Minutes

The Minutes of the 116^{th} Meeting of the Expert Appraisal Committee for Building Construction, Coastal Regulation Zone, Infrastructure Development and Miscellaneous projects held on $19^{th} - 21^{st}$ September, 2012 at SCOPE Complex, New Delhi.

1. Opening Remarks of the Chairman.

The Chairman welcomed the members to the 116th meeting of the Expert Appraisal Committee.

2. Confirmation of the Minutes of the 115th Meeting of the EAC held on 16th - 17th August , 2012 at New Delhi.

In item No.5.3 'EC for 4-Lane with paved shoulder of the section Km 155 to Km 198.60 of NH-75 (Satna to Bela) in the State of Madhya Pradesh by M/s. Madhya Pradesh Road Development Corporation Limited (F.No. 10-47/2011-IA-III)', the conditions at (i) shall be read as follows:

(i) It is indicated that 1160 nos. trees are lying in RoW, however bare minimum trees to be cut. Necessary permission shall be obtained from the Competent Authority for tree cutting. Compensatory afforestation shall be provided as per the norms. 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.

4. Consideration of New Proposals:

4.1 CRZ clearance for Pedder road viaduct by M/s MSRDC. [F.No.11-42/2010-IA.III]

As presented by the project proponent, the Govt. of Maharashtra has initiated the Pedder Road Viaduct project in the year 2000, as the daily traffic count was increasing in great proportions. This led to congestion and added to the pollution levels in the area. There are about 10 signals posts in the proposed alignment of 4.1 kilometers. During the peak hours it takes about 45 to 50 minutes to pass this alignment in the existing status. The service levels are in the "E" category that is speed of 17kmh where as after construction of Pedder Road Viaduct (PVR), the service levels will be improved to "D" category and speed to 40kmh.

There is an existing Kemps Corner flyover since last 50 years and which is not in a very worthy condition. The Traffic Police Department has also suggested for an alternative to this flyover. After the construction of Pedder Road Viaduct (PRV) there will be an ease out in the traffic congestion. It will save travel time and will have uninterrupted travel avoiding 10 signals posts on the north south connection of the western corridor.

Length of Viaduct from Haji Ali square to beyond G.B Pant Chowk on Marine Drive is proposed as 4100 m., 3700m with a approach from Haji Ali side 200m and Wilson College side is 200m. The Overall width is 13m. The carriageway will be 12m of 4 lane without any median and crash barriers is 0.5m width on either side. There is an entry and exit ramp at Haji Ali and Marine Drive. There is a provision in design for entry ramp at Khadya marg and at Tardeo road. The latest noise and visual barriers will be installed throughout the viaduct. Various alternatives have been studied so as to avoid CRZ area for the alignment. There will be no pier in CRZ area however upper protrudes 8 m above CRZ area.

Substructure will be a single pier with single pour or pre-cast piers caps. Superstructure shall be of steel and concrete composite section. Girders fabrication will be off site. Transportation on trailers and erection of the same in night time Deck slab cast in situ. No staging for deck slab but sheet decking will be used. Noise barriers on both the sides of the flyover will be installed. The expected noise levels to be less than 35db.

In order to have better safety following safeguards have been proposed during the construction phase;

- (i) Work in short starches of 100 m to avoid distribution to traffic.
- (ii) Concreting using RMC to avoid pollution at site.
- (iii) Concreting in the night to avoid difficulties to traffic.
- (iv) Transportation of girders at night to avoid difficulties to traffic.
- (v) Use safety nets for superstructure works and traffic wardens to be used to safeguard the area and for safety of traffic.

MSRDC informed that a Public Consultation was held in March 2008 to examine the grievances of the local residents. All the suggestions were heard and were properly incorporated in the project, wherever applicable. There will be high-tech air purifier, noise barrier and visibility barrier installed.

The beginning of the Pedder Road Viaduct (PRV) i.e Rajni Patel Chowk fall under CRZ –II (300 m) and a loop at Tambe Chowk also falls under CRZ –II. MCZMA considered the project in its 60th meeting held on 25th February 2010 and recommended the proposal vide letter No. MCZMA/06/186 dated 19th April 2010. As per the recommendation, one pillar earlier proposed in CRZ-I is shifted to CRZ-II.

The proposal was examined by the EAC in its 91^{st} meeting held on $21^{st} - 23^{rd}$ September, 2010 and sought additional information including public hearing though it is not required under CRZ Notification, 1991, but due to various representations received from some local residents of Pedder Road, the committee suggested to conduct a Public hearing as per provisions of Environmental Impact Assessment Notification, 2006 and the issues raised by the public should be addressed in the Environmental Management Plan.

The Public hearing was conducted on 19.07.2011 at Institute of Engineers Hall. The major issues raised area Noise pollution. Proponent has informed that Noise barrier-3 - 3.5m height proposed through out the stretch., which can reduce 27 dB (A). Pre-fabricated steel super structure will be used so as to reduce the noise/ disturbance to the public. Expansion joints are the source of the noise and the span is increased to reduce the number of joints. Air purifiers mounted at the light poles. Initial cost of Rs 10 crore is proposed towards the above.

During the discussion, the following points emerged:

- *i)* It is noted that from the minutes of the the Public Hearing that the PH could not be conducted and ended abrubtly. However, some of the issues raised by the public during PH included Noise pollution. PP shall submit the detailed action plan on all the issues raised during Public Hearing.
- *ii)* It is informed by the PP that no court case is pending against the project.

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.

4.2 CRZ clearance for Mumbai Trans Harbour Sea link by M/s MMRDA [F.No.11-65/2012-IA-III]

As presented by the project proponent, the proposal involves_construction of 6 lanes Road Bridge across the Mumbai harbor. The proposed Mumbai Trans Harbour Link ('MTHL') which aims at facilitating decongestion of Mumbai by improving connectivity between the Island city and main land (Navi Mumbai) and development of Navi Mumbai Region was envisaged about 30 years back. The alignment was approved by Prime Minister's Office in 1984. The project involves the construction of a bridge across the Mumbai harbour between Sewri on the island city side (in the Mumbai Port Trust area) and Chirle on the Navi Mumbai side. The link is about 22 km long with a 16.5 km bridge across the sea and a 5.5 km long viaduct on the land. The exit and entry into the six lane freeway would be through interchanges at the end points and at the intermediate points on the Navi Mumbai side.

MTHL project received environmental clearance from MoEF on 11th March 2005. On receipt of the same, GoM through MSRDC Ltd had initiated the bidding process for construction of Sea Link but it could not be concluded. The validity of environmental clearance granted was for a period of five years for commencement of the construction or operation of the project. The proposed alignment passes through coastal regulation zone (CRZ). The Eastern Freeway, which is a north south 4 lane elevated road presently under construction, and the proposed Sewri-Worli East West connector would integrate with MTHL. From the interchange the alignment will follow the approved alignment passing along Timber Depot Road and enter Sewri Mudflats and then continue towards east and traverses over Sewri mudflats, pir-pau jetty, Thane Creek Channel, Panvel Creek Channel and the intertidal zone before turning south to enter the main land at Shivaji Nagar in Navi Mumbai. Vertical clearance of min 9.1m all along the length and maximum 25.2m for navigation purpose is proposed. The project will have Toll Plaza on land on Navi Mumbai side, Bridge Control Station and state of the art intelligent transport system. Casting yards are proposed at Sewri and Nhava outside the CRZ area. However, two temporary jetty will be constructed for movement of the materials.

Rapid EIA has been carried out as per the guidelines of MoEF, GoI. Mitigation measures are proposed to ameliorate the impacts due to the proposed construction and operation of the MTHL especially addressing the issues of mudflats/migratory birds. It is proposed to construct a temporary bridge in the mudflats for transportation of men and machinery at the execution site, thus minimizing the effect on the mudflats. The proposed alignment of MTHL passes through the Coastal Regulation Zone (CRZ) as per the Coastal Zone Management Plans (CZMP) of Mumbai and Navi Mumbai. Out of 22 km length of MTHL, 2.25km of length passes through the CRZ (2km in CRZ I and 0.25km in in CRZ II). Since entire sea link is proposed on viaduct, area occupied by piers will be affected. Compensatory mangrove plantation in an area of 30 ha in Nava side is proposed for loss of 0.1776 ha of mudflats/mangroves.

The project was considered by the MCZMA in its 73rd meeting of the MCZMA on 23rd April 2012 and MCZMA recommended to the MoEF.

- *i)* 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 mangrove plantation in 30 ha area
- *ii)* Proponent shall provide lighting in consulting with the Bombay Natural History Society so as to minimise the likely impacts to the migratory birds.
- *iii)* All the construction equipments shall be provided with exhaust silencer as committed.

- *iv)* Noise containment barriers shall be provided both sides of the bridge in mudflat area (CRZ-IA) so as to minimise the likely impacts to the migratory birds as committed.
- *v)* There shall be no dredging and reclamation for the project.
- *vi) Pre- stressed super structure shall be used in the mud flat area for construction as committed.*
- vii) Permission from the High Court of the Bombay shall be obtained with respect to mangrove cutting.
- viii) The muck 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.
- ix) Proponent informed that there are no fishing activity in the area since it is a navigation channel for the nearby ports. However, navigational channel is provided with 25m for ships and 9.1 m for fishing boats.
- *x)* All the recommendations of the MCZMA shall be strictly abided.
- *xi)* Proponent informed with respect to condition about EC for built up area more than 20,000 sqm that there is no building construction beyond 20,000 sqm hence prior EC is not required.

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

4.3 CRZ clearance for west coast water transport project by M/s MSRDC [F.No.11-71/2012-IA-III.]

As presented by the project proponent, the Maharashtra State Road Development Corporation (MSRDC), Govt of Maharashtra proposes to establish "Passenger Water Transport System along West Coast of Mumbai" which will cover approximately 55 km from Borivli to Nariman point with six stops along the way. The six passenger water transport (PWT) terminals are 1) Nariman Point 2) Bandra 3) Juhu 4) Versova 5) Marve and 6) Borivali (near existing jetty) situated along the west coast of Mumbai. GoM has appointed Maharashtra State Road Development Corporation (MSRDC) as a nodal agency to implement the Passenger Water Transport Project through a Government Resolution (GR) No. IWT 2098/ CR-31/ Part -3/PRT 1 Home Department in 2002. Various studies have been conducted to ascertain the feasibility and the most economic route including Techno-financial feasibility study of Passenger Water Transport System along west coast of Mumbai, by Louis Berger Group, Techno-financial feasibility study of Passenger Water Transport System along west coast of Mumbai, by Mott MacDonald, Mumbai, Mathematical Model Studies for examining Wave Tranquillity and Optimising Layouts for Passenger Water Transport Terminals in Mumbai, by Central Water and Power Research Station and Passenger Ferry Operator Study for Passenger Water Transport Terminal locations along West Coast of Mumbai, by Mott MacDonald

To provide a fast and sustainable mode of transport to the city of Mumbai. With the natural environment facilitating, the development of waterways would be an alternative in Mumbai to ease commuting and save on time and fuel consumption.

The project envisages the development of both offshore and onshore facilities. The ferry terminals are proposed at Nariman Point, Bandra, Juhu, Versova, Marve and Gorai. The construction of terminals is planned in a phased way. In Package I terminals would be constructed at Nariman Point, Bandra and Juhu while in Package II terminals are proposed at Versova, Marve and Gorai.

The infrastructure development on shore facilities proposed is terminal building and access roads. The amenities proposed in the terminal building are ticket counters, arrival and departure lounge, office for ferry operators, security booths, traffic control room, restaurants, rest rooms, book stalls, telephone booths, ATMs and first aid facilities.

Descrip	Locations								
tion	Nariman Point	Bandra	Juhu	Versova	Marve	Boriv ali			
Plot area (sq. m)	40,000	32,000	9,750	30,000	10,300	30,000			
Min. BUA (sq. m)	4000	3000	750	3000	3000	3000			
Berthin g facilities	Catamaran 8 Hoverport 2 Total 10	Catamaran 6 Hoverport 2 Total 8	Catamaran - Hoverport 2 Total 2	Catamaran 4 Hoverport 2 Total 6	Catamaran 2 Hoverport 1 Total 3	Catam aran 8 Hover port 2 Total 10			
Termina l area on land		90 %	100 %	10 %	50 %				
Termina l area on water	100 %	10 %		90 %	50 %	100 %			

Area Available for Development at Each Location

	160,000	50,000	 50,000	300,000	711,00
Dredgin					0
g					
Cu. m.					
Breakw	break -	extension	 offshore	No break -	
ater	water	of existing	breakwater	water due	
	250m long	breakwater	of 780m	to natural	
	on south	to 200m	length	protection	
	and 300m	length		enjoyed by	
	long on			it on	
	north of			account of	
	backbay			being	
	entrance			located in	
				Manori	
				creek	

Demarcation of High Tide Line and Low Tide Line for Passenger Water Transport Terminal locations along West Coast of Mumbai, by Centre for Earth Science Studies, 2005 and by IRS 2012, MCZMA has recommended the project. As per the MCZMA, the project area lies in the CRZ I and CRZ II. MSRDC has prepared extensive EMP and DMP for the project. They have budgeted at present Rs. 600 lakhs towards EMP for construction phase and Rs. 140 lacs during operational phase which may go up during implementation of the project.

It is noted that the project involves capital dredging and breakwaters. Therefore the project will attract the EIA Notification, 2006 as amended in 2009. The claim of the proponent that there is no cargo handling hence it will not attract EIA Notification, is not acceptable. Port and Harbour is the activity covered under EIA, Notification, 2006 which normaly includes breakwater and dredging. Adding the component specifically vide the amendmend notification in 2009 implies that these to be regulated with proper Environmental Impact assessment and Management. The Committee thefore finalized ToR.

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

- (i) Submit a copy of layout of all the terminals superimposed on the HTL/LTL map demarcated by an authorized agency on 1:4000 scale along with the recommendation of the SCZMA.
- *(ii)* Details of land breakup along with land use plan and Details of green belt development.
- (iii) Submit the details of mangroves areas, mangrove conservation plan, details of destruction if any and required permission from High Court of Bombay

- *(iv)* Submit the details of the reclamation along with the source of materials and its quantity & quality.
- (v) Submit the details of shore line changes along with the shore protection if nay required.
- (vi) Submit details of Environmental Management Plan and Environmental Monitoring Plan with parameters and costs.
- (vii) Submit details of Risk Assessment, Disaster Management Plan including emergency evacuation during natural and man-made disaster like floods, cyclone, tsunami and earth quakes etc.
- (viii) Submit the details of the fishing activity and likely impact due to the activity.
- *(ix) Details of solid / liquid wastes generation and their management.*
- (x) Details of Water requirement, source, .
- (xi) Submit the details of the eco-sensitive areas, if any.
- (xii) Submit the details of Oil Spill Contingent Management Plan.
- (xiii) Submit the details of the dredging if any, details of dredging sludge quantity quality in terms of its toxic metals (atleast Cr+6, Arsenic, Mercury, and lead) and its disposal with quantity (reclamation/dredging disposal site) If disposal is in sea, location, the justification for selecting such location, the dispersal of dumping material, its effect on marine environment, effect of fishes.
- (xiv) Submit the details of study on connectivity and its carrying capacity (both road and railway).
- (xv) The General guidelines as per the annexure-II to this Minutes shall also be considered for preparation of EIA/EMP.

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.

4.4 CRZ clearance for retaining wall service road, relocation of police chowki along the bank of Mithi River Mumbai b M/ s MMRDA F.no.11-64/2012-IA-III]

As presented by the project proponent, the project involves construction of an 11 km long retaining wall on the Mithi river at S. No.4, Parigh Khadi, a retaining wall on Vakola nalla at S. No. 378, Kolekalyan & 341 of Bandra and construction of Bharat Nagar Police Chowki along the bank of the Mithi river. The development shall comprise of 9,320 m2 area for the retaining wall and for the service road 55,671 m2 area. The total permissible built up area of proposed project for retaining wall (11 km): 9,320 m2 and for service road: 55,671 m2. This Proposed construction of retaining wall will provide improved tidal exchange and adequate conveyance capacity during floods in Mithi river & Vakola Nalla. Service road along the retaining wall will be used for periodic desilting operation in the river & adjoining channels. Encroachment will be arrested in the river bed. The Mithi river meets Arabic sea at Mahim causeway bridge. The total water requirement during Construction Phase is 6 m3/day (for construction purpose only. No water will be required after completion of work). The power supply necessary for the proposed project will be met by D G set of capacity 100 kVA. Fuel required: 10 Ltr/hour. The estimated project cost is approximately Rs.193.37 Crore.

MCZMA had recommended the project vide letter No. CRZ-2010/CR-219/TC-3 dated 18.06.2012. Retaining wall on Mithi River falls in CRZ-I, II & III) and the relocation of Polic Chowki in CRZ-II.

During the discussion, the following points emerged:

- *i)* All the recommendations of MCZMA shall be complied with.
- *ii)* There shall be no waste disposal in CRZ area.

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 CRZ clearance for Improvement and conservation of cultural/ Archaeological assets-Ganjam fort. Ganjam (Polagarda) by State Archeology, Deptt. of Culture, Orissa (F.No. 11-32/2011-IA.III).

It is noted that the proposal is for conservation of existing Archaeological structure hence it will not require clearance under CEZ Notification, 2011. Only demolition and reconstruction of Archaeological building require clearance.

4.6 CRZ clearance for improvement and conservation of cultural/ Archaeological assets-of Bhabakundaleswar Temple Manik Patna in Puri District, Orissa by State Archeology, Deptt. of Culture. Orissa (F.No. 11-33/2011-IA.III). It is noted that the proposal is for conservation of existing Archaeological structure hence it will not require clearance under CEZ Notification, 2011. Only demolition and reconstruction of Archaeological building require clearance.

4.7 CRZ clearance for construction of Surge protection embankment from Sandhkud Basti to Oil Refinery Project by M/s Paradeep Port Trust, Odisha [F.No. 11-67/2012-IA-III]

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

4.8 CRZ Clearance for intake and outfall facilities for 1X350MW Coal based Supercritical Thermal Power Plant at Ankulapatur Village,Chillakur Mandal, SPSR Nellore District, A.P by VSF Projects limited, Hyderabad.

As presented by the project proponent, the proposal involves construction of intake and outfall facilities for 1X350MW Coal based Supercritical Thermal Power Plant at Ankulapatur Village, Chillakur Mandal, SPSR Nellore District, A.P. The project is being implemented in Ankulapatur Village, Chillakur Mandal, SPSR Nellore district of Andhra Pradesh. The project site is located at a distance of about 18 kms from National Highway (NH-5) and 14 kms from Krishnapatnam and 60 kms from Nellore. The Project envisages installation of 1 module of 350 MW generating facilities consisting of pulverized coal fired Super critical boiler, steam turbine generator with associated auxiliaries, creek water cooling systems, power evacuation system, water system and all other facilities which are required for such thermal power plants. Water for the plant will be drawn from the creek. The total requirement of water will be around 3178 m3 per hour. Storage of 19068 m3 capacity to hold 6 hours requirement of water will be constructed at the plant site. The APSCZMA had recommended the project

During the discussion, the following points emerged:

- *(i) Revise the diffuser outfall details for separation of the plumes.*
- *(ii)* Submit the details of layout on the CRZ map including existing features of the site.
- (iii) Submit the details of the worst (lowest in seven years over consecutive days) flow scenario of the creek at the intake point.

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.

4.9 CRZ Clearance for sea water intake and brine discharge from 1.2 MGD desalination plant for 400000 TPA Rebar Mill & 55.000 TPA Ferro Chrome

Plant at Gopalpur Ganjam District, Odisha by M/s Tata Steel Ltd. [F.No.11-63/2012-IA.III]

As presented by the project proponent the proposal involves construction of sea water intake and brine discharge from 1.2 MGD desalination plant for 400000 TPA Rebar Mill & 55.000 TPA Ferro Chrome Plant at Gopalpur Ganjam District proposed by M/s Tata Steel Ltd. Tata Steel intends to put up a 400,000 TPA Rebar mill and 55,000 TPA Ferro-chrome Plant in Chatrapur Tehsil of Ganjam District in Odisha. As there is no dependable surface water source in the near vicinity of the site, Tata Steel had planned to put up a sea water desalination plant to meet make make-up water requirement for Plant operations. Ultimate water requirement is envisaged at 40 MGD of desalinated water.

The Rebar Mill, Ferro Chrome Plant and current 1.2 MGD capacity Desalination Plant are in non-CRZ area. Sea Water Intake, Brine Discharge Outfall, Pipelines, Sump & Pump House, etc are coming under CRZ. The proposal envisages intake Volume, 568 Cum / hr (Initial Phase), 28406 cum/hr (Final phase), Brine Discharge : 341 cum /hr (Initial Phase), 20831 cum/hr (Final Phase), Intake / Discharge: Intake & Outfall (multiple port diffusers) are located at 1000 m inside sea at 12 m water depth. Intake & Outfall are 600 m apart. 1000 m long pipelines are buried 2 m below seabed. Seawater sump and pump house beyond 200 m distance from HTL in an area of 40,000 sq m (*in CRZ III*), Pipelines for sea water intake and outfall covering in CRZ I – 300m, in CRZ III – 300 m and in CRZ IV – 1000 m, etc.

Along with the terrestrial EIA study, M/s National Institute of Oceanography (NIO) undertook the studies in January 2011 for demarcation of HTL, LTL and CRZ boundary lines at project site. M/s Indomer Coastal Hydarulics Pvt. Ltd, Chennai assessed the marine aspects in February 2011, in which the seawater quality, tidal waves and current data, bathymetry and salinity dispersion of brine discharge for the final phase have been studied.

Public hearing for the Main Plant was conducted on 20th September 2011. State Pollution Control Board, Odisha granted Consent to Establish for the project in January 2012. MoEF granted Environmental Clearance to the project on 14th August 2012.

The CRZ component of the Project has been appraised by Odisha Coastal Zone Management Authority (OCZMA) on 8th May 2012 and OCZMA has forwarded the CRZ Recommendation to MoEF on 16th June 2012 for grant of CRZ Clearance for the project.

- *i) Proponent shall shift the sump and pump house beyond 500 m from HTL. Submit the size of the sump.*
- *ii)* The outfall shall be at 1 km from shore at 12 m CD

- *iii)* Screens and trash bars shall be provided to avoid entry of fishes and fish larvae in to the system.
- *iv)* All the recommendations of the CZMA shall be followed.
- *v)* There shall be no disturbance to the sand dunes.

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

4.10 Environmental and CRZ clearance for the installation of single point mooring (SPM) project at Ennore Coast, Tamil Nadu by M/s. Chennai Petroleum Corporation Ltd. [F.No.10-19/2009-IA-III].

As presented by the project proponent, a new crude oil pipeline of 42? dia. was proposed to be laid to bring crude oil from Chennai Port to Manali refinery for a distance of about 17 Km. This pipeline was to originate from Bharathi Dock III of Chennai Port and routed along the Chennai-Ennore Port connectivity road. Since there was abnormal delay in obtaining the right of way for the pipeline from to Chennai Port to refinery SPM is proposed. The Single Point Mooring (SPM) with Crude Oil Terminal within Enoore Port Limit is to import of Crude Oil through VLCC Tankers for its Manali Refinery. The location of SPM is at about 6.5 Km in the Sea from the landfall point (LFP) of Enoor Port. Offshore Pipe Line upto COT planned at Ennor Battrey Limits. Onshore Pipe Line from COT to Refinery mostly through un-inhabitant areas and may cross the Ennor Creek and Bucking Ham Canal.

The proposal was considered by the EAC in its 75th meting held on 23rd -24th April, 2009 finalized ToR including conduct of PH

During the discussion, the following points emerged:

- (i) It is noted that the pipeline route has been changed from the original pipeline and SCZMA recommendation is awaited. Further, the Public Hearing was conducted for the original proposal.
- (ii) Shall conduct Public Hearing for the revised project
- *(iii)* Submit recommendations of CZMA.

In view of the foregoing observations, the committee recommends to delist the proposal till the above requirements are fulfilled. The proposal shall be considered afresh only after the above observations are addressed and submitted.

4.11 Environmental clearance for 4-Lane with paved shoulder of the section Km 98/2 to Km 46/6 of NH-27 (Mangawan to MP/UP Border) in the State of Madhya Pradesh by Madhya Pradesh Road Development Corporation Limited [F.No. 10-46/2011-IA-III].

As presented by the Project proponent, the proposal involves 4-laning with paved shoulder of the section Km 98/2 to Km 46/6 of NH 27 (Mangawan to MP/UP Border) in the State of Madhya Pradesh. The existing length of the road is 51.60 kms and the design length is 52.074 kms. The existing road having 7.00 m wide carriage way with 2 to 2.50 m wide hard shoulders. The proposed road will have paved shoulders with divided carriage way having two lane 7.00 m wide carriage way with 1.5 m wide paved shoulders i/e 5.5 m wide service road, and in open country area having 7.00 m wide two lane with 2.50 granular shoulders in either side of the project. The project road passes through 12 villages / towns. Land acquisition of 191.02 ha is required for the project. The project requires diversion of 23 ha forests land. The proposed widening includes 11 no. of Bay s on both sides, 2 no. of truck lay bay, 01 toll plaza, 9 & 2 no. of Vehicular & pedestrian underpasses. 6 temples, 25 no. of OFC, 2 no. of well, 2 hand pumps, 10 No. of Water tanks, 29 bore wells and 5 transformers will be affected due to the project. One no. of Major bridge will be widened and out of 9 nos of minor bridges, 6 will be reconstructed. The corridor crosses one Major river- Tamas and few small streams. About 1200 nos. of tress will be likely to be affected by the widening of the road. There is no wildlife sanctuary within 10 km from the road.

The project was considered by the EAC in its 103^{rd} meeting held on $13^{th} - 15^{th}$ July, 2011 and finalised ToR accordingly ToR was granted on 04.08.2011 including conduct of Public Hearing. Public Hearing was conducted on 26.02.2012 at Government Senior Secondary School, Garh, Rewa District.

- *i)* The proposal requires 23 ha. of Reserve forests. Necessary Stage-I permission for diversion of forest area shall be submitted.
- *ii)* The project indicates 1200 trees will be cut. Avenue plantation shall be carried out as per IRC (SP-21-2009) apart from statutory requirement based on land availability of land within proposed ROW. Compensatory afforestation of three times trees shall be carried out. Necessary prior permission shall be obtained for cutting of trees from the competent authority.
- *iii)* 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.
- *iv) R&R shall be as per the guidelines of State/Central Government.*

- *v) IRC* guidelines shall be followed for widening & up-gradation of road.
- *vi)* The responses/commitments made during public hearing shall be complied with letter and spirit.
- vii) 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 after submission of Stage –I Forests Clearance, with the above condition in the Clearance letter for strict compliance by the project proponent.

4.12 Environmental clearance for 4 laning with dual carriageway configuration for Km 50.000 to 209.500 (Patiala – Sangrur – Bamala Bathinda Section) of NH–64 in Punjab State by M/s Central Works Division, PWD, B&R, Patiala (F.No.10-70/2011-IA-III)

The proposed road is four laning of existing two lane highway from Patiala - Bathinda Section (Km 50.000 to km 209.500) including Southern Patiala Bypass, proposed Sangrur Bypass and Dhanoula Bypass of NH-64 in the State of Punjab under NHDP Phase-V on DBFOT Basis. The terrain along the project road is plain except a small stretch of rolling terrain near Bathinda. Existing length of project road is about 159.500 km. Proposed length of project road including bypasses is about 166.445 km. The project road passes through Patiala, Sangrur, Barnala and Bathinda districts in the state of Punjab. Existing ROW width varies from 15 to 45 m. The proposed ROW width will be minimum 45 m except proposed Bus Bay, Truck lay byes and toll plaza locations. For four laning of the existing project road, no Reserve Forest land diversion will be required. However, 281.8045 ha PF declare on NH-land may be diverted. There are two wildlife sanctuaries situated within 10km radius of project road viz. Bir Motibagh WLS (located 50m-300m away from project road). Project road does not involve diversion/acquisition of Wildlife Sanctuary. No National Park and critically identified area by CPCB is existing within the 10km radius of the project road.

For four laning of the project road, from Patiala-Bathinda including Southern Patiala Bypass, proposed Sangrur Bypass and Dhanoula Bypass will require felling of 65370trees (girth size >29cm) and 60669 plants(girth size <30cm) within the ROW of the project road and1160 tree in agriculture land.

Three Bypass proposed out of them Southern Patiala Bypass (in between km 50.644 to km 64.200) of NH-64 is existing 2-lane road maintained by BRO and rest two are new alignment proposed in agriculture land in between km 106.750 to km 116.000 (Sangrur Bypass) and km138.075 to km 142.810 (Dhanoula Bypass) of project road.

Approximately 149.9536 ha of non forest land may be acquired for four laning of the project road including bypasses. There will be 1 nos. of major bridges, 29 (23 on Main Carriageway and 6 on Service Road) minor bridges and 279 culverts in the project road. In the four laning of the project road, 10 vehicular underpasses and 20 pedestrian/cattle underpasses have been provided. In the project road, flyovers have been proposed at 12 locations. The service roads have been provided in the length of 105.114 Km (both side) at 33 locations. Bus bays have been provided at 60 locations (LHS+RHS) and truck lay byes at 2 locations. All major junctions (10) and minor junction (38) will be improved in the project road. Toll plaza is proposed at 3 locations in the project road. About 554 structures will be affected. The budget for environment management, monitoring and including compensatory afforestation has been earmarked as approximately Rs. 368 Crore. The estimated cost for the project road is Rs. 1269 Crore. The estimated total cost of the project road is Rs. 1686 Crore.

The project was considered by the EAC in its meeting held on 104th meeting held on 17th -19th August, 2011 including conduct of Public Hearing. Public Hearing conducted on 25.04.2012 at Patiala- Bhawanigarh raod, Sekhpura.

- (i) The project road is within 10 km from Bir Motibagh Wildlife Sanctuary (50 to 300 m) and Patiala and Bir Aishwan Wildlife Sanctuary, Sangrur (250 – 300m), hence, necessary clearance from NBWL shall be obtained.
- (i) The proposal requires 281.8.45.ha. of Protected forests. Necessary Stage-I permission for diversion of forest area shall be submitted.
- (ii) The project indicates 65370 trees fall in ROW, however, bare minimum trees will be cut. Avenue plantation shall be carried out as per IRC (SP-21-2009) apart from statutory requirement based on land availability of land within proposed ROW. Compensatory afforestation of three times trees shall be carried out. Necessary prior permission shall be obtained for cutting of trees from the competent authority.
- *(iii)* Adequate underpass shall be provided at village Chupur as committed.
- (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 after submission of Stage –I Forests Clearance, with the above condition in the Clearance letter for strict compliance by the project proponent.

4.13 Finalisation of ToR for improvement and widening (four- laning) of Jodhpur-Pali road Project of section NH-65 in the State of Rajasthan by SE, PWD, NH Circle, Jodhpur, Rajstahn [F.No.10-61-2012.]

As presented by the project proponent the proposal involves widening (four-laning) of Jodhpur-Pali road Project of section Nh-65 in the State of Rajasthan. The Proposed Project road starts from Km 308.00 of NH-65 at the Jalamand Chauraha in Jodhpur city and ends at meeting point of existing state Bypass of Pali town at Km 114.000 of NH 14 following the existing State Bypass of Pali town and excluding portion of existing NH-65 from Km. 366/000 to Km. 377/000. The project road passes through Jodhpur and Pali districts. The project road passes through plain terrain. Total project length is 71.553 km. The land along the project road is mostly passing through agricultural land. Along few sections combination of barren land and built-up areas with commercial development is observed. There are a few settlements like Kuri, Mogra Kalan, Kakani, Nimbala, Rohat, Mukanpura, Bandai, Kharda. The existing ROW is varying from 18 to 56m in general, 60m ROW is available for existing Pali bypss. The project road does not pass through any National Park/Wildlife Sanctuary/Reserved Forest/Protected Forest area. Provision has been made for two lane to four lane with 2 m granular shoulder on both sides and 4.5m wide median in rural section and four lane with 1.5m footpath/drain both side and 0.61m NJ Crash Barrier median in urban section. Proposed ROW for widening varies from 45 to 56m and 100m at toll plaza location. Total land acquisition is 105.24 Ha out of which 39.18 Ha is Government Land and 66.05 Ha is Private land.

There is no proposed bypass/realignment along the project corridor, existing pali bypass of total length 12.315km will be widened from 2lane to 4 lane. 60m ROW is available for widening of existing Pali bypss.

The project road passes through 10 villages out of which 3 are in Jodhpur district and 7 in Pali district. There are reconstruction and widening of 6 major bridge, 6 minor bridge, 2 flyover/grade separator, 45 culverts and 1 ROB along the project corridor Construction of 2 new cattle crossings and 2 grade separators has been proposed. 14 Bus Bays and 1Truck lay byes have been proposed. Foot Path and lined drain is proposed along major towns in 10.285 Km length at Jodhpur, Jaipur Old Bypass Junction & Rohat. The project road crosses five river streams i.e. Luni (at km 324.4), Rediya (at km 348.100), Guhiya (at km 353.520), Bandi (at km 370.0) and Jojri (at km 317.5). Use of fly ash cannot be considered on this project as there is not any thermal power plant within 100 Kms of the project corridor.

325 KL / day water for construction period shall be required for construction and other purpose including plantation, dust suppression and labor camps (215 KLD for Road making, 70 KLD for Dust suppression and 40 KLD for domestic purpose). Water requirement for the construction of the road will be extracted from perennial river/ground water resources after taking permission from concerned authorities. There are about 1100 PAPs due to improvement of project road. The entitled persons would be compensated according to the provisions of NH Act 1956.

About 1440 no. of trees girth more than 30 cm are to be felled. There is no endangered or protected species on the project road. The avenue plantation shall be carried out as per IRC SP 21: 2009 on the available land within proposed ROW. Capital Cost (Civil Work) is Rs. 266.16 Crores. Cost of implementation of EMP is Rs. 2.60 Crores which includes environmental monitoring budget during construction and operation phase. Cost of R&R is 7.15 Crores and land Acquisition cost is 65.96 Crores.

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

- (i) It is indicated that approximately 1440 nos. trees falls within ROW, however, bare minimum trees shall 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.
- (ii) Design is to be updated as per the latest IRC guidelines/practices
- (iii) 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.
- (iv) 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.
- (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) Submit the details of the road safety audit and plans for meeting the IRC safety requirements.

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.

4.14 Finalisation of ToR for rehabilitation and upgrading to 2 lane/2 lane with paved shoulders configuration and strengthening various National Highways, NH-23) in the State of Odisha [F.No. 10-64/2012-IA-III]

As presented by the project proponent, the project involves rehabilitation and upgrading to 2 lane/2 lane with paved shoulders configuration and strengthening Pallhara-Pitri junction section of NH-23 in the state of Odisha. The proposed road stars from Pallhara (km 337.470) to Pitri Junction (km 405.450) via Khamar in Dhenkanal and Angul Districts of Odisha. The existing road width varies from 5.5 m to 7.5 m. The total length of the project road is 68 km. The total land requirement for the project is 45.94 ha. All the land likely to be acquired is privately owned agricultural/ waste land except 5.97 ha Revenue forest land. The existing ROW varies from 12m to 24m except for new byepasses and some isolated locations where ROW is less than 12m or more than 24m. The project involves 5.97 ha of Revenue Forest Land. Approximately 2750 number of trees will be cut for the proposed project. There are 10 Major/Minor bridges, 163 Culverts, 6 road realignments, 3 curve improvement and 4 Major junctions. Side drains have also been provided along the project road. The project road crosses Samakoi river at km 376.200. Besides, Pallahara bypass crosses Makada nall at km 338.300. construction water requirement will be met through combination of Surface water from nearby Streams (Samakoi river) and groundwater after prior permission from concerned authorities. There will be no use of timber or forest products. Critically polluted 'Talchar' area is about 10 km from the end point (Pitri Junction) of project road.

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

- (i) The project road passes through Reserved forests, however, no forest land is required. The proposal indicates the acquisition of 1.47 ha Revenue 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 approximately 6700 nos. trees falls within ROW, however, bare minimum trees (about 2800) shall 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) Design is to be updated as per the latest IRC guidelines/practices
- *(iv) 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.*
- (v) 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.
- (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)Submit the details of the road safety audit and plans for meeting the IRC safety requirements.

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.

2nd Day: 20th September, 2012:

4.15 CRZ clearance for proposed construction of additional tankage project at Paradeep Terminal, Odisha by M/s Indian Oil Corporation Ltd. (F. No. 10-39/2007-IA.III)

As presented by the project proponent construction of additional Tankage project at Paradeep Terminal, Odisha. Indian Oil corporation proposes to augment the tankage facility at existing POL terminal at Paradeep, Odisha and laying of Furnace Oil pipeline from North jetty to Paradeep terminal.

The project site is located at Paradeep, Jagatsinghpur district of Orissa having latitude and longitude of 20° 17' 08" N and 86° 38' 60" E respectively. The nearest Railway

station is Paradeep at a distance of 1 Km and National High way is NH-5A. Existing tankage capacity are MS: 2 x 13995 KL, SKO- 24300 KL and 23970 KL, HSD - 24100 KL and 24365 KL and proposed tankage capacity are : MS - 2212 KL, SKO- 2 x 4382 and 2301 KL, HFHSD- 3 x 2601 KL, ATF - 2 x 5303 KL.

Augmentation of existing Tank Wagon Gantry having loading facility of 08 nos. BTPN TW to 02 nos. full fledged BTPN TW loading Gantry (56 BTPN TW in each rake) for loading of MS/HSD/SKO/ATF with suitable pumping arrangements and allied facilities as per OISD 117/118 norms. Laying of FO pipeline from North Jetty to Paradeep Lighterage Terminal.

Construction of TLF bays for loading of MS/HSD/SKO/ATF/FO with suitable pumping arrangements and allied facilities as per OISD 117/118 norms. Other allied facilities like building and fire protection system as per OISD 117/118 norms.

Odhisa Coastal Zone Management Authority recommended the project vide letter No. EE-E/2012/1372/F & E dated 23rd June, 2012.

During the discussion, the following points emerged:

- (i) It is noted that the HTL demarcation has been done as per CRZ Notification, 1991. It shall be as per CRZ Notification, 2011.
- (ii) Submit plan of action to comply the provisions of MSIHC Rules, 1989.
- (iii) The site features of the proposed pipeline route are not provided. PP shall submit the same along with distance from the mangroves, mitigation measures to prevent likely impacts.
- *(iv)* Submit detailed Disaster Management Plan.
- (v) Submit Oil Spill Contingency Plan with details of infrastructure.

In view of the foregoing observations, the committee recommend to delist the proposal. The proposal shall be considered afresh after the above observations are addressed and submitted.

4.16 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]

M/s. Adani Hazira Port Private Limited (AHPPL), a subsidiary of Adani Ports and Special Economic Zone Limited (APSEZL) formally known as Mundra Port and Special Economic Zone Limited (MPSEZL) has entered into the sub concession agreement with Hazira Port Private Limited (HPPL) promoted by M/s. Shell India for construction, operation and maintenance of the multi cargo terminals, backup facilities and related infrastructure facilities. Multi Cargo Port" by M/s Hazira Port Private Limited, Shell Group was granted EC/CRZ Clearance by MoEF vide F.No. J-16011/11/2003-IA-III on 26th June 2003. Further, MoEF recommended the revised proposal vide F. No. J-16011/11/2003-IA –III on 19th February 2007. Later ToR was issued to Adani Hazira Port Pvt, Ltd, vide F.No. 11-150/2010- IA.III on 07th April 2011, for minor alteration in basin, liquid cargo handling along with storage facilities, other dry & general cargo, Ro-Ro terminals for automobile handling, the dredging upto -15m CD supporting infrastructure facilities along with additional arterial road network connecting to NH – 6 and internal road, rail connectivity to all terminals by MoEF.

Total 12 berths out of which 7 Berths will be developed in first five years plan: Two Container Berths, One Coal Berth, One Liquid Berth, Three Multi-Purpose Berths for handling bulk, break bulk cargo etc. Dredging up to - 15.0 m instead of earlier proposal of -13.5m, Liquid cargo handling facilities along with associated piping & storage facilities Utilities & Supporting infrastructure facilities such as (i) Ro-Ro Terminal (ii) Internal roads, (iii) Rail corridor, (iv) HT Power Transmission Line. Relocation of NIKO existing effluent pipe line and outfall, Proposed Reclamation to the tune of 225.30 ha at North Side of Port Limit & 84 ha at South Side of Port Limit. Desalination Plant of 6MLD Capacity along with intake and outfall facilities. Effluent Treatment Plant of Capacity 2.5 MLD and STP of 2.0 MLD capacity.

The major points raised during the Ph are Pollution control measures, employment oppourtunity, CSR activities, medical facilities, training, precautions for accident preventin and safety etc.

During the discussion, the following points emerged:

(i) Regarding the issues raised during the Public hearing, the Committee noted that reposne of the proponent to the issues raised during the Public Hearing are not specificly addressed in the EIA report. PP shall submit detailed and specific action plan on the issues raised during the Public Hearing.

The Committee recommend to defer the project and will be considered after recipt of the above information.

4.17 Environment & CRZ Clearance for proposed crane roll on Jetty facility at West Port, Mundra by M/s Adani Port & SEZ Ltd [F.No.11-14/2012-IA.III]

As presented by the project proponent the proposal involves construction of crane roll on Jetty facility at West Port, Mundra. APSEZL is proposing to set up a Crane Rollon Jetty facility in the SEZ area and within existing Water Front Development Plan (WFDP) of APSEZL near Tunda Village of Kachchh District Gujarat. APSEZL has handled 64.02 MMTPA Cargo for the year 2011-12. The cargo handling capacity of the proposed Jetty is very limited and for specialized cargo which is insignificant as compared to existing cargo handled by APSEZL. Proposed Jetty is of size 38 m x 68 m against more than 30 km of coastline development under WFDP. The proposed Jetty is having basin area of approx. 8 ha., turning circle diameter of 280 m, Intake channel of 120 m expanded from existing 80-90 m, dredging in the tune of 2.4 Mm³ and total project cost of approx. Rs. 93 Crores.

Power will be generated through DG set during construction phase, Water consumption will be 100 KLD and Domestic sewage generation will be 8 KLD and will be transported & treated through existing CETP of APSEZL. Solid waste will be sent to MSW site in the APSEZL and hazardous waste will be sent to registered recyclers as approved by CPCB. The Gujarat Coastal Zone Management Authority has recommended the project

During the discussion, the following points emerged:

(i) The Sewage shall be treated in the CETP of APSEZ as comitteed.(ii) All conditions stipulated by the GCZMA shall be complied with(iii)No other cargo than the speficied one shall be handled.

The Committee recommends the proposal for Environment and CRZ Clearance after receipt of the information at (i) with the above condition in the Clearance letter for strict compliance by the project proponent.

4.18 Revalidation of Environmental and CRZ clearance accorded for the development of Multipurpose Port at Rewas Raigad by M/s Rewas Port Ltd [F.No. 10-1/2007-IA.III]

The Environmental Clearance (EC) under the EIA Notification 2006 and CRZ Notification 1991 has been granted for the Construction of Multipurpose Port at Rewas, Raigad, vide letter no. 10-1/2007-IA-III dated 3.5.2007 and corrigendum issued vide letter of even number dated 8.6.2007. The present proposal is for extension of validity of the Environmental Clearance.

Rewas Aware Port is planned as a deep water all weather multipurpose port at Rewas Headland in the Alibag Tehsil, Raigad District, Maharashtra. The project is being developed under a Build, Own, Operate, Share, Transfer (BOOST) Concession Agreement with Maharashtra Maritime Board (MMB), with Concession period of 50 years. M/s. Rewas Ports Limited (RPL) is the Special purpose vehicle for the development, maintenance and operation of the port, with MMB having an equity participation of upto 11% in the SPV.

The proposed port is located in the proximity of confluence of rivers Amba, Patalganga and Karanja creek, south of Karanja Fishing Harbour in Dharamtar Creek, at Latitude 18^0 49' N, Longitude 72^0 56' E. Initial phase of development comprises of

construction of 13 berths to cater to the container, dry bulk, liquid bulk, automobiles and general cargo. Out of 13 berths proposed in Phase I, 10 berths are planned on Rewas side and 3 berths on Aware side. The Port will have a design capacity to handle 58.5 mill tonnes of cargo.

The port will cater to 6000 TEU container vessels at all state of tide and 9000 TEU container vessels with tidal window apart from bulk carriers. The approach channel to the port has been designed to be 300m wide with a depth of 14.5m below chart datum. The development has been planned suitably considering the conditions stipulated in the EC and the extent of land transferred/ being transferred by Government of Maharashtra, within the framework of overall project area of 1328 ha on Rewas side and 80 ha on Aware side as approved by MoEF.

The rail connectivity to the proposed port has been planned as a 24 km double line DFC compliant rail link from Hamrapur station on Central Railway. The road connectivity will comprise of a 20 km long 4 lane road from Wadkhal on NH 17 upto the port. The road and rail line have been aligned alongside for a route length of 11 km from the port beyond which the rail line traverses eastward to Hamrapur and the road southward towards NH 17.

The Committee noted that there is a compliant from BEAG alleging that proposal considered and accorded EC by the Ministry and the ne which was recommended by the MCZMA are different, MCZMA suggested to shift towards southwest to reduce mangroves, more ITL, - commercial / residential development in ITL, No EIA for reclamation, As per EIA ? destruction of 170 ha mangroves whereas the actual is 3000 ha.

The proponent has clarified that the MCZMA has suggested to shift the facility to avoid mangrove areas. There will be no commercial or residential, golf course in the premises.

The details submitted and presented were examined by the committee in its meeting held on 5^{th} -7th March, 2012 and sought additional information. The proponent has submitted the information. The details submitted and presented were examined by the Committee.

- *i) Connectivity roads shall be as per IRC*
- *ii)* Though this is a revalidation of the earlier clearance, the Proponent shall submit the copy of the proposal submitted to MCZMA for their records and comments if any. The Ministry may get the comments/ recommendations of MCZMA in view of the CRZ Notification, 2011.

- *Buffer zone of 175 m from mangroves against the requirement of 50 m is proposed.*
- (i) The office building proposed in intertidal zone (ITZ) shall be shifted beyond ITZ.
- (ii) Submit the Corporate Responsibility on Environmental Protection/ management
- *iv)* Submit a map showing the mangroves and buffer zone of 175 m around the mangroves.

The Committee recommends the proposal for Environment and CRZ Clearance after receipt of the information at (ii) with the above condition in the Clearance letter for strict compliance by the project proponent.

4.19 Environment Clearance for development of an Incineration facility for hazardous wastes generating from Ship recycling activity at existing TSDF site, Alang, District Bhavnagar, Gujarat by M/s. Gujarat Maritime Board.[F.No.10-45/2009-IA.III].

As presented by the project proponent, the proposal involves the development of an incineration facility for incinerating hazardous wastes generating from ship recycling activity at existing TSDF site at Alang. The Alang-Sosiya Ship Breaking Yard (ASSBY) is the largest Ship-breaking Yard in Asia, which have a capacity to recycle about 400 ships per annum and can generate about 40 lakhs light displacement tonnage per annum. The stretch of ship breaking yard along the Gulf of Cambay coastline is about 10 km long and Alang-Sosiya Ship Breaking Yard is about 50 km. away from Bhavnagar city.

The TSDF facility was created in the year 2005 on the Survey No 325/1/1 near Alang Village, Dist Bhavnagar. The existing facility has three landfill cells which are already in operation since the year 2005. The land was notified by Gujarat Pollution Control Board in November 2000 under HW Management Rules-1989. Looking at the potential generation of ignitable wastes to a tune of 1000 MT per year in the form of oily sludge, paint chips, thermocol, and cable pieces which require heat treatment, GMB has proposed to install an Incinerator having 5 MT per day capacity on operations 200 days a year.

The Gujarat Pollution Control Board had already authorized GMB in Oct-2005 for installation and treatment of the proposed captive incinerator within existing notified TSDF. GMB requested the committee for waiving of Public Hearing. The Expert Committee after detailed deliberations and considering all the parameters of the project decided not to waive Public hearing, since the project is not located in the notified developed industrial area. The proposal was considered by the EAC in its 78th meeting held on 20th to 22nd July, 2009 finalised ToR including conduct of Public Hearing. Public Hearing conducted on 31.05.2012 at the site.

During the discussion, the following points emerged:

- *i)* 20% of green belt with minimum 2 rows of trees shall be planted all around the boundary of the site. Revise and submit the layout.
- *ii)* Submit the copy of the approved layout for the existing/ proposed facilities at the site.
- *iii)* On line monitoring shall be provided to monitor the air pollutants. The details of monitoring shall be recorded and be submitted along with the six monthly monitoring report.
- *iv)* The guidelines on Common Incinerator of CPCB shall be followed.
- *v)* All the recommendations of EMP DMP shall be strictly complied.

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

4.20 Environmental clearance for the proposed Integrated Common Hazardous Waste Management Facility with common Incinerator at plot No.D2/CH/135, 136, Dahej II Industrial Estate, Bharuch, Gujarat by M/s Saurashtra Enviro Projects Pvt. Ltd (F.No. 10-16/2012-IA.III)

As presented by the Project proponent, the proposal is for development of Integrated Common Hazardous Waste Management Facility with common Incinerator at plot No.D2/CH/135, 136, within Notified Industrial Estate, Dahej II Industrial Estate, Bharuch, Gujarat. The capacity of 10 Million Kcal/hour (Two incineration each having capacity of 5 MKcal/hour), Forced Evaporation system (Stand alone and waste heat recovery system) with capacity of 11.5 KL/hour and other additional facilities of neutralization plant, Blending unit, pyrolysis, laboratory, weigh bridge etc at Plot no. D2/CH/135, 136, Dahej II Industrial Estate, Notified Gujarat industrial estate, Bharuch, Gujarat. The total land area is 23520 sq m. The total project cost is Rs. 35 crores. The site is well connected with road and rail network. The nearest village is Vadadla at distance of 2 Km and the nearest town is Dahej located at distance of 8 Km. There is no national park, sanctuary and heritage site in surrounding 10 Km radius.

Source of water would be GIDC water and allocation for same is obtained. The water consumption for the proposed project is $50 \text{ m}^3/\text{day}$ and the major waste water generation will be from washing, scrubber bleed and domestic waste water; which will be

 20 m^3 /day. The industrial waste water generated will be discharged through forced evaporation. The domestic waste water will be discharged in septic tank and soak pit.

Air quencher, Liquid quencher, Cyclone, Multicyclone, ID Fan, 1^{st} stage scrubbing – Water, 2^{nd} stage scrubbing – Alkaline, Mist eliminator and ID Fan are the air pollution control equipment attached to incineration stack with height of 32 m. Cyclone – 2 nos. and Scrubber will be installed to the stacks of forced evaporation system with height of 32 m. Ash from incineration process and salt generated from forced evaporation system are the source of hazardous waste generated from the proposed project. Ash from incineration process and salt from forced evaporation system shall be send to approved land fill site whereas containers shall be sold to approved recyclers.

The proposal was considered by the EAC in its 110^{th} meeting held on $5^{\text{th}} - 7^{\text{th}}$ March, 2012 and finalized ToR including conduct of Public hearing. Public Hearing conducted on 22.08.2012

The Committee noted that there are complaints against the proponents' similar existing facility at Kutch alleging handling /incineration of plastics, non compliance of consent conditions etc. Since it is related to another facility, ministry can examine it separately.

During the discussion, the following points emerged:

- *(i) Submit the comparison on proposed technology and advance technology viz plasma technology.*
- (ii) Shall provide on line air quality monitoring system.
- (iii) The Residue from the evaporation shall be collected and sent to disposal into the landfill facility. MoU with the Landfill facility provider shall be submitted.
- (iv) The guidelines on Common Incinerator of CPCB shall be followed.
- (v) All the recommendations of EMP DMP shall be strictly complied.
- (vi) 20% of green belt with minimum 2 rows of trees shall be planted all around the boundary of the site. Revise and submit the layout.
- (vii) To consider more green belt, shifting the storage yard further inside the plot, PP can ask for addl area.

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

4.21 Finalisation of ToR for development of western dock by Paradip Port Trust, Odisha [F.No. 11-69/2012-IA-III]

As presented by the project proponent, the project involves development of new western dock complex comprise of six berths handling Iron Ore exports (2nos.), Coal imports (2nos.), Coal exports (2nos.) at Paradip Port, District Jagatsingpur, Odisha. Approximately 160 ha. Forest land involved covering dock basin, stock piles, railway siding and other ancillary facilities. 6 million cum of dredging for development of dock basin. Construction materials for development of Western Dock will be stored in temporary storage area earmarked for this purpose inside the Paradip Port. Approximately 7 KLD of water will be required per day for construction purpose. During construction stage, earth and materials below water will be dredged for making basin. The internal source of water will be met from the source of Taldanda Canal. The power requirement during the operational phase is 40 MW and will be met from Central Electricity Supply Company (CESCO).

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

- *i)* Submit the status of compliance of environmental norms by the existing activity / to the conditions of earlier clearances
- *ii)* Submit authenticated CRZ map prepared by an authenticated agency on 1:4000 scale superimposing layout plan on the map
- *iii) Submit the Corporate Responsibility on Environmental Protection/ management*
- iv) Submit the details of the Mitigative measures for controlling fugitive emission
- *v)* Submit the details o action plan to comply the relevant provisions of MARPOL shall be addressed
- vi) Submit the details of Green Belt
- vii) Submit the details of Shoreline changes at the project site.

The activity is expansion of existing activity and Public Hearing was conducted under EIA, 2006, hence the Committee recommended to waive the PH under 7 (II).

4.22 Finalisation of ToR for solid waste management plant at Ranchi by M/s A 2 Z Waste Management (Ranchi) Ltd. (F. No. 10-56/2012-IA.III)

The recommended to defer the project since the project proponent requested for postponement.

4.23 Finalisation of ToR for development of LNG project at Kakinada Seaports by M/s Kakinada Seaports, Andhra Pradesh [F.No. 11-68/2012-IA-III]

As presented by the project proponent, the project involves development of LNG project at Kakinada Seaports, Andhra Pradesh. Kakinada Seaports Limited (KSPL), along with the potential LNG handling partners are to setup an LNG Terminal using off shore Floating Storage and Regasification unit (FSRU) with an initial capacity of 5.0 MTPA; expandable up to 10.0 MTPA, within the limits of Kakinada Deep Water Port in East Godavari District of the state of Andhra Pradesh. The present cargo handling capacity of Kakinada Deep Water Port is 10.83 MTPA and additional 07MTPA after V, VI &VII berths completion for which the Public Hearing conducted in the year 2010 and subsequently EC accorded in the year 2011.

LNG carriers will unload LNG to stand still FSRU Ship, berthed on the proposed jetties, and sail away. The re-gasified LNG is sent to the shore through an approx. 2.5 Km long sub sea pipeline. The Degasification unit at FSRU shall consist of a vaporizer unit with sea water as heating medium. The sea water is pumped to the Regasification unit; it gets cooled in the process and is discharged back to the sea. An onshore gas metering station(s) will be constructed within the port jurisdiction and gas send-out pipelines will be laid from FSRU up to the metering station.

In order to cater to large LNG Q max ships, it is proposed to widen and deepen the existing navigation channel from 160 mt (at -14mt CD) to \sim 300 mt (at -16mt CD). This shall also involve the dredging of channel, turning basin and berth pockets.

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

- (xvi) Submit the details of the various applicable regulations including safety regulations along with the proposed compliances. Also details of safety aspects associated with handling of LNG vis a vis other cargo in other facilities within the port.
- (xvii) Submit the details of the Hazop analysis
- (xviii) Submit the layout along with the port boundary.
- (xix) Submit details of Risk Assessment, Disaster Management Plan including emergency evacuation during natural and man-made disaster like floods, cyclone, tsunami and earth quakes etc.
- (xx) Submit a copy of layout superimposed on the HTL/LTL map demarcated by an authorized agency on 1:4000 scale along with the recommendation of the SCZMA.

- (xxi) Submit details of storage and regasification, distribution network etc and vulnerability of human habitation vis a vis LNG associated risks.
- (xxii) Type of LNG carriers proposed taking into account the future growth in vessel sizes beyond the present day market trend and the handling aspects of such vessels from environmental considerations.
- (xxiii) Submit the Hydrodynamic study as required under OM dated 3.11.2009.
- (xxiv) Submit the details of the reclamation along with the source of materials and its quantity & quality.
- (xxv) Submit the details of shore line changes along with the shore protection if nay required.
- (xxvi) Submit details of Environmental Management Plan and Environmental Monitoring Plan with parameters and costs.
- (xxvii) Submit the details of the fishing activity and likely impact due to the activity.
- (xxviii) Details of land breakup along with land use plan and Details of green belt development.
- (xxix) Details of solid / liquid wastes generation and their management.
- (*xxx*) Water requirement, source, impact on competitive users.
- (xxxi) Submit the details of the eco-sensitive areas, if any.
- (xxxii) Submit the details of Oil Spill Contingent Management Plan.
- (xxxiii) Submit the details of dredging sludge quantity quality in terms of its toxic metals (atleast Cr+6, Arsenic, Mercury, and lead) and its disposal with quantity (reclamation/ dredging disposal site) If disposal is in sea, location, the justification for selecting such location, the dispersal of dumping material, its effect on marine environment, effect of fishes.
- (xxxiv) Submit the details of study on connectivity and its carrying capacity (both road and railway).
- (xxxv) The General guidelines as per the annexure-II to this Minutes shall also be considered for preparation of EIA/EMP.

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.

4.24 Environmental clearance for rehabilitation and upgrading of existing 2 lane to 4 lane from Solapur to Yedeshi section of NH-211 in the State of Maharashtra and from solapur to Sangareddy section of NH-9 including solapur bypass in the State of Maharashtra, Karnataka and Andhra Pradesh by M/s NHAI [F.No. 10-32/2011-IA-III]

The recommended to defer the project since the project proponent requested for deferment.

4.25 Environmental Clearance for rehabilitation & upgaradation of existing Carriageway 4-lanning from Amravati to Maharashtra/ Gujarat Border section from Km. 166.000 to km 649.000 of NH-6 in the State of Maharashtra by NHAI (F.No. 10-35/2011-IA-III)

As presented by the project proponent, the project road starts near Amravati at km 166.725 and ends at Maharashtra/Gujarat Border at km 649.000 on NH-6. The terrain along the project road is plain except from Km 557.00 to Km 561.000 in rolling and from Km 601.150 to Km 608.00 in hilly terrain. The proposed length of the project road is 484.069 km. The project road passes through the Amravati, Akola, Buldhana, Jalgaon, Dhule and Nandurbar districts of Maharshtra State. Existing ROW width varies from 25 to 30 m. The proposed ROW is 50 m to 60 m. There is no wildlife sanctuary, national park within 10 km distance from the project road. Thirteen (13) bypasses /major realignments are proposed in the project road, namely, Borgaon Manju Bypass (Km 229.420 to Km 234.220), Khamgaon Bypass (Km 293.320 to Km 306.000), Nandura Bypass (Km 314.980 to Km 320.980), Varangaon Bypass (Km 388.800 to Km 392.330)), Jalgaon Bypass (Km 424.560 to Km 441.405), Parola Bypass (Km 483.650 to Km 488.630), Mukti Bypass (Km 504.120 to Km 506.675), Dhulia and Fagne Bypass (Km 515.100 to Km 529.100), Kusumbe Bypass (Km 540.665 to Km 543.780), Ner Realignment (Km 551.540 to Km 553.000), Shewali & Sakri Bypass (Km 570.000 to Km 578.000), Chinchpada Bypass (Km 625.150 to Km 628.820), Sarvad Realignment (Km 630.260 to Km 631.500). 1609 ha land is proposed to be acquired for widening and bypasses on the project road. Proposal for diversion of 48.61475 ha reserved forest land is with state Government. The project road is crossing Uma River (Km 194.900), Katepurna River (Km 221.400), Bhikund River (Km 272.800), Bhikund River (Km 274.600), Bildi River (Km 284.500), Bordi River (Km 302.000), Gyan River (Km 316.500), Vishwa Ganga (Km 332.000), Nalgana River (Km 351.700), Bhagwati River (Km 389.650), Vaghur River (Km 410.700), Girna River (Km 437.700), Anjani River (Km 462.050), Bori River (Km 491.300), Panjhara River (Km 553.350), Kan River (Km 577.450), Bichan River (Km 620.650), Rayangan River (Km 634.700), Rangawali River (Km 640.750). Most of these remain dry during none monsoon season.

Total water requirement will be 1250 kld, which will meet through surface water and ground water sources. Quantity of fly ash proposed to be utilized for embankment as per IRC-SP-58 is about 50,000 cum from Akola Thermal Power Plant which is located close to the project road. 12 existing 2-lane major bridges will be retained while 32 new 4-lane and 20 new 2-lane major bridges will be constructed. 64 existing 2-lane minor bridges will be retained and 227 new 4-lane and 163 2-lane minor bridges will be constructed. Existing 248 culverts will be widened, 141 proposed for reconstruction and 154 new culverts will be constructed. There are 9 vehicular underpasses and 4 pedestrian underpasses exist in the alignment. In the 4 laning of the project road, additional 40 vehicular underpasses and 29 pedestrian/cattle underpasses will be provided. There are 9 ROBs exist on the project road, 3 new ROBs will be provided. The service roads will be provided in the length of 178.28 km at 108 locations. Bus Bays will be provided at 65 locations and truck lay byes will be provided at 12 locations. All major junctions (54) and minor junction (266) will be improved in the project road as per IRC guidelines. Toll plaza is proposed at 7 locations in the project road. Crash barriers will be provided in 22.42 km length at 37 locations.

52700 trees are likely to be felled for 4 laning of the project road. 642 residential structure, 543 commercial structures and 139 residential cum commercial structures) may be affected due to 4 laning of project road. Affected families will be compensated as per National Highways Act, 1956. The budget for environment management and monitoring has been earmarked as Rs. 36 Crores. The estimated cost for Resettlement & Rehabilitation is Rs. 618 Crores. The capital cost of the project is Rs. 3825 Crores.

Public Hearing conducted on 19.01.2012 at Collectorate, Akola, 03.02.2012 at Kolhatkar Sabhagruh, 13.03.2012 at Niyojan Bhwan Dhule, 27.03.2012 at Panchayat Samiti Sabhagruh, Navapur, 11.04.2012 at Shri Ram Bhawan, Vadnera and 15.05.2012 at Collectorate, Jalgaon.

- (i) The proposal indicates the acquisition of 48.61475 ha Reserve forest 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 52700. nos. trees are to be cut. Necessary permission shall be obtained from the Competent Authority for tree cutting. Compensatory afforestation shall be provided as per the norms. 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) Fly ash shall be used in the project.*
- (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

4.26 Environmental Clearance for widening and Improvement of existing 2-lane to 4-lane of Kiratpur-Bilaspur Section of NH-21 in the State of Punjab and Himachal Pradesh (F.No.10-118/2011.IA.III)

As presented by the project proponent, the project road starts from Km. 73.200 at Kiratpur in District Roopnagar in the State of Punjab and ends at Km. 134.500 in Bharadi Village near Bilaspur town in Bilaspur District in the State of Himachal Pradesh. The project road traverses through 25 villages, 7 villages in the state of Punjab and 18 villages in the state of Himachal Pradesh. The existing length of the road is 61.300 km. The proposed length is 26.462 km. wherein widening of existing alignment of 12.732 km starts at 73.200 km and ends upto 85.932 km and construction of 1 realignment of length is 13.73 km with construction of 3 tunnels (length of 1.75 km, 0.65 km, 0.394 km). The existing carriageway varies from 5 m to 7 m with paved shoulder (0.3 m to 0.9 m) and existing RoW varies from 24 m to 42 m, whereas the proposed RoW will be 45 m. The existing landuse along the project corridor is predominantly hilly in the stretch of Himachal Pradesh and plain in Punjab Section. Forest land is 30%, Agriculture area is 26%, Barren area is 14% and rest is others. The proposed road passes through Gobindsagar Wildlife Sanctuary at two locations at Km. 23+100 for 400 meters and at Km. 26+100 for 300 meters. 123 Ha of total land to be acquired for the project, in Himachal Pradesh the total land requirement is 92 Ha and in Punjab the total land requirement is 31 Ha. The proposal for diversion of 39.462 ha (3.15 ha in sanctuary and 36.312 ha in Protected Forest) and 19.5 ha Protected Forest in Punjab. The existing major Bridges are 2, minor Bridges are 4 and Junctions are 5. The proposed improvement involves the total number 22 new bridges, 77 culverts, 5 junction improvements, 26 Bus Bay, 1 truck Lay Bye, 1 toll plaza, 3 Tunnels and 3 Pedestrian cum cattle under pass. Tunnels will be constructed on the basis of controlled blasting technique method by NATM.

8059 numbers of trees present in proposed RoW 45 m however bare minimum trees shall be felled during construction of 4 lane. Total water requirement are 4 lac Kl. 80% from

surface water and 20% from Ground Water. Total estimated domestic Solid waste generation is 1000 kg/day. 3164544 Cum cutting and 3460101 Cum filling are involved in the project. 100% cutting material will be used in filling apart from this the project also required 810907 Mt of aggregate; 437,053 Mt of boulder and 117280 Mt of river sand for construction. There is Guru Gobind Singh Super Thermal Power Plant at Roopnagar which is 25 Km away from the start point Km. 73.200. However concerned authority denied to provide fly ash because they have an agreement with adjoining cement industries. 127 families are partially/completely affected and the affected families will be compensated as per NH Act. Total civil cost for project road is INR 724.82 Cr, addition to this environmental cost is approx 7.5 Cr and R&R cost is INR 11.35 Cr, So, Total project cost will be approx INR 743.9 Cr.

Public Hearing conducted on 29.06.2012 at Massewal Roop Nagar District, Punjab and 02.07.2012 in Bilaspur District, Himachal Pradesh.

- (i) The proposed road passes through Gobindasagar Wildlife Sanctuary at two location. Clearance from NBWL shall be obtained.
- (ii) 3 tunnels are proposed in the proposed road widening project. Controlled blasting shall be carried out. Proponent shall ensure that the details of tunnel shall be informed to the Wildlife Board and Forests Authority while applying for clearance.
- (iii) Project road requires acquisition of 39.462 ha (3.15 ha in Sanctuary and 36.312 ha in protected Forests). 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 8059. nos. trees falls within RoW, bare minimum of them are to be cut. Necessary permission shall be obtained from the Competent Authority for tree cutting. Compensatory afforestation shall be provided as per the norms. 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) Noise barrier and safety measures shall be provided near the school
- (vi) 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.
- (vii) R&R shall be as per the guidelines of State/Central Government.
- (viii) IRC guidelines shall be followed for widening & up-gradation of road.

- *(ix)* The responses/commitments made during public hearing shall be complied in letter and spirit.
- (ix) All the recommendation of the EMP shall be complied in 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

4.27 Environmental Clearance for widening and improvement of existing carriageway to 2/4 lane of Bilaspur-Ner Chowk section of NH-21 from Km 134.500 to km 186.500 in the State of Himachal Pradesh (F.No.10-52/2011-IA-III).

As presented by the project proponent, the project road of NH-21 starts at Km.134+350 and ends at Km.186+650. The existing road is a 2 lane carriageway with earthen shoulder and the length is about 63.5 Km. The improvement proposal is of total design length 57.913 Km (including Sunder nagar Bypass and the Link Connectivity) which consists of 4-lane new construction of New alignment taking off from existing NH-21 near Neoni Chowk to Jarol Village (Km.126+500 to Km.159.070) of length is 32.570Km. The projected traffic indicates that the project road will need to be widened to 4-lane immediately. The Engineering investigations carried out on the existing road revealed that the existing road is deficient in geometrics and improving the geometrics will involve deep cuts and high fills. There are structures on the hills and valleys all along the project road and constructing these large fills and cuts shall not be feasible and shall involve large scale rehabilitation/resettlement. Accordingly three options were examined for the improvement of the Project Road Section which are

Option I: Widening of the Existing Road to 2-lane with Paved Shoulder Option II: Alternative New Alignment on the Eastern side of the Existing NH21 Option III: Alternative New Alignment on the Western side of the Existing NH21

Based on the merits and demerits, the alternative new alignment on the western side of the existing NH21 between ferry site near Neoni Chowk to Proposed Sundar Nagar bypass was recommended and adopted for implementation. The proposed project road passes through Govind Sagar lake in a length of 1.57 km at 6-8 locations declared as a Sanctuary area in Dist. Bilaspur. It has been recently proposed for denotification by the State Govt. The project road passes through Protected Forest falling under Bilaspur Forest Division in district Bilaspur whereas Suket and Mandi Forest Divisions in district Mandi. The proposed road passes mostly through hilly and mountainous terrain of Himalayan range, but part of it crosses through agricultural, forest land and built-up area.

Existing ROW width varies between 11 to 42 m at different location. The Proposed ROW width is 45m except at the existing widening of NH-21 with 24m-30m and link connectivity & tunnels with 20m. The proposed project passes through 44

villages, which fall in two districts namely Bilaspur and Mandi. The proposed length of the alternative new alignment of NH 21 is 57.913 km and the existing length of road is 63.5 km. 189.2 ha of land is proposed to be acquired for this project (59.64 ha Govt. land and 129.52 ha Private). 26.71 ha. of forest land to be diverted for the proposed project. There are 2 bypasses viz. Sunder Nagar Bypass and Ner Chowk Bypass proposed in the project stretch and total length of bypass is 10.228 Km.

Existing Widening from Jarol Village to Start of Sundar Nagar bypass (follows existing road) (Km.159.070 to Km.167.473) of length 8.403Km. Proposed Sundar Nagar Bypass from Km. 173.904 to Km. 179.582 (2 lane to be constructed by State PWD and another 2 lane to be constructed by NHAI.) – 5.678 Km.). Existing widening from End of Sundar Nagar Bypass to Start of Proposed Ner Chowk Bypass (Km.179.582 to Km.184.323) of length 4.741Km. Proposed Ner Chowk Bypass - (Km.184.323 to Km.188.874) of length 4.550Km. Link Connection to ACC Cement Plant of length 1.971 Km. Existing (3 major bridges, 10 minor bridges) whereas proposed 10 major bridges and 12 minor bridges, 222 Culverts exists and 144 nos proposed (83 nos new culverts, 61 nos reconstruction of existing culverts), 1 flyover, 1 pedestrian/Cattle underpass, Truck lay-bye 2, and 1 Toll Plaza at km 151+735 proposed along the entire stretch. There are 12 major and 18 minor junctions on the existing road whereas 5 major junctions and 22 minor junctions proposed on the project road. Provision of 2 tunnels (length of long tunnel is 1.410 km and short tunnel is 0.860 km). A total of 10000 trees are found within the Proposed Right of Way, which will be impacted due to new alignment and proposed bypass 1941 households comprising of about 15491 Project affected people (PAPs) also fall in PROW. PAPs shall be compensated according to the provision of NH Act 1956. 1400 KL/day of water is required for construction and 840 KL/day water will be abstracted from existing borings present along the project road and remaining from surface water sources. Fly ash will be utilized for construction of embankment from Guru Gobind Singh super thermal powerplant at Ropar near Ghanauli, Punjab as per MoEF notifications; The total project cost is Rs. 1000.49 crore (including civil cost, Environmental cost, shifting of utilities, land acquisition and R&R cost). The total cost for Resettlement and Rehabilitation is approximately Rs. 183.96 crore. An environmental budget of Rs. 2.03 crore (two crores and three lacs only) has been drawn. The Public Hearing was conducted for the project.

- *i)* The proposed road passes through Gobindasagar Wildlife Sanctuary at two location. Clearance from NBWL shall be obtained.
- *ii)* 2 tunnels are proposed in the proposed road. Controlled blasting shall be carried out. Proponent shall ensure that the details of tunnel shall be brought to the Wildlife Board and Forests Authority while applying for clearance.
- *iii)* Project road requires acquisition of 39.462 ha (3.15 ha in Sanctuary and 36.312 ha in protected Forests). 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 8059. nos. trees falls within RoW, bare minimum are to be cut. Necessary permission shall be obtained from the Competent Authority for tree cutting. Compensatory afforestation shall be provided as per the norms. 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) Noise barrier and safety measures shall be provided at School.*
- vi) 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.
- *vii) R&R shall be as per the guidelines of State/Central Government.*
- viii) IRC guidelines shall be followed for widening & up-gradation of road.
- *ix)* The responses/commitments made during public hearing shall be complied with letter and spirit.
- *x)* 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 Request for waiving the condition No.XVIII- No Blasting - Rehabilitation & strengthening to 4-laning of Jammu-Udhampur Section of NH-1A km.15.000 (Jammu Byepass) to km.67.000 (Udhampur) in the State of J&K. [F.No. 10-4/2010-IA.III]

The project road is rehabilitation & strengthening to 4-laning of Jammu-Udhampur Section of NH-1A from Km 15.000 (Jammu Bypass) to Km 67.000 (Udhampur) in the State of J&K. It is a strategic road and only way to commute Jammu to Srinagar. National Highways Authority of India was accorded environmental clearance for the proposed four laning of Jammu-Udhampur Section of NH-1 A by Ministry of Environment & Forests (MoEF) vide letter F. No. 10-4/2010-IA.III dated 31 August 2010. There is Specific Condition No. XVIII in Environmental Clearance letter that there shall be no blasting of rocks. The project road from Km 50+800 to Km 50+900, from Km 51+200 to Km 51+480 and Km 51+780 to Km 52+060 on main road, and from Km 0+300 to Km
0+400, Km 1+000 to Km 1+200 and Km 2+500 to Km 2+700 on existing Udhampur Bypass (Total length 1160 m for 6-locations) is passing through large size hard rocks/boulders, where control blasting is unavoidable. At these locations rocks comprise granite and sandstone, which are semi hard to hard in nature. Wildlife sanctuaries areas are located more than 15 km distance from the identified proposed controlled blasting locations. There is no populated area within 1 km from the proposed controlled blasting locations. Controlled blasting at identified locations will be restricted during day time only. Tunnels will be constructed on the basis of controlled blasting technique method by NATM. None electric detonators and pre-splitting controlled blasting technique will be used to achieve significant reduction of ground vibrations, noise, air blast and reduction of over-break & fly-rocks. Controlled blasting will be carried out for 8 to 10 days as per requirement of construction activities. Optimal charge per delay and muffling of blasting area after the connection of blast holes by wire mesh, used tyers and sand/earth bags will be ensured for safety. Impact of blasting will be restricted to maximum 250 m from the blasting location. Mitigation and safety measures shall be strictly followed for controlled blasting as per guidelines at identified 6 locations.

During the discussion, the following points emerged:

- *i)* As proposed byNHAI, the blasting shall be restricted only for 8 days with restricted tmne from 8 am to 6 pm subject to the following condition.:
- *ii)* Habitation within 1 km -about 15-16 families shall be evacuated to safe location during the period of blasting and rehabilitated back to own premises. If there are any damage to their properties,NHAI shall compensate 100 % under the notice of local Authority.
- *iii)* NHAI shall intimate habitation withn 1 km as well loccal authority before caryig out the blasting.
- *iv)* Blasting shall not be carried out within 10 km pheriphery of any protected area and within 1 km of any sensitive receptor.
- *v)* All other required clearances for carrying out blasting shall be obtained from the competent Authority.
- *vi) NHAI shall submit an undertaking on the above.*
- *vii) Proponent shall submit locations of blasting sites on a latest google map*
- *viii)* Proponent shall submit brief write up on blasting plan, likely impacts and proposed mitigation measures

The Committee recommended to defer the project and the proposal shall be reconsidered after the receipt of the above information.

4.29 Environmental Clearance for rehabilitation & Upgradation of existing 2 lane to 2/4 with paved shoulder from Indo/Nepal Border to Varanasi Section of NH-233 in the State of Uttar Pradesh from Km 0.000 to km 298.740 by M/s NHAI [F.No.10-5/2011-IA.III]

As presented by the project proponent, the project involves rehabilitation & upgradation of existing 2 lane to 2lane with paved shoulder and 4 lane divided carriageway from Indo/Nepal Border to Varanasi Section of NH-233 in the State of Uttar Pradesh. The project road starts from Indo-Nepal Border in Kakarahawa at km 0.000 of NH 233 and terminates at km 299.350 in Varanasi. The road is a recently declared as National Highway in the state of Uttar Pradesh starting from India/Nepal border (connecting to Lumbani) via Naugarh, Sidarthnagar, Bansi, Basti,Baskari, Tanda, Ajamgarh and terminating at Varanasi. The various sections of SH has been declared as NH 233 is listed below.

SH-5 (Basti – Kalwari – Tanda)
SH-30A (Section Tanda to Baskari)
ODR connecting Tanda&Baskari
SH-30 (Bahraich – Faizabad – Azamgarh Road section Baskari - Azamgarh.)
SH-34 (LucknowBallia Road SH No. 34 section Ajamgarh – Rani Ki Sarai)
SH-73 (Varanasi – Azamgarh)

The project road passes through district of Sidharthnagar, Basti, Ambedkar Nagar, Azamgarh, Jaunpur and Varanasi. Also passes through following towns and cities of Kakrahwa Bazar, Naugarh, Bansi, Rudhauli, Shukul Bazar, Tanda, Baskhari, Atraulia, Kaptanganj, Rani Ki Sarai, Gosai Bazar, Lalganj, Devgaon, Chandawak and Varanasi.

The topography of the region is plain and the land use pattern is predominantly agricultural followed by settlement, forest and built up section. The alignment is subdivided into two packages Package-I and Package-II. Package I (Km 0.000 to Km 121.800) is 2-lane with paved shoulder in rural section (7mt C/W, 2m PS, 1m ES on B/S) and four lane divided carriageway in Urban locations (7.25 mt C/W, 1.5 m Sidewalk 2.0 mt space for utilities on both sides and 2.m central median) whereas in Package II (Km121.800 to Km124.100) is 2-lane Ghaghara Bridge under construction by UPPWD, (km 124.100 to Km 125.090) is 2-lane with paved shoulders and from km 125.090 to Km 299.350 is 4-lane divided carriageway for rural section and at Urban locations 4-lane divided carriageway with 2.5 m raised foot path on both sides accommodating space for Utilities and drain.

Existing ROW width varies from 8 - 36 m at different location. The Proposed ROW width in Package I is 45m for Rural section & 24m in urban location, 60 m for Bypass locations and 30m for alignment in Bansi town whereas in Package II the proposed ROW width is 60 m for rural & bypass locations and 26 m for Urban Locations

The project road does not pass through any wildlife sanctuary or national park along the project road within 10 km.

The Road Side plantation along this section of NH 233 is notified as Protected Forest as per Uttar Pradesh Government Gazette "1115/XIV-331-50, dated 10th Feb 1960" In Package I the proposal for diversion of 172.279 ha (90.897 ha. PF land in district Siddharthnagar & 81.382 ha. PF land in district Basti) of PF land is with the State Government.

In Package II the proposal for diversion of 48.901 ha (20.722 ha. in district Ambedkar Nagar, 6.24 ha. in district Jaunpur and 21.939 ha. in district Varanasi) of PF land is with the State Government. The road also passes through 1.61 ha. of RF land in Sehda Reserved Forest and Rudrapur Reserved Forest in district Azamgarh.

The proposed length of this section of NH 233 is 299.350 km and the existing length of road is 295.8 km. 1247.14 ha of land is proposed to be acquired for this project (244.41 ha Govt. land and 1002.73 ha Private) . 3.4 km of total length of Service Road and 19.8 km of Footpath shall be constructed in Package I on both sides whereas 56.46 km of Footpath on both sides in Package II . 15 Bypasses both in Package I & II have been proposed of total length of 78.57 km at congested settlements both residential & commercial and locations with educational institutes & places of worship at Naugarh (Km 21+240 to 23+760),2.52 Km; Rudaulli (Km 64+580 to 69+240), 4.66 km; Tanda (Km 126+580 to 137+880), 11.30 km; Bhaskari (Km 147+800 to 151+050), 3.25 km; Shukla Bazaar (Km 154+900 to 157+700), 2.80 km; Athroliya(Km 169+300 to 174+900), 5.60 km; Kaptanganj (Km 191+950 to 195+850), 3.90 km; Azamgarh /Rani Ki Sarahi(Km 207+250 to 224+750), 17.50 km; Bindra Bazar (Km 231+650 to 234+650), 3.0 km; Gossai Bazar (Km 240+340 to 243+540), 3.20 km; Lalganj(Km 246+500 to 250+500), 4.0 km; Devgao(Km 254+320 to 259+120), 4.80 km; Chandwak(Km 271+520 to 275+100), 3.58 km; Dhanganj(Km 278+100 to 281+700), 3.60 km and Cholapur (Km 285.780 to 290.640), 4.86 km

In Package I: There are 6 existing major bridges and out of that 4 nos. are proposed to be retained after repairs & widening and 2 nos. replaced to new 2 lane bridges. There are 33 existing minor bridges out of which 19 nos. are proposed to be retained after repairs & widening, 10 nos. to be replaced and 4 nos. new construction. There are 168 culverts (37 nos of new culverts and 131 nos of culverts replaced & proposed for widening), 2 ROBs, 5 vehicular underpass, 1 cattle cum pedestrian underpass, 15 nos of bus bays, and 2 nos. of toll plaza have been proposed in overall project area.

In Package II: There are 2 existing major bridges and out of that 1 nos. proposed to be retained after repairs & widening with an additional new 2 lane bridge and 1 no. replaced to new 4 lane bridge. There are 27 existing minor bridges out of which 16 nos. are proposed to be retained after repairs & widening, 2 nos. to be replaced and 9 nos. new construction. The proposed project road has 293 culverts (117 nos of new culverts and 176 nos of culverts replaced & proposed for widening), 2 major (1 new Four lane, and one 2-lane besides existing2-lane bridge) and 27 minor bridges (10 new four lane bridge).

3 ROBs, 13 vehicular underpass, 23 cattle cum pedestrian underpass, 22 nos of bus bays, 6 Truck lay byes, 2 Truck terminal / wayside amenities and 3 nos. of toll plaza have been proposed in overall project area. For both the packages 860 KL/day of water is required for construction and the water will be extracted from surface water & ground water sources. There are 28511 nos of trees (Pkg I) and 49430 nos of trees (Pkg II) are likely to be impacted along the PROW. 4225 nos properties (Pkg I) and 5950 nos of properties (Pkg II) are likely to be affected by widening and improvement of Highway.

Fly ash 2,08,140 cum in Pkg I and 6,83.028 cum in Pkg II shall be utilized for construction activity from NTPC at Tanda, which is located within 100 km radius of Project road. The total project cost is Rs. 1005.68 Crores for Package I and Rs 2098.44 Crores for Package II (including civil cost, Environmental cost, shifting of utilities, land acquisition and R&R cost). The total cost for Resettlement and Rehabilitation is approximately Rs. 395.68 crores for Pkg I and Rs. 768.59 crores for Pkg II. An environmental budget of Rs. 16.37 crore (Rupees sixteen crore and thirty seven lacs only) has been drawn up. The Public Hearing was conducted for the project.

During the discussion, the following points emerged:

- *i)* No wildlife sanctuary within 10 km radius.
- *ii)* Project road requires acquisition of 222.79 ha 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 28511. nos. trees falls within RoW, bare minimum are to be cut Necessary permission shall be obtained from the Competent Authority for tree cutting. Compensatory afforestation shall be provided as per the norms. 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) Noise barrier and safety measures shall be provided at schools.
- 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 recommends the proposal for Environmental Clearance with the above condition in the Clearance letter for strict compliance by the project proponent

4.30 Finalisation of ToR for rahabilitation and widening of existing Highways to 4- lane with paved shoulders of Yadgiri-Warangal section of NH- 202 (new NH-163) in the State of Andhra Pradesh by M/s NHAI [F.No. 10-63/2012-IA-III]

As presented by the project proponent, the project starts at Km 54.000 (Yadgiri) and ends Km 150.000 (Warangal) which is about 35 km away from Hyderabad city of Andhra Pradesh State covering total length 96 km and proposed length is 99.005 Km. The project road falls in Nalgonda and Warangal Districts of AP. The road section passes through important built up areas like Wangapally, Alair, Jangoan, Raghunathpally, Ghanpur, Dhramasagar, Kazipet, Hanamkonda, Warangal and Vangapahad. The land use pattern with in 10km on either side of the project area is predominantly mixed of agricultural/barren land. Land use pattern within 45-60 m ROW is also similar in nature. The project does not pass through any wild life sanctuary within 10km linear buffer of carriageway. Existing Row varies between 25 to 30 m. The proposed RoW varies between 45 (for a length of about 8 km) to 60 m. Approximately 432.8 ha. of land proposed to be acquired for improvement and widening of the road out of which, Govt. land is about 43.3 ha, agricultural land is about 173.12 ha and barren and built-up land is about 216.4 ha. The project road has existing 2 major bridges, 27 minor bridges, 2 causeways, 157 culverts. One major bridge, 12 minor bridges proposed for new construction along with improvement of the existing 2 major, 9 minor bridges and existing culverts are: 157 culverts Out of which 83 will be retained and new 67 Slab culverts have been proposed. 3 PUP/CUP's, 4 VUP's and 2 Flyovers have been proposed. There are 5 major and 65 minor intersections on the project road, 8 major and 31 minor junctions have been proposed for improvement. Service roads have been proposed at selected built-up areas, Grade separator/Flyover and VUP locations. Bus bays have been proposed at 25 locations (on both sides i.e., 25x2). Truck lay byes have been proposed at 2 locations (1 on LHS & 1 on RHS). Toll plazas have been proposed at 2 locations and One trauma centre (medical facilities) and one ambulance facility is proposed at each Toll Plaza. There would be about 788 project affected families due to improvement of project road based on tentative design. The entitled persons shall be compensated as per National Highways Act, 1956. Four Bypasses have been proposed namely; Wangapally Bypass, Alair Bypass, Jangaon Bypass and Warangal Bypass. RCC/ W Beam Metal Crash Barrier has been proposed at 33 locations for about 6072 m (2*3036 m) covering Major Bridge, Minor bridge, CUP, VUP, ROB, Grade Separator/Flyover. W Beam Metal

Crash Barrier of length 15,720 m covering approaches to Major Bridge, Minor bridge, CUP, VUP, ROB, Grade Separator/Flyover. Where embankment height more than 3 m and curve locations. Pedestrian Guard Rail on service road is provided for 15,020 m (on both sides). Traffic Signs will be provided as per IRC 67 & SP 55.

Overhead signs along the Project road at 18 locations excluding toll plaza (10 nos full width overhead signs of size 2*12 m + 12 m and 8 nos Cantilever type of size 4.0 m * 12.0 m). Street lighting will be provided as per IRC guidelines. Peak demand of water would be about 284 KLD during construction (40% from Surface source & 60% Ground source). The approximate Environmental Management works to be about Rs. 7.9 Crores. The cost of resettlement and compensation worked out to be about Rs. 338.47 Crores. The total civil cost of the project is about Rs.790. Crores. The total project cost is about Rs.1331.43 Crores.

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

- (i) No Forests land, No eco- sensitive areas/ Sanctuary within in 10 km radius.
- (ii) It is indicated that about 3000 nos. 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.

4.31 Finalisation of ToR for widening of existing single to 2 lane with paved shoulder of Gulabpura (NH-79)-Shahpura-Jahazpur-Hindole (NH-12) – Nainwa- Uniara (NH-116) (Newly declared National Highway (NH-148D in the State of Rajasthan by M/s NHAI (F.No. 10-57/2012-IA.III)

&

4.32 Finalisation of ToR for widening of existing 2 lane to 4/6 lane of Solapur to Bijapur section of (NH-13) in the State of Maharashtra and Karnataka by M/s NHAI, N. Delhi. (F.No. 10-58/2012-IA.III)

Since the ToRs for the above two projects were already considered finalized by EAC and are listed by mistake, NHAI requested to consider the following projects

'Finalisation of ToR for widening and Improvement of existing single/inter-mediate lane to 2-lane with paved shoulder of section Nimbi Jodha (Near Ladnu) at km 0.00 - Degna - Merta City at km 139.900 of NH-458 in the State of Rajasthan'[F.No. 10-/2012-IA-III].

As presented by the project proponent, the project road starts at 0.00 km of NH 458(km 95.650 of NH-65) at Nimbi Jodha and terminates at km 139+900 near Mertacity in Nagaur District of Rajasthan. The section of NH 458 has been upgraded from SH 59 (47 km),SH 19 (5.5 km), MDR-37B(18.50km),SH 60(20.50 km), MDR 24 (24 km), VR 73(7.5km),NH 89 (10.50 km) (SH 21 (7.2 km) and SH 39 (28.60 km) to National Highway NH 458 in the State of Rajasthan. The existing length of the section is 144.377 km, whereas proposed length after introduction of Bypassis 139.900 km. The section of project road is passing through onlythrough Nagaurdistrict of Rajasthan. The road is being upgraded from single/intermediate lane to two lane (7.0 m, width), paved shoulder 1.5m and earthern shoulder 1.0 m on both sides of road. Only at two locations NH 89 for a length of 10.5 km (Lampolai – Dangabas- km 78 of existing NH 89). Since the existing road was earlier Major District Road, Other District Road and Village road it is passing through settelements therefore 8 New bypasses has been proposed to locality Bhantri(1.285 km), Chotikhatu (2.600 km), Badikhatu (3.842 km), Sanju (1.715 km)), Tilanes (2.200km),Idwa (5.310 km), Baggad (2.695 km), Merta City (5.682 km) and one realignment at Degana of length 0.985km. The widening and Improvement proposal includes concentric widening for a length of 13.967 km, Left side widening for a length of 56.978 km, Right side widening of 39.700 km and realignments and bypasses of length 26.310 and curve improvement of 2.945 km. There is provision of 2 Toll Plaza at km 34.000 and 93.500 km, 21 number of major and 82 number of minor junctions are proposed. The existing right of way varies from 6m to 22m and proposed right of way is 45m except at kms 0.000 to 1.3000, 14.000 to 15.500, 41.350 to 42.250, 56.450 to 56.750, 88.880 to 89.220, 119.450 to 120.150 where PROW has been restricted to 12m due to settelements and at two locations of Toll Plaza from km 33+860 to km 34 +140 and km 93+360 to km 93+640. 85 New Culverts are proposed which includes replacement of 24 existing Culverts and 34 Causeways in existing section being retained

and also includes 27 new culverts. Approximately 374.316 Ha. of land is proposed to be acquired which is predominantly agriculture and approximately 684 households requires demolition. The proposed NH 458 is not passing through any Reserve Forest, Protected Forest, National Park and Sanctuary. No Wild life park / Sanctuary exist within 10 km of the Project road. The total water requirement is 8000KLD, which is proposed to be extracted from Ground water. The cost of the project is Rs 548.55 crores and cost per km is Rs 3.92 crores.

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

- (i) No forest land acquisition, not passing through eco-sensitive areas, no wildlife Sanctuary within 10 km radius.
- (ii) It is indicated that about 20, 000. nos. trees / plants falls in the ROW, however, minimum number of 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 cool 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.

4.33 Finalisation of ToR for widening and upgradation of existing 4 lane to 6 lane of Chitrdurga to Haveri including Chitradurga bypass (km 189 to km

340) of NH-4 in the State of Karnataka by M/s NHAI, N. Delhi. (F.No. 10-59/2012-IA.III)

As presented by the project proponent, the project road section of National Highway-4 starts from existing Km 189.000 at outskirt of Chitradurga town and ends at existing Km 340.000 at Haveri and passes through Chitradurga, Davengera and Haveri Districts of the state of Karnataka. The major settlement en-route are Chitradurga, Kolahal, Emmahatti, Golarahatti, Chikbennur, Hunsukatte, Bharmasagara, Davangere Anagodu, Harihar, Ranibennur and Haveri. 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. This project does not involve diversion of any Forest area. The project stretch from Km 280.500 to Km 310.950 falls within 10 km radius from the boundary of Ranebennur Black Buck Wildlife Sanctuary. However the project stretch is located outside the boundary of the sanctuary area and no acquisition of Ranebennur Black Buck Wildlife Sanctuary land is envisaged due to the project. The proposed land acquisition is 193.73 ha. This includes 11.6238 ha of Government land and rest 182.1062 ha. of private land. Among Private land 173.000 ha. is agriculture land and rest residential and commercial land areas. One Bypass has been proposed at Chitradurga. The existing Right of way is varies between 35-60 m. The proposed right of way for main alignment is 60 m in rural and bypass whereas in urban areas it is 50 m, except at interchanges, toll plaza and other project facilities. The existing road has 6 nos. of Major bridges (Individual Carriageway), 44 nos. of Minor bridges (Individual Carriageway), 389 nos. of Culverts, 3 nos. ROBs, 57 nos. Pedestrian/Cattle underpasses, 20 nos. Vehicular Underpasses, 1 no. of overpass, 8 nos. of Flyovers, 3 nos. Foot over bridge, 2 nos. of toll plaza and 231.542 Km (both side) of service roads. It is proposed to retain the existing major bridges with repair and widening and to provide 2 new major bridges. All the existing Minor Bridges will be widened to 6-lane and additional 22 new minor bridges are proposed. Similarly all the existing culverts will be retained. Apart from 57 existing Pedestrian/Cattle underpasses which shall be widened and additional 4 nos. new Pedestrian/Cattle underpasses are proposed. 6 new Vehicular Underpasses, 17 new bus bays and 3 nos. of new proposed Flyovers, 1 no. of new foot over bridge will be provided in the project. The project road will have provision of 2 nos. Truck laybyes, 2 nos. Rest areas, High mast light at Toll Plazas, Interchanges and starting and ending of bypasses, Street Light at 58 locations for 42.00 Km, Service roads at 259.502 Km (both sides). The proposed safety measures will be provided as per IRC: 67 and 6 laning Manuals. Approximately 2919 roadside trees are within proposed ROW, however bare minimum will proposed to be felled for widening of 6 lanes. Approximately 712 KL/Day water will be required for construction purposes. To meet this requirement about 20 percent will be abstracted from Surface water source and rest from Ground water source with proper requisite permission from concerned department. About 105 nos. of structures will be partially affected. The NHAI shall compensate to the authorized owner as per NHAI Act, 1956. The avenue plantation shall be carried out as per IRC SP: 21:2009 apart from statutory requirements. The total estimated Project Civil Cost is approximately Rs. 1313 Crores, EMP cost is Rs. 22.88 crores and R & R Cost is Rs. 47.44 crores.

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

- (i) The project stretch from km 280.500 to 310.950 falls within 10 km radius from the boundary of Ranebennur Black Buck Wildlife Sancturay Clearance from NBWL shall be obtained.
- (ii) It is indicated that about 2919 nos. 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.

4.34 Finalisation of ToR for widening and upgradation of existing carriageway to 4- lane of Kashipur – Sitarganj of NH-74 in the State of Uttrakhand by M/s NHAI, N. Delhi. (F.No. 10-60/2012-IA.III)

As presented by the project proponent, the project road starts at Kashipur (Km 175.000) and ends at Sitarganj (Km 256.900) on NH-74 in the State of Uttarakhand and Uttar Pradesh. The project stretch is mostly inhabited and passes through plain terrain of Udham Singh Nagar, Rampur and Bareli district of Uttarakhand and Uttar Pradesh. There are 54 Villages along the corridor with a total length of 82.000 km. The project road passes through predominantly agricultural area (70%) followed by Built Up area (26%),

Water body (2%) and others (2%) on either side of 10km. The land use pattern of project within proposed RoW passes through predominantly agricultural area (50%); settlements (40%) and others (10%). The project road does not pass through any Protected Area/ Wildlife Sanctuary/National park/Biosphere Reserve, etc. and within 10 Km of either side. Approx. 290 ha of land is required for construction, out of which 195 ha land is available. Additional 95 ha of land acquisition is required - 80 for bypasses and 15 ha for main road construction. the proposed project also involves diversion of 38 ha of protected forest land. Existing RoW width varies from 21 m to 45 m. The proposed RoW width varies from 45 m to 60 m (including bypass locations). At Toll Plaza location the RoW is 95 m. There exist 4 major and 13 minor bridges, 164 culverts, 8 Major Junctions and 182 Minor junctions. Three new bypasses are proposed at Doraha (1.8 km), Kelakhera (2.85 km), Gadarpur (8.8 km). Total project road length is 77.200 Km including the bypasses. The project road is proposed with improvement of total 17 bridges (reconstruction -5and existing bridge retained - 12), 196 culverts (reconstruction of existing culverts - 86, widening - 77, new construction - 32 and merge with PUP in realignment). Two ROBs are proposed at design chainage Km 211+885 and Km 229+937. Service road of 5.5 m wide is proposed at RoB location on either side of project road for a length of 15.63 km. other than that service roads are proposed along built-up areas. 35 bus bays and 2 truck lay byes and 1 toll plaza of length 780 m (km 222+100 - km 222+800) are also proposed. Safety measures are proposed as per IRC:SP-44-1996; 8951 trees are proposed to be felled for widening and strengthening of existing 2-lane to 4-lane as per preliminary survey. The avenue plantation shall be carried out as per IRC: SP-21-2009 apart from the statutory requirement. 1000 KLD of water proposed to be abstracted from surface water and ground water sources for the construction of road. A total of 614 structures (Kachcha - 409 and Pakka - 205) structures are falling under the ROW will be cleared. The authorized affected structures will be compensated as per NH Act, 1956. There is no thermal power plant within 100 km of the project stretch. The total civil cost is 487.72 crores.

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

- (i) The proposal indicates the acquisition of 38 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 about 8951 nos. 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 cool 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.

4.35 Finalisation of ToR for widening and improvement of existing 2 lane to 4 lane of Mahulia (km 277.500 of NH-33) ends at Kharagpur (km 129.600 of NH-06) in the State of Jharkhand and West Bengal by M/s NHAI. (F.No. 10-66/2012-IA.III)

As presented by the project proponent, the project road starts from Mahulia at existing chainage (Km 277.500 of NH33) ends at Kharagpur (Km 129.600 of NH-06) and passes through two districts East Singbhum and West Medinipur. The existing length of the project road is 125.9 km. The design length of the project road is 127.13 Km. The project road runs through two districts East Singbhum and West Medinipur and eight important towns (Ghatshila, Dalbhumgarh, Chakuliya, Baharagora, Jamboni, Gopi Vallabhpur, Jhargram, Kharagpur). Existing ROW varies from 45- 60 m. The proposed ROW is 60 m. The entire project stretch passes through plain terrain. The landuse pattern within 10 km buffer is 59% Agricultural land, 15% Settlements, 15% Forest land and remaining 11% comprises the Water bodies and other features. The landuse pattern within the 60 m ROW is 66% Agricultural, 10 % settlement, 6 % forest and remaining 18 % is barren land. There is no wildlife sanctuary or national park within 10 km buffer along the project road. Total land proposed to be acquired for the project is 139.5 ha including 22.603 ha is forest land (Reserve forest - 10.813 Ha, Protected forest - 9.609 Ha, Jagal Jhari - 2.181 Ha). The proposal for diversion of 22.603 ha. of forest land is with the CCF, State Govt. There is existing 3 Major bridges, 21 Minor bridges, 148 Culverts, 6 ROBs, 1 RUB along the project road. Existing 3 Major bridges will be widened to 4 lane, 6 Minor bridges (new construction) and 15 no's of existing minor bridges will be widened to 4-lane. Out of existing 148 no's of culverts 87 will be retained with minor repair, 12 retained and 49 reconstructions. 8 no's of vehicular underpass, 12 no's of Pedestrian underpass, 14 cattle underpass, and 1 grade separator are also proposed. Out of these 6 ROB's one falls under NH-33 and 5 in NH-06. 3 new ROBs are proposed adjacent to all existing ROBs. 2 new Toll Plaza have been proposed along the 127.13 km long project highway at km 306.900 (NH-33) and another at km 158.250 on (NH-6). 26 no's Bus bay and 11 no's of Truck lay byes are proposed.

Approximately 950 KL / day of Water will be required for construction and will be abstracted from sub surface and ground source. Water shall be abstracted after obtaining permission from concerned authority. Nearly 48,874 no's of trees falls in proposed ROW of 60 m, however bare minimum trees likely to be felled. The details of tree felling shall be incorporated in draft final EIA. The flyash shall be used from Kolaghat thermal power plant which is located around 65 km from Kharagpur ie, endpoint of the project. Approx. 3364 in Jharkhand and 264 plots in West Bengal will be partially or completely affected due to proposed project. The affected family will be compensated as per NH Act -1956. Total environmental and social cost is about INR 143.2865 Crores. Total capital cost of the project is about INR 974.2534 Crores.

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

- (i) The proposal indicates the acquisition of 22.603 ha Forests land (10.813 ha Reserve Forests and 9.609 ha protect forestrs, Jagal Jhari -2.181 ha). 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 48874 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.

3rd Day: 21st September, 2012:

3. <u>Consideration of Old Proposals:</u>

3.1 Environmental Clearance for proposed Sahara City Homes – Kashipur Village Kharmasi and Bhagwantpur, distt Udham Singh Nagar.M/s Sahara India Commercial Corporation Ltd. F. No 21-41/2012-IA.III

The proposed project is located in Kashipur Town, district Udham Singh Nagar, in the state of Uttarakhand. The proposed project will provide private housing with facilities such as school, commercial and community center, club, hospital and other services. The proposed project stretches over an area of 32.2533 Acre with 9.085 Acre (28.17%) under landscape and 14.863 Acre area under parking.

The proposed project has total 101346.92 sq.m of buildup area (Residential & EWS – 89,548.0 m² and Commercial & Amenities – 11,798.92 m²). The proposed project has 1088 dwelling unit that is 282 unit of Group Housing – I, 604 unit of group housing – II, 42 Independent housing and 160 unit of EWS

Parking provision has been made on Surface and under stilt. The proposed project has total parking provision for 1237. That is 997 parking for residential area and 240 for Commercial area.

The total water requirement for the proposed project is 720 KLD. The source of water will be ground water. The fresh water requirement is 362.6 KLD. The waste water generated will be 446 KLD which will be treated in STP of 500 KLD capacity. About 357 KLD of treated water will be generated which will be used on site for Horticulture (110 KLD), Flushing (155 KLD), DG set cooling (20 KLD) and AC Makeup water (72 KLD). The project is designed on zero discharge of waste water.

The proposed project has total power requirement of 3.86 MVA and the backup power supply will be 2.71 MVA by 8 D.G set of $380 \times 2 + 250 \times 4 + 1 \times 750 + 200 \times 1$. The main source of electricity will be State Electricity Board. About 3.05 TPD of solid waste will be generated. The organic waste or biodegradable waste will be processed on site by vermin composting. The Hazardous waste like D.G set oil will be sold to authorized recyclers.

During the discussion, the following points emerged:

- *i.* Preliminary No Objection Certificate from town planning shall not be accepted, only final no objection on the layout map shall be accepted by EAC. Clearance shall be accorded only after submission of final 'No Objection Certificate' received from the town planning.
- *ii.* Additional entry and exit to hospital/school should be provided as agreed by the project proponent and submit the revised layout plan.
- *iii.* Dedicated parking arrangements should be provided to school and hospital
- iv. Green belt of 6 meters width around periphery should be provided
- v. Detailed calculation regarding washing shall be provided
- vi. All taps and opening for treated effluent shall be kept at ground level
- vii. Corporate Environmental Responsibility shall be adhered to; as per OM dated May 18, 2012
- *viii.* Thermal insulation should be provided for hot water pipe as agreed by the project proponent
- *ix. Provide EMP in tabular format*

The Committee recommends 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.

3.2 Amendment for Environmental Clearance for construction of Residential Complex "harmony Naturals" (SHRISTI) at Village Azara and Mikirpura Chakardoi, District Kamrup, Assam by M/s SKRE Building Future Pvt. Ltd F.N. 21-54/2010-IA-III.

As presented by the project proponent, the project involves construction of Group Housing aimed at economically weaker section at affordable prices on a plot area of 3.8943 ha. The total built-up area of the project is 80011.48 Sq.m. It is proposed to construct 970 units (1BHK- 560 units, 2 BHK- 330 units & 3 BHK- 80 units). The total water requirement is 623.6 KLD (freshwater – 397.48 KLD). The capacity of STP proposed is 550 KLD. Treated waste water to be used for flushing will be 180.24 KLD, Garden and green belt 38.56 KLD, pond makeup 7.32 kld & balance 211.86 KLD will be sent to natural drain. Total solid waste generation will be 2.926 T/day. The power requirement is about 3.4 MW. The total parking proposed is 1155 ECS (541 cars + 614 scooters).

EC was issued vide letter no 21-54/2010-IA-III dated 12.03.2012. It has been mentioned by proponent that GMDA has granted permission to the project vide its letter no GMDA/BP/1309/09062010/134 dated 11.05.2012 for a total built up area of 80011.48, however while submitting the proposal to MoEF a conversion factor of 1 ft = 0.3 m has been used instead of 1 ft = 0.3048 m plus amendments got done by GMDA during approval to the tune of 1455 sq.m.

It has been also requested to replace the line 'it is proposed to construct 907 units in 30 blocks' with '970 units' and the line 'the total parking proposed is 705 ECS cars + 520 two wheelers' by '541 cars + 614 scooters.

The Committee recommends the above proposal for Environmental Clearance

3.3 Environmental Clearance for up gradation and expansion of Shri Vinoba Bhave Civil Hospital, Silvassa by M/s Medical Superintendent, Shri Vinoba Bhave Civil Hospital, Silvassa [F. No 21-77//2011- IA.III]

As presented by the project proponent, the proposal is for up gradation and expansion of Shri Vinoba Bhave Civil Hospital, Silvassa. The total area is 9.3 acres. There is a small building 9485 sqm. The proposed built up area will be 58935.24 sqm. There will be two towers existing and expansion, The number of Floors will be: Hospital -B+G+4 and Housing- Stilt +7. The Hospital building will be 28698.35 sqm, School of Nursing 2876.74 sqm, Nursing Hostel 5090.92 sqm, Housing 6540.16 sqm and Service block & Ancillary 6242.88 sqm. The facilities proposed are Multi specialty and specialty camp, emergency and Trauma dept, operation theater complex and ICUs, Physiotherapy and rehabilitation services, preventive and promotive health care etc. Parking area proposed is 3192.69 sqm. The water requirement is 240 KLD (one time requirement) and 160 KLD daily requirement. The source is ground water and water supply from Silvassa municipal Council. The waste water generation is about 200 KLD. The treated sewage will be reused for green belt and fire fighting. Green belt proposed is 8880.6 sqm.

During the discussion, the following points emerged:

1. As committed by the proponent, 7 year O&M of STP should be the responsibility of the contractor.

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

3.4 Environment Clearance for construction of 1st Mall & Hotel at Village Mohakampur Khurd, Tehsil Dehra (Parwa Doon) Dehradun, Uttarakhand by M/s Gangotri Incandescent (P) Ltd, (F.No.SEIAA/Gen-01/2011/440)

M/s Gangotri Incandescent (P) Ltd. has applied proposal for 1st Mall & Hotel, at Khasra No. 143 ka. 144, Mohakampur Khurd, Dehra (Parva Doon), Distt. Dehradun.

The total land area of proposed activity is 12,450 Sq. meter. The total built-up area of proposed Mall & Hotel is 24,830.75 Sq. meter (Basement – 02 Nos, Floors – 04 Nos). Total Area under Road Widening is 380 Sq.m, Net Plot Area is 12070 Sq m & Proposed Ground Coverage is 4075.94 Sq.m. Total Parking spaces proposed are 420 ECS & Landscape area is proposed with in 4255.00 Sq.meter i.e. 34.17%. The total Project Cost of unit is Rs. 186.42 Crore. The water requirement of the unit will be 400 KLD, however, water consumption will be reduced up to 250 KLD as 150 KLD water will be make-up by the recycling of treated waste water, which will be sourced from Bore wells (02Nos.). The wastewater generated (I70 KLD) proposed to be treated through

appropriate capacity Sewage Treatment Plants (STP) of 250 KLD capacity. Treated water will be used for Cooling, Gardening, Fire Fighting and other uses within the Project area. No wastewater is proposed to be discharged outside the premises, the project proponent has proposed to connected load of Power 3.0 MW while Net requirement will be 2.2 MW, Which will be sourced from Uttarakhand State Electricity Board (U.S.E.B.). Green Insulated DG sets (1500 KVA x 02 Nos. & 600 KVA x 01 No.) shall be provided, which will serve as a partial backup, 100 % backup for common services like lifts, corridor lightning etc. About 22.5 kg/day Solid Waste will be generated, the Solid Wastes generated will be segregated as biodegradable, recyclable and inert wastes. Non-biodegradable wastes will be disposed as per MSW Rules and bio-degradable wastes will be composted for Manuring. Rainwater harvesting system of 27 cubic meter x 03 Nos. Tanks capacity is also proposed. The project proponent has also proposed to provide Energy & Water conservation measures for the Project.

The Project was considered by SEAC, Uttarakhand in its meeting held on 04-06-2011and site inspection was also conducted by SEAC, Uttarakhand on 10.6.2011. SEIAA has recommended the proposal and forwarded to MoEF vide Letter dated January 16, 2012.

Project was considered at MoEF in the 112^{th} Meeting of the Expert Appraisal Committee for Building Construction, Coastal Regulation Zone, Infrastructure Development and Miscellaneous projects held on $10th - 11^{th}$ May, 2012 at SCOPE Complex, New Delhi.

During the discussion, the following points emerged:

- *i. Thick Plantation should be provided on the patch of 73m X 30 m towards the railway line side as committed by the project proponent*
- *ii.* Insulated glass should be provided on the windows on the railway line side as committed by the project proponent
- iii. As committed by the proponent, 5-7 year O&M of STP should be the responsibility of the contractor.

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

4. Consideration of New Proposals :

4.36 Environmental Clearance for Residential Housing Complex at 35th BN ITBP Bimola / Katarmal Camp Almora by M/s Commandant, 35th BN ITBP, Police. [F.No 21-10/2012 IA-III]

ITB Police MHA/Govt of India is establishing a Battalion at village- Bimola and Katarmal for which 8.535 hectare private land 23.581 hectare State Govt/Forest land has been already acquired in which 196, Type-**II** Qtrs, 67 Typie-III, TO Type-IV, 5 Type-V

and 7 No. 120 men barracks has to be constructed for which approval from Ministry of Home Affairs already received. Proposed construction site is located Approx. 140 Km from PantNagar Air-port, 105 Km from Kathgodam railway station, 15 km from Distt head quarter Almora, 3 km from N-H- 87-E, approx 284 kms from international boundary Lipulekh and approx 20 km away from wild life centaury Binsar, Distt-Almora (Uttarakhand). Clearance from M.O.E.F. for land acquisition act 1980 has already been obtained vide letter No. 08B/UCP/09/199/2007/FC/1268 dtd- 18/12/2007. The fresh water demand shall be 330 KLD after complete occupancy of the residential complex which will be fulfilled through lifting of water from river Kosi. M.S pipe line will be laid which will be stored in underground service reservoir. Sewage will be treated and reused for flushing, road cleaning, and horticulture. Waste water generation from the project will be treated in STP. It will segregated into biodegradable, recyclable and others components and disposal will be ensured into waste bins, separate bins for biodegradable waste and recyclable waste will be provided at various locations. Beside from this whole complex will be declared as a polythene free zone as declared in other locations of I.T.B.Police. The plantation matrix adopted for the green belt development includes pits of 0.30 X0.30 X 0.30 Mt. size with spacing of 2X2Mt. It is also stated that plantation has to be taken up randomly and the landscaping aspects could be taken into consideration. The total power requirement at the full occupation capacity of these dwelling unit is being about 400KW .The power shall be supplied by the state Electricity board. The project shall have provision for D.G sets standby arrangement for minimizing energy consumption, the residents shall be encouraged to use energy saving appliances / fittings.

During the discussion, the following points emerged:

- *i.* Solid waste should be handled as per MSW rules 2000
- *ii.* Solar heating and solar light should be provided wherever possible.

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

4.37 Environmental Clearance for residential and non residential Housing Complex at 36Bn, ITB Police Force, Lohaghat, Uttarakhand by M/s Commandant, 36 Mn, ITB Police Force. [F.No. 21-15/2012-IA-III]

ITB Police MHA/Govt of India is establishing a Battalion at Barakot road, Pau-Patan ,Lohaghat, Distt- Champawat (Uttarakhand)for which 23.00 hectare State Govt/Forest land has been already acquired in which 170 Type-II Qtrs, 53 Type-III, 06 Type-IV, 02 Type-V and 6 No. 120 men barracks has to be constructed for which approval from Ministry of Home Affairs already received. Proposed construction site is located Approx. 180 Km from PantNagar Airport, 210 Km from Bareilly railway station, 18 km from Distt head quarter Champawat, 5 km from N-H, approx 51 kms from international boundary Nepal. The fresh water demand shall be 330 KLD after complete occupancy of the residential complex which will be fulfilled through lifting underground water. Sewage will be treated and reused for flushing, road cleaning, and horticulture. Waste water generation from the project will be treated in STP. It will segregated into biodegradable, recyclable and others components and disposal will be ensured into waste bins, separate bins for biodegradable waste and recyclable waste will be provided at various locations. Beside from this whole complex will be declared as a polythene free zone as declared in other locations of I.T.B.Police. The plantation matrix adopted for the green belt development includes pits of 0.30 X0.30 X 0.30 Mt. size with spacing of 2X2Mt..It is also stated that plantation has to be taken up randomly and the landscaping aspects could be taken into consideration. The total power requirement at the full occupation capacity of these dwelling unit is being about 400KW. The power shall be supplied by the state Electricity board. The project shall have provision for D.G sets standby arrangement for minimizing energy consumption .the residents shall be encouraged to use energy saving appliances / fittings.

During the discussion, the following points emerged:

- *i.* Solid waste should be handled as per MSW rules 2000
- *ii.* Solar heating and solar light should be provided wherever possible.

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

4.38 Environmental Clearance for the development of Industrial Estate at Vasanthanaraspura, Tumkur District, Karnataka by M/s KIADB, Bangalore [F.No. 21-27/2009-IA-III]

The proposed Vasanthanarasapura industrial area is about 316.55 ha and is located at about 20 Km from Tumkur and about 100 Km from Bangalore, Karnataka. Project Site is situated at 13° 29' 24" N Latitude and 77° 02' 02"E Longitude and adjacent to NH 4. Industries such as IT/BT Precision & Electronic Industries, Garments and Food Processing & General industries are expected for Vasanthanarasapura industrial area. Tentative water demand for the proposed project is 5 MLD. Water source for the proposed project is Hemavathi Canal. 6.00 acres of land has been earmarked for ETP & STP. Storm water drains have been planned along the sides of the roads to collect the surface run – off water from the roads. Nala diversion drains have been planned to collect the surface run - off water from the nalas existing in the site. Surface water from the project site will be led into tanks near Nelahala and Sorakunte. All industries coming up in the proposed Industrial Development Area (IDA) if required will utilize the services of the Common Hazardous Waste Management Facility (CHWMF) already existing in the near Dobaspet on NH 207. All the hazardous waste will be transported to this facility for treatment and for further safe disposal. Safe storage and transportation of the produced solid and hazardous waste is the total responsibility of the individual industry. 3.00 Acres of Land has been earmarked for waste management. Tentative power requirement for the proposed project is 5000 KVA & the source is Karnataka Power Transmission Corporation Limited (KPTCL). A 66/11 KV electric line passes in the industrial area.

As the industrial area is adjacent to the National Highway-4, a 30 m wide central road with median is proposed for main entry into the layout. For smooth flow of traffic in the layout 18 m wide roads are proposed as arterial roads. 25.40 acres of land has been earmarked for landscape development. Greenbelt areas proposed are15 Meters along the boundary of the site, around ETP, between the residential and industrial plots

During the discussion, the following points emerged:

While discussing the above project, it was informed by KIADB that the total area of the project is 316.55 Ha and the project does not involve any category 'A' industry at this point of time, however, Category A industries may come up in future.

In view of the above, it was decided in the meeting that since no category 'A' industry is involved when the case was presented before the EAC and also that the total area of the project is less than 500 Ha, the proponent has to apply at the state level and take clearance from the SEIAA. It was suggested to the proponent that, in case, category 'A' industries apply for a plot within the proposed SEZ in future, the proponent shall have to apply to MoEF for the amendment in EC accorded by SEIAA.

4.39 Environmental Clearance for the development of Industrial Estate at Harohalli Ramnagara District, Bangalore, Karnataka by M/s KIADB, Bangalore [F.No.21-28/2009-IA-III]

The proposed Harohalli industrial area is about 371.91 ha and is located at about 40.50 Kms from Bengaluru. Project Site is situated $12^{\circ} 40' 42''$ N Latitude and $77^{\circ} 23''$ 33''E Longitude and adjacent to NH 209.

The Project envisaged is an Industrial theme park with a vision of providing "Hassle free production environment" for the manufacturing of IT/BT Precision & Electronic Industries, Garments and Food Processing/Chemical industries, Plastic, Foundry & Others/General industries.

The proposed Industrial Park is to be developed with facilities encompassing common infrastructure facilities such as Roads, Power, Water, Drainage, Street lightning and Social infrastructure facilities. The proposed project site comprises of semi-urban and rural environment. Presently the land is barren with degraded shrub in most of the area, while some land is also covered by agricultural activity. Tentative water demand for the proposed project is 5 MLD. Water source for the proposed project is BWSSB. 7.00 acres of land has been earmarked for ETP & STP. ETP & STP will be designed based on the effluent characteristics and quantity. Adequate treatment measures will be provided to ensure that the treated effluent meets the prescribed standards. All industries coming up in the proposed Industrial Development Area (IDA) if required will utilize the services of the Common Hazardous Waste Management Facility (CHWMF) already existing in the near Dobaspet on NH 207. 3 acres 35 guntas of Land has been earmarked for waste management. Tentative power requirement for the proposed project is 5000 KVA & the source is Karnataka Power Transmission Corporation Limited (KPTCL). 90.00 acres of

land has been earmarked for landscape development. Greenbelt areas proposed are 15 meters along the boundary of the site, around ETP and between the Residential and industrial plot

During the discussion, the following points emerged:

While discussing the above project, it was informed by KIADB that the total area of the project is 371.91 Ha and the project does not involve any category 'A' industry at this point of time, however, Category A industries may come up in future.

In view of the above, it was decided in the meeting that since no category 'A' industry is involved when the case was presented before the EAC and also that the total area of the project is less than 500 Ha, the proponent has to apply at the state level and take clearance from the SEIAA. It was suggested to the proponent that, in case, category 'A' industries apply for a plot within the proposed SEZ in future, the proponent shall have to apply to MoEF for the amendment in EC accorded by SEIAA.

4.40 ToR for the Housing Complex Dag No. 835,733,833,772, 773, 774, 777, 812, 778, 781,771, 767, 813, 727, 729, 726, 834, 779, 725, 844, 804, 728, 775, 768, 836, 782, 770, 780, 766/1862, 776, 811, 769, 732, 803, 730, 766, 780, Mouza – Ramcharani, Village – Dharapur, District – Kamrup, Assam by M/s B.K. Planner Pvt. Ltd. [F.No.21-39/2012-IA.III]

The proposed project site is a flat land, measuring about, 79405 sqm - as per Deed and 79286.98 sqm – as per mutation certificates. There will be construction of a housing complex comprising of 25 nos. of blocks, consisting of 2,39,764.00 sqm total built-up area. The Ground Coverage is 20821.00 sqm (26.26 %). Height of the building is 33 mt. Width of road in front of the project site is 30 mt. Distance of Fire Station from Site is 6.2 km. Car Parking required is 1817 nos. while provided is 1891 nos. Total No. of Trees provided is 1110 nos.

Total No. of Dwelling Units is 1488 flats in 24 nos. of blocks & 306 Studio Apartments in 1 block (Total - 1794 nos.). No. of story - Residential : 21 nos. of blocks - G+9 storied, 3 nos. of blocks - G+10 storied, 1 block - B+G+9 storied and a common basement below 21 nos. of blocks. Total Population during Construction phase is 1000 persons while during Operation phase is 10982 persons (8052 residential, 2930 temporary).

Electricity Demand is 8000 kVA and it will be supplied by State Electricity Board. 4 nos. of 500 kVA each D.G.set is proposed. Fuel (Diesel) required for D.G.sets is 320 lt/hr. Stack Height for D.G.sets is 4.47 mt stack for each 500 kVA DG set above the roof the building.

The total quantity of water required for the proposed project during operational phase is 1493 kLD and fresh water demand is 911 kLD, which will be supplied by GMDA. Wastewater generation from the proposed project will be 1042 kLD. Wastewater

will be treated in STP operated by FAB technology followed by tertiary treatment. Treated wastewater will be reused in flushing through dual plumbing line (362 kLD), landscaping (144 kLD) and car washing (76 kLD) and rest (460 kLD) of the treated wastewater will be discharged into the GMDA drain outside the proposed project site. Constructional Phase Water Demand is 100 kLD (70 kld for workers, 30 kld for construction work).

Garbage will be segregated at source for biodegradable, non-biodegradable recyclables and non-biodegradable inert material during construction (200 kg/day) and operational phase (5.65 ton/day) and finally total MSW will be disposed off by GMDA as per MSW (M&H) Rules 2000.

Roof top rain water will be collected in separate conduit. Part of the roof top rain water will be stored in UG rain water storage tanks and reused. Recharging is not considered here because the ground water table is within 4.0 meter from GL.

For firefighting sufficient quantity of water will be kept reserved in underground reservoir as per Assam Fire and Emergency Services, Govt. of Assam norms. Apart from that sufficient numbers of fire extinguishers will be kept. In case of emergency, the reserved water shall be used for fire fighting.

During the discussion, the following points emerged:

- *i.* The area of the project is more than 150000 sq m, therefore EIA is required.
- *ii.* Submit details regarding safety for the pedestrians, FOB requirement etc
- iii. Submit details regarding effluent standards, point of disposal, sludge handling etc
- *iv.* Submit contours map for the proposed site and details regarding drainage management, maintaining the natural drainage pattern etc
- v. EIA report should incorporate Disaster Management Plan/EMP
- vi. Corporate Environmental Responsibility shall be adhered to; as per OM dated May 18, 2012
- vii. Green belt of minimum width of 15 meters along the periphery of the project site should be provided.
- viii. Internal circulation plan with 9 m wide internal roads should be provided
- ix. Rain water harvesting

General Guidelines

- (*i*) The EIA document shall be printed on both sides, as for 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 4th 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 4th 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.

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.

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 "<u>http://moef.nic.in/Manual</u>".

4.41 Environmental Clearance for proposed construction of commercial complex at Village Dispur and Mouza Beltola, Guwahati, Assam by M/s Jalan Industrial Corporation & M/s Jalan Steel Corporation [F. No 21-50/2012-IA. III]

Name of the Project is Commercial Complex by M/s Jalan Industrial Corporation & M/s Jalan Steel Corporation. The location is Dag No. 45(old)/869 (New), 127/129 Patta No.: 565, 139, Village Dispur and Mouza Beltola, Guwahti, Assam and the Project cost is 42.2 Crores. Distance of the project site from the nearest LGBI Airport, Assam is around 20 Km. Present land use of the project site is private Industrial land. There are no existing trees at construction area and not likely to cut trees for the proposed development. There is existing steel melting shop in operating condition. Same will be shifted to another location.

The Plot/Land Area in m^2 is 6,437.17. The Built-up Area in m^2 is 23,325.01. The FSI Area in m^2 is 14,456.07. The Ground Coverage in m^2 is 2,881.27. The Basement Area in m^2 is 7613.83. The Hollow Plinth Area in m^2 is 2,889.82. The Parking Area in m^2 is 9515.98. The Tree Covered Area in m^2 is 515.92. The Landscape area is 754.92 and the Total No. Of Blocks / Buildings is Total 92 shops, 08 Commercial Office & 11 Shopping Mall.

During the discussion, the following points emerged:

The internal road provided in the project is only 4 meters and only 1 meter width is provided for the green belt. It was decided to defer the proposal and advised the project proponent to provide minimum 6 meters of internal road and green belt of 3 m to be provided all around the plot. The proponent is requested to present the case in the next meeting after incorporating above changes in the layout plan

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.

4.42 Environmental Clearance for Arya Smart Living at Abhaypur, North Guwahati, Assam by M/s Arya Erectors India Pvt. Ltd. [F. No 21-51/2012-IA. III]

The Name of the Project for the proposed development is "Arya Smart living" at Abhoypur, North Guwahti, and Assam. The Location for proposed Development will be in Abhoypur, Mouza, Tehsil- Silasundari Ghopa, North Guwahti, District – Kamrup, State- Assam. The Project Cost is Rs. 72.2 crores. The Regional planning rule applicable for the project is Building Bye laws for Guwahti Metropolitan areas 2006. The total Plot Area is 38106 sq.m. The RG Area is 6783.3. The Paved Area is 12120.5 sq.m. The Road Area is 5301.8 sq. m. The Building Footprint is 13900.4 sq. M and the Total Area is 38106 sq.m. The Podium area is 1744 Sq.m. The Swimming pool area is 150 Sq.m. The Roof area is 14456 sq.m. The Total no. of units is dwelling; Type-A; 08 Units, Type-B: 08 Units, Type-C 108 units Apartments unit; 144 units. Tower A; Basement parking + Still Parking + Convenience Stores 1st Floor + Convenience Stores 2nd Floor + Podium + 12 floors. The Height of Building is 57.87 meter.

The no of parking is required is 516 [proposed Car:-547/ Two Wheeler: - 102]. The Power requirement –Operation Phase Connected load is 5435 KW and The Max. Demand load is 2421 KW. The Total waste (TPD) 0.68. The Bio-degradable Waste (TPD) 0.32. The Non- Biodegradable Waste (TPD) is 0.36. The Landscape Area is 6783.3Sq.m (17.8% of the net plot area). No Trees are existing on the site. The Total Supply is 372 KLD. The Guwahati water supply project new is 143.9 KLD. The Tanker supply for cooling tower make up for AC (non monsoon) is 34.2 KLD. The Recycled water supply is 194.00 KLD. The waste water generation is 215 KLD. The STP capacity is 230 KLD. The Treated water coming from STP is 194.00 KLD. The Flushing water requirement is 88.15 KLD. The Quantity of wastewater generated is 215 KLD

During the discussion, the following points emerged:

- *i. Revise and submit the layout plan with peripheral green belt of 3 meters all around the plot area*
- *ii. Revise and submit the relocation plan for MSW facility.*
- *iii.* Zero discharge criteria should be met as agreed by the project proponent.

iv. The internal road should be kept 7 m and 9 m as committed by the project proponent.

The Committee recommends 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.

4.43 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 proposed project is a development of a State Legislative Assembly Complex at Dispur, Guwahati comprising an Assembly Building, a couple of Annex Building, a Multi Level Car Parking Block and alongwith allied facilities spreaded over a land belongs to Govt. of Assam under the control of General Administration Department; who has handed the work of this area to Assam Legislative Assembly. The proposed project will be a part of Dispur Secretariat Enclosure. The project is abutted on Guwahati Shilling Road, a major arterial road within the city. Area of the land is 40,165 sqm. Total built-up area of the proposed development will be 45,534.96 sq.m.

Railway Station is 4.0km approx. and Gopinath Bordolui Airport is 22 km approx. The total built up area for the proposed project will be 45,534.96 sq.m. The complex will have Assembly House, Administrative Offices, Car Parking facilities and services. Ground coverage after the construction of the project will be 12,379.95 sq.m (30.92% of land area).

Solid waste generated in Project area is domestic and inert in nature. Generated solid waste during operational stage of project is preliminarily assessed as 1746 kg/day or 1.75 tonne/day. It will be collected from designated locations in each floor and segregated into reusable waste and non-reusable waste by authorized agency dealing in collection and disposal of garbage. The segregated solid waste will be disposed to municipal solid waste collection agency.

During the construction phase, sewage will be treated and disposed through temporarily built septic tanks. During the operation phase, wastewater of around 212 kLD will be treated in S.T.P. within the premises and treated effluent will be fully reused for air-conditioning and site maintenance. No wastewater will be discharged into municipal drain. Total Water Requirement is 449 kLD.

Daily power requirement for the proposed complex is assessed as around 3871 kW. Connected load is assessed as around 4839 kVA. Asssam State Electricity Board will be the supply agency. Power back-up will be there by providing three 1250 kVA and two 750 kVA D.G. Sets.

During the discussion, the following points emerged:

While discussing the above project in the meeting, it was informed by Executive Engineer, PWD, that, construction for the above project has already been started. The committee after discussion mentioned that since construction has already been started, this is a case of violation.

The committee advised the project proponent, along with other suggestions, to provide minimum 9 meters of internal road, green belt of 3 m all around the plot and justification on energy saving and ground water/fresh water requirement were also sought.

The committee decided to defer the proposal and requested proponent to present the case in the next meeting after incorporating above changes in the layout plan.

4.44 Environmental Clearance for proposed National Law University and Judicial Academy, Amingaon, Guwahati, Assam by M/s Chief Engineer. PWD, Guwahati, Assam. [F. No 21-54/2012-IA. III]

The National Law School of India University came into being on 29th August, 1987 through a Gazette notification under the National Law School of India Act, (Karnataka Act 22 of 1986). National Law School is one of the five Centers for Advanced Legal Studies and Research being planned in the five regions to carry out cutting edge research in various aspects of law with a thrust on new and emerging areas.

The Location of Plot is at the bank of river Brahmaputra. The site is a narrow strip of land stretching in a inverted L-shape. A small piece of land on the NW also constitutes the part of site for the proposed project. Total Site area is 93620 sqmt. (23.13 Acres). On North Side is PWD road at the foothills of Agyathrui Hills. On the east are privately owned lands with certain residential houses. On South Side is abutting State Highway from Amingaon to Hajo. A little away from the State Highway flows Brahmaputra River and on west side, lay Government lands. Kamakhya Railway station is 7 km and Lokapriya Gopinath Bordoloi International Airport is around 18 Km.

Due to the heavy rainfall and proximity to the river, no rain water harvesting can be proposed. Instead underground water tank for treated water and rain water with pumps for dewatering is to be provided.

Buildings to be constructed in phase I are National law school (G+4), Administrative building (G+4) block1, Library building (G+4), Grade - III (G+2), Grade - IV (G+2), Girls hostel (G+2), Boys hostel (G+4). Buildings to be constructed in phase II are Judicial Academy (G+3) Administrative building (S +4) block - 2 Auditorium Convention centre & Guest house Director's residence (Duplex) (G+1) Professor's Residence (S +4) Faculty / Lecturer residence (G+5) Facility Building (G+1)

The Building Coverage will be 20,594 Sq.m (22%), Internal Road (Paved) are 39,742.5 Sq.m (42%) and Green Area is 33,280 Sq.m (36%)

Daily power requirement for the proposed National law university and Assam Judicial Academy is preliminarily assessed as around 2409 KW during operational stage. Connected load is 4260 KW.Assam State Electricity Board will be the supply agency. The power requirement during the construction period will be aprox.50 KW. 100% power back up will be provided by installing 3 nos. of 1010 KVA D.G. Sets.

Total fresh water requirement is [248+30+48]=326 KLD. Water demand during the construction stage will be 28.41 KLD. Out of 376.73 KLD around 109 KLD will be consumed for toilet flushing and 20 KLD consumed for Filter Backwash where treated waste water will be used, thus required fresh water for domestic purpose will be [377-(109+20)]= 248 KLD. In this project, no wastewater will be discharged into municipal sewer. But, stormwater from the ground surface will be discharged into municipal storm water drain. Net fresh water requirement (248 + 30 + 48 + 20) kLD = 346 kLD. Wastewater generated will be in the tune of 322 KLD. It is proposed that 3 (three) STP of 120 KLD each will be installed to treat waste water. The water discharged after treatment, will be re-used in toilet flushing, for secondary usage like landscaping, DG Cooling etc. There is a drain being proposed to be constructed to the natural drain .Hence the incremental pollution load is virtually nil.

During the discussion, the following points emerged:

- *i.* Recalculate and submit the parking details considering peek requirement for auditorium
- *ii. STP treatment technology suggested by the proponent should be rechecked and alternate technology should be evaluated.*
- *iii.* Revise and submit the layout plan with peripheral green belt of 3 meters all around the plot area
- *iv.* The internal road should be kept 9 m
- v. Submit EMP in tabular from

The Committee recommends 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.

4.45 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]

A requirement has been placed for establishing the Tezpur Medical College/Teaching Hospital at Bihoguri, Tezpur, Assam by Society for Medical Education at Assam. The facility contains accommodation as stand prescribed by the Medical Council of India (MCI) for establishing Hospital with 500 beds in General wards for all the Departments excluding Pay -in -Cabins. Further, a Medical College for annual in-take of 100 students has been designed on the norms prescribed by the MCI leading to MBBS Degree.

The facility is also supported with buildings containing hostel accommodation for girls and boys ^xfor 250 students capacity, hostel accommodation for nurse, hostel facility for senior/Junior resident Doctors. Residential accommodation for Principal, Vice Principal, Medical Superintendent, Professors residence, Asst Professors residence and other staff members have also been provided

The site for the Tezpur Medical College, Bihoguri, Tezpur, Assam is located about 18 km from city of Tezpur on the National Highway NH-52. The site is like a quadrilateral in shape and measures a total area of approximately 36.8 acres. The site is generally flat in nature with a gentle slope of 1 to1.5m from the National Highway in the North to the village Road at the back of the site in the South.

The water requirement for the project will be met from the water supply system as proposed by Public Health & Engineering Department of Govt. of Assam and as well as bore wells within the premises. Daily water requirement is 1 mld. The water requirement primarily shall be met by Water Supply Project for Tezpur Medical College & Hospital as proposed by Public Health Engineering Department, Tezpur Circle, Tezpur. Surface water from the river Brahmaputra is planned to take up for the project by lifting it through pumps. The total capacity of water supply system is 1.60 MLD. The water supply system shall additionally be supported by 4 Nos. Bore Wells to be provided at site.

The average daily domestic demand of water during the operational stage will be 483 KLD. Therefore, generated wastewater will be in the tune of 442 KLD. It is proposed that 3 (three) STP of 150 KLD each will be installed to treat waste water.

The proposed project being hospital, Bio-medical waste will be generated. The waste will be properly segregated, collected, transported and stored following the Bio-medical Waste (management & Handling) Rules, 1998 stipulated by MoEF, Govt. of India. The waste will be sent to the common bio-medical waste treatment facility for treatment and disposal. The domestic garbage will be collected separately and will be picked up separately.

During the discussion, the following points emerged:

While discussing the above project in the meeting, it was informed by Executive Engineer, PWD, that construction for the above project has already been started. The committee after discussion concluded that since construction has already been started, this is a case of violation.

The committee advised the project proponent, along with other suggestions, to provide minimum 9 meters of internal road, green belt of 3 m all around the plot and justification on energy saving and ground water/fresh water requirement were also sought.

The committee decided to defer the proposal and requested proponent to present the case in the next meeting after incorporating above changes in the layout plan.

4.46 Finalization of ToR for the development of Industrial Estate at Growth Centre, Bawal, Dist Rewari, Haryana by M/s Haryana State Industrial & Infrastructure Development Corporation Ltd. [F.No. 21-57/2012-IA.III]

The proposed project is 'Industrial Estate at Growth Centre Bawal, Phase-III and Phase - IV. Latitude: 28° 05 51.90" N Longitude: 76° 36 34.08" E. Proposed area under industrial plot 1,131.21 acres (457.78 ha). Plot Area for phase III is 452.09 acre (182.95 hectare) & Plot Area for phase IV is 679.12 acre (274.83 hectare). As per EIA Notification 2006, the project is listed as 7(c) category as the proposed area is <500 ha. and having the proposed CETP of 58 MLD . As General condition is applicable for this project, Haryana-Rajasthan inter-state boundary coming within 10 km radius of the proposed project site. Hence, Environmental clearance for the proposed project has to be obtain the from the Ministry of Environment and Forest (MoEF),New Delhi, Different types of industries will be proposed in Industrial Estate, like, General Manufacturing Industries, Auxiliary Industry and etc. So, far the development of units and their activities is not certain. Each unit will take its own Environmental Clearance from statutory body, after obtaining an Environmental Clearance for the Estate.

Water requirement is 21 MLD. A treated effluent of 15.4 MLD(@2000 gallons/acre) out of that 10 MLD treated water will be recycled within the project. Adequate treatment of sewage will be carried out in a CETP of capacity 58 MLD (For all the four Phases) For power requirement a 220 kV/132 kV/33 kV substation is proposed to supply power in the area. One DG Set of 180 kVA capacity is proposed for pumping of water at boosting station. Cost of Phase III will be Rs. 79.25 crores and Phase IV will be Rs. 284 crore

During the discussion, the following points emerged:

The project proponent mentioned that Phase -I is already operational and proponent have applied for Environmental Clearance for Phase -II. The extant proposal is for the ToR for Phase -III and Phase -IV. It was observed by the committee that, since all the 4 phases of the project are adjacent to each other, additional ToR can be provided, which can be included in the earlier ToR for Phase -II. EC will be provided for combined area.

It was suggested by the committee to submit the revised form -I for Phase -II which shall includes details of proposed Phase -III and Phase -IV also.

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

- *(i)* Justification for the selection of site with the details of alternative sites evaluated.
- (ii) Examine in detail the proposed site with reference to impact on infrastructure covering water supply, storm water drainage, sewerage, power, etc., and the disposal of treated/raw wastes from the industrial estate on land/water body and into sewerage system.
- (iii) Study the socio-economic situation of the project area and its surroundings and their impact on the project design and operation.
- *(iv) Study the existing flora and fauna of the area and the impact of the project on them.*
- (v) Study the hydrological and geo-hydrological conditions of the project area. Include a contour plan indicating slopes and showing drainage pattern and outfall.
- (vi) Examine and submit details about the resettlement and rehabilitation of project-affected persons in the nearby villages, in accordance with the National Resettlement and Rehabilitation policy.
- (vii) Storm water drainage and outfall may be described.
- (viii) Rain water harvesting proposals should be made with due safeguards for ground water quality. Maximise recycling of water and utilisation of rain water.
- *(ix) Examine soil characteristics, topography, rainfall pattern and soil erosion.*
- (x) Application of renewable energy/alternate energy, such as solar energy, wind energy may be described.
- (xi) Management of wastes discharged by the industrial units and the service facilities, especially the CETP may be described.
- (xii) Identification of recyclable wastes and waste utilisation arrangements may be made.
- (xiii) Explore possibility of generating biogas from decomposable wastes.
- (xiv) Arrangements for hazardous waste management if any may be described.

- (xv) Traffic management plan including parking and loading/ unloading areas may be described. Traffic survey should be carried out on week days and week end.
- (xvi) Examine and submit details of Air quality monitoring as per latest National Ambient Air Quality standards as notified by the Ministry on 16th November, 2009.
- (xvii) Odour mitigation plan may be described. Also make provision of green belt as a measure for mitigation of dust and noise and buffer between habitation and industry.
- (xviii) EMP should include technical and institutional aspects for pre-treatment by constituent units.
- (xix) Use of local building materials should be described. The provisions of fly ash notification should be kept in view.
- (xx) Landscape plan, green belts and open spaces may be described. Examine and submit the details of the Green Belt. At least three rows-15 m width of green belt all along the boundary shall be provided.
- (xxi) Environmental Management Plan should be accompanied with Environmental Monitoring Plan and environmental cost and benefit assessment.
- (xxii) Examine separately the details for construction and operation phases both for Environmental Management Plan and Environmental Monitoring Plan.
- (xxiii) Provide for conservation of resources, energy efficiency and use of renewable sources of energy in the light of ECBC code.
- (xxiv) The facilities to be provided in the industrial estate should be detailed out.
- (xxv) Make assessment of any regulatory measure in view of the environmental and social impacts of the project (such as unauthorised development around the estate).
- (xxvi) Submit the details of CSR activities.
- (xxvii) Other details as indicated in Appendix III of EIA Notification 2006 should also be attended.

4.47 Finalization of ToR for development of FSRU based LNG Terminal at Deep Water Port, Kakinada, East Godavari Dist., by M/s Andhra Pradesh Gas Distribution Corporation Limited. [F.No. 11-70/2012-IA.III]

Andhra Pradesh Gas Distribution Corporation Limited (APGDC) . APGDC together with GDF Suez ("the Promoters") are proposing to develop a Floating Storage Re-gasification Unit (FSRU) for import of LNG in Kakinada Deep Water Port ("the Project") through an SPV to be incorporated. Objective of the project is to fulfill the emergent need of fuel, specifically natural gas in India in general and Andhra Pradesh in specific. Natural gas imported under the project will serve various sectors, namely Power, Fertilizer, City Gas Distribution including CNG, other industrial and commercial sectors.

Major target parameters of the project are as follow:

- Send-out demand and flexibility:
 - Annual capacity: up to 6.5 MTPA.
 - Maximum send out flow rate shall be 50% above the average. Average send out would be 14.2 MMSCMD of Re-gasified natural gas
- FSRU output :
 - Pressure: Min 80 bars, Max 120 bars
 - \circ Temperature : Min 0°C, Max 10°C
- Marine specifications Vessel size:
 - \circ Marine facilities will be designed to accommodate LNG vessels between 120,000 M³ and 215,000 M3. However, mooring and berth shall be designed to accommodate up to 265,000 M³ (Qmax) class vessels.
- Flaring: zero flaring or no gas release to atmosphere (including during unloading) will occur under normal operation.

A key objective of the Promoters is to build and commission a floating type LNG import terminal by early 2014. Estimated Cost of the project is Rs. 1000 crore.

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

- *i)* Submit MoU made between Port Authority for establioshment of the prposed facility.
- *ii)* Submit the details of the various applicable regulations including safety regulations along with the proposed compliances. Also details of safety aspects associated with handling of LNG vis a vis other cargo in other facilities within the port.
- *iii)* Submit the details of the Hazop analysis

- *iv)* Submit details of Risk Assessment, Disaster Management Plan including emergency evacuation during natural and man-made disaster like floods, cyclone, tsunami and earth quakes etc.
- v) Submit a copy of layout superimposed on the HTL/LTL map demarcated by an authorized agency on 1:4000 scale along with the recommendation of the SCZMA.
- vi) Submit details of storage and regasification, distribution network etc and vulnerability of human habitation vis a vis LNG associated risks.
- vii) Type of LNG carriers proposed taking into account the future growth in vessel sizes beyond the present day market trend and the handling aspects of such vessels from environmental considerations.
- *viii)* Submit the Hydrodynamic study as required under OM dated 3.11.2009.
- *ix)* Submit the details of the reclamation along with the source of materials and its quantity & quality.
- *x)* Submit the details of shore line changes along with the shore protection if nay required.
- *xi)* Submit details of Environmental Management Plan and Environmental Monitoring Plan with parameters and costs.
- *xii)* Submit the details of the fishing activity and likely impact due to the activity.
- *xiii)* Details of land breakup along with land use plan and Details of green belt development.
- *xiv)* Details of solid / liquid wastes generation and their management.
- *xv*) *Water requirement, source, impact on competitive users.*
- *xvi)* Submit the details of the eco-sensitive areas, if any.
- *xvii)* Submit the details of Oil Spill Contingent Management Plan.
- xviii) Submit the details of dredging sludge quantity quality in terms of its toxic metals (atleast Cr+6, Arsenic, Mercury, and lead) and its disposal with quantity (reclamation/ dredging disposal site) If disposal is in sea,

location, the justification for selecting such location, the dispersal of dumping material, its effect on marine environment, effect of fishes.

xix) The General guidelines as per the annexure-II to this Minutes shall also be considered for preparation of EIA/EMP.

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.

5. Recommended Projects

5.1 CRZ Clearance for redevelopment and modernization of entire Essel Outdoor location Film Studio at plot bearing CTS No. 114,115,115/1, Village Turbe, V.N. Purav Marg, Chembur by M/s. Essel Group [F.No. 10-41/2009-IA.III].

The proposal involves redevelopment and modernization of old structures existing in Film shooting studio. The plot area of the studio is 16,064.89 sq.m. and is situated in I2 (industrial zone) as per revised sanction Development Plan of M-ward approved by the Government. Total built up area 10,138.860 sq.m. The proposal is to demolish all the existing old structures (19 structures) and to reconstruct 5 numbers of additional studio buildings accommodating additional 6 studios. All the studios shall be provided with acoustic treatment and shall be Air Conditioned. There will be arrangements for post production facilities also including dubbing, Folly Studio, Stereo Track, Laying background music, premix etc. The studio floors will be attached with computerized control rooms for film shooting along with arrangements for Live Telecast. The total water requirement is 100 KLD. The power requirement will be 203 KW. The estimated cost is Rs. 25.21 crore.

The proposed structures are located in CRZ- II, on landward side of existing structures MCZMA in its 50^{th} meeting held on 22.04.09 recommended the proposal for the issue of CRZ Clearance.

The proposal was put up for consideration in the 77th EAC meeting held on 25^{th} - 26^{th} June, 2009, 78^{th} EAC meeting held on 20^{th} - 22^{nd} July, 2009, 79^{th} meeting held 27^{th} - 28^{th} August, 2009 and 88^{th} meeting held on 28^{th} - 29^{th} June, 2010. The EAC has recommended the project, however while processing the proposal for grant of clearance certain additional information were called. The additional information was discussed by the EAC in its meeting held on 9^{th} - 10^{th} July, 2012. The Committee sought information

on commitment for the disposal of debris generated during the operation of studio, undertaking for construction on landward side of existing structure, Comprehensive Disaster Management Plan including emergency evacuation during natural and manmade disaster and fire fighting arrangements. The details submitted by the proponent were discussed by the Committee.

During the discussion, the following points emerged:

- (i) Construction shall be on the landward side of the existing authorized road as committed.
- *(ii)* The debris shall be disposed at the sites idneitifed and approved by the local authority
- *(iii)* There shall be no discharge of waste in coastal area.
- (iv) Ground water shall not be tapped within 200 metre of the High Tide Line; within the 200metre 500metre zone, it can be tapped only with the concurrence of the Central or State Ground Water Board.
- (v) There shall be no disposal of solid or liquid wastes on coastal area. Solid waste Management shall be as per Municipal Solid (Management and Handling) Rules, 2000.
- *(i) There shall be no disposal of wastes in CRZ area.*
- (*ii*) There shall be no construction in No Development Zone.

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

5.2 Amendment to Environmental Clearance and CRZ clearance Eco Tourism-Vasahat& Beach Resort at village Nagaon, Tal.Alibag, Dist. Raigad, Maharashtra by M/s Calcite Properties Developers Pvt. Ltd., Mumbai [F.No. 11-62/2010-IA-III]

The proposal was discussed and considered at Agenda No. 6.7 of 107^{th} Meeting of the Expert Appraisal Committee for Building Construction, Coastal Regulation Zone, Infrastructure Development and Miscellaneous projects was held on $15^{\text{th}} - 16^{\text{th}}$ December, 2011 and $16^{\text{th}} - 17^{\text{th}}$ April, 2012.

In the project component the following errors to be corrected as per the MCZMA recommendations:

Item	Present	To be corrected
Area below HTL	52,155.14	52,946.05
Area between HTL to 200	2,62,563.65	2,43,309.41
m		

Area between 200m to 500	2,63,023.67	2,68,231.36
m		
Area beyond 500 m from	1,68,657.53	1,49,545.81
HTL		
Seaward side	3,14,718.78	3,28,622.83
Landward side	4,31,681.22	4,17,777.17

Following components to be incorporated: i) 4 Nos. of Windmill of 1 MW each, (ii) 2 Nos. Swimming Pool and (c) Club House.

MCZMA vide letter dated 10.09.2012 stated that the matter was discussed in their Authority meeting held on 30th July, 2012 and the components i) 4 Nos. of Windmill of 1 MW each, (ii) 2 Nos. Swimming Pool and (c) Club House were the part of original proposal considered by the MCZMA and recommended to MoEF

The Committee recommends to include the above components in the CRZ Clearance with the conditions stipulated earlier in the Clearance letter for strict compliance by the project proponent.

5.3 CRZ clearance for development of Outfitting Jetty at Hazira Manufacturing complex, Surat by M/s Larson and Toubro Ltd [F.No. 11-53/2012-IA-III]

The proposal involves development of Outfitting Jetty at Hazira Manufacturing complex, Surat. Larsen & Toubro (L&T) is a USD 12.8 billion technology, engineering, construction, manufacturing and financial services conglomerate, with global operations.

The Project has been appraised by the EAC in its meting held on $9^{\text{th}} - 10^{\text{th}}$ July, 2012 and noted that the proposed activity is an outfitting jetty and there is no cargo handling hence, EIA notification does not apply to the project. The committee sought additional information viz. *details of compliance of the conditions of EC/Consent orders, the recommendations of the State GCZMA, details of the proposed activities on the CRZ map of 1:4000 scale prepared by an authorized agency. The details submitted by the proponent were discussed by the Committee.*

During the discussion, the following points emerged:

- *i)* Only outfitting of ships which includes piping, electrical, engineering equipment, accommodation, deck equipment shall be carried out at the proposed facility. No painting shall be carried out
- *ii)* Shall use only precast material for construction purposes
- *iii)* There shall be no painting and sand blasting activities
- *iv)* All the conditions stipulated by the GCZMA shall be strictly complied with
- *v) Ground water shall not be tapped within 200 metre of the High Tide Line; within the 200metre 500metre zone, it can be tapped only with the concurrence of the Central or State Ground Water Board.*
- vi) There shall be no disposal of solid or liquid wastes on coastal area. Solid waste Management shall be as per Municipal Solid (Management and Handling) Rules, 2000.
- *vii)* There shall be no disposal of wastes in CRZ area.

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

5.4 Environmental Clearance for establishment of commercial Complex at plot No. 1/A, Bhagabanpur Industrial estate Bhubaneswar, Odisha by M/s Life Line Protein & Care Pvt. Ltd. [F.No.21-46/2012-IA.III]

The Commercial Complex involves construction on a plot area of 10,029.7 Sq.m (or 2.487 acres). There will be 2B+G+3 storied Commercial complex with total built up area of the project is 38,003 Sq.m. Parking of 372 ECS is proposed against the requirement of 313 ECS. The total water requirement is 133 KLD (Fresh water requirement = 67 KLD). The water supply will be through PHD (Public Health Department) during operation and private water tankers during construction phase. The sewage generation is about 83 KLD and capacity of STP is about 100 KLD. Treated water will be used for flushing/horticulture/DG cooling and HVAC Cooling. The total power requirement is 1,350 KW. 3 number of DG sets of 750 KVA capacity each are proposed. Total solid waste generation will be 547 kg/day. The total cost of project is about Rs. 42 Crores.

The project was discussed in the 115^{th} meeting held on August 16, 2012 of EAC and sought additons information viz. calculations for the energy conservation proposed for the project and EMP in tabular form as committed in the EIA report. The details submitted by the project proponent were examined by the Committee in its meeting held on 19^{th} to 21^{st} September, 2012.

During the discussion, the following points emerged:

(i) 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.

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

5.5 Environmental Clearance for the project Residential cum Commercial Complex at plot No. 441 Patrapada, Bhubaneswar, Orissa. M/s Amrapali Homes Projects (P) Ltd. [F. No 21-44/2012-IA.III]

The Residential cum Commercial Complex involves construction on a plot area of 26,664.37 Sq.m (or 6.59 acres). There will be hotel, commercial & residential blocks having total built up area 1,11,317.85 Sq.m. Parking of 1,023 ECS is proposed. The total water requirement is 578 KLD (Fresh water requirement = 301 KLD). The water supply will be provided through Municipal water supply during operation and private water tankers during construction phase. The sewage generation is about 370 KLD and capacity of STP is about 450 KLD. Treated water will be used for flushing, horticulture, DG cooling and HVAC cooling. The total power requirement is 4,500 KVA. 6 number of DG sets of 3,000 KVA capacity (2×500 KVA + 4×500 KVA) are proposed. Total solid waste generation will be 2,504 kg/day.

The project was discussed in the 115th meeting of EAC held on August 16, 2012 and sought additons information viz.

- (ii) Provide separate entry and exit for residential and commercial area and resubmit the layout plan.
- (iii) Submit EMP in tabular form as committed in the EIA report
- (iv) 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.

The details submitted by the project proponent were examined by the Committee in its meeting held on 19^{th} to 21^{st} September, 2012.

During the discussion, the following points emerged:

- (i) Separate entry and exit for residential and commercial area
- (ii) 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.

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

5.6 Environmental Clearanc for the construction of "Five Star Hotel" at Guwahati, Assam by M/s. Chartered Hotels Pvt. Ltd. [F. No 21-73/2011-IA.III]

As presented by the project proponent, the proposal involves, construction of "Five Star Hotel" at Guwahati, Assam. The project falls under category B2 of project activity number 8(a) (Building Construction Projects) of EIA notification dated 14th

September, 2006. Since there is no SEIAA, the project is being considered by the Ministry.

The proposed hotel will be developed at Ganeshguri, near Changanmal Sarawgi petrol pump, G.S. Road, Dispur, Guwahati -6. The project site comes under jurisdiction of Guwahati Municipal Development Authority (GMDA). The site is well connected by road & railway network. Guwahati Railway station is the nearest railway station from the site at a distance of 5.4 kms. The Lokpriya Gopinath Bordoloi International Airport is situated at a distance of 20.5 kms from the project site.

The total Plot area is 6798.00 m^2 . Total built up area (FSI+ Non FSI) =15295.00+13722.00 m²= 29017.00 m², with FSI of 2.25. Building Configuration: 2 Basement + Ground + Service floor + 12 Storey

The source of water during construction phase is Tanker water and Operation phase is GMC and Treated water from STP, Total Water Demand :Construction phase: 100 KLD Operation phase: 556 KLD (Potable – 330 KLD & Non potable 226 KLD) Wastewater generated: 296 KLD, STP capacity: 300 KLD (SAFF Technology)

Total waste: 0.67 TPD, Biodegradable waste: 0.30 TPD, Non-biodegradable waste: 0.37 TPD. Power will be met from Assam Power Generation Co. Ltd. Construction Phase: Connected Load: 250 KW, Demand Load: 150 KW, Operation Phase : Connected Load: 3780 KW, Max Demand Load:1564 KW. Back-up Supply: D.G sets for power back up supply, Operation phase: 2 D.G. sets of 1010 kVA each. 687.22 Sq.m of landscape area will be provided in the hotel. 8 new trees are proposed to be planted in this project. Parking at Basement 1 & 2 Car Parking – 142, Scooter Parking: 248.

The project was discussed in the 107th meeting of EAS held on December 2011 and sought additons information viz.

- i. The area earmarked for Landscape shall be enhanced.
- ii. There shall be conflict free entry and exit,
- iii. RWH shall be provided .
- iv. Parking shall be made as per norms of MoEF and should include for the buses also.
- v. Green belt not less than 33 % shall be developed all along the periphery.
- vi. Disaster Management plan including emergency evacuation shall be put in place and details shall be submitted.

The details submitted by the project proponent were examined by the Committee in its meeting held on 19^{th} to 21^{st} September, 2012.

During the discussion, the following points emerged:

i. There shall be conflict free entry and exit,

- ii. RWH shall be provided.
- iii. Parking shall be made as per norms of MoEF and should include for the buses also.
- iv. Green belt not less than 33 % shall be developed all along the periphery.
- v. Disaster Management plan including emergency evacuation shall be put in place.

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

5.7 Environmental Clearance of proposed Commercial cum Residential Complex project at Guwahati, distt Kamrup (Metro) Assam by M/s Kamrup Ice & Cold Storage Co [F. No 21-27/2012-IA.III]

As presented by the project proponent, the proposal involves construction of commercial-cum-residential complex at R.G. Baruah Road, Guwahati, Assam on a plot area of 10278 Sq.m. The Total Built-up Area of the project is 34497 m2. The construction work will involve construction of (G+8) stories building with 64 numbers of flats (Block B-C area ~13817sqm). Block A will be developed for commercial purpose which include Hotel facility with area of 20626 sqm. Green area of 2400 Sq.m. will be provided. Parking of 268 ECS is proposed. The total water requirement is 136 KLD (Fresh water requirement = 92 KLD). The source of the water is through Groundwater abstraction during operation and construction phase. The sewage generation is about 110 KLD and capacity of STP is about 135 KLD. Treated water will be used for flushing/horticulture/DG cooling and HVAC Cooling. The total power requirement is 4112 KVA. 2 number of DG sets of 500 KVA and 1 DG Set of 125 KVA capacity each are proposed. Total solid waste generation will be 405 kg/day.

The project was discussed in the 114th meeting of EAS held on July 2012 and sought additons information viz.

- i. Re-submit the drawing showing area for loading unloading in commercial area by reduced parking adjacent to exit point
- ii. Submit Ground water details along with evaluation of seepage control measures for proposed 3 story basement.
- iii. The outer roads shall be of 9 meters throughout
- iv. Peripheral plantation width should be 1 meter minimum

The details submitted by the project proponent were examined by the Committee in its meeting held on 19^{th} to 21^{st} September, 2012.

During the discussion, the following points emerged:

- i. The outer roads shall be of 9 meters throughout
- ii. Peripheral plantation width should be 1 meter minimum

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

5.8 Environmental Clearance for the Residential – Commercial Project at Dag No. 555/556, Patta No. 396, village – Sahar Dispur, Mouza Beltola, Ganeshguri, Guwahati, Assam by M/s Assam Investment & Construction Company [F. No 21-35/2012-IA.III]

The project involves construction residential-cum-commercial complex on a plot area of 5,615.76 Sq. m. The total built up area proposed is 27,914.40 Sq. m. There will be 2Basement + GF+ 8 floors. The total water requirement proposed is 73 KLD (fresh water requirement–46 KLD). The capacity of STP proposed is about 55 KLD. Treated water will be used for flushing/horticulture/DG & HVAC cooling. The total power requirement is 750 KVA. Total solid waste generation will be 318.22 Kg/day. The total parking spaces proposed are 233 ECS. The total cost of the project is Rs. 40.4 Crores.

The project was discussed in the 112th meeting of EAC held in May 2012 and sought additons information viz.

- (i) Water & Energy Conservation Measures shall be submitted
- (ii) Undertaking in maintenance of the STP in the project area shall be submitted
- (iii) Internal road width should be 9 m
- *(iv)* Submit details regarding adequacy of water demand and flushing requirements
- (v) Guidelines of CPCB on reuse of treated wastewater shall be followed.

The details submitted by the project proponent were examined by the Committee in its meeting held on 19^{th} to 21^{st} September, 2012.

During the discussion, the following points emerged:

- (i) Internal road width should be 9 m
- *(ii) Guidelines of CPCB on reuse of treated wastewater shall be followed.*

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

5.9 Environmental Clearance for construction of Academic-cum-Residential Campus for Indian Institute of Technology (IIT), Bhubaneswar in the village of Aragul, Jatni, Dist. Khurda, Bhubaneswar, Odisha [F.No. SEIAA-19/2012-IA.III]

As presented by the project proponent, the proposal involves construction of Academic-cum-Residential Campus for Indian Institute of Technology (IIT), Bhubaneswar in the village of Aragul, Jatni, Dist. Khurda, Bhubaneswar, Odisha. Indian Institute of Technology Bhubaneswar came into existence in July 22, 2008, inheriting the brand name IIT. It is going to establish its Academic cum Residential campus at Aragul,

Bhubaneswar of Khurda District, Odisha. For this project 516.955 Acres of land is required, which has already been acquired. Govt. land has been alloted to IIT Bhubaneswar on Dated 10/02/2009. The daily power requirement for the proposed academic complex is preliminarily assessed as 5000 KVA. The power will be entirely supplied by 11KV source of CESU, Odisha. Also, in case of power cut, 100% power backup generators will be provided for common uses only. Fresh make up of 1000 m3/day will be required for the project which will be sourced from PHED supply of Govt. of Odisha.

The project was discussed in the 114th meeting of EAC held on July 2012 and sought additons information viz.:

- i. Review the treatment technology for STP and ETP and submit details for the same.
- ii. Submit the revised parking drawing showing the provision of bus parking.
- iii. Submit revised parking drawing showing details for physically challenged persons.
- iv. Battery powered busses should be promoted

The details submitted by the project proponent were examined by the Committee in its meeting held on 19^{th} to 21^{st} September, 2012.

During the discussion, the following points emerged:

- *i.* Shall follow flyash rules 2009, and it shall mention in tender document
- *ii.* 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.
- *iii.* Internal road width should be 9 m
- iv. Guidelines of CPCB on reuse of treated wastewater shall be followed.

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

5.10 Environmental Clearance for the Group Housing project 'Royal Habitat' at Govindpur, Jatni Road (Near KIIST Engineering College) Bhubaneswar, Dist. Khurda, Odisha by M/s S J Developers & Housing (P) Ltd. [F. No 21-47/2012-IA.III]

The Group Housing Project involves construction on a plot area of 28,186.470 Sq.m (or 6.23 acres). There will be 28 residential towers + commercial + community having total built up area 59,964.806 Sq.m. Parking of 522 ECS is proposed. The total water requirement is 228 KLD (Fresh water requirement = 132.081 KLD). The water

supply will be provided through Public Health Department during operation and private water tankers during construction phase. The sewage generation is about 163 KLD and capacity of STP is about 250 KLD. Treated water will be used for flushing, horticulture and DG cooling. The total power requirement is 1487.61 KVA. 2 number of DG sets of 500 KVA capacity each are proposed. Total solid waste generation will be 1,156 kg/day.

The project was discussed in the 115th meeting of EAC held in August, 2012 and sought additons information viz.

- (i) Resubmit the traffic circulation plan showing the emergency road on the rare side of the building.
- (ii) Submit EMP in tabular form as committed in the EIA report
- (*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.

The details submitted by the project proponent were examined by the Committee in its meeting held on 19^{th} to 21^{st} September, 2012.

During the discussion, the following points emerged:

(*i*) 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.

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

5.11 Environmental Clearance for the Construction of Residential Complex at Avarampalayam Road, Coimbatore, Tamil Nadu by M/s. Coromandel Engineering Company Ltd. [F.No.21-92/2011-IA.III]

The case pertains to construction of residential buildings "Coral Ennar" in Ganapathy Village, Coimbatore North Taluk, Coimbatore District in the state of Tamil Nadu by M/s Coromandel Engineering Company Ltd. The total land area is 13142.81 Sqm (3.24 Acres). The proposal involves construction of 10 blocks of residential building with a total built up area of 27,972.82 Sqm. The power requirement during operation is about 1.1 MVA which will be sourced from the nearby TNEB grid which will be distributed through the transformers within our premises. For emergency purposes, 2 No. of 160 KVA capacity DG sets will be used. The total water requirement during operation phase of the project is 111 KLD and the fresh water requirement is about 57 KLD which will be sourced from TWAD. The wastewater generation from the project is estimated to

be about 80 KLD, which will be treated in a sewage treatment plant of capacity 100 KLD proposed and will be recycled for flushing and gardening. It is estimated that the municipal solid wastes will be generated in the following passion from the development: Biodegradable wastes: 0.30 Tons/ day Non-biodegradable wastes: 0.20 Tons/day Waste from such bins will be collected separately on daily basis and taken to a separate centralized collection facility. The total space provided for parking is 229 ECS. The total cost of the project is about Rs. 3330.38 Lakhs.

The proposal was put up for consideration in the 107^{th} meeting held on $15^{th} - 16^{th}$ December, 2011. The EAC after examination had called for following additional information.

- (i) Since there will be addition of 500 sqm to the built up area, the form –I shall be accordingly revised and submitted.
- (ii) Parking shall be made as per norms of MoEF and should include for the buses also.
- (iii) Green belt not less than 33 % shall be developed all along the periphery.

The details submitted by the proponent were examined by the EAC in 114th meeting and in 116th meeting.

Regarding point no (i) above committee noted that, revised form – I, duly signed by the proponent was received in the Ministry vide letter dated May 07, 2012. Regarding addition of 500 sqm to the built up area it has been clarified by the proponent in the letter that an area of 555.35 Sq.m has been added to the build-up area for common amenities thus making a total builtup area of 27,972.82 Sqm.

The Committee recommends the proposal for Environmental Clearance with condition at (ii) and (iii) in the Clearance letter for strict compliance by the project proponent.

116th Meeting of the Expert Appraisal Committee for Infrastructure Development, Coastal Regulation Zone and Miscellaneous projects held on $19^{th} - 21^{st}$ September, 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.	Shri V.G.Koshy	Member
5.	Dr. S.P. Bansal	Member
6.	Dr. H.S. Ramesh	Member
7.	Dr. Y. Basavaraju	Member
8.	Dr. Niraj Sharma (Rep. of CRRI)	Member
9.	Shri Bala Subramaniam	Member
10.	Shri Lalit Kapur	Member Secretary
MoEF	officials	
10. Shri E. Thirunavukkarasu		Scientist 'C', MoEF

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

Project Authorities:

Representatives from