toll Plazas at 2 locations, High mast light at 3 locations, Street Light at 19 locations for 23.200 Km, Service roads of 46.060 Km. A total number of 13400 roadside trees are fall with proposed ROW. Tree loss will be minimized by restricting tree cutting within formation width. Avenue plantation will be carried out as per IRC SP: 21: 2009 on available ROW apart from statutory requirements. 1129 nos. of structures will be affected due to widening of this section. The NHAI shall compensate to the authorized owner as per NHAI Act, 1956. Approximately 410 KL/Day water will be required for the project during construction stage for entire project. To meet this requirement about 40 percent will be abstracted from Surface water source and rest from Ground water source with proper requisite permission from concerned department. No Thermal Power Plant exists within 100 km radius of the project sections, so no use of Fly Ash is proposed in the Project. The proposed safety measures are provided as per IRC: 67 and 4 laning Manuals.

The total estimated Project Civil Cost is Rs. 750.00 Crores, EMP cost is Rs. 12.80 Crores and R & R Cost is Rs. 27.03 Crores.

#### **4.26 Rehabilitation and up-gradation of existing 2-lane to 4-lane of Maharashtra/Karnataka Border to Sangareddy section of NH-9 from 348.800 to km.493.000 in the State of Karnataka and Andhra Pradesh.**

As presented by the project proponent, the project road section of National Highway-9 starts from Maharashtra/Karnataka Border at Km 348.800 and ends at Km 493.000 near Sangareddy and passes through Bidar district in the state of Karnataka and Medak district of Andhra Pradesh. The existing and proposed length is 144.200 km. The major settlement en-route are Tadola, Rajeshwar, Humnabad, Hudgi, Mangalgi, Mannaekheli, Murkanda and Bhangoor in Karnataka; Chirkapalli, Zaheerabad, Ranjor, Digwal, Lingampalli, Kamkol, Budhera, Sadashivpet, Nandi Kandi, Pothireddipalli and Sangareddy in Andhra Pradesh. The land

use pattern on either side of 10 Km of the project road is predominantly agriculture followed by built-up area. The project road does not pass through any ecological sensitive area/ National Park/ Sanctuaries etc.. Pockets of Unclass forest are located along the existing RoW between Km 349.260 to Km 352.055, Km 363.893 to Km 364.493, Km 380.024 to Km 380.174, Km 389.123 to Km 389.233, Km 401.461 to Km 403.440 and Km 410.286 to Km 410.896 and pockets of reserve forest is between Km 436.360 to km 437.215. The project involves 8.434 ha. diversion of reserve/ unclass forest land (Unclass forest land: 5.592 ha. and Reserve forest land: 2.842 ha.) The proposed land acquisition for this section is 614.846 ha., which includes 504.1737 ha. of private land, 102.2383 ha. of Government land, 8.434 ha. of forest land. The existing Right of way is generally 30 m. The proposed right of way is 60 m for rural and open area and 50 m in urban built-up area, except at interchanges, toll plaza and other project facilities.

There are proposal for 3 nos. of bypasses at Mannaekheli, Sadashivpet and Zaheerabad. The existing road has 3 nos. of Major bridges, 40 nos. of Minor bridges, 203 nos. of Culverts and 1 no. of Railway under Bridge (RUB). It is proposed for improvement with widening of all the existing Major Bridges, 35 nos. of existing Minor Bridges, 179 nos. of culverts and 1 no. of RUB. Apart from these there are proposal of 12 nos. of new Minor Bridges, 38 nos. of new Culverts and 1 no. of Railway over Bridge (ROB). All the new structures are proposed in the new bypasses. There are proposal of 7 nos. Vehicular Underpasses, 14 nos. Cattle/Pedestrian Underpasses and 18 nos. of Bus bays on either side of the road. The project road will have provision of 2 nos. of Truck laybys, 3 nos. of Rest areas cum Wayside amenities, Toll Plazas at 2 locations, High mast light at 2 locations, Street Light at 29 locations for 23.045 Km, Service roads of 42.500 Km. A total number of 35100 roadside trees are fall with proposed ROW. Tree loss will be minimized by restricting tree cutting within formation width. Avenue plantation will be carried out as per IRC SP: 21: 2009 on available ROW apart from statutory requirements. 1792 nos. of structures will be affected due to widening of this section. The NHAI shall compensate to the authorized owner as per NHAI Act, 1956. Approximately 520 KL/Day water will be required for the project during construction stage for entire project. To meet this requirement about 40 percent will be abstracted from Surface water source and rest from Ground water source with proper requisite permission from concerned department. No Thermal Power Plant exists within 100 km radius of the project sections, so no use of Fly Ash is proposed in the Project. The proposed safety measures are provided as per IRC: 67 and 4 laning Manuals.

The total estimated Project Civil Cost is Rs. 1022.93 Crores, EMP cost is Rs. 15.41 Crores and R & R Cost is Rs. 61.97 Crores.

***The Committee recommended for the issue of amendment to the ToRs by dividing the project in to three separate projects, subject to the condition that NHAI shall inform the PCB, public about the***

***changes of the project component where already PH conducted. PH to be conducted to the projects where PH is not yet conducted.***

**4.27 Environmental Clearance for widening and upgradation of existing carriageway to 2-lane with paved shoulders in Padi - Dahod Section of NH-113 in the State of Gujarat and Rajasthan by M/s NHA [F.No.10-71/2010-IA.III]**

As presented by the project proponent, the project road starts at km 180.000 near Padi (in Rajasthan) and continues up to km 267 (in Gujarat). The existing length of the project road is 87 km. Design length of the project is 85.5 kms. The project road runs through two states-Rajasthan & Gujarat, two districts- Banswara (in Rajasthan) & Dahod (in Gujarat), and five Tehsils-Banswara, Bagidora & Kushalgarh in Rajasthan and Jhalod & Dahod in Gujarat. Existing ROW varies from 6-64m. Proposed ROW is 30-60m (60m in Bypasses). The project road stretch mainly passes through plain terrain. 5 km passes through rolling terrain. Settlements present along the project road include Kalinjira, Barodiya, Jhalod, Limdi, Dahod. 61% land use along the project road is agriculture land, settlements make up about 3%, barren land comprises 25% and forest comprises about 9%. There is no wildlife sanctuary or national park along the project road within 10 km radius.

Total land required for the project is 205ha, of which 5.91 ha is forest land. The project road passes through 4.41 Ha Protected Forests & 1.5 Ha Reserve forest (for a length of 3.95 km). Proposal for diversion of 4.41 ha of Protected forest in Rajasthan is with the Regional office at Lucknow. Proposal for 1.5 ha Reserve forest is with State Government, Gujarat. River Anas, Machan, Hiran crosses the project road. Anas is the chief river of the project area. Five bypasses are proposed along the project road for a total length of 22.1 km.

There are 4 major bridges along the project road, 1 will be retained with minor repair and 1 will be reconstructed and 2 will be newly constructed. 29 minor bridges are present, 12 will be retained, 5 reconstructed and 12 will be newly constructed. There are 157 culverts along the road, of which 53 will be newly constructed, 34 will be reconstructed, 15 will be widened and 55 will be retained with repair. The existing road has no flyovers, underpass, service roads, truck lay byes or Toll Plaza. 1 Toll plaza proposed at km 240/500, 2 truck laybye proposed near Rajasthan-Gujarat (km 221/500 & 226/250), and 90 bus stops (both sides combined) are proposed. 154 trees are to be cut along the project road. Species mainly include Chole, Tendu, Khejri, Babool, Mahua. 23 religious structures will be affected and 13 schools will be partially affected. 21 wells and 41 water tanks will be affected due to widening. These will be relocated.

About 477 structures will be affected, of which 298 are residential, 28 commercial, 23 are religious, 28 are mixed and others 100. Surface water

required is 314000 KL, ground water required is 115580KL. There is no thermal power plant within 100km of the project road.

The environmental cost is about Rs 30.02 million & the social cost is 260 million. Total project cost is Rs 3346.5 million.

Public Hearing conducted at Banswara & Limdi on 26.07.2011. The major issues are Compensation.

During the discussion, the following points emerged:

- (i) The proposal indicates about 5.91 ha forest land including 4.41 protected forest and 1.5 ha reserve forest is to be acquired. Necessary stage -I forestry clearance shall be obtained as per OM dated 31.03.2011 and submitted along with final EIA report.
- (ii) It is indicated that 154 nos. trees falls within proposed RoW, however, bare minimum, however bare minimum trees to be cut. Necessary permission from competent authority shall be obtained for tree cutting. Necessary green belt shall be provided on both side of the highway with proper central verge and cost provision should be made for regular maintenance.
- (iii) Explore the possibilities of using cold mix technology wherever possible particularly near wildlife sanctuary.
- (iv) Rain water harvesting including oil and grease trap shall be provided. Water harvesting structures shall be located at every 500 mts along the road. Vertical drain type rainwater harvesting structures shall be set up to minimize surface runoff losses of rainwater.
- (v) R&R shall be as per the guidelines of State/Central Government.
- (vi) IRC guidelines shall be followed for widening & up-gradation of road.
- (vii) The responses/commitments made during public hearing shall be complied with letter and spirit.
- (viii) All the recommendation of the EMP shall be complied with letter and spirit. All the mitigation measures submitted in the EIA report shall be prepared in a matrix format and the compliance for each mitigation plan shall be submitted to MoEF along with half yearly compliance report to MoEF-RO.

***The Committee recommends the proposal for Environmental Clearance with the above condition in the Clearance letter for strict compliance by the project proponent***

**4.28 Finalisation of ToR for widening and Rehabilitation of existing carriageway to 2-lane with pave shoulder and 4-lane of Bhilwara to Ladpura Section of NH-758 (from km.87.250 to km.155.000) in the State of Rajasthan. by M/s NHA [F.No.10-74/2012-IA-III]**

As presented by the project proponent, the existing project road starts from Bhilwara at Km. 86.550 at NH- 79 at Pur Flyover and ends at Ladpura at Km 157.000 at NH-76, Total existing length of the project road is 70.450 Km. The proposed starting point is Bhilwara (Bhadali khera Village Junction) at Km 87.250 and end point is Km 155.000 at Ladpura Village. The total proposed length of the project road is 67.750 Km. Predominantly the road is passing through plain terrain. The land use pattern of the project area is Agriculture, Built-up, Government, Barren and Reserved Forest. Project Road passes through Bhadali Kheda, Arjiya, Akola, Suwana, Agarpura, Bankakhera, Swaipur, Bigod, Hoda, Mandalgarh, Jafarpura & Ladpura settlements of various sizes. The Project Road does not pass through any National Park / Sanctuary/Wild Life Area. The existing right of way is varies from 15 to 30 m on an average. The proposed right of way is 30 m & 45 m in built up areas and 60m in rural areas including Toll Plazas, truck lay byes and rest areas. Total 87.195 ha of land is proposed to be acquired for the improvement of the project, out of which Bypasses is 80.955 Ha. while realignments are 6.240 Ha. No Forest land is required for diversion for widening of the project road. 1 major bridge, 2 Minor bridges, 24 Slab/Box, 23 pipe culverts, no vehicular, pedestrian & cattle underpasses, no Grade Separator, 1 ROB, 3 Bus shelters, no parking and rest area, No Toll Plaza are present in the existing road. 3 major bridges, 2 Minor bridges, 102 Slab/Box culverts, 1 vehicular underpass, no pedestrian & cattle underpasses, 1 ROB, 12 Bus shelters, 1 parking and rest area (Km 112 near Banka Kheda village) and 1 Toll Plaza (Km 143) & 2 truck lay byes has been proposed. Service road of 0.700 km has been proposed along the project road at 1 location. 2 Bypasses for Bhilwara (16.400 Km.), ladpura (1.280 Km.) and 2 major realignment at Triveni Junction (0.870 Km) and Mandalgarh ROB (1.080 Km.) are proposed. Total 193.65 KLD water shall be required for construction and other purposes. There is no provision of Fly Ash as there are no Thermal power plants. There is no Major Water body existing near project Road. There are a few manmade water-bodies along the road stretch. Approx 1203 trees are affected due to proposed road, against which avenue plantation along the road side is proposed apart from the statutory requirement. 495 private survey / Khasra numbers of various land use have been identified, where land acquisition shall take place for the improvement of project road. The entitled person / family shall be compensated according to the provision of NH Act 1956. The cost of LA, R&R and environmental management is approx Rs. 60.92 crores The total civil construction cost for the project is 240.104 crores while the total project cost is Rs. 334.162 crores

During the discussions, the Committee finalized the following TOR for further study:

- (i) No Forests land is involved in the project and no Eco- sensitive area within 10 km radius from the road.
- (ii) It is indicated that about 1203 nos. trees to be cut, the information should be provided about their species and whether it also involved any protected or endangered species.
- (iii) Explore the possibilities of cooled mixed technology instead of hot mixed technology
- (iv) Submit the details of the road safety audit and plans for meeting the IRC safety requirements.
- (v) The additional ToR and General Guidelines as per the annexure-I and Annexure-II respectively to this Minutes shall also be considered for preparation of EIA/EMP.
- (vi) Any further clarification on carrying out the above studies including anticipated impacts due to the project and mitigative measure, project proponent can refer to the model ToR available on Ministry website "<http://moef.nic.in/Manual/Highways>".

Public hearing to be conducted for the project as per provisions of Environmental Impact Assessment Notification, 2006 and the issues raised by the public should be addressed in the Environmental Management Plan.

A detailed draft EIA/EMP report should be prepared as per the above additional TOR and should be submitted to the Ministry as per the Notification.

#### **4.29 Finalisation of ToR for widening and Rehabilitation of existing carriageway from 2-lane to 2-lane with paved shoulder and 4-lane of Bikaner-Phalodi Section (Km0.000 to Km 162.000) of NH-15 in the state of Rajasthan by M/s NHA [F.No.10-71/2012-IA-III]**

As presented by the project proponent, the project road is widening and up-gradation to two lane with paved Shoulder /four Laning of Bikaner – Phalodi Section (Km 0+000 to Km 162+000) of NH-15 in Rajasthan State. Total length of project road is 162 km. The project road passes through mostly plain terrain. Existing ROW width is 12 m to 60 m. The proposed ROW width is 60 m. A small portion of the project road falls within 10 km area from Gajner Wildlife Sanctuary falling in Gajner in Bikaner District, but this is not notified and case pending in Court. Approx. 120 ha protected forest land (road side plantation land) diversion will be required for two/four lane up-gradation of the project road. Only 2532 trees are likely to be felled

for two/four laning of the project road. The project road is not crossing any river. No water body is likely to be affected due to four lane/two lane up-gradation of the project road. There is no realignment or bypass proposed in the alignment. In the two/four lane up-gradation of the project road, 1 existing major bridge, 18 existing minor bridges, 83 existing culverts will be retained and widened/reconstructed, while 2 new minor bridges and 11 hume pipe culverts will be constructed. One new flyover has been proposed in the alignment. Bus Bays have been provided at 7 locations and truck lay byes at 4 locations. Pedestrian and cattle under pass has been provided at one location. Rest areas have been provided at four locations. Toll plaza are proposed at 2 locations. In the four lane/two lane up-gradation of the project road, existing 5 major and 76 minor junctions will be improved. There is no thermal power plant within 10 km distance from the project road. For construction of the project road, estimated average water requirement is about 275 kl per day, which will be met through deep ground water resources. Approximately 230 ha land will be acquired for two/four lane up-gradation of the project road. Total 112 structures (residential and commercial structures) are likely to be affected due to two lane up-gradation of the project road. Affected families will be compensated as per National Highways Act, 1956. The budget for environment management and monitoring has been earmarked as approximately Rs. 3.4 Crores.

The estimated cost for Resettlement & Rehabilitation is approximately Rs. 43.1 Crores. The capital cost of the project is approx Rs. 767.2 Crores.

During the discussions, the Committee finalized the following TOR for further study:

- (i) A small portion of the project stretch in Gujarat falls within 10 km radius from the boundary of Gajner Wildlife Sancturay Clearance from NBWL shall be obtained.
- (ii) It is indicated that 2532 nos. trees falls within the proposed RoW, however, bare minimum trees to be cut, the information should be provided about their species and whether it also involved any protected or endangered species. Necessary green belt shall be provided on both side of the highway with proper central verge and cost provision should be made for regular maintenance.
- (iii) Explore the possibilities of cooled mixed technology instead of hot mixed technology
- (iv) Submit the details of the road safety audit and plans for meeting the IRC safety requirements.
- (v) The additional ToR and General Guidelines as per the annexure-I and Annexure-II respectively to this Minutes shall also be considered for preparation of EIA/EMP.

- (vi) Any further clarification on carrying out the above studies including anticipated impacts due to the project and mitigative measure, project proponent can refer to the model ToR available on Ministry website “<http://moef.nic.in/Manual/Highways>”.

Public hearing to be conducted for the project as per provisions of Environmental Impact Assessment Notification, 2006 and the issues raised by the public should be addressed in the Environmental Management Plan.

A detailed draft EIA/EMP report should be prepared as per the above additional TOR and should be submitted to the Ministry as per the Notification.

#### **4.30 Finalisation of ToR for upgradation of existing 4-lane to 6-lane partial access control Highway from Bhubaneswar to Ichhapuram (km.223.000 to km.414.000) section of NH-5 in the state of Odisha by M/s NHAI [F.No. 10-70/2012-IA-III]**

As presented by the project proponent, the project involves upgradation to Six Lanes Partially Access Control Highway from Bhubaneswar –Ichhapuram Section (Km 233+000 to Km 414+000) of NH-5 in the State of Odisha on DBFO Pattern under NHDP Phase by NHAI. The project road starts at Ichhapuram (Km 233.000) and ends at Bhubaneswar (Km 414.000) on NH-5 in the state of Odisha. The project road passes through Ganjam, Nayagarh and Khurda districts. The project road passes through plain and rolling terrain. Existing ROW width varies from 45 to 60 m. The proposed ROW width is 60 m. Chilika Lake (Chilika Bird Sanctuary) is within 10 km from the project road. The project road crosses Rushikulya River, Konisri Nadi, Malaguni River and Mandakini River. Other Seasonal river are Balighai Nala, Ghatka Nala, Ambaghai Nadi, Sapua Nala, Berhampur Nala, Surya Nala, Khari Nadi, Mandrik Nala, Kalajhar Nala, Shalia Nadi, Ghagurhia Nala, Kusumi Nadi, Dutlai Dhara Nadi, Karha Nadi, etc For six laning of the project road, 32.6 ha reserved/protected forest land is likely to be involved. Total 12652 trees are likely to be felled for six laning of the project road. In the six lane road, 4 existing major bridges, 40 existing minor bridges, 221 existing box culverts, 51 existing span culverts and 88 existing pipe culverts will be retained and widened. There is no proposal for new bridges or culvert. There are 15 vehicular underpasses and 8 pedestrian/cattle underpasses in the project road. Under six laning 15 additional vehicular underpasses are proposed to be constructed on the project road. Service roads are available in 24.4 km length at 14 locations. During six laning, 74 km additional

service road will be provided at 20 locations. Bus Bays at 30 locations and truck lay byes at 7 locations are available. Under six laning, 15 additional Bus Bays have been provided. All existing major junctions (27) and minor junctions (49) will be improved in the project road under six laning. There are existing two toll plaza on the project road. Under six laning, one new toll plaza will be constructed. There is no thermal power station within 100 km distance, therefore, there is no provision for utilization of fly ash in the project road. For construction of the project road, estimated average water requirement is about 375 kl per day, which will be met mostly from surface water resources. 21.6 ha land will be acquired for six laning of the project road. Total 735 structures (residential and commercial structures) are likely to be affected partly due to six laning of project road. Affected families will be compensated as per National Highways Act. The budget for environment management and monitoring has been earmarked as approximately Rs. 10.2 Crores.

The estimated cost for Resettlement & Rehabilitation is approximately Rs. 3.6 Crores. The capital cost (civil cost) of the project is Rs. 1905.27 Crores.

During the discussions, the Committee finalized the following TOR for further study:

- (i) Part is passing in CRZ area. Recommendation of CZMA shall be obtained and submitted.
- (ii) The proposal indicates the acquisition of 120 ha Protected Forests land. Necessary stage –I forestry clearance shall be obtained as per OM dated 31.03.2011 and submitted along with final EIA report.
- (iii) It is indicated that 2532 nos. trees falls within the proposed RoW, however, bare minimum trees to be cut, the information should be provided about their species and whether it also involved any protected or endangered species. Necessary green belt shall be provided on both side of the highway with proper central verge and cost provision should be made for regular maintenance.
- (iv) Explore the possibilities of cooled mixed technology instead of hot mixed technology
- (v) Submit the details of the road safety audit and plans for meeting the IRC safety requirements.
- (vi) The additional ToR and General Guidelines as per the annexure-I and Annexure-II respectively to this Minutes shall also be considered for preparation of EIA/EMP.

- (vii) Any further clarification on carrying out the above studies including anticipated impacts due to the project and mitigative measure, project proponent can refer to the model ToR available on Ministry website “<http://moef.nic.in/Manual/Highways>”.

Public hearing to be conducted for the project as per provisions of Environmental Impact Assessment Notification, 2006 and the issues raised by the public should be addressed in the Environmental Management Plan.

A detailed draft EIA/EMP report should be prepared as per the above additional TOR and should be submitted to the Ministry as per the Notification.

#### **4.31 Finalisation of ToR for widening and Improvement of existing single intermediate lane to 2-lane with paved shoulder section of Raipur (km.216.600) to Jassakhera (km.248.960) of NH-458 in the State of Rajasthan by M/s NHAH [F.No. 10-69/2012-IA-III]**

As presented by project proponent, the project involves Widening and Improvement of NH 458 from Raipur – Jassa Khera (Newly Declared National Highway) to 2 lane National Highway Standard. The project road starts at 216.600 km of NH-458 (near NH-14) at Raipur and terminates at km 248+960 near Jasskhera (on NH-8) in Pali, Ajmer and Rajsamand District of Rajasthan. The proposed length of this section of NH 458 is 32.320. km which includes 2 bypasses of length 6.56 km and two curve improvement 3.775 km. The two bypasses are Raipur bypass of length 3.805 km and Haripur Bypass of length 2.755 km. Curve improvement of length 2.815 km at Kot Kirana and 0.960 km at Jassakhera . The Proposed road shall be two lane configuration of National Highway Standards and consists of two lane carriageway of 3.5 m each with 1.5m Paved Shoulder and 1.0 m Earthen Shoulder. The existing length of National Highway is 34.715km and right of way varies from 10 m to 24 m except in Todgarh wild life Sanctuary where formation width is 7m from km 23+452 to 241+794 km. The existing carriageway varies from Single lane to intermediate lane from 3.0 m to 5.5 m. The Project Road is passing through Pali, Ajmer and Rajsamand District of Rajasthan.45 nos of culverts has been proposed which includes 14 are new, 20 causeway and 11 nos of Pipe and Slab culverts proposed to be upgraded. The total water requirement is 6 lacs KLD, which is proposed to be extracted from Ground water and surface water (Luni River).

There is a provision of 8 Bus bays at 4 location (both side), 9 number of major and 15 number of minor junctions are proposed. Approximately, 134.607 ha. of land is proposed to be acquired which is predominantly agriculture and approximately, 57 households requires demolition. Approximately, 1500 to 2000 nos of trees/Plant along the project road, the predominant species are Neem, Dhak, Papri, Khejri and Peepal etc. Existing alignment is passing through Todgarh Wild life Sanctuary from km 234 +

452 to km 241 + 794 for a length of 7.342 km , this stretch has also been notified as Reserve Forest. the alignment is crossing River Luni at km 218.325 (approx). The total cost of the project is Rs. 194.79 crores and cost per km is Rs. 6.02 crores.

During the discussions, the Committee finalized the following TOR for further study:

- (i) The existing alignment is passing through Todgarh Wildlife Sanctuary from km 234+ 452 to km 241 + 794 for a length of 7.342 km, this stretch is also notified as Reserve Forests.
- (ii) It is indicated that 2000 nos. trees falls within the proposed RoW, however, bare minimum trees to be cut, the information should be provided about their species and whether it also involved any protected or endangered species. Necessary green belt shall be provided on both side of the highway with proper central verge and cost provision should be made for regular maintenance.
- (iii) Explore the possibilities of cooled mixed technology instead of hot mixed technology
- (iv) The additional ToR and General Guidelines as per the annexure-I and Annexure-II respectively to this Minutes shall also be considered for preparation of EIA/EMP.
- (v) Any further clarification on carrying out the above studies including anticipated impacts due to the project and mitigative measure, project proponent can refer to the model ToR available on Ministry website “<http://moef.nic.in/Manual/Highways>”.

Public hearing to be conducted for the project as per provisions of Environmental Impact Assessment Notification, 2006 and the issues raised by the public should be addressed in the Environmental Management Plan.

A detailed draft EIA/EMP report should be prepared as per the above additional TOR and should be submitted to the Ministry as per the Notification.

#### **4.32 Finalisation of ToR for widening and Rehabilitation of existing 4-lane to 6-lane of Aurangabad to Barwa Adda (km.180.000 to km.400.057) Section of NH-2 in the State of Bihar and Jharkhand by M/s NHAI [F.No. 10-73/2012-IA-III]**

As presented by the project proponent, the Project alignment starts at km 180.000 near Aurangabad on NH-2 in the State of Bihar and ends at km 400.057 near Barwa Adda on NH-2 in the State of Jharkhand. The existing alignment is already a four-lane dual carriageway corridor. Total length of

the project is 221.346 km of which existing alignment is 210.742 km and Bypass is 10.604 km. Project highway passes through mainly plain land and few stretches passes through rolling terrain. The predominant land use pattern of the area is agriculture, barren, forest and built up. Important settlements are Amas, Madanpur, Sherghati, Dobhi & Barachhati in the state of Bihar and Chauparan, Barhi, Barkattha, Bagodar, Atka, Dumri - Isri, Nimiaghat, Topchanchi, Rajgunj, Barwa Adda in the state of Jharkhand.

The Project alignment passes through Gautam Buddha Wildlife Sanctuary; but no additional land will be acquired in the sanctuary area. some stretches of the road passes through Protected forest. The proposal for diversion of 13.225 hectare forest land (Protected Forest & Jungle Jhari) is with state government.

The existing Right of Way varies from 35 to 60 m. The proposed Right of Way (PROW) varies from 45 m to 60 m. Somewhere, it is kept same as existing ROW. At Bypasses, the proposed ROW is 90 m. The additional land of 546.75 hectares will be acquired for the project road. Major bridges (existing at 11 locations & proposed at 13 locations), minor bridges (existing at 87 locations & proposed at 86 locations) and culverts (369 existing & 384 proposed) are provisioned in the project road. There are existing 9 major junctions. Major junctions shall be improved as per IRC Code. 22 vehicular underpasses (existing at 5 locations and proposed at 22 locations) and 4 Cattle/ Pedestrian underpasses have been proposed at different settlement locations. There are Railway Over Bridges (existing at 2 locations & proposed at 2 locations), flyovers (existing at 2 locations & proposed at 3 locations), vehicular overpasses (new proposed at 9 locations), Foot Over Bridges (existing at 1 location & proposed at 38 locations) on the project road. 65 Bus Bays & 17 truck lay bye have been proposed. Service roads of total length of 206.396 km have been provided along the project road on both sides at settlement areas. 15000 nos. of trees falls within 60 m ROW. Avenue plantation shall be carried out as per SP -21-2009 apart from the statutory requirement.

2600 Kl / day water for construction period shall be required for construction and other purposes including plantation and dust suppression and water shall be abstracted from the rivers like Barakar, Jamunia, Buria, Suryakund, Gul Sakhari, Barsuti, Falgu and their tributaries. There are Chandrapura Thermal Power Station and Bokaro Steel Plant located within 100 km from the project road and fly ash will be used for the construction as per MoEF, GoI norms. Altogether 5102 PAFs as per loss of permanent and temporary residential and commercial structures within ROW along with agricultural land. Proper compensation shall be given by NHAI for this purpose. Total project cost has been estimated to 2749 crores of which civil construction cost estimated to Rs 2340 crores, L.A. , R & R and preconstruction cost estimated to 398 crores and environmental mitigation cost estimated to 11 crores.

During the discussions, the Committee finalized the following TOR for further study:

- (i) The proposal indicates the acquisition of 13.22d ha Protected Forests land. Necessary stage –I forestry clearance shall be obtained as per OM dated 31.03.2011 and submitted along with final EIA report.
- (ii) It is indicated that 15000 nos. trees falls within the proposed RoW, however, bare minimum trees to be cut, the information should be provided about their species and whether it also involved any protected or endangered species. Necessary green belt shall be provided on both side of the highway with proper central verge and cost provision should be made for regular maintenance.
- (iii) Explore the possibilities of cooled mixed technology instead of hot mixed technology
- (iv) Explore the possibilities of using slag from the nearby steel plants
- (v) Submit the details of the road safety audit and plans for meeting the IRC safety requirements.
- (vi) The additional ToR and General Guidelines as per the annexure-I and Annexure-II respectively to this Minutes shall also be considered for preparation of EIA/EMP.
- (vii) Any further clarification on carrying out the above studies including anticipated impacts due to the project and mitigative measure, project proponent can refer to the model ToR available on Ministry website “<http://moef.nic.in/Manual/Highways>”.

Public hearing to be conducted for the project as per provisions of Environmental Impact Assessment Notification, 2006 and the issues raised by the public should be addressed in the Environmental Management Plan.

A detailed draft EIA/EMP report should be prepared as per the above additional TOR and should be submitted to the Ministry as per the Notification.

#### **4.33 Finalisation of ToR for Rehabilitation and upgrading to 2 lane/ 2 lanes with paved shoulders configuration and strengthening NH-217 by M/s SE (D&P) SNH, Orissa (F.No. 10-106/2011-IA-III)**

ToR issued on 22.03.2012. The proponent informed that after detailed design it was noted that there is no land acquisition and the additional RoW is less than 20 m. Hence requested to exempt from EIA. The Committee

noted that the project does not come under the purview of EIA Notification, 2006 hence EC is not required.

#### **4.34 Finalisation of ToR for rehabilitation and upgrading to 2-lane to 2-lane with paved shoulders and strengthening of Poanta-Gumma section of NH-72B in the State of Himachal Pradesh**

As presented by project proponent, the project road starts from km 0.00 (existing SH -1 chainage 10.560) at Paonta Sahib and end at km 95.00 (existing SH-1 chainage 124+000) at Guma. The land use pattern of the project area is mostly agricultural and forest. The road passes through plain/rolling terrain in only 11.5 km and Mountainous/steep terrain in 83.50 km. The project road passes through 52 villages/towns of two districts namely Sirmaur and Shimla. There is no Wild life Sanctuary or National Park along the stretch. The existing ROW varies from 8.0 m to 32.50 m and proposed ROW is kept minimum 18 m. Acquisition of 26.71 Ha land is required for the improvement of the project. 6.0 ha reserved forest land has to be got diversified for non forest use i. e. for improvement of road. Including existing structures, 1 major bridge, 13 minor bridges, 345 culverts, 7 bus bays, 2 truck lay byes and 1 Toll Plaza have been proposed. Over all 6303 but 5152 trees having girth more than 300 mm will be affected. 16000 saplings are proposed to be planted along roadside. About 500 KLD water for 600 days (mostly surface water) shall be required for construction including plantation and dust suppression. There is no high embankment in the road where fly ash can be used. The Total Project Cost is 382.0 Crores, which includes environmental cost of Rs. 5.0 Crore and R&R Cost including LA cost is Rs. 50.0 Crore.

During the discussions, the Committee finalized the following TOR for further study:

- (i) The proposal indicates the acquisition of 6 ha Reserve Forests land. Necessary stage –I forestry clearance shall be obtained as per OM dated 31.03.2011 and submitted along with final EIA report.
- (ii) Identify the areas prone to land slide and submit the appropriate remedial measures.
- (iii) Submit the details of the road safety audit and plans for meeting the IRC safety requirements.
- (iv) The additional ToR and General Guidelines as per the annexure-I and Annexure-II respectively to this Minutes shall also be considered for preparation of EIA/EMP.
- (v) Any further clarification on carrying out the above studies including anticipated impacts due to the project and mitigative measure, project proponent can refer to the model ToR available

on Ministry website “<http://moef.nic.in/Manual/Highways>”.

Public hearing to be conducted for the project as per provisions of Environmental Impact Assessment Notification, 2006 and the issues raised by the public should be addressed in the Environmental Management Plan.

A detailed draft EIA/EMP report should be prepared as per the above additional TOR and should be submitted to the Ministry as per the Notification.

#### **4.35 Finalisation of ToR for Ahmedabad -Dholera six –lane expressway by M/s Gujarat State Road Development Corporation Ltd [F.No. 10-109/2011-IA-III].**

As presented by the project proponent, the proposed Ahmedabad-Dholera Expressway starts near Sarkhej on Sardar Patel Ring Road and ends after Dholera Special Investment Region and merging with SH-6 at termination point. It also includes the proposed Dholera Airport connectivity and its approximate length is 116 km. Proposed corridor RoW is 250 m in Dholera Special Investment Region (SIR) for an approximate length of 25-28km and 150 m (minimum) outside the SIR. ROW consisting of 50 m RoW is specially reserved for the Ahmedabad-Dholera Rail Link.

The proposed access controlled expressway project with new alignment has been envisaged through an area which shall have the advantage of simultaneous development as well as shall result in a shorter distance to travel. The junctions with existing road will be planned in the form of interchanges and flyover to ensure uninterrupted flow of traffic.

Dholera is identified as one node of DMIC project and will develop as investment region. The Industrial Mega Parks are the central feature of the Dholera SIR to develop economic hub. Key industrial sectors in the industrial mega parks include Gems & Jewellery, Engineering, Chemicals & Petrochemicals, Oil & Gas, Power Plant, Textiles & Apparels and Food processing. The emerging sectors include IT/ITES, Auto/Automobile, ship repairing/building, tourism and Knowledge Hubs.

As a part of DMIC project Dholera is required to develop as investment region providing international standards. Connectivity is the main issue to develop any region. Rail line, Port, roadway and airway are options for the connectivity. Proper connectivity is required to link Dholera with inter state as well as with intra state. Port development not feasible to develop in Dholera. So to serve the better connectivity International airport, expressway, rail line is proposed. Expressway between Ahmedabad to Dholera can provide better transportation link to develop Dholera as economic hub. Dholera Expressway is main connectivity between Ahmedabad to Dholera (Dholera SIR). It will reduce the travel time from Ahmedabad to Bhavnagar and also reduce traffic congestion on Ahmedabad-Mumbai expressway as well as six lane highway. Major traffic generated

from industrial mega parks will travel through expressway. Some traffic from residential, commercial and recreational places will also travel through expressway. Expressway also provides connectivity with Dholera international airport with cargo facility.

Expressway – falls within 10 km from National park hence treated as Category ‘A’

During the discussions, the Committee finalized the following TOR for further study:

- (i) Project road starts 2 km boundary of Veladadar National Park, hence clearance from National Board for Wildlife
- (ii) Part is passing in CRZ area. Recommendation of CZMA shall be obtained and submitted.
- (iii) The proposal indicates the acquisition of about 40 - 45 ha Protected Forests land. Necessary stage –I forestry clearance shall be obtained as per OM dated 31.03.2011 and submitted along with final EIA report.
- (iv) It is indicated that 1600 nos. trees falls within the proposed RoW, however, bare minimum trees to be cut, the information should be provided about their species and whether it also involved any protected or endangered species. Necessary green belt shall be provided on both side of the highway with proper central verge and cost provision should be made for regular maintenance.
- (v) Explore the possibilities of cooled mixed technology instead of hot mixed technology
- (vi) Explore the possibilities of using slag from the nearby steel plants
- (vii) Submit the details of the road safety audit and plans for meeting the IRC safety requirements.
- (viii) The additional ToR and General Guidelines as per the annexure-I and Annexure-II respectively to this Minutes shall also be considered for preparation of EIA/EMP.
- (ix) Any further clarification on carrying out the above studies including anticipated impacts due to the project and mitigative measure, project proponent can refer to the model ToR available on Ministry website “<http://moef.nic.in/Manual/Highways>”.

Public hearing to be conducted for the project as per provisions of Environmental Impact Assessment Notification, 2006 and the issues raised by the public should be addressed in the Environmental Management Plan.

A detailed draft EIA/EMP report should be prepared as per the above additional TOR and should be submitted to the Ministry as per the Notification.

#### **4.36 Environmental clearance for the development of Solid Waste Management Facility at Jhuriwala, Panchkula, Haryana by M/s. Executive Engineer, Huda Division (F.No.10-7/2009-IA-III)**

As presented by the project proponent that the proposal is for establishment of Common Municipal Solid Waste Management Facility (CMSWMF) at Panchkula Urban Complex. The project site is in proximity to the protected area notified under wildlife (Protection) Act, 1972 attracts the General Condition (GC), hence is treated as Category 'A' project of EIA Notification 2006.

The proposed site is located in 5.35 ha (13.24 acres) area of open scrub vegetation in Jhuriwala which will be used to develop Sanitary Landfill Facilities (SLF) for management of 150 metric tones of municipal solid waste Panchkula Urban Complex. The water requirement is 420 LPD for domestic purpose and 12,136 l/day for flushing and Horticulture purposes. The proposed landfill will receive MSW by road from various wards/localities located within Panchkula urban complex. National Highway-73 connects the site. However, a road down the NH-73 has been proposed for the proper accessibility to the landfill site and landfill facility for proper circulation and movement of vehicles.

The TOR was finalized during the meeting held on 23<sup>rd</sup> -24<sup>th</sup> April, 2009. The EIA presented during the meeting held on 27<sup>th</sup> – 29<sup>th</sup> January, 2010 and the Committee noted that the TOR for the development of solid waste management facility at Jhuriwala, Panchkula, Haryana was issued on 20.05.2009 whereas the public hearing was conducted about a year before the TOR on 30<sup>th</sup> June, 2008. The Committee suggested that a fresh public hearing, based on the EIA prepared on the basis of TOR should be conducted as per the provisions of the EIA Notification, 2006 and the issues raised by the public should be addressed in the Environmental Management Plan. Accordingly fresh Public hearing was conducted on 25.03.2010 at Panchkula. The details submitted were discussed by the Committee.

The committee recommended the proposal in its 93<sup>rd</sup> meeting held on November 9, 2010. However, in a WP filed by the Joint Action Committee, Panchkula against the project, the Hon'ble High Court of Punjab directed the EAC to hear the petitioners. Shri Hemant Sarin Advocate, Resident of Sector- 23, Shri Subbash Kapoor, General Secy, JAC attended the 114<sup>th</sup> EAC meeting held on July 9, 2012 and presented their views. The EAC

suggested the Ministry to communicate the same to the Municipal Corporation of Panchkula for their comments.

Executive Engineer, Panchkula attended the 115<sup>th</sup> meeting of EAC on 16<sup>th</sup> and 17<sup>th</sup> August 2012 and provided the reply/comments on the observations of the Joint Action Committee, Panchkula and information on each point raised by the petitioner. The EAC recommended the proposal for Environmental Clearance after submission of the following documents:

- (i) Proponent shall revise and submit the certified layout plan such that the distance between the MSW site and the outer boundary of sector 25 is atleast 500 m.
- (ii) The proposed plan should be realigned such a way that the waste tipping area and processing area and other project components which produces maximum air and noise pollution is farthest from the habitation. Submit the drawings for the same.
- (iii) State of the art measures should be adopted for odor control from the plant.
- (iv) 30 meters wide green belt with dense vegetation in canopy formation should be provided on the Highway side of the site and 20 meters wide green belt should be provided on the balance portion of the boundary of the site.
- (v) The size of the project should be scaled down in case the above recommendations are not fulfilling.

Meanwhile the above matter came before the Hon'ble Punjab & Haryana High Court on 15.10.2012. It was mentioned by the counsel for the intervenor that the area where the SWM plant is proposed to be set up comes within the sanctuary situated in panchkula declared under the wild life protection act 1972.

For the above observation of JAC, Panchkula, it was brought to the notice of Hon'ble Court by HUDA that the project proponent (HUDA) has obtained the certificate from Principal Chief Conservator (Wild Life) and Chief Wild Life Warden Haryana, Panchkula vide office memo No-3178 dated 22.01.2010 where in it has been mentioned that because this area of project site is an area which is adjoining the Khol-Hai-Rattan Wildlife Sanctuary and therefore a 8 feet high wall will have to be constructed by the project proponent so that the Wild animals may not enter into the project area and there will be no construction outside the boundary.

It has also been mentioned that the permission for diversion of 5.35 hectare of forest land for setting up of Solid Waste Management Plant at Village Jhuriwala under section - 4 & 5 of the PLPO 1900 under Pinjore

Forest Division Distt. Panchkula has also been accorded by the Ministry of Environment & Forest, Government of India, New Delhi through its Regional Office, Principal Chief Conservator Forests (Central), Ministry of Environment & Forest, Govt. of India North Regional Office, Chandigarh vide memo No-9-HRC159/2006-CHA/6982 dated 25.08.2008

The Hon;ble court mentioned that “It would be the duty of the Experts Appraisal Committee to examine the location of the area in question where the aforesaid Plant is proposed to be set up. It shall also be the obligation of the Committee to examine as to whether the permission of the Central Empowered Committee is required or not. Only after examination of these issues, permission shall be granted. Experts Appraisal Committee is directed to take a decision within a period of one month from 19.10.2012.”

Accordingly the matter was again discussed in the 117<sup>th</sup> EAC meeting held on 18<sup>th</sup> – 19<sup>th</sup> October 2012 and it is observed that the permission for diversion of 5.35 hectare of forest land for setting up of Solid Waste Management Plant at Village Jhuriwala under section – 4 & 5 of the PLPO 1900 under Pinjore Forest Division Distt. Panchkula has been accorded by the Ministry of Environment & Forest, Govt, of India, New Delhi through its Regional Office, Principal Chief Conservator Forests (Central) Ministry of Environment & Forest, Govt, of India North Regional Office, Chandigarh. It was advised by the committee to route the file through the Wild Life Division in the Ministry to revalidate the location of the SWM site with respect to the sanctuary situated in panchkula. However in view of the site being within 10km of the wild life sanctuary clearance from Standing Committee of NBWL shall also be sought by the Project proponent.

During the discussion, the following points emerged:

- (i) Prior clearance from Standing Committee of NBWL should be obtained before commencing the facility.
- (ii) The waste lying at the existing dumping site shall be excavated and should be accumulated to designated place within the site and this accumulated waste shall be compacted and closed scientifically after reaching the design height.
- (iii) Boundary wall of 8 feet high should be constructed all along the project site.
- (iv) The proposed layout shall be as per the revised plan to keep maximum distance between waste tipping area and processing area and other project components which produces maximum air and noise pollution from the habitation.
- (v) State of the art measures should be adopted for odor control from the plant.

- (vi) 30 meters wide green belt with dense vegetation in canopy formation should be provided on the Highway side of the site and 20 meters wide green belt should be provided on the balance portion of the boundary of the site.
- (vii) The proponent shall ensure that the project fulfills all the provisions of Solid Wastes (Management and Handling) Rules, 2000 including collection and transportation design etc.
- (viii) The gas generated from the Landfill facility shall be collected and disposed as per rules.
- (ix) The proponent shall obtain necessary clearance from the Ground Water Authority for the use of ground water.
- (x) The depth of the land fill site shall be decided based on the ground water table at the site.
- (xi) An On Site Emergency Management Plan shall be prepared and implemented.
- (xii) Periodical ground water/soil monitoring to check the contamination in and around the site shall be carried out.
- (xiii) Any other condition, as stipulated in the court order, should be adhered to.

***The Committee recommended the proposal for Environmental Clearance with the above conditions in the Clearance letter for strict compliance by the project proponent.***

**4.37 Environmental clearance for widening & up-gradation of existing 2 Lane to 4/6 laning of divided Carriageway Configuration of Patna to Buxar Section of NH-30 & NH-84 in the State of Bihar and U.P. by M/s. National Highway Authority of India [F.No. 5-10/2009-IA-III].**

The project road starts from Km. 178.600 of NH -30 near Anisabad in Patna and ends at Bharauli on NH-19 in Uttar Pradesh after crossing Ganga River near Buxar, covering a total length of 125 km. The road falls in Patna, Bhojpur and Buxar district of Bihar and Ballia district of UP. The land use pattern of the project area is mostly agricultural (53.66%), built up (41.53%), protected forest (0.9%) and barren (03.91%). The project road does not pass through any reserved forest, sanctuary and national park etc. However, road side plantation in Ara – Buxar portion in Bhojapur district has been declared as a protected forest. MoEF vide its letter dated 24<sup>th</sup> September 2012 accorded in principle approval for diversion of 53.63 ha of forest land for widening of NH84 in Bhojpur and Buxar district. The project road passes through 34 villages, out of which 9 villages are in Patna district, 20

in Bhojpur and 5 m in Buxar district. There is no village in UP portion as project road length in UP is 1.25 km which is approach of Ganga Bridge. The Right of Way varies from 20-35 m. The proposed ROW is 60m. Approximately 605.2 ha of land is being acquired; which includes 202.72 ha for widening, and 402.48 ha for realignments bypasses and CPR relocations. There are 12 major bridges, 18 minor bridges, and 179 culverts. 20 Vehicular underpasses, 77 pedestrian and cattle underpasses, service roads at 26 locations and 30.77 km in total length have been provided. Bus bays have been proposed at 34 locations. Truck lay byes have been provided at 5 locations, and way side amenities at three locations. There are 11 congested areas where bypass/realignments have been proposed for total length of 67.08 km, namely Patna- Bihita section Bypass length -29.7 km, Realignment at Koilwar for geometric improvement of new bridge at Sone River - 3.550 km, Ara town Bypass - 11.70 km, Realignment for Bibiganj - 1.13 km, Gajraj Ganj Bypass - 2.5 km, Bihiya Realignment - 1.9 km, Saraiya/Bilouty Realignment -1.8 km, Sahpur/ Ranisagar Bypas - 8.0 km, Barhampur Bypass - 1.8 km, Naya Bhojpur Bypass -1.9 km and Purana Bhojpur Bypass- 3.1 km. About 15711 trees are going to be felled for the project area, against which about 471333 trees are proposed to be planted. About 1562 households and 8307 persons are going to be affected due to the project. The entitled persons will be compensated and assisted as per the Resettlement and Rehabilitation plan.

The budget for environmental management works during construction and operation phases come out to be Rs. 3.2584 Crores. The capital cost of the project is 1738.744 Crore.

The proposal was appraised by the EAC in its meeting held in... and recommended for issue of EC subject to submission of Stage- I FC. As per the OM dated 31.03.2011, EC to be issued after submission of Stage -I FC. If the FC is not submitted in one year time, the proposal has to be considered as fresh. Since the Proponent has submitted FC after one year, the proposal was again considered by the EAC.

The committee noted that there is no change in the project profile, and the EIA was done a year back hence no fresh EIA, PH required.

***The Committee recommends the proposal for Environmental Clearance with the above condition in the Clearance letter for strict compliance by the project proponent***

## **Recommended projects**

**5.1 Amendment to the Environment clearance granted for M/s Hazira LNG Pvt. Ltd. for construction of storage tank of LNG having capacity of 200 000 cubic meters. (F.No. J-16011/23/2000-IA-III/Pt)**

The proposal is for construction of storage tank of LNG having capacity of 200 000 cubic meters. M/s Hazira LNG Pvt. Ltd has existing Terminal of 5 MMTPA of LNG and obtained clearance for 4 x 160000 Cum however constructed 2 x 160,000 cubic meters. Now intend to construct one new LNG tank of 200,000 cubic meters capacity instead of 2 x 160000. Quantitative Risk Assessment is carried out by NEERI. The summary of the Risk assessment are (i) The risks of placement of third storage tank of capacity 200,000 m<sup>3</sup> along with two existing 160,000m<sup>3</sup> tanks was evaluated. The catastrophic rupture of all storage tanks simultaneously has been ruled out in the study due to very low failure frequency. (ii) The risk has been evaluated in terms of iso-contours and F/N curves for storage tank of 160,000 m<sup>3</sup> and 200,000 m<sup>3</sup> considering domino effect failure which is worst case scenario. (iii) The combined Individual risk due to two storage tanks in case of fire and explosion scenario is acceptable. The 10<sup>-6</sup> risk contour falls within the terminal site only where the risk is acceptable. Societal risk due to the failure of two tanks is in the ALARP region.

The proposal was examined by the EAC in its meeting held in April, 2002 and May, 2012 and committee sought the compliance status of the conditions stipulated in the earlier clearance as well as compliance to MSIHC Rules. The details submitted by the proponent were examined by the Committee. The proponent has also informed that the proposal is only change in the number and size of the tanks within the permitted capacity hence requested for an amendment to the EC dated 02.03.2001.

During the discussion, the following points emerged:

- (i) All recommendation of EMP/ DMP shall be complied with.
- (ii) All the conditions stipulated by the SCZMA shall be complied with.

***The Committee recommends the issue of amendment to the EC dated 02.03.2001 with the above condition in the Clearance letter for strict compliance by the project proponent.***

## **5.2 Environmental Clearance for Construction of Group Housing for Inderlok Housing Scheme, Phase-II Roshanabad, Haridwar by M/s Haridwar Development Authority [F.No 21-38/2012-IA.III]**

The proposed project is for the construction Residential Project by Haridwar Development Authority. Plot area is 48500Sq.mt. Total built up area is 1,07,344.01 Sq.mt. Residing population is 4160, No. Of blocks is 16, No. of units is 832(including 288 for 2BHK for 3 BHK and 256 units for ISP & EWS). No of ECS is 1462 ECS(395 no. at Basement, 476 no. as stilt parking and 591 as open parking). Total water requirement is 610.53 KLD, waste water generation is 490.78 KLD, Water sources is ground water, STP is 600 KLD capacity , total power requirement is 3492 KW , power sources is

Uttarakhand state electricity board, DG sets is 2x200 KW, solid waste generated is 1.71 ton/day.

The land available is 48500 sq.mt, Nearest highway is Delhi-Haridwar National Highway, nearest railway station is Jwalapur railway station (-7.7 km, SE), nearest Air port is Jolly Grant Air Port, Dehradun (-26.9 Km, NNE), nearest Habitat is Roshnabad and Hetampur village, Nearest river is Ganga River Canal (-5 Km, SSE) Ganga River (-10.5 Km, ESE), Industrial Area is adjacent to site (SIDCUL) and the project area is Rajaji National Park (-1.0 Km, NE)

The project was considered in 115<sup>th</sup> meeting of EAC held on 16<sup>th</sup> – 17<sup>th</sup> August, 2012. During the discussion, the following points emerged:

- (i) Green belt of minimum width of 15 meters should be provided on the industrial area side and a width of 6 m should be provided along the periphery of the township.
- (ii) Clearance should be obtained from wild life board (NBWL) as the site is 1.0 km from Rajaji national park. Also check if the notification is issued from the chief warden, wild life regarding the distance of 1 km from Rajaji national park.
- (iii) Energy conservation to the extent of 20% shall be incorporated including water conservation (reuse/recycle, rain water harvesting and water efficient fixtures) and other green building practices for various buildings proposed for the project.
- (iv) The project developer shall provide solar energy for street lighting and for water heaters and shall submit a detailed report to the Ministry.
- (v) Provide details for the rain water harvesting system for the project.
- (vi) Submit EMP in tabular form as committed in the EIA report.

The project proponent has submitted the required document and the same were examined in the meeting held on 18<sup>th</sup> – 19<sup>th</sup> October, 2012. It has been observed that the layout map submitted by the proponent is not showing the 15 meters wide green belt on the industrial area side, as committed in the meeting and as mentioned in the Minutes of 115<sup>th</sup> EAC meeting.

***In view of the above observation the Committee recommends the above proposal for Environmental Clearance after submission of the information at (i) above, with the above condition in the Clearance letter for strict compliance by the project proponent.***

### **5.3 Environmental Clearance of proposed Residential Project Paramount Grand Near Sarusajai Station, Lokhra, NH-37,**

**Guwahati, Assam M/s Paramount Grand [F. No 21-40/2012-IA.III]**

The proposed project "Paramount Grand" near Sarusajai Stadium, Mouza: Beltola, Tehsil: Guwahati, District: Kamrup, Assam will have the total plot area of 11214.8 m<sup>2</sup> and Built-up Area of 40,153.0 m<sup>2</sup>. The total water requirement of the project will be 149 KLD among which the fresh water requirement will be 87 KLD and recycled water requirement will be 62 KLD. The Municipal Solid waste generation will be 489.25 KGD. 366 ECS Parking in total will be provided in the basement. For the purpose Mechanized parking will be installed. Dual Plumbing system is proposed for conservation of water.

The project was considered in 115<sup>th</sup> meeting of EAC held on 16<sup>th</sup> – 17<sup>th</sup> August, 2012. During the discussion, the following points emerged:

- (i) Resubmit the parking plan including stack parking.
- (ii) Submit complete landscape plan on the layout map.
- (iii) Submit EMP in tabular form as committed in the EIA report.
- (iv) Recycling water pipeline and outlet should be at ground level so that no one consumes the water for drinking.

The project proponent has submitted the required documents and the same were examined in the meeting held on 18<sup>th</sup> – 19<sup>th</sup> October, 2012.

***In view of the above observation the Committee recommends the above proposal for Environmental Clearance, with the above condition in the Clearance letter for strict compliance by the project proponent***

**5.4 Environment & CRZ Clearance for the development of Multi Cargo Port with supporting utilities and infrastructure facilities at Hazira, Surat by M/s Adani Hazira Port Pvt. Ltd. [F. No. 11-150/2010 -IA-III]**

The proposal was disused by the EAC in the meeting held in September, 2012. Regarding the issues raised during the Public hearing, the Committee noted that response of the proponent to the issues raised during the Public Hearing are not specifically addressed in the EIA report. PP shall submit detailed and specific action plan on the issues raised during the Public Hearing. The action plan submitted by the proponent was discussed by the committee.

During the discussion, the following points emerged:

- (i) The same action plan shall be submitted to the Pollution Control Board.

- (ii) The action plan shall be implemented without fail. Report on compliance shall be submitted to the Regional Office, MoEF along with the six monthly report.
- (iii) All the recommendations of SCZMA shall be complied with.
- (iv) Periodical study on shore line changes shall be conducted and mitigation carried out if necessary. The details shall be submitted along with the six monthly monitoring report.
- (v) Oil spills if any shall be properly collected and disposed as per the Rules. Proper Oil Contingency Management Plan shall be put in place.
- (vi) The detailed plan with budgetary provisions for the CSR shall be submitted to the Ministry.
- (vii) All the recommendation of the EMP and DMP shall be complied with letter and spirit.
- (viii) Periodical monitoring of sea water quality at the out let shall be carried out to check that the discharge is meeting the standards and not causing any impact to marine life.
- (ix) Transport of cargo shall in closed system and dust control viz water sprinkler, along conveyor and transfer point shall be provided.

***The Committee recommends the proposal for Environmental and CRZ Clearance with the above conditions in the Clearance letter for strict compliance by the project proponent.***

**Visit to Resorts in Maharashtra:**

There are about 10 resorts in Thane, Maharashtra. Earlier EAC decided to visit the site. Accordingly, the committee constituted following committee to make site visit and report.

Dr. M.L Sharma, Vice Chairman  
Dr Apurba Gupta, Member  
Dr. Neeraj Sharma, Member  
Shri Lalit Kapur.

## **Annexure-I**

- (i) Any litigation(s) pending against the proposed project and/or any directions or orders passed by any court of law/any statutory authority against the project is to be detailed out.
- (ii) Submit detailed alignment plan, with details such as nature of terrain (plain, rolling, hilly), land use pattern, habitation, cropping pattern, forest area, environmentally sensitive places, mangroves, notified industrial areas, sand dunes, sea, river, lake, details of villages, teshils, districts and states, latitude and longitude for important locations falling on the alignment by employing remote sensing techniques followed by ground truthing and also through secondary data sources.
- (iii) Describe various alternatives considered, procedures and criteria adopted for selection of the final alternative with reasons.
- (iv) Submit Land use map of the study area to a scale of 1: 25,000 based on recent satellite imagery delineating the crop lands (both single and double crop), agricultural plantations, fallow lands, waste lands, water bodies, built-up areas, forest area and other surface features such as railway tracks, ports, airports, roads, and major industries etc. and submit a detailed ground surveyed map on 1:2000 scale showing the existing features falling within the right of way namely trees, structures including archeological & religious, monuments etc. if any.
- (v) If the proposed route is passing through any hilly area, examine and submit the stability of slopes, if the proposed road is to pass through cutting or embankment / control of soil erosion from embankment.
- (vi) If the proposed route involves tunneling, the details of the tunnel and locations of tunneling with geological structural fraction should be provided. In case the road passes through a flood plain of the river, the details of micro drainage, flood passages and information on flood periodicity at least of last 50 years in the area should be examined.
- (vii) The projects is located within 10km. of the sanctuary a map duly authenticated by Chief Wildlife Warden showing these features vis-à-vis the project location and the recommendations or comments of the Chief Wildlife Warden thereon should be furnished at the stage of EC.
- (viii) Study regarding the Animal bypasses / underpasses etc. across the habitation areas shall be carried out. Adequate cattle

passes for the movement of agriculture material shall be provided at the stretches passing through habitation areas.

- (ix) If the proposed route is passing through a city or town, with houses and human habitation on the either side of the road, the necessity for provision of bypasses/diversions/under passes shall be examined and submitted. The proposal should also indicate the location of wayside amenities, which should include petrol station/service centre, rest areas including public conveyance, etc.
- (x) Submit details about measures taken for the pedestrian safety and construction of underpasses and foot-over bridges along with flyovers and interchanges.
- (xi) Assess whether there is a possibility that the proposed project will adversely affect road traffic in the surrounding areas (e.g. by causing increases in traffic congestion and traffic accidents).
- (xii) Examine and submit the details of use of fly ash in the road construction, if the project road is located within the 100 km from the Thermal Power Plant.
- (xiii) Examine and submit the details of sand quarry, borrow area and rehabilitation.
- (xiv) Climate and meteorology (max and min temperature, relative humidity, rainfall, frequency of tropical cyclone and snow fall); the nearest IMD meteorological station from which climatological data have been obtained to be indicated.
- (xv) The air quality monitoring should be carried out as per the new notification issued on 16<sup>th</sup> November, 2009.
- (xvi) Identify project activities during construction and operation phases, which will affect the noise levels and the potential for increased noise resulting from this project. Discuss the effect of noise levels on near by habitation during the construction and operational phases of the proposed highway. Identify noise reduction measures and traffic management strategies to be deployed for reducing the negative impact if any. Prediction of noise levels should be done by using mathematical modeling at different representative locations.
- (xvii) Examine the impact during construction activities due to generation of fugitive dust from crusher units, air emissions from hot mix plants and vehicles used for transportation of materials and prediction of impact on ambient air quality using appropriate mathematical model, description of model, input

requirement and reference of derivation, distribution of major pollutants and presentation in tabular form for easy interpretation shall be carried out.

- (xviii) Also examine and submit the details about the protection to existing habitations from dust, noise, odour etc. during construction stage.
- (xix) If the proposed route involves cutting of earth, the details of area to be cut, depth of cut, locations, soil type, volume and quantity of earth and other materials to be removed with location of disposal/ dump site along with necessary permission.
- (xx) If the proposed route is passing through low lying areas, details of fill materials and initial and final levels after filling above MSL, should be examined and submit.
- (xxi) Examine and submit the water bodies including the seasonal ones within the corridor of impacts along with their status, volumetric capacity, quality likely impacts on them due to the project.
- (xxii) Examine and submit details of water quantity required and source of water including water requirement during the construction stage with supporting data and also classification of ground water based on the CGWA classification.
- (xxiii) Examine and submit the details of measures taken during constructions of bridges across river/canal/major or minor drains keeping in view the flooding of the rivers and the life span of the existing bridges. Provision of speed breakers, safety signals, service lanes and foot paths should be examined at appropriate locations through out the proposed road to avoid the accidents.
- (xxiv) If there will be any change in the drainage pattern after the proposed activity, details of changes shall be examined and submitted.
- (xxv) Rain water harvesting pit should be at least 3 - 5 m. above the highest ground water table. Provision shall be made for oil and grease removal from surface runoff.
- (xxvi) If there is a possibility that the construction/widening of road will cause impact such as destruction of forest, poaching, reductions in wetland areas, if so, examine the impact and submit details.

- (xxvii) Submit the details of road safety, signage, service roads, vehicular under passes, accident prone zone and the mitigation measures.
- (xxviii) IRC guidelines shall be followed for widening & upgradation of road.
- (xxix) Submit details of social impact assessment due to the proposed construction of road.
- (xxx) Examine road design standards, safety equipment specifications and Management System training to ensure that design details take account of safety concerns and submit the traffic management plan.
- (xxxi) Accident data and geographic distribution should be reviewed and analyzed to predict and identify trends – incase of expansion of the existing highway and provide Post accident emergency assistance and medical care to accident victims.
- (xxxii) If the proposed project involves any land reclamation, details to be provided for which activity land to reclaim and the area of land to be reclaimed.
- (xxxiii) Details of the properties, houses, businesses etc. activities likely to be effected by land acquisition and their financial loses annually.
- (xxxiv) Detailed R&R plan with data on the existing socio-economic status of the population in the study area and broad plan for resettlement of the displaced population, site for the resettlement colony, alternative livelihood concerns/employment and rehabilitation of the displaced people, civil and housing amenities being offered, etc and the schedule of the implementation of the project specific
- (xxxv) Submit details of Corporate Social Responsibility. Necessary provisions should be made in the budget.
- (xxxvi) Estimated cost of the project including environmental monitoring cost and funding agencies, whether governmental or on the basis of BOT etc and provide details of budget provisions (capital & recurring) for the project specific R&R Plan.
- (xxxvii) Submit environmental management and monitoring plan for all phases of the project viz. construction and operation.

**General Guidelines**

- (i) The EIA document shall be printed on both sides, as far as possible.
- (ii) The status of accreditation of the EIA consultant with NABET/QCI shall be specifically mentioned. The consultant shall certify that his accreditation is for the sector for which this EIA is prepared.
- (iii) On the front page of EIA/EMP reports, the name of the consultant/consultancy firm along with their complete details including their accreditation, if any shall be indicated. The consultant while submitting the EIA/EMP report shall give an undertaking to the effect that the prescribed TORs (TOR proposed by the project proponent and additional TOR given by the MoEF) have been complied with and the data submitted is factually correct (Refer MoEF office memorandum dated 4<sup>th</sup> August, 2009).
- (iv) While submitting the EIA/EMP reports, the name of the experts associated with/involved in the preparation of these reports and the laboratories through which the samples have been got analysed should be stated in the report. It shall clearly be indicated whether these laboratories are approved under the Environment (Protection) Act, 1986 and the rules made there under (Please refer MoEF office memorandum dated 4<sup>th</sup> August, 2009). The project leader of the EIA study shall also be mentioned.
- (v) All the TOR points as presented before the Expert Appraisal Committee (EAC) shall be covered.

117<sup>th</sup> Meeting of the Expert Appraisal Committee for Infrastructure Development, Coastal Regulation Zone and Miscellaneous projects held on 18<sup>th</sup> – 19<sup>th</sup> October, 2012 at Scope Complex. Lodhi Road, New Delhi.

### List of Participants

#### Expert Committee

1.	Shri Naresh Dayal	Chairman
2.	Dr. M.L. Sharma	Vice Chairman
3.	Dr. Apurba Gupta	Member
4.	Dr. S.P. Bansal	Member
5.	Dr. H.S. Ramesh	Member
6.	Dr. Y. Basavaraju	Member
7.	Dr. Niraj Sharma (Rep. of CRRI)	Member
8.	Shri Lalit Kapur	Member Secretary

#### MoEF officials

10.	Shri E. Thirunavukkarasu	Scientist 'C', MoEF
11.	Shri Amardeep Raju	Scientist 'C', MoEF