State Level Environment Impact Assessment Authority, Uttar Pradesh

Directorate of Environment, U.P.
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To,

Shri Awanish Kumar Awasthi,
Chief Executive Officers,
M/s UP Expressway Industrial Development Authority,
C-13, 2nd Floor, Paryatan Bhawan,
VipinKhand, Gomti Nagar,
Lucknow- 226010

Ref. No. 407 /Parya/SEAC/4632-5156/2018 Date: 23 November, 2019

Sub: Environmental Clearance for Proposed Construction of 04 Lane Bundelkhand Expressway (expandable to 06 lane) in District-Chitrakoot, Banda, Hamirpur, Mahoba, Jalaun, Auraiya and Etawah, U.P., M/s Uttar Pradesh Expressway Industrial Development Authority (UPEIDA).

Dear Sir,

Please refer to your application/letters 09-01-2019, 14-01-2019, 04-1-2019, 26-02-2019, 09-10-2019, 24-10-2019, 04-11-2019 & 09-10-2019 addressed to the Chairman/Secretary, State Level Environment Impact Assessment Authority (SEIAA) and Director, Directorate of Environment Govt. of UP on the subject as above. The State Level Expert Appraisal Committee considered the matter in its meetings held on dated 06/11/2019 and SEIAA in its meeting dated 22/11/2019.

A presentation was made by the project proponent Shri Manoj Kumar Gupta, Superintending Engineer, UPEIDA along with their consultant M/s Vardan Environet. The proponent, through the documents submitted and the presentation made, informed the committee that:-

1. The environmental clearance is sought for Construction of 04 Lane Bundelkhand Expressway (expandable to 06 lane) in District-Chitrakoot, Banda, Hamirpur, Mahoba, Jalaun, Auraiya and Etawah, U.P., M/s Uttar Pradesh Expressway Industrial Development Authority (UPEIDA).
2. Terms of reference in the matter were issued by SEIAA, U.P. vide letter no. 26/Parya/SEAC/4632/2018, dated 10/05/2019.
3. EIA report submitted by the project proponent on 24/10/2019.
4. The proposed expressway will be having 4-Lane (Expandable to 6 lane) configuration starting from Ch. (-) 0+790 at Jhansi-Allahabad Road Junction (Near Chitrakoot) and terminates at Ch. 295+280 (at Agra-Lucknow Expressway) in Etawah.
5. High speed connectivity starts from Km 266.6 of NH 76/new NH 35 (Varanasi- Banda road), near Bharatkoop to km 133.778 of Agra-Lucknow Expressway near village Kudrail in Etawah district.
6. Salient features of the project:

Design Speed	120 Km
Width of Carriageway	7.5m both sides (2x2 Lanes) along with 3.0m Paved shoulder and 2.0m Earthen shoulder on either side.
Width of ROW	110m
Width of Median	5.5m raised median including 0.75m edge strip on both sides
Service Road	3.75m wide carriageway in staggered manner on one side
Safety Features	Metal beam Crash Barrier on Shoulders and Median, Road, Studs, ROW Fencing, Pavement Marking, Caution and Slogan Boards, Anti-Glare Screens on Curves, Advanced Traffic Management System
Wayside Amenities	4 Location
Toll Plazas	At Start and End of Expressway and at 4 Nos. Double Trumpet interchange locations

7. Key structure of the project:

Sl. No.	Type of Structures	Proposed no.
1	Interchange	13

2	Major Bridge	14
3	Minor Bridge	266*
4	Vehicular Underpass	19
5	Light Vehicular Underpass	97
6	Pedestrian Underpass	98
7	RoB	4
8	Toll Plaza	6
9	Wayside Amenities	4
10	Fly Over	18

8. Land Acquisition for Expressway:
   - Total Districts: 7 Districts viz. Chitrakoot, Banda, Mahoba, Hamirpur, Jalaun, Auraiya & Etawah
   - Total Tehsils: 17 nos. (as in Table below)
   - Villages to be affected: 182
   - Total land to be acquired: 3618.771 Hectare (approx.)
   - Land already acquired: 3321.0206 Hectare (As on 18.08.2019)
   - Fund Allocated for LA: 2512 Crore (approx.)
9. 270,000 Nos. of trees will be planted as Compensatory Plantation and environmental enhancement.
10. Estimated Cost of the Project: INR 8869.52 Crores.
11. Raw Material/ Fuel Requirement details:

Raw Material /Fuel	Quantity per Annum/ Total Quantity for construction)	Unit	Source (in case of import, please specify country and Name of the port from which Raw Material / Fuel is received)	Mode of Transport	Distance of Source from Project Site (in Kilo meters) (In case of import, distance from the port from which the raw material / fuel is received)	Type of Linkage (Linkage / Fuel Supply Agreement / e-auction / MoU / LOA / Captive / Open market / Others)
Soil	7,00,00,000	Cum	Nearby Borrow Area	Road	0.002-2.00Km (Lead Varies)	The contractor will make the necessary material supply agreement with the authorised vendor during construction period
Sand	9,00,000	Cum	Sand Quarries	Road	Within 1-2 km	
Cement	7,00,000	Cum	Authorized Vendors at Local level	Road	-	
Aggregates	78,00,000	Cum	Approved Quarry sites	Road	2-26 Km (Lead varies)	
Bitumen	1,30,000	MT	Authorized Vendors	Road	-	
Steel	1,00,000	MT	Authorized Vendors	Road	-	
Fly Ash	10,00,000	Cum	Power Plants with 300 km radius	Road	90-170 Km (Lead varies)	
Plastic Waste	1300	MT	Authorized Vendors	Road	-	
Water	13,270	KLD	SW/GW	Road	-	After obtaining permission from the regulatory authorities

12. The project proposal falls under category–7(f) of EIA Notification, 2006 (as amended).

Based on the recommendations of the State Level Expert Appraisal Committee Meeting (SEAC) held on 12/09/2019 & 06/11/2019 the State Level Environment Impact Assessment Authority (SEIAA) in its Meeting held 22-11-2019 decided to grant the Environmental Clearance for proposed project along with subject to the effective implementation of the following general & specific conditions:-

A. <u>General Conditions:</u>

1. A comprehensive EIA shall be undertaken taking into view conditions stipulated in this clearance also and submitted to this Authority within 02 years of commencement of the project. The comprehensive EIA study should also include:
   I. The detailed impact analysis under the scope of work particularly the impact on ambient air quality interpreting the incremental concentration of the various parameters based on air quality models.
   II. The specific target group in the predominant wind directions.

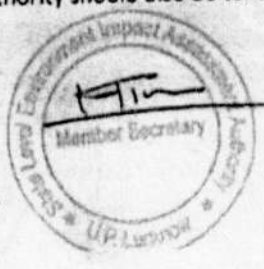
III. Critical traffic analysis for the construction and the operation phases based on eco-friendly fuels in order to formulate an action plan to keep the surrounding air quality confirming to its present level/the prescribed norms.

IV. Efforts to utilize the fly ash to the maximum level and the natural clay/soil to the minimum level should be made.

2. Permission for any tree felling shall be taken from Forest Department as per law. In addition to the proposed compensatory plantation (3 Trees planted for every tree cut) it shall be ensured that adequate plantation on both sides of proposed expressway shall be undertaken with shade giving, ecologically friendly, sound absorbing and native species of trees to attenuate probable air and noise pollution. A densely populated green belt in both sides of the expressway shall be developed.
3. The implementation of the environmental management plan should be reviewed every 06 months by the project proponents and the Action Taken Report should be submitted to this authority, UPPCB, and the concerning District Magistrate.
4. The project proponent will set up separate environmental management cell for effective implementation of the EMP etc as well as stipulated environmental safeguards under the supervision of a Senior Experienced Executive.
5. Full support should be extended to concerned officers/authorities by the project proponents during their inspection of the project for monitoring purposes by furnishing full details and action plan, including action taken reports in respect of mitigative measures and other Environmental protection activities.
6. A Six Monthly monitoring report should be submitted to the Authority regarding the implementation of the stipulated conditions.
7. The E.I.A. Authority or any other competent authority may stipulate any other conditions or environmental safeguards, subsequently, if deemed necessary, which should be complied with.
8. First aid centers along the highway should be identified with referral facility for nearby trauma centers for causality management.
9. Regular noise levels should be monitored during construction and operation phase.
10. The date and place of sampling of water testing should be provided along with the quality of water as suitable for drinking purposes alongwith compliance report.

B. Specific Conditions:

1. Project proponent shall carryout the analysis for aquatic and terrestrial of soil and for surface water as well as subsurface water samples for environmental parameters/ contaminants effecting the ecological system. Water and soil test samples shall be collected and be analyzed for at least of two site stations of the river/natural water bodies, distance admeasuring approximately 100mt apart from one another., and likewise for subsurface water, at least two subsurface water sample shall be collected from both bank side of the river/ natural water bodies, trans distance admeasuring approximately 500mt., apart in the traverse journey of Expressway road/bridge width.
2. Project proponent shall assess the impact of Expressway road/bridge construction on migratory birds under the direction and supervision of Chief Wildlife Warden of Govt. of U.P.
3. Conservation measures shall be adopted to preserve aquatic and terrestrial fauna.
4. Bio-diversity in terms of flora and fauna shall be maintained.
5. State Environmental Impact Assessment Authority reserves the right to add additional safeguard measures subsequently, if found necessary, and to take action including the revoking of the environmental clearance under the provisions of the Environmental (Protection) Act, 1986, to ensure effective implementation of the suggested safeguard measures in a time bound and satisfactory manner.
6. Status of compliance to the various stipulated environmental conditions and environmental safeguards will be uploaded by the project proponent in its website.
7. Source of water-required water shall be met by rivers and canals wherever it is possible. In no other option borewell may be recommended after obtaining permission competent authority.
8. Felling of trees only after obtaining NOC from the competent authority.
9. Vehicle having PUC certificate should be use.
10. Safe drinking water for labours should be provided.
11. 100 PPM, PM_{10} must be achieved.
12. Continuous online AAQ monitoring at every 100 KM interval to be done.
13. Trauma center alongwith refreshment center at every 50 KM to be provided.
14. Drainage line and provision of lighting on both side of the road side should be provided.
15. Traffic light signal at each crossing and at diversion point to be provided.
16. Name of approaching town with mileage sign to be provided.
17. Mining permission from competent authority should also be taken.



18. The construction work shall be undertaken in a manner that the active channel, flow and direction rivers coming under proposal should not be disturbed. The active channel width shall be as certified by Central Water Commission and shall keep into account the flood flows also. The project in all its phases shall ensure that there is no such activity that may affect/result in change of flow (quantity and direction) of river or silting of the river or its tributaries.
19. The use of plastic waste in the construction of the Highway shall be explored. It is suggested that the crusher's dust can be used along with plastic waste in construction of road.
20. The fly ash generating potential of the surrounding areas shall be estimated and its use shall be explored in the proposed expressway.
21. The project proponent shall obtain forest clearance under the provisions of Forest (Conservation) Act, 1986, in case of the diversion of forest land for non-forest purpose involved in the project.
22. The project proponent shall obtain clearance from the National Board for Wildlife, if applicable.
23. The project proponent shall prepare a Site-Specific Conservation Plan & Wildlife Management Plan and approved by the Chief Wildlife Warden. The recommendations of the approved Site-Specific Conservation Plan / Wildlife Management Plan shall be implemented in consultation with the State Forest Department. The implementation report shall be furnished along with the six-monthly compliance report. (In case of the presence of schedule-I species in the study area).
24. The project proponent shall obtain Consent to Establish / Operate under the provisions of Air (Prevention & Control of Pollution) Act, 1981 and the Water (Prevention & Control of Pollution) Act, 1974 from the concerned State pollution Control Board/ Committee.
25. The project proponent shall obtain the necessary permission from the Central Ground Water Authority, in case of drawl of ground water / from the competent authority concerned in case of drawl of surface water required for the project.
26. All potable water sources near the right of way should be such that they meet drinking water criteria as prescribed. Necessary water recharge facilities shall be constructed near each potable water station.
27. Ground and surface water sources (including rivers and cannels) will be used to meet the water requirement during construction phase of the project road subject to permission from the competent concerned authorities. Ways to minimize the water consumption including use of stored rain water should be explored and included in the comprehensive EIA as indicated in condition no. 1.
28. It shall be ensured that the alignment and other project areas are more than 05 Km away from (i) Protected areas notified under the Wild Life (Protection Act, 1972 (ii) Critically polluted areas as notified by the Central Pollution Control Board from time to time (iii) Notified Eco-Sensitive areas (iv) Inter-State boundaries and international boundaries.
29. For any extraction of ground water, prior permission from CGWB shall be taken.
30. Construction material shall be so handled that wastes do not find their way into water bodies. Wastes shall be suitably collected and treated as per standards. Necessary consents shall be obtained from the competent authority in this regards.
31. Separate Environmental Clearances as applicable shall be obtained for any subsidiary activities like rest areas, automobile repair shops etc planned in the project area as per EIA notification.
32. Measures should be taken to protect the ponds along the proposed alignment that may likely to be affected. Wetlands within the study area of the project should be identified and it shall be ensured that there is no eco-degradation of these wetlands as a result of the project. Details shall be submitted with the comprehensive E.I.A.
33. The CNG station should be established for proper functioning of vehicles to control pollution on the proposed highway.
34. The operation and maintenance of dust monitoring to be reviewed after every six months.
35. Rain water harvesting sites should be developed where ever possible as per norms.
36. The project proponent should obtain necessary permission from the State Irrigation Department before drawing water from the river sources for the purpose of the proposed construction activity. Prior permission from the concerned Authority should be taken for any abstraction of groundwater.
37. Noise barriers should be provided at appropriate locations particularly in the areas where the alignment passes through inhabited areas, so as to ensure that the noise levels do not exceed the prescribed standards and comply with provisions given under Noise Rules 2000 (as amended) for silence zone as defined under the rules.
38. Rest areas with facilities like toilets and refreshment may be included along the expressway.
39. Provision of trauma center/medical facilities is to be provided on this expressway within convenient distance.

40. It is suggested that in between two ways of the road the height of the divider on both side of the green verge should be such that no traffic like motorcycle, cycle, and tractor can cross over. It is also suggested that it will be better if in between two roads strong railing could be provided with sufficient height.
41. Overloading factor should be adequately incorporated during design and construction of the expressway.
42. Adequate drainage structures should be provided along the entire length of expressway so that no conditions of water stagnation are created. Near the settlement areas, drainage structures shall be covered.
43. Relocation of temples and other cultural properties like mosques, schools, hospitals etc, along the proposed alignment, shall be taken-up only after permission from competent authority/local administration.
44. Suitable measures shall be taken to educate highway users on the risk of HIV and human trafficking. Environmental and safety awareness drives through hoardings should also be promoted.
45. On every toll barriers Weigh Bridge is to be installed to check the load of the trucks and restrict the over loaded vehicles and comply as per the capacity design of the road.
46. Separate clearances from the competent authority shall be obtained regarding acquisition of water bodies, forest land, cultural sites etc. Such clearances shall take into consideration minimum impact options.
47. Sand and aggregates shall be obtained from approved quarries only. Borrow areas shall have the approval of the competent authorities.
48. Acquisition of land should be as prescribed under Govt. Rules.
49. Dredged material from road side ditches should be suitably disposed as not to cause any environmental problem. Necessary permission shall be obtained from the competent authority in this regard.
50. Consent for discharge of effluents from workers camp and other construction activity should be obtained from competent authority.
51. Borrow pits should be so selected so as to have minimum loss of productive land.
52. Separate NOC and consent of the UPPCB shall be obtained with regards to asphalt plants, crushers, batching plants, hot mix plants etc.
53. Landfill sites for earth, stone or other construction material shall be duly approved by the competent authority.
54. The alignment shall be so maintained that there is no Archeological or cultural property in the project area.
55. The proposal should conform to Regional Development Plan for the area and if non conforming, suitable permission should be taken before construction from the competent authority.
56. Adequate provision for infrastructure facilities including water supply, fuel and sanitation must be ensured for construction workers during the construction phase of the project in order to avoid any damage to environment.
57. Appropriate measures must be taken while undertaking digging activities to avoid any likely degradation of water quality and other incidents.
58. Borrow pits for earth, quarry sites for road construction material and dump sites must be identified keeping in view the following:
    a) No excavation or dumping on private property is carried out without consent of the owner.
    b) No excavation or dumping should be allowed on wetlands, forest areas, protected or prohibited land or other ecologically valuable or sensitive locations.
    c) Excavation work should be done in consultation with the Soil Conservation and Watershed Development Agencies working in the area.
    d) Construction spoils including bituminous material and other hazardous materials must not be allowed to contaminate water courses and the dump sites for such materials must be secured so that .they should not leach into the ground water, and necessary permission from the UPPCB be obtained.
    e) During the earthwork on embankments care is to be taken regarding environmental pollution. The adequate number of sprinkles should be used during the operation period.
59. Adequate precautions and norms should be followed during transportation of the construction material so that it does not affect the environment adversely.
60. Borrow pits and other scars created during the road construction should be properly leveled and treated.
61. Possibility of use of non conventional energy sources may be explored.
62. Municipal solid waste & Hazardous waste shall not be used in the construction of the express way.
63. Automatic traffic signal is to be provided at all crossing functioning during day and night.
64. During foggy weather the vehicular traffic may be held with parking facilities to avoid accidents.

Concealing factual data and information or submission of false/fabricated data and failure to comply with any of the conditions stipulated in the Prior Environmental Clearance attract action under the provision of Environmental (Protection) Act, 1986.

State Level Environment Impact Assessment Authority * Member Secretary * U.P. Lucknow

This Environmental Clearance is subject to ownership of the site by the project proponents in confirmation with approved Master Plan for Chitrakoot, Banda, Hamirpur, Mahoba, Jalaun, Auraiya and Etawah. In case of violation; it would not be effective and would automatically be stand cancelled.

The project proponent has to ensure that the proposed site in not a part of any no- development zone as required/prescribed/Indentified under law. In case of the violation this permission shall automatically deemed to be cancelled. Also, in the event of any dispute on ownership or land use of the proposed site, this Clearance shall automatically deemed to be cancelled.

Further project proponent has to submit the regular 6 monthly compliance report regarding general & specific conditions as specified in the E.C. letter and comply the provision of EIA notification 2006 (as Amended).

These stipulations would be enforced among others under the provisions of Water (Prevention and Control of Pollution) Act, 1974, the Air (Prevention and Control of Pollution) Act, 1981, the Environment (Protection) Act, 1986, the Public Liability (Insurance) Act, 1991 and EIA Notification, 2006 including the amendments and rules made thereafter.

(Ashish Tiwari)
Member Secretary, SEIAA

No...../Parya/SEAC/4632/2019 Dated: As above

Copy with enclosure for information and necessary action to:

1. The Principal Secretary, Department of Environment, Govt. of Uttar Pradesh, Lucknow.
2. Advisor, IA Division, Ministry of Environment, Forests & Climate Change, Govt. of India, Indira Paryavaran Bhawan, Jor Bagh Road, Aliganj, New Delhi.
3. Additional Director, Regional Office, Ministry of Environment & Forests, (Central Region), Kendriya Bhawan, 5th Floor, Sector-H, Aliganj, Lucknow.
4. District Magistrate Chitrakoot, Banda, Hamirpur, Mahoba, Jalaun, Auraiya and Etawah.
5. The Member Secretary, U.P. Pollution Control Board, TC-12V, Paryavaran Bhawan, Vibhuti Khand, Gomti Nagar, Lucknow.
6. Copy to Web Master/ guard file.

(Ashish Tiwari)
Member Secretary, SEIAA