

**Minutes of 102<sup>nd</sup> Meeting of Expert Appraisal Committee (Infra-II) for projects related to airports 7(a); common hazardous waste treatment, storage and disposal facilities 7(d); common bio-medical waste treatment facilities 7(da); common effluent treatment plants 7(h); common municipal solid waste management facility 7(i); building and construction 8(a) and townships and area development projects 8(b) held on 24.02.2023.**

**VENUE: Narmada Conference Hall, First Floor, Jal Wing, Ministry of Environment, Forest and Climate Change, Indira Paryavaran Bhawan, Jorbagh Road, New Delhi – 110 003 (Hybrid Mode for Members only. Proponent and Consultant are required to attend the meeting physically).**

**DATE: 24.02.2023**

### **PROCEEDINGS**

**102.1 Opening Remarks of the Chairman:** The Chairman extended warm welcome to the Members and other participants in the meeting and broadly introduced the agenda for the meeting, adopted by the EAC. The Member Secretary was then requested to begin the proceedings.

**102.2 Confirmation of Minutes of 101<sup>st</sup> Meeting of Expert Appraisal Committee (Infra-II) held on 20.01.2023.**

The Expert Appraisal Committee (Infra-II), hereinafter referred to as the EAC (Infra-II), was informed by the Member Secretary that no representation has been received regarding the correctness of the minutes of the 101<sup>st</sup> meeting of EAC (Infra-II) held on 20.01.2023 after it was uploaded on the PARIVESH. The Minutes of 101<sup>st</sup> meeting of EAC were, therefore, confirmed and the observation that the typo errors, if any noticed during processing of these cases, may be corrected appropriately in the light of relevant facts and figures.

**102.3 Consideration of Proposals:** The EAC (Infra-II) considered proposals as per the agenda adopted for the 102<sup>nd</sup> meeting. The details of deliberations held and decisions taken in the meeting are as hereunder:

### Agenda 102.3.1

#### **Proposed Hospital project-Shija Academy of Health Sciences at Revenue Survey No. 1158, Langol, Lamphelpat, Langol (91 Meitei Longol), Imphal West, Manipur by M/s Shija Hospitals and Research Institute Private Limited – Environmental Clearance**

**(IA/MN/INFRA2/416726/2023; F. No. 21-74/2022-IA.III)**

Detailed information on the proposal is given in **Annexure-1**. Based on the information submitted and clarifications provided by **M/s Shija Hospitals and Research Institute Private Limited** along with EIA consultant **M/s ABC Techno Labs India Private Limited** and detailed discussions held on all the issues, the EAC has noted that the project/activity is covered under Category 'B' of item 8(a) 'Building and Construction projects' of the Schedule to the EIA Notification, 2006 and its subsequent amendments, and requires appraisal at State level. However, due to non-existence of SEIAA in Manipur, the proposal was sent for appraisal at Central level by sectoral EAC.

**2.** After detailed deliberation, committee enquired about the open area and OSR area mentioned under land use breakup of the proposed project, which was explained by the project proponent. Further, EAC suggested to change project title to Shija Hospital and Research Institute instead of Shija Academy, for which the proponent agreed to. Accordingly, the EAC recommended proposal for grant of environmental clearance with following specific conditions in addition to standard general conditions stipulated by the Ministry for such projects:

- (i) Abstraction of ground water shall be subject to the permission of Central Ground Water Authority (CGWA). Fresh water requirement shall not exceed **217 m<sup>3</sup>/day** during operational phase.
- (ii) As proposed, wastewater shall be treated in an onsite STP of total **300 KLD** capacity and trade effluent shall be treated in **ETP of 70 KLD** capacity. Only recycled water will be used for flushing, greenbelt development, OSR and boiler operation.
- (iii) The project proponents would commission a third-party study on the implementation of conditions related to quality and quantity of recycle and reuse of treated water, efficiency of treatment systems, quality of treated water being supplied for flushing (specially the bacterial counts), comparative bacteriological studies from toilet seats using recycled treated waters and fresh waters for flushing, and quality of water being supplied through spray faucets attached to toilet seats.
- (iv) Area for greenery shall be provided as per the details provided in the project document i.e., area under plantation/greenery will be **5,384** sq. m. As proposed, at least **385** trees shall be maintained within the site during the operation phase of the project. The landscape planning should include plantation of native species. A minimum of one tree for every 80 sq. m. of land should be planted and maintained. The

- existing trees will be counted for this purpose. Plantations to be ensured species (cut) to species (planted). The species with heavy foliage, broad leaves and wide canopy cover are desirable. Water intensive and/or invasive species should not be used for landscaping.
- (v) No tree should be felled/transplanted unless exigencies demand. Where absolutely necessary, tree felling shall be with prior permission from the concerned regulatory authority. Old trees should be retained based on girth and age regulations as may be prescribed by the Forest Department.
  - (vi) Where the trees need to be cut with prior permission from the concerned local Authority, compensatory plantation in the ratio of 1:10 (i.e., planting of 10 trees for every one tree that is cut) shall be done and maintained. In selecting species for raising plantations it should be ensured that there is no loss of native biodiversity. Area for green belt development shall be provided as per the details provided in the project document.
  - (vii) The local bye-law provisions on rain water harvesting should be followed. If local bye-law provision is not available, adequate provision for storage and recharge should be followed as per the Ministry of Urban Development Model Building Byelaws, 2016. As proposed, PP shall provide 88 nos of RWH pits and five RWH tanks of 300 KLD capacity for rain water harvesting after filtration.
  - (viii) The solid waste shall be duly segregated into biodegradable and non-biodegradable components and handled in separate area earmarked for segregation of solid waste, as per SWM Rules, 2016. As committed biodegradable waste shall be processed in OWC and the non-biodegradable waste shall be handed over to authorized local vendor. The STP sludge shall be used as manure for greenbelt after dewatering. The bio-medical waste shall be handled by SHRI.
  - (ix) The PP shall provide electric charging points in parking areas for e-vehicles as committed.
  - (x) As committed, solar energy installation of 540.378 KWp capacity to meet at least 14.8% of the connected load shall be implemented.
  - (xi) This Environmental Clearance to the project is under the provisions of the EIA Notification, 2006. The Project Proponent is under obligation to obtain approvals/clearances under any other Acts/Regulations or Statutes as applicable to the project.

### **Agenda 102.3.2**

#### **Development of New Integrated Civil Enclave at Halwara Airport, Village Aitiana, Rajkot Tehsil, Ludhiana District, Punjab by M/s Airports Authority of India - Environmental Clearance**

**(IA/PB/INFRA2/416744/2023; F. No. 21-84/2020-IA.III)**

Detailed information on the proposal is given in **Annexure-2**. Based on the information submitted and clarifications provided by **M/s Airports**

**Authority of India** along with EIA consultant **M/s Greencindia Consulting Private Limited** and detailed discussions held on all the issues, the EAC has noted that the project/activity is covered under Category 'A' of item 7(a) 'Airports' of the Schedule to the EIA Notification, 2006 and its subsequent amendments, and requires appraisal at Central level by sectoral EAC.

2. The project proponent informed the committee and stated that the validity of QCI/NABET accreditation certificate of the consultant had expired on 22.2.2023 and, therefore, they are ineligible to present the proposal for EC. The PP requested to defer the proposal. The EAC expressed dissatisfaction and asked the consultant to inform such details in advance to the project proponent or Ministry so as to avoid the wastage of time. After due deliberations, the EAC decided to defer the proposal.

**Agenda 102.3.3**

**Revision and Expansion of Residential-cum-Commercial with Multiplex Building Project at Mouza Baramunda, Tehsil Bhubaneswar, District Khurda, Odisha by M/s Harshpriya Constructions Private Limited - Amendment in Environmental Clearance**

**(IA/OR/MIS/297557/2023; F. No. 21-71/2022-IA.III)**

Detailed information on the proposal is given in **Annexure-3**. Based on the information submitted and clarifications provided by **M/s Harshpriya Constructions Private Limited** along with EIA consultant **M/s Grass Roots Research and Creation Private Limited** and detailed discussions held on all the issues, the EAC has noted that the project/activity is covered under Category 'B' of item 8(a) 'Building and Construction projects' of the Schedule to the EIA Notification, 2006 and its subsequent amendments, and requires appraisal at State level. However, due to non-existence of SEIAA in Odisha, the proposal required appraisal at Central level by sectoral EAC.

2. Details of amendment sought in environmental clearance dated 12.01.2023 is as under:

S. No	Particulars	Existing EC	Amendments in EC sought
1.	Total Units Residential • 3BHK • 2BHK • Duplex	265 units • 179 nos. • 83 nos. • 3 nos.	No change
2.	Population persons	2583	No change

3.	Total Fresh Water Requirement	119 KLD	No change
4.	Total Waste Water Generation	132 KLD	No change
5.	Total STP Capacity	160 KLD	No change
6.	Electric Load	2839 kW + Solar-279.6 kW	<b>1828 kW from TPCODL + Solar-182 kW</b>
7.	DG Sets	2250 kVA (3 x 750 kVA)	<b>1320 kVA (2 x 500 kVA &amp; 1 x 320 kVA)</b>
8.	Solid Waste	965 kg/day (0.965 TPD)	No change
9.	Biodegradable Waste	386 kg/day	No change
10.	Non-Biodegradable Waste	579 kg/day	No change
11.	RWH Pits	24 nos.	No change
12.	Total Cost of the project	INR 75 Cr.	No change
13.	Page 4; Point (x)	Total power requirement is 3548.75 kVA and same will be TP Central Odisha Distribution Limited (TPCODL). In addition, three numbers of DG sets with total capacity of 2250 kVA (3 × 750 kVA) is proposed as power backup.	<b>Total power requirement is 1828 kW and same will be supplied by Tata Power Central Odisha Distribution Limited (TPCODL). In addition, three numbers of DG sets with total capacity of 1320 kVA (2 × 500 kVA &amp; 1 x 320) is proposed as power backup.</b>
14.	Page 4; Point (xi)	Solar based lighting in the landscape areas, signage, entry gates and boundary walls (240 kWA) and LEDs for internal lighting (115.20 kWA) is proposed as energy saving measures to save about 10 % (355	<b>Solar power generation by using Solar Photo Voltaic Panels (91 kWp) and LEDs for internal lighting (91 kW) is proposed as energy saving measures to save about 10% (182</b>

		kWA) of total power requirement (i.e., 3578.75 kWA)	<b>kW) of total power requirement (i.e., 1828 kW).</b>
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3. After detailed deliberation, the committee recommended to amend environmental clearance dated 12.01.2023 as per detail mentioned in Table in para 2 above. All the terms and conditions stipulated in environmental clearance dated 12.01.2023 shall remain unchanged.

**Agenda 102.3.4**

**Establishment of Integrated Municipal Solid Waste Management Project for Jhumri Telaiya Nagar Parishad at Village Chandordih, Tehsil & District Koderma, Jharkhand by M/s Jhumri Telaiya Nagar Parishad - Further consideration for Environmental Clearance**

**(IA/JH/MIS/157101/2020; F. No. 10-40/2020-IA.III)**

Detailed information on the proposal is given in **Annexure-4**. Based on the information submitted and clarifications provided by **M/s Jhumri Telaiya Nagar Parishad** along with EIA consultant **M/s Wolkem India Limited** and detailed discussions held on all the issues, the EAC noted that though the project/activity is covered under Category B of item 7(i) Common Municipal Solid Waste Management Facility (CMSWMF) of the Schedule to the EIA Notification, 2006, and its amendments, but since the Koderma Wildlife Sanctuary is located within 3.3 km from the project site in the northern direction the the project would fall under Category 'A' and requires appraisal at Central level by the Sectoral EAC.

2. Earlier the proposal was appraised by EAC in its 93<sup>rd</sup> meeting held on 05.08.2022 wherein EAC deferred the proposal and requested the project proponent to furnish the following additional information for further consideration:

- (i) Revalidation of baseline data of EIA/EMP report with fresh baseline data of one month collected during the post-monsoon period. Sampling design and number of samples to be collected should be statistically sound and approved at a high level in the SPCB.
- (ii) Topmost priority has to be accorded in the EMP to ensure pollutants from the facility do not affect the Koderma wildlife sanctuary. For this water management within the proposed facility is the key. The possibility of groundwater contamination should be eliminated by identifying all potential sources for groundwater contamination and providing appropriate mitigation measures. Topographical features should be utilised to ensure surface runoff from the facility does not flow towards the drains leading to Koderma wildlife sanctuary.

- (iii) Koderma settlement located north-east to the site is likely to be affected by air pollution emanating from the facility. Adequate mitigation measures, including well designed tree planting, may be proposed in the EMP to protect the residents of this settlement against air pollution coming from the site.
- (iv) Segregation of hazardous waste has to be ensured and provided with appropriate details in the EMP.
- (v) Details of seepage management, leachate drain system, leachate collection pit and circulation system may be adequately described in the EMP.

**3.** In response, the proponent has submitted the following information on PARIVESH on 15.02.2023 and same was considered by EAC during the present meeting.

- (i) Collected AAQ, Ground Water, Surface Water, Soil & Noise samples in the month of October 2022 (Post monsoon season) and all results are within CPCB norms.
- (ii) The pollutants generated from solid waste material will not enter in any ecologically sensitive areas of the Koderma Wildlife Sanctuary.
- (iii) In the project all activities will be limited within project site. The solid waste material will not enter in any ecologically sensitive areas of the Koderma Wildlife Sanctuary. A Green Belt will be developed at the capital cost of Rs.10 lakhs and recurring Rs. 3.5 lakhs along the periphery of the proposed project which will limit noise reaching outside the project boundary and also provide habitat to small birds and mammals.
- (iv) Hazardous waste and bio-medical wastes are not expected to be a part of proposed project/MSW stream; however, if received same should be handed over to the authorized collector for disposal. Input and output analysis reports of heavy & toxic metals will be given during the operational period. All type of sludge cakes and toxic components will be sent to nearest TSDF Adityapur which is approved by Jharkhand State Pollution Control Board, Ranchi and the agreement copy will be submitted to all concern Government departments.

**4.** After detailed deliberations the EAC recommended the proposal for grant of environmental clearance with the following specific conditions in addition to the standard general conditions stipulated by the Ministry for such projects.

- (i) Consent to Establish/Operate for the project shall be obtained from the State Pollution Control Board as required under the Air (Prevention and Control of Pollution) Act, 1981 and the Water (Prevention and Control of Pollution) Act, 1974.

- (ii) Air pollution control device viz., gas quencher; treatment with mixture of hydrated lime and activated powder for adsorption of partial acidity and VOCs (if any); bag-filter/ESP for removal of particulate matter; ventury scrubber followed by packed bed scrubber with caustic circulation to neutralize the acidic vapours in flue gas; and demister column for arresting water carry over will be provided to the incinerator.
- (iii) Online pollutant monitoring shall be provided as per CPCB guidelines for monitoring particulate matter, SO<sub>2</sub>, NO<sub>x</sub> and CO from the incinerator stack. The periodical monitoring of Dioxins and Furans in the Stack emissions shall be carried out.
- (iv) No tree can be felled/transplant unless exigencies demand. Where absolutely necessary, tree felling shall be with prior permission from the concern Authority. Old trees should be retained based on girth and age regulations as may be prescribed by the Forest Department. Where the trees need to be cut/transplanted with prior permission from the concerned local Authority, compensatory plantation in the ratio of 1:10 (i.e. planting of 10 trees for every one tree that is cut/non-survival of any transplanted tree) shall be done and maintained. In selecting species for Plantations it should be ensured that there is no loss of native biodiversity.
- (v) Project Proponent shall develop green belt in 10,700 sq.m of area as committed.
- (vi) Project proponent shall implement rainwater harvesting from rooftop, paved areas and landscaping areas.
- (vii) Project proponent should use LED Lamps and Solar panel as energy saving conservation in the project area as committed.
- (viii) The landscape planning should include plantation of native species. The species with heavy foliage, broad leaves and wide canopy cover are desirable. Water intensive and/or invasive alien species should not be used for landscaping.
- (ix) Dioxins and furans shall be analysed through CSIR-National Institute for Interdisciplinary Science and Technology (NIIST), Thiruvananthapuram or equivalent NABL accredited laboratory.
- (x) Leachates to be collected and utilized within project after proper treatment. The proponent should submit the details of leachate collection and treatment system to be installed to concerned Integrated Regional Office of the Ministry. Toxicity Characteristic Leaching Procedure (TCLP) should be performed on leachates.
- (xi) No fresh water to be used except for potable use.
- (xii) Sufficient number of Piezometer wells shall be installed in and around the project site to monitor the ground water quality in consultation with the concerned State Pollution Control Committee/CPCB. Trend analysis of ground water quality shall be carried out in each season



and information shall be submitted to the SPCB and concerned Integrated Regional Office of MoEF&CC.

- (xiii) Ground water monitoring for physico-chemical parameters should be carried out and record be maintained by providing piezometric wells along the flow channel (up and down).
- (xiv) Ambient air quality monitoring shall be carried out in and around the landfill site at up wind and downwind locations.
- (xv) The depth of the land fill site shall be decided based on the ground water table at the site.
- (xvi) Environmental Monitoring Programme shall be implemented as per EIA/EMP report and guidelines prescribed by CPCB. Periodic ground water/soil monitoring to check the contamination in and around the site shall be carried out.
- (xvii) The Company shall ensure proper handling of all spillages by introducing spill control procedures for various chemicals.
- (xviii) On line real time continuous monitoring facilities shall be provided as per the CPCB guidelines or State Board Directions.
- (xix) Scrubber water, leachate water or wheel wash shall be treated properly and recycled to achieve zero liquid discharge.
- (xx) Gas generated in the land fill should be properly collected, monitored and flared.
- (xxi) Pre-medical check-up to be carried out on workers at the time of employment and regular medical record to be maintained.
- (xxii) Emergency plan shall be drawn in consultation with the concerned SPCB/CPCB and implemented in order to minimize the hazards to human health or environment from fires, explosion or any unplanned sudden or non-sudden release of hazardous waste or hazardous waste constituents to air, soil or surface water.
- (xxiii) Rainwater runoff from the landfill area shall be collected and treated in the effluent/leachate treatment plant.
- (xxiv) Adequate covering arrangement in site should be done to prevent the runoff of rainwater in the project premises.

### **Agenda 102.3.5**

**Construction of Residential Complex at village Sambalpur, Town-5 (Sakhigopinath), District Sambalpur, Odisha by M/s JAS Construction Pvt. Ltd. – Further consideration for Environmental Clearance under Violation Category**

**(IA/OR/INFRA2/400387/2022; F. No. 21-73/2022-IA-III)**

Detailed information on the proposal is given in **Annexure-5**. Based on the information submitted and clarifications provided by **M/s JAS Construction Private Limited** along with EIA consultant **M/s Grass Roots Research and Creation Private Limited** and detailed discussions held on all the issues, the EAC has noted the project/activity is covered under Violation category under Category 'B' of item 8(a) 'Building and Construction projects' of the Schedule to the EIA Notification, 2006 and its subsequent amendments, and requires appraisal at State level. However, due to non-existence of SEIAA in Odisha, the proposal required appraisal at Central level by sectoral EAC. The proposal has been submitted under violation category as per provisions under Ministry's O.M. dated 07.07.2021.

**2.** Earlier, the proposal was considered by EAC in its 95<sup>th</sup> meeting held on 15.09.2022, 96<sup>th</sup> meeting held on 23.09.2022 and 97<sup>th</sup> meeting held on 28.10.2022.

**3.** In its 95<sup>th</sup> meeting, EAC observed the following and decided to further examine the proposal in its next meeting before issuing necessary directions in the matter.

- (i) The details regarding period of violation for which damage assessment has been calculated is not mentioned.
- (ii) Year-wise breakup of the turnover of project during period of violation has not been specified.
- (iii) Certain items in the Natural & Community Resource Augmentation Plan appear to be highly under-evaluated.
- (iv) Certified balance sheets of the builder company for the concerned period are needed to examine the issue properly.

**4.** Accordingly, EAC examined the proposal in its 96<sup>th</sup> meeting held on 23.09.2022 and deferred the proposal for want of following information/documents:

- (i) Land use of the project site as per the approved master plan.
- (ii) Traffic management with respect to level of traffic, transportation potential and traffic volume.
- (iii) The details regarding period of violation for which damage assessment has been calculated is not mentioned.
- (iv) Year wise breakup of the turnover of project during period of violation has not been specified.
- (v) Many items in the Natural & Community Resource Augmentation plan appear to be highly under-evaluated and have little relation to the actual needs.
- (vi) Certified balance sheets of the builder company for the concerned period are needed to examine the issue properly.

5. Subsequently, the proponent has submitted following replies to above mentioned queries on PARIVESH on 21.10.2022 and the same was examined by EAC in its 97<sup>th</sup> meeting held on 28.10.2022.

- (i) **Reply to ADS 1:** Land use of the project site is 'residential' and it is in accordance with the Master Plan of Sambalpur (Copy submitted).
- (ii) **Reply to ADS 2:** Study has been conducted in this regard. Accordingly, followings are submitted.

S. No	Section	Average Traffic Volume				
		2-Wheeler	3-Wheeler	Car/Taxi	Bicycle	Total
1	Road surrounding the complex	1	1	2	-	4
2	Inside the complex	3	6	36		45

S. No	Section	Year	Average Traffic Volume				
			2-Wheeler	3-Wheeler	Car/Taxi	Bicycle	Total
1	Road surrounding the complex	2021-22	1	1	2	-	4
2	Inside the complex	2021-22	3	6	36	-	45
Total			4	7	38	-	49
1	For Residential Complex	2022-23	4	8	43	0	55
2		2023-24	5	9	49	0	62
3		2024-25	6	10	55	0	70
4		2025-26	6	11	62	0	79
5		2026-27	7	12	71	0	89
6		2027-28	8	13	80	0	101
7		2028-29	9	15	91	0	114
8		2029-30	10	16	102	0	128
9		2030-31	11	18	116	0	145
10		3031-32	12	20	131	0	163

Specific remarks drawn from the present study is as follows:

- It was found that the parking space provided and the area given to parking is adequate and more than the required parking space (> 40 % of total area) based on the guidelines.
- As there are enough parking spaces in the complex it would not hamper the traffic of the adjacent road near the complex, also having provision of visitor's parking spaces.

- In order for entry and exit, further 12.19 m wide roads are provided in the complex premises for maneuver of vehicles keeping in mind the safety parameters for the road users in and outside the complex.
- (iii) **Reply to ADS 3:** Damage assessment has been re-calculated for the period of violation considering start year as 2016 up to current year i.e. 2022. However, the construction of violation part started from 2016 and was completed in 2017. The built-up area (BUA) constructed at project site = 30,611.971 sq. m, out of which BUA of Phase-I is 11,226.14 sq. m and Phase-II + III (under violation) is 27,235.11 sq. m.
- (iv) **Reply to ADS 4:** Year-wise breakup of the turnover of project during period of violation (2016 to 2022) is shown below:

S.No.	Year	Turnover Cost (INR)
1	2016	3,89,755
2	2017	19,04,568
3	2018	7,45,193
4	2019	31,21,915
5	2020	1,21,35,693
6	2021	1,03,62,471.92
7	2022	25,36,028.62
<b>Total</b>		<b>INR 3,11,95,624.54</b>

- (v) **Reply to ADS 5:** Revised budget for Remediation plan and Natural, Community Resource Augmentation plan along with Penalty as per Standard Operating Procedure (SOP) dated 07.07.2021 are presented as under:

**a. Revised remediation plan with proposed activities and budget – Air Environment:**

Activity	Significant Impact/Damage	Remediation Plan (To be followed for projects in vicinity of site)	Proposed Budget for Remediation (INR)
<ul style="list-style-type: none"> <li>• Site Clearance</li> <li>• Excavation</li> <li>• Transportati on of material</li> <li>• Operation of D.G. sets and construction</li> </ul>	<ul style="list-style-type: none"> <li>• Impact on human health – Respiratory problems</li> <li>• Damage to properties by way of dust deposition and gaseous</li> </ul>	<ul style="list-style-type: none"> <li>• Dust suppression and water sprinkling system.</li> <li>• Conduction of vehicle check-up camps in the area at regular intervals (in consultation with the Motor</li> </ul>	<ul style="list-style-type: none"> <li>1. Dust suppression and water sprinkling system = INR 60,000/-</li> <li>2. Barricading/Screening = INR 1,00,000/-</li> <li>3. Cost of tarpaulin</li> </ul>

<p>equipment/ machinery.</p> <ul style="list-style-type: none"> <li>• Construction activity.</li> <li>• Temporary stay of construction workers.</li> </ul>	<p>emissions</p> <ul style="list-style-type: none"> <li>• Impact on vegetation/plants – Interference with photosynthesis</li> </ul>	<p>Vehicle Department)</p> <ul style="list-style-type: none"> <li>• Providing barricades to Panchayat/Local Municipality for use at other construction sites.</li> <li>• Providing tarpaulin sheets to Panchayat/Local Municipality for covering the loose construction material at other construction sites.</li> <li>• Providing Personnel protection equipment to the health department for construction workers.</li> <li>• Ambient air quality monitoring at nearby sensitive locations.</li> </ul>	<p>sheet = INR 50,000/-</p> <p>4. Vehicle check-up camp = INR 1,00,000/- (@10,000/camp)</p> <p>5. Personal protective equipment to construction workers = INR 1,00,000/-</p> <p>6. Ambient air quality monitoring at nearby sensitive locations = INR 1,50,000/- (@6000/month)</p> <p><b>Total budget proposed for Remediation of Air Environment = INR 5,60,000/-</b></p>
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**b. Revised remediation plan with proposed activities and budget – Water Environment:**

Activity	Significant Impact/Damage	Remediation Plan (To be followed for projects in vicinity of site)	Proposed Budget for Remediation (INR)
<ul style="list-style-type: none"> <li>• Water consumption for construction activities, drinking water and sanitary facilities for construction workers</li> <li>• Waste water generation from construction workers, cleaning machinery/</li> </ul>	<ul style="list-style-type: none"> <li>• Water consumed in construction of the project = 63 ML (@2 KL/sq. m of built-up area including drinking water consumption of labour, RMC, cement block/brick, curing, bricks/block soaking, concrete curing, masonry and cement</li> </ul>	<ul style="list-style-type: none"> <li>• Modular STP for waste water treatment in public buildings.</li> <li>• Storm water channelization, cleaning of drains and ground water recharge in nearby areas.</li> <li>• Mobile type toilets in the nearby area.</li> </ul>	<ul style="list-style-type: none"> <li>• Modular STP = INR 2,00,000/</li> <li>• Channelization of storm water, RWH pits, cleaning of public drain system in the area = INR 1,50,000/-</li> <li>• Cost of mobile type toilets in the nearby area = INR</li> </ul>

<p>equipment and vehicles</p> <ul style="list-style-type: none"> <li>• Sediment load generation and contamination of surface run off due to fugitive dust and construction material</li> </ul>	<p>plastering, flooring works etc.)</p> <ul style="list-style-type: none"> <li>•STP treated water was used for construction activities through tankers.</li> <li>•Drinking water for labour was obtained through tanker.</li> <li>•Discharge of contaminated water from construction machinery to land/ water channel drainage.</li> <li>•Discharge of domestic sewage to the project site.</li> <li>•Deterioration of the water channel/drain due to surface run-off causing impact on aquatic life.</li> </ul>		<p>2,00,000/-</p> <p><b>Total budget proposed for Remediation of Water Environment = INR 5,50,000/-</b></p>
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**c. Revised remediation plan with proposed activities and budget – Noise Environment**

<b>Activity</b>	<b>Significant Impact/Damage</b>	<b>Remediation Plan</b> (To be followed for projects in vicinity of site)	<b>Proposed Budget for Remediation</b> (INR)
<ul style="list-style-type: none"> <li>• Movement of construction equipment and machineries.</li> <li>• Construction activities</li> <li>• Operation of D.G. set</li> </ul>	<ul style="list-style-type: none"> <li>• Nuisance to the nearby occupants due to increase in noise and vibration level.</li> <li>• Health impacts on construction workers due to increased noise</li> </ul>	<ul style="list-style-type: none"> <li>• PPEs to Local Health Department and regular health check-up camps in the area with free distribution of hearing aids.</li> </ul>	<ul style="list-style-type: none"> <li>• Personal protective equipment, health check-up camps and hearing aids distribution = INR 1,00,000/-</li> <li>• Acoustic</li> </ul>

	levels.	<ul style="list-style-type: none"> <li>• Acoustic enclosure for DG sets</li> <li>• Periodic ambient noise quality monitoring at nearby sensitive locations.</li> </ul>	<p>enclosure and vibration pads for DG sets = INR 50,000/-</p> <ul style="list-style-type: none"> <li>• Ambient noise quality monitoring at nearby sensitive locations = INR 50,000/-</li> </ul> <p><b>Total budget proposed for Remediation of Noise Environment = INR 2,00,000 /-</b></p>
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**d. Revised remediation plan with proposed activities and budget – Land Environment**

<b>Activity</b>	<b>Significant Impact/Damage</b>	<b>Remediation Plan</b> (To be followed for projects in vicinity of site)	<b>Proposed Budget for Remediation</b> (INR)
<ul style="list-style-type: none"> <li>• Excavation</li> <li>• Solid waste generation during construction activity.</li> <li>• Generation of hazardous wastes like empty cans of varnish, paints etc. during construction activity.</li> </ul>	<ul style="list-style-type: none"> <li>• Change in landuse - There is no impact on landuse as the development of project is in accordance with Master Plan of the area.</li> <li>• Loss of productivity and fertility of soil.</li> <li>• Chocking of drains due to surface runoff during rainy season.</li> <li>• Contamination or degradation of soil /water quality from mismanagement of solid, hazardous</li> </ul>	<ul style="list-style-type: none"> <li>• Assistance to the local farmers for storage of excavated top soil and its reutilization.</li> <li>• Constructing Community Waste Bins in nearby villages.</li> <li>• Creating awareness for waste segregation and management.</li> </ul>	<ul style="list-style-type: none"> <li>• Assistance to local farmers for creating barriers to preserve stored top soil = INR 1.00,000/-</li> <li>• Community waste bins in nearby areas = 1,00,000/-</li> <li>• Solid waste management awareness camps = INR 50,000/-</li> </ul> <p><b>Total budget proposed for Remediation of Land Environment = INR 2,50,000 /-</b></p>

	waste.		
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**e. Revised remediation plan with proposed activities and budget – Biological Environment**

Activity	Significant Impact/Damage	Remediation Plan	Proposed Budget for Remediation (INR)
1. Site clearance 2. Cutting of existing trees	<ul style="list-style-type: none"> <li>Loss of vegetation from project site: No trees were cut at site prior to development of project.</li> <li>Habitat loss of native fauna (avi-fauna).</li> </ul>	<ul style="list-style-type: none"> <li>Plantation of 482 native trees within project site to attract native fauna.</li> <li>Development of park, garden (400 native trees) in nearby public roads and other public buildings for habitat compensation.</li> </ul>	<ul style="list-style-type: none"> <li>Cost of plantation &amp; maintenance of total 882 trees @600/tree = INR 5,29,200/-</li> </ul> <p><b>Total budget proposed for Remediation of Biological Environment = INR 5,29,200/-</b></p>

**f. Revised remediation plan with proposed activities and budget – Socio-Economic Environment**

Activity	Significant Impact/Damage	Remediation Plan (To be followed for projects in vicinity of site)	Proposed Budget for Remediation (INR)
Occupational Health	Health impacts on construction workers	<ul style="list-style-type: none"> <li>Providing first aid kits to nearby construction sites &amp; primary health centres.</li> <li>Providing wheel chair (5 nos.), stretchers (10 nos.) for the primary health centre.</li> </ul>	<ul style="list-style-type: none"> <li>First aid kits (10 nos.) = INR 40,000/- (@4000/kit)</li> <li>Stretchers &amp; Wheelchairs = INR 1,10,000 (@12,000/wheel chair &amp; @5000/stretchers)</li> </ul> <p><b>Total budget proposed for Remediation of Socio-economic Environment =</b></p>



			INR 1,50,000 /-
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**g. Revised Total Budget for Remediation Plan:**

S.No.	COMPONENT OF ENVIRONMENT	PROPOSED REMEDIATION BUDGET (INR)
1	Air Environment	5,60,000/-
2	Water Environment	5,50,000/-
3	Noise Environment	2,00,000/-
4	Land Environment	2,50,000/-
5	Biological Environment	5,29,200/-
6	Socio-economic Environment	1,50,000/-
	<b>REVISED TOTAL BUDGET FOR REMEDIATION PLAN</b>	<b>INR 22,39,200/-</b>

**II. Revised Natural & Community Resource Augmentation Plan Budget:**

S.No.	ACTIVITY	YEAR-WISE IMPLEMENTATION BUDGET (INR)			TOTAL BUDGET (INR)
		1 <sup>st</sup> Year	2 <sup>nd</sup> Year	3 <sup>rd</sup> Year	
1	Develop greenery in vicinity of project site along external roads, greenbelts, parks, etc., in consultation with local authorities	30,000	30,000	30,000	90,000/-
2	Management/maintenance of roads & public greenery	50,000	50,000	50,000	1,50,000/-
3	Rain water harvesting in nearby schools	50,000	50,000	50,000	1,50,000/-
4	Awareness camps for local community on waste minimization and water conservation	30,000	30,000	30,000	90,000/-
6	Provision of clean drinking water taps for public	30,000	30,000	30,000	90,000/-
7	Upgradation of Community resources including religious places, school and health centre	30,000	30,000	30,000	90,000/-
8	Free health check-up camps for residents of nearby areas	40,000	40,000	40,000	1,20,000/-
9	Training on developing technical skills for the constructions workers	30,000	30,000	30,000	90,000/-
	<b>TOTAL REVISED BUDGET FOR NATURAL &amp; COMMUNITY RESOURCE AUGMENTATION (INR)</b>				<b>8,70,000/-</b>

**III. Revised cumulative budget for Remediation, Natural & Community Resource Augmentation Plan:**

S.No.	PARTICULARS	PROPOSED BUDGET (INR)
1	Remediation Plan	22,39,200/-
2	Natural & Community Resource Augmentation Plan	8,70,000/-
	REVISED CUMULATIVE BUDGET FOR REMEDIATION, NATURAL & COMMUNITY RESOURCE AUGMENTATION PLAN	<b>INR 31,09,200/-</b>

**IV. Revised penalty amount as per SOP of MoEF&CC**

Total cost of the project is INR 40 Crore & total turnover cost during the period of violation is INR 3.11 Crore.

Revised Penalty cost for our project will be:

= 20 Lakhs (0.5% of the total project cost) + 0.77 Lakhs (0.25% of the total turnover)  
 = 20.77 Lakhs

Total revised penalty cost for our project is Rs. 20.77 Lakhs.

(vi) **Reply to ADS 6:** Certified balance sheets of the builder company for the violation period were submitted.

**6.** Meanwhile proponent has submitted the following information through PARIVESH portal on 16.02.2023 and same is considered in the present meeting.

- (i) As advised by EAC, traffic volume has been re-assessed and traffic Management Plan updated accordingly, considering full occupancy of the project. Accordingly revised traffic details are submitted
- (ii) Revised budget for Remediation, Community & Natural Resources Augmentation Plan as well as Penalty is as under:

**I. Remediation Plan**

**a. Revised remediation plan with proposed activities and budget – Air Environment:**

Activity	Significant Impact/Damage	Remediation Plan (To be followed for projects in vicinity of site)	Proposed Budget for Remediation (INR)
<ul style="list-style-type: none"> <li>• Site Clearance</li> <li>• Excavation</li> </ul>	<ul style="list-style-type: none"> <li>• Impact on human</li> </ul>	<ul style="list-style-type: none"> <li>• Dust suppression and water sprinkling</li> </ul>	3. Dust suppression and water sprinkling

<ul style="list-style-type: none"> <li>• Transportati on of material</li> <li>• Operation of D.G. sets and construction equipment/ machinery.</li> <li>• Construction activity.</li> <li>• Temporary stay of construction workers.</li> </ul>	<p>health – Respiratory problems</p> <ul style="list-style-type: none"> <li>• Damage to properties by way of dust deposition and gaseous emissions</li> <li>• Impact on vegetation/ plants – Interference with photosynthesis</li> </ul>	<p>system.</p> <ul style="list-style-type: none"> <li>• Conduction of vehicle check-up camps in the area at regular intervals (in consultation with the Motor Vehicle Department)</li> <li>• Providing barricades to Panchayat/Local Municipality for use at other construction sites.</li> <li>• Providing tarpaulin sheets to Panchayat/Local Municipality for covering the loose construction material at other construction sites.</li> <li>• Providing Personnel protection equipment to the health department for construction workers.</li> <li>• Ambient air quality monitoring at nearby sensitive locations.</li> </ul>	<p>system = INR 60,000/-</p> <p>4. Barricading/Screening = INR 1,00,000/-</p> <p>3. Cost of tarpaulin sheet = INR 50,000/-</p> <p>4. Vehicle check-up camp = INR 1,00,000/- (@10,000/camp)</p> <p>5. Personal protective equipment to construction workers = INR 1,00,000/-</p> <p>7. Ambient air quality monitoring at nearby sensitive locations = INR 1,50,000/- (@6000/month)</p> <p><b>Total budget proposed for Remediation of Air Environment = INR 5,60,000/-</b></p>
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**b. Revised remediation plan with proposed activities and budget – Water Environment:**

Activity	Significant Impact/Damage	Remediation Plan (To be followed for projects in vicinity of site)	Proposed Budget for Remediation (INR)
<ul style="list-style-type: none"> <li>• Water consumption for construction activities, drinking water and sanitary facilities for construction workers</li> </ul>	<ul style="list-style-type: none"> <li>• Water consumed in construction of the project = 63 ML (@2 KL/sq. m of built-up area including drinking water consumption of</li> </ul>	<ul style="list-style-type: none"> <li>• Modular STP for waste water treatment in public buildings.</li> <li>• Storm water channelization, cleaning of</li> </ul>	<ul style="list-style-type: none"> <li>• Modular STP = INR 2,00,000/</li> <li>• Channelization of storm water, RWH pits, cleaning of public drain</li> </ul>

<ul style="list-style-type: none"> <li>Waste water generation from construction workers, cleaning machinery/equipment and vehicles</li> <li>Sediment load generation and contamination of surface run off due to fugitive dust and construction material</li> </ul>	<p>labour, RMC, cement block/brick, curing, bricks/block soaking, concrete curing, masonry and cement plastering, flooring works etc.)</p> <ul style="list-style-type: none"> <li>STP treated water was used for construction activities through tankers.</li> <li>Drinking water for labour was obtained through tanker.</li> <li>Discharge of contaminated water from construction machinery to land/ water channel drainage.</li> <li>Discharge of domestic sewage to the project site.</li> <li>Deterioration of the water channel/drain due to surface run-off causing impact on aquatic life.</li> </ul>	<p>drains and ground water recharge in nearby areas.</p> <ul style="list-style-type: none"> <li>Mobile type toilets in the nearby area.</li> </ul>	<p>system in the area = INR 1,50,000/-</p> <ul style="list-style-type: none"> <li>Cost of mobile type toilets in the nearby area= INR 2,00,000/-</li> </ul> <p><b>Total budget proposed for Remediation of Water Environment = INR 5,50,000/-</b></p>
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**c. Revised remediation plan with proposed activities and budget – Noise Environment**

Activity	Significant Impact/Damage	Remediation Plan (To be followed for projects in vicinity of site)	Proposed Budget for Remediation (INR)
<ul style="list-style-type: none"> <li>Movement of construction</li> </ul>	<ul style="list-style-type: none"> <li>Nuisance to the nearby</li> </ul>	<ul style="list-style-type: none"> <li>PPEs to Local Health</li> </ul>	<ul style="list-style-type: none"> <li>Personal protective</li> </ul>

<p>equipment and machineries.</p> <ul style="list-style-type: none"> <li>• Construction activities</li> <li>• Operation of D.G. set</li> </ul>	<p>occupants due to increase in noise and vibration level.</p> <ul style="list-style-type: none"> <li>• Health impacts on construction workers due to increased noise levels.</li> </ul>	<p>Department and regular health check-up camps in the area with free distribution of hearing aids.</p> <ul style="list-style-type: none"> <li>• Acoustic enclosure for DG sets</li> <li>• Periodic ambient noise quality monitoring at nearby sensitive locations.</li> </ul>	<p>equipment, health check-up camps and hearing aids distribution = INR 1,00,000/-</p> <ul style="list-style-type: none"> <li>• Acoustic enclosure and vibration pads for DG sets = INR 50,000/-</li> <li>• Ambient noise quality monitoring at nearby sensitive locations = INR 50,000/-</li> </ul> <p><b>Total budget proposed for Remediation of Noise Environment = INR 2,00,000 /-</b></p>
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**d. Revised remediation plan with proposed activities and budget – Land Environment**

<b>Activity</b>	<b>Significant Impact/Damage</b>	<b>Remediation Plan</b> (To be followed for projects in vicinity of site)	<b>Proposed Budget for Remediation</b> (INR)
<ul style="list-style-type: none"> <li>• Excavation</li> <li>• Solid waste generation during construction activity.</li> <li>• Generation of hazardous wastes like empty cans of varnish, paints etc. during construction activity.</li> </ul>	<ul style="list-style-type: none"> <li>• Change in landuse - There is no impact on landuse as the development of project is in accordance with Master Plan of the area.</li> <li>• Loss of productivity and fertility of soil.</li> <li>• Chocking of drains due to surface runoff during rainy</li> </ul>	<ul style="list-style-type: none"> <li>• Assistance to the local farmers for storage of excavated top soil and its reutilization.</li> <li>• Constructing Community Waste Bins in nearby villages.</li> <li>• Creating awareness for waste segregation and management.</li> </ul>	<ul style="list-style-type: none"> <li>• Assistance to local farmers for creating barriers to preserve stored top soil = INR 80,000/-</li> <li>• Community waste bins in nearby areas = 1,50,000/-</li> <li>• Solid waste management awareness camps = INR 20,000/-</li> </ul>

	<p>season.</p> <ul style="list-style-type: none"> <li>Contamination or degradation of soil /water quality from mismanagement of solid, hazardous waste.</li> </ul>		<p><b>Total budget proposed for Remediation of Land Environment = INR 2,50,000 /-</b></p>
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**e. Revised remediation plan with proposed activities and budget – Biological Environment**

Activity	Significant Impact/Damage	Remediation Plan	Proposed Budget for Remediation (INR)
<p>1. Site clearance 2. Cutting of existing trees</p>	<ul style="list-style-type: none"> <li>Loss of vegetation from project site: No trees were cut at site prior to development of project.</li> <li>Habitat loss of native fauna (avi-fauna).</li> </ul>	<ul style="list-style-type: none"> <li>Plantation of 482 native trees within project site to attract native fauna.</li> <li>Development of park, garden (400 native trees) in nearby public roads and other public buildings for habitat compensation.</li> </ul>	<ul style="list-style-type: none"> <li>Cost of plantation &amp; maintenance of total 882 trees @600/tree = INR 5,29,200/-</li> </ul> <p><b>Total budget proposed for Remediation of Biological Environment = INR 5,29,200/-</b></p>

**f. Revised remediation plan with proposed activities and budget – Socio-Economic Environment**

Activity	Significant Impact/Damage	Remediation Plan (To be followed for projects in vicinity of site)	Proposed Budget for Remediation (INR)
Occupational Health	Health impacts on construction workers	<ul style="list-style-type: none"> <li>Providing first aid kits to nearby construction sites &amp; primary health centres.</li> <li>Providing wheel chair (5 nos.), stretchers (10 nos.) for the</li> </ul>	<ul style="list-style-type: none"> <li>First aid kits (10 nos.) = INR 40,000/- (@4000/kit)</li> <li>Stretchers &amp; Wheelchairs = INR 1,10,000 (@12,000/wheel chair &amp;</li> </ul>

		primary health centre.	@5000/stretcher )  <b>Total budget proposed for Remediation of Socio-economic Environment = INR 1,50,000 /-</b>
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**g. Revised Total Budget for Remediation Plan:**

S. No.	COMPONENT OF ENVIRONMENT	PROPOSED REMEDIATION BUDGET (INR)
1	Air Environment	5,60,000/-
2	Water Environment	5,50,000/-
3	Noise Environment	2,00,000/-
4	Land Environment	2,50,000/-
5	Biological Environment	5,29,200/-
6	Socio-economic Environment	1,50,000/-
	<b>REVISED TOTAL BUDGET FOR REMEDIATION PLAN</b>	<b>INR 22,39,200/-</b>

**II. NATURAL & COMMUNITY RESOURCE AUGMENTATION PLAN:**

Natural and Community resources include Schools, Heritage buildings, Railway Stations, Public Buildings, Open Spaces, Water bodies, Sarai/Shelter homes, Bus stands, Health Care Centres, Forest, Orchards, Religious places, Markets, etc. The extent of impacts are inevitably proportionate to the scale of development and thus it is proposed that for smaller developments [8(a) projects], the natural & community resource augmentation activities should be undertaken upto a radius of 500 m (affected area) from the project site in coordination with local authorities. Natural & Community Resource Augmentation plan has been prepared based on assessment of Community assets and needs. Following activities are proposed for Natural & Community Resource Augmentation plan for this project on the basis of need based assessment of the affected area:

- Develop greenery in vicinity of project site along external roads, greenbelts, parks, etc in consultation with local authorities.
- Long-term management/maintenance of public greenery (external road side plantation, green belts, parks, etc.).
- Upgradation of Community resources including religious place, school and health centre.

- Free health check-up camps for workers engaged at project site and residents of nearby villages.
- Provision of clean drinking water taps for public,
- Training on good construction practices for workers engaged at project site.
- Awareness camps for local community on waste minimization and water conservation.
- Promoting rain water harvesting and construction of RWH pits in nearby school.

**(a) Revised Natural & Community Resource Augmentation Plan Budget:**

S. No.	ACTIVITY	YEAR-WISE IMPLEMENTATION BUDGET (INR)			TOTAL BUDGET (INR)
		1 <sup>st</sup> Year	2 <sup>nd</sup> Year	3 <sup>rd</sup> Year	
1	Develop greenery in vicinity of project site along external roads, greenbelts, parks, etc., in consultation with local authorities	1,00,000	1,00,000	1,00,000	3,00,000/-
2	Management/maintenance of roads & public greenery	1,00,000	1,00,000	1,00,000	3,00,000/-
3	Rain water harvesting in nearby schools	1,00,000	1,00,000	1,00,000	3,00,000/-
4	Awareness camps for local community on waste minimization and water conservation	50,000	50,000	50,000	1,50,000/-
6	Provision of clean drinking water taps for public	27,000	27,000	27,000	81,000/-
7	Upgradation of Community resources including religious places, school and health centre	1,50,000	1,50,000	1,50,000	4,50,000/-
8	Free health check-up camps for residents of nearby areas	1,00,000	1,00,000	1,00,000	3,00,000/-
9	Training on developing technical skills for the constructions workers	30,000	30,000	30,000	90,000/-
<b>TOTAL REVISED BUDGET FOR NATURAL &amp; COMMUNITY RESOURCE AUGMENTATION (INR)</b>					<b>17,61,000/-</b>

**III. Revised cumulative budget for Remediation, Natural & Community Resource Augmentation Plan:**

S. No.	PARTICULARS	PROPOSED BUDGET (INR)
1	Remediation Plan	22,39,200/-



2	Natural & Community Resource Augmentation Plan	17,61,000/-
	<b>REVISED CUMULATIVE BUDGET FOR REMEDIATION, NATURAL &amp; COMMUNITY RESOURCE AUGMENTATION PLAN</b>	<b>INR 40,00,200/-</b>

#### **IV. Revised penalty amount as per SOP of MoEF&CC**

Total cost of the project is INR 40 Crore & total turnover cost during the period of violation is INR 4.09 Crore.

Revised Penalty cost for the project will be:

= Rs. 20 Lakhs (0.5% of the total project cost) + Rs. 1.02 Lakhs (0.25% of the total turnover)  
= Rs. 21.02 Lakhs

Total revised penalty cost for the project is Rs. 21.02 Lakh.

**9.** After deliberation, EAC recommended the proposal for grant of Environmental Clearance with following specific conditions in addition to the standard general conditions stipulated by the Ministry for such projects:

- (i) Project proponent shall submit bank guarantees of Rs.40,00,200/- being equivalent to the budgetary provision for implementation of Remediation Plan, Natural & Community Resource Augmentation Plan and also for penalty of Rs. 21.02 lakhs with the SPCB prior to the grant of environmental clearance.
- (ii) Remediation Plan, Natural & Community Resource Augmentation Plan shall be completed in 3 years whereas bank guarantee shall be for 5 years. The bank guarantee shall be released after successful implementation of the EMP, followed by recommendations of the EAC and approval of the regulatory authority.
- (iii) The PP shall obtain the Fire safety recommendations and height clearance from the Airports Authority of India and submit the same to the concerned Integrated Regional Office of the Ministry within six months of the issue of EC letter.
- (iv) The PP should carry out geotechnical and hydrological studies to assess the impact and suitable mitigation measures.
- (v) The PP shall obtain a distance certificate from the concerned Divisional Forest Officer for the adjacent protected areas/Wildlife Sanctuary and submit the same to the concerned Integrated Regional Office of the Ministry within six months of the issue of the EC letter.
- (vi) Abstraction of ground water shall be subject to the permission of Central Ground Water Authority (CGWA). Fresh water requirement

shall not exceed 262 KLD during operational phase.

- (vii) As proposed, wastewater shall be treated in onsite STP of 230 KLD capacity. The treated water from the STP shall be recycled and re-used for flushing horticulture & DG Cooling within the premises and surplus treated water is discharged to the external sewer/drain.
- (viii) About 837 Kg/day solid wastes is being generated in the project. The biodegradable waste is 335 kg/day which is being given to approved recyclers. Solid waste was segregated at source itself as Organic and Inorganic and managed through an authorized vendor. Organic Waste and STP sludge (18.98 kg/day) is handover to Municipal Corporation for disposal. Inorganic Waste is handed over to authorized vendors for recycling.
- (ix) The power is being supplied by WESCO (Western Electricity Supply Company of Odisha). The total power requirement is 1464 kWA and 2 nos. DG sets of total 305 kVA capacity (1×125 kVA & 1×180 kVA) installed.
- (x) The project proponents would commission a third-party study on the implementation of conditions related to quality and quantity of recycle and reuse of treated water, efficiency of treatment systems, quality of treated water being supplied for flushing (specially the bacterial counts), comparative bacteriological studies from toilet seats using recycled treated waters and fresh waters for flushing, and quality of water being supplied through spray faucets attached to toilet seats.
- (xi) Area for greenery shall be provided as per the details provided in the project document i.e., area under plantation/greenery will be 8625 sq. m. The landscape planning should include plantation of native species and a minimum of one tree for every 80 sq. m of land should be planted and maintained. The existing trees will be counted for this purpose. Species selected for planting should be such as to ensure that there is no loss of native biodiversity. The species with heavy foliage, broad leaves and wide canopy cover are desirable. Water intensive and/or invasive species should not be used for landscaping.
- (xii) The local bye-law provisions on rain water harvesting should be followed. If local bye-law provision is not available, adequate provision for storage and recharge should be followed as per the Ministry of Housing and Urban Affairs (erstwhile Ministry of Urban Development), Model Building Byelaws, 2016.
- (xiii) 5 Rain Water Harvesting tanks of 100 KL have been installed for collection of rain water.
- (xiv) The solid waste shall be duly segregated into biodegradable and non-biodegradable components and handled in separate area earmarked for segregation of solid waste, as per SWM Rules, 2016. As committed, biodegradable waste shall be utilized through the OWC to be installed

within the site. Inert waste shall be disposed off as per norms at authorized site. The recyclable waste shall be sold to authorized vendors/recyclers. Construction & Demolition (C&D) waste shall be segregated and managed as per C&D Waste Management Rules, 2016.

- (xv) As committed, the proponent is required to maintain parking area of 17,232 m<sup>2</sup>, for at least 282 ECS. Electrical vehicle charging facility shall be provided for 30% of total parking capacity.
- (xvi) The PP shall ensure installation of solar-based lighting (220 kWA) and LED lighting (221 kWA) to meet at least 10% of total power requirement (i.e. 1464 kWA).
- (xvii) The Environmental Clearance to the project is primarily under provisions of EIA Notification, 2006. The Project Proponent is under obligation to obtain approvals/clearances under any other Acts/Regulations or Statutes as applicable to the project.

### **Agenda 102.3.6**

#### **Development of Greenfield Airport at Vijayapura, Karnataka by M/s Public Works Department, Vijayapura Division, Government of Karnataka - Further consideration for Terms of Reference**

**(IA/KA/INFRA2/407485/2022; F. No. 21-77/2022-IA.III)**

Detailed information on the proposal is given in **Annexure-6**. Based on the information submitted and clarifications provided **by M/s Public Works Department, Vijayapura Division, Government of Karnataka** along with EIA consultant **M/s ABC Techno Labs India Private Limited** and detailed discussions held on all the issues, the EAC has noted that the project/activity is covered under Category 'A' of item 7(a) 'Airports' of the Schedule to the EIA Notification, 2006 and its subsequent amendments, and requires appraisal at Central level by sectoral EAC.

**2.** Earlier, the proposal was examined by EAC in its 99<sup>th</sup> meeting held on 21.12.2022; wherein EAC had noted that there is no evidence that alternate sites were considered in the proposal. Further, EAC had noted the improper presentation of land use maps and GIS analysis of the study area. Accordingly, the EAC deferred the proposal for want of proper justification in respect of the project site along with proper land use maps.

**3.** In response, the proponent submitted the following information on PARIVESH on 31.01.2023 and same was considered by EAC during the present meeting.

- (i) Initially three sites namely i) Bijapur (at Arakeri village near Bhutanal tank), ii) Mulwada iii) Madhubhavi have been considered for the preliminary assessment of proposed Airport. Details as follows:

**Site No.1:-** In the year 1982 it was proposed to develop Aerodrome at Arakeri village in Bijapur Tq/ dist Arakeri Road (near Bhutanaltank). Then this was rejected by the Principal Govt. Flying training School Bangalore, because the runway length of about 3500 ft. was not sufficient to operate passenger aircrafts. There is no scope to get any area beyond 3500 ft, as there is already a village at one end of the area and a tank at the other end, also high tension lines running across the site. The site was therefore found unsuitable for the development of Aerodrome. (Letter enclosed)

**Site No.2:-** This Mulawad site is located above 30Km away from the Vijayapur City and was found unfit due to technical reasons/ obstacles like uneven topography, sugar factory chimney, wind mills, electrical poles, HT towers, Mulawad lift irrigation canal crossing across the proposed site. Also the flyover constructed on Hubballi-Vijayapur –Kalaburgi NH adjacent to proposed site may obstruct flight in approach & take off path for the proposed runway 09/27. The proposed site is therefore found infeasible for the development of Aerodrome. (Letter enclosed)

**Site No.3:-** Madhubhavi site was identified by the Principal Govt. Flying training School Bangalore in the year of 1982 near Aliabad and Ainapur village which is about 3 Kms from Bijapur on the road leading to Madhubhavi Spinning Mills where clear length up to 8,000 to 10,000 feet is available which can be considered for development of Aerodromes. The entire field consists of rocky and murrum soil and possesses good strong strata. Most of the area is covered by Government land. Later In the year 2009 the Vijayapur Greenfield Airport based on the in-principle approval of MoCA, State Government took up the development of Vijayapur Greenfield Airport near Madhubhavi Village on PPP basis, the work was entrusted to MARG Construction Ltd. Chennai. Later it was terminated due to some technical and financial issues. In the year 2019 the subject of development of Airport was entrusted to the PWD which found the Madhubhavi site suitable for the development of Vijayapur Airport

- (ii) The PP has also submitted the land use map and GIS analysis of the study area

4. However, EAC, while examining Google based imageries/maps of the proposed site, noticed some construction work at the proposed site. On enquiry, the proponent informed that only some preparatory work has been carried out on the site. The EAC requested the proponent to submit an undertaking wherein it is clearly stated that no construction work had been initiated on the proposed site. However, proponent could not submit the

undertaking as desired by EAC. In view of non-submission of the undertaking regarding existing construction work, the proposal was deferred for want of following information/documents:

- (i) Proponent is required to furnish an undertaking that no construction work has been initiated on the proposed project site.
- (ii) In case any construction work has already been undertaken at the site then the Proponent may provide the details of construction carried out at the site by the project proponent or any other person/agency on their behalf.

**LIST OF PARTICIPANTS OF EAC (INFRASTRUCTURE-2) IN 102<sup>nd</sup> MEETING OF EAC (INFRA-2) HELD ON 24.02.2023**

<b>S. No.</b>	<b>Name</b>	<b>Designation</b>	<b>Attendance</b>	<b>Remarks</b>
1	Dr. Promode Kant	Chairman	Present till 1 pm	Physical
2	Shri Monish Mullick	Vice Chairman 1	Present. Chaired the meeting after 1 pm	Physical
3	Dr. Satish C. Garkoti	Vice Chairman 2	Present	Physical
4	Dr. Arun Jyoti Nath	Member	Present	Physical
5	Prof. Inderjit Singh	Member	Present	Virtual
6	Prof. P. K Joshi	Member	Present	Physical
7	Dr. Arun Kumar Saraf	Member	Absent	-
8	Dr. Hema Achyuthan	Member	Present	Physical
9	Dr. Harish C. Nainwal	Member	Present	Physical
10	Shri Ashwani Kumar	Member	Present	Physical
11	Dr. Meenakshi Dhote	Member	Absent	-
12	Dr. Ragavan P	Special Invitee	Present	Physical
13	Dr. Ashish Kumar	Additional Director & Member Secretary	Present	Physical

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**Annexure -1**

**Background information, details of appraisal during earlier EAC meetings and information submitted by the project proponent in compliance to ADS raised, if any**

**Agenda 102.3.1**

**Proposed Hospital project - Shija Academy of Health Sciences at Revenue Survey No. 1158, Langol, Lamphelpat, Langol (91 Meitei Longol), Imphal West, Manipur by M/s Shija Hospitals and Research Institute Private Limited – Environmental Clearance**

**(IA/MN/INFRA2/416726/2023; F. No. 21-74/2022-IA.III)**

The Project Proponent (M/s Shija Hospitals and Research Institute Private Limited) along with his EIA consultant (M/s ABC Techno Labs India Private Limited) made a presentation on above said proposal. The EAC took note of following key parameters and salient features of the project as presented during the meeting as well as the details provided in the brief and application for this project:

- (i) The project is new. Shija Hospitals and Research Institute Private Limited already has an existing 350 bedded hospital which was established in the year 1999. Now SHRI has proposed the addition of 300 beds at Revenue Survey Document Number -1158, Langol, Lamphelpat, Langol (91 Meitei Langol), Imphal West, Manipur-795004 from existing 350 bedded hospital.
- (ii) The proposed project is located at Revenue Survey Document Number -1158, Langol, Lamphelpat, Langol (91 Meitei Langol), Imphal West, Manipur-795004. (Survey No. SL-07,SL-08, SL-09, SL-10, SL-11, SL-16, SL-18, SL-19, SL-20, SL-21, SL-22, SL-23, SL-25, SL-26, SL-27, SL-29, SL-30, SL-31, SL-32, SL-33, SL-34, SL-35, SL-36, SL-38, SL-39, SL-40, SL-41, SL-42, SL-43, SL-44, SL-46, SL-47). The site co-ordinates are 24°50'7.67"N Latitude and 93°54'50.15"E Longitude.
- (iii) The total plot area is 30793 sq. m. The existing built-up area of the 350 bedded hospital is 14,458 sq. m and the built-up area of proposed 300 beds hospital is 36,163.08 sq. m. So the total built-up area (existing + proposed) is 50,621.08 sq. m. The additional 300 bedded hospital block will have B+G+3 floors and has obtained Planning Permission for this project from Imphal Municipal Corporation.
- (iv) Land use breakup of the proposed project is as follows:

<b>S.No</b>	<b>Description</b>	<b>Area (Sq. m.)</b>	<b>Percentage (%)</b>
1	Ground Coverage Area	9,014	29.27%
2	Solid Waste Processing	106	0.34%

	Area		
3	STP & ETP Area	250	0.81%
4	Internal Roads	6,570	21.34%
5	Greenbelt Area	5,384	17.48%
6	OSR Area	3,162	10.27%
7	Parking Area (Surface)	3,740	12.15%
8	Open Area	2,567	8.34%
	Total	30,793.0	100%

- (v) During construction phase, total water requirement is expected to be 77m<sup>3</sup>/day which will be met by local tankers. During the construction phase, the sewage generated will be treated by providing mobile STP. Temporary sanitary toilets will be provided during peak labour force.
- (vi) During operational phase, total water requirement of the project is expected to be 333 m<sup>3</sup>/day and the fresh water of 217 m<sup>3</sup>/day will be met through NS Drinking Water and 116 m<sup>3</sup>/day of flushing requirement will be met through Recycled Water. Domestic wastewater generated (245.2 KLD) will be treated in STP of capacity 300 KLD and trade effluent of 55.25 KLD will be treated in ETP of capacity 70 KLD. Total 116 m<sup>3</sup>/day will be reused for flushing, 43 m<sup>3</sup>/day for greenbelt development and 112 m<sup>3</sup>/day for OSR, Avenue Plantation & Maintenance respectively.
- (vii) About 1313.45 kg/day of solid wastes will be generated in the project. The biodegradable waste 525.38 kg/day will be processed in OWC and the non-biodegradable waste generated of 788.07 hg/day will be handed over to authorized local vendor. The STP sludge of 23 kg/day will be used as manure for greenbelt after dewatering. The bio-medical waste of about 348.75 kg/day will be generated from the 650 bedded hospital and the BMW will be handled by SHRI, who is authorised by MSPCB.
- (viii) The total power requirement during construction phase will be met from DG set and total power requirement during operation phase is 750 KVA and will be met from Manipur State Power Distribution Company Limited. Proposed energy saving measures would save about more than 14.8 % of power in addition to terrace solar power generation of 540.378 KWp.
- (ix) Rooftop rainwater of buildings will be collected in 5 Nos of RWH tanks of total 300 KLD capacity for harvesting after filtration in addition to 88 Nos of RWH pits.



- (x) Parking facility for 465 four wheelers and 488 two wheelers is proposed to be provided against the requirement of 465 Nos and 465 Nos respectively (according to local norms).

Built-up area statement of the proposed project is as follows:

S. No	Particulars	Base ment	Ground Floor	Upper ground Floor	1st Floor	2 <sup>nd</sup> Floor	3 <sup>rd</sup> floor	4 <sup>th</sup> floor	Terrace	Total BUA
1	Existing hospital (Block-E)	-	1307	-	1310	1310	1310	1310	410	6957
2	Eastern block/ blood bank building (Block-F)	-	875	-	900	850	850	850	155	4480
3	Existing hospital (northern block/ eye hospital)	-	801	-	1010	1010	-		200	3021
	Built-up area (Subtotal – A)									14,458
4	Proposed hospital	11240	5400	5059	4514.2	4752.4	4752.4	0	445	36163.08
5	Proposed STP & ETP area		250							
6	Proposed solid waste management		106							
7	Proposed liquid medical oxygen		155							
8	Electrical sub-station		120							
	Built-up area (Subtotal – B)									36,163.08
	Total built-up area									50,621.08

- (xi) The greenbelt area of 5384 sq. m will be developed. Total of 385 trees will be planted in the green belt environment.
- (xii) The estimated cost of the project is ₹ 108 Crore. Capital cost of EMP is ₹ 206.6 Lakhs & recurring cost is ₹ 644.4 Lakhs per annum as against the capital cost of Project (₹ 108 Crore).
- (xiii) The project is not located in Critically Polluted area.
- (xiv) The project is not located within 10 km of Eco Sensitive Zone. NBWL Clearance is not required.
- (xv) Forest Clearance is not required.
- (xvi) No tree cutting is involved.
- (xvii) No court case is pending against the project.
- (xviii) CRZ Clearance is not required.
- (xix) Employment generation: During construction phase: 200 Nos; during operational phase: 578 Nos.
- (xx) Benefit of the project: Providing social health protection and equal access to quality health care has significant positive effects on individual and public health, economic growth and development. The health sector is also a major employment sector, with important potential in job creation.

**2.** The project/activity is covered under category 'B' of item 8(a) 'Building and Construction projects' of the Schedule to the EIA Notification, 2006 and its subsequent amendments, and requires appraisal at State level. However, due to non-existence of SEIAA in Manipur, the proposal required appraisal at Central level as Category B project by sectoral EAC.

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**Annexure -2**

**Background information, details of appraisal during earlier EAC meetings and information submitted by the project proponent in compliance to ADS raised, if any**

**Agenda 102.3.2**

**Development of New Integrated Civil Enclave at Halwara Airport, Village Aitiana, Rajkot Tehsil, Ludhiana District, Punjab by M/s Airports Authority of India - Environmental Clearance**

**(IA/PB/INFRA2/416744/2023; F. No. 21-84/2020-IA.III)**

The Project Proponent (M/s Airports Authority of India) along with his EIA consultant (M/s Greencindia Consulting Private Limited) made a presentation on above said proposal. The EAC took note of following key parameters and salient features of the project as presented during the meeting as well as the details provided in the brief and application for this project:

- (i) The project is new.
- (ii) The proposed development is under consideration because the nearest existing Ludhiana Airport at Sahnewal is a constrained Airport with no land for runway extension and other allied development activities. It is expected that the existing Ludhiana Airport will be closed once flight operation commences from Halwara Airport.
- (iii) The site is located in Aitiana village, Ludhiana District. The site is approachable by Halwara-Aitiana Link Road which is 0.1 km from the site in SW direction. Mullanpur Railway Station is located at a distance of 10.2 km in NNE direction. Coordinates of the project site as follows:

S. No.	Latitude	Longitude
1	30°44'54.76" N	75°36'40.66" E
2	30°45'15.14" N	75°37'03.44" E
3	30°44'59.71" N	75°37'20.17" E
4	30°44'40.80" N	75°36'58.96" E

- (iv) The proposed project of Halwara Airport is spread over an area of 54.85 ha/ 135.54 acres. The proposal involves construction of one and a half level Integrated Terminal Building of built-up area 15,000 sq. m (including 5000 sq m of basement) and an interim building of 2000 sq. m area along with apron, GSE area, parking and other allied facilities. Land use breakup of the project is as follows:

S.No	Features	Area (ha)	Built up Area (in m <sup>2</sup> )
1	City Side Development	4.06	
2	Space for Future Residential	3.32	

	Complex		
3	Space Services & Ancillary Building	2.47	
4	Parking	2.93	
5	Green Area	2.4	
6	Interim Building	0.2	2000
7	Terminal Building	1.5	10000+5000
8	Proposed Apron + Taxi Track	2.37	
9	GSE Area	0.15	
10	Others & Road Area	5.0	
11	Future development	30.45	
	<b>Total</b>	<b>54.85</b>	

- (v) Earlier the Ministry has granted Terms of Reference (ToR) to this project vide letter No. 21-84/2020-IA.III dated 28.12.2020 based on the recommendation of 57<sup>th</sup> Meeting of Expert Appraisal Committee (Infra-2) held on 25.11.2020 for preparation of EIA/EMP report with public consultation.
- (vi) The baseline study for preparation EIA report was conducted during the October to December, 2020 and public hearing was conducted by the Punjab Pollution Control Board on 22.08.2022 at 12.00 noon at the project site under the chairmanship of Smt. Daljeet Kaur, Additional Deputy Commissioner, Jagraon, District Ludhiana.
- (vii) The public hearing was attended by 55 persons from nearby villages. Issues raised during Public Hearing are plantation inside the premises of the proposed site, ground water pollution & noise pollution, impact of drainage pattern and health care facility. In response, proponent agreed to provide the appropriate measures to fulfil the issues raised during the public hearing.
- (viii) The proposed Airport shall be using Ground water. Canal water and Municipal Supply water is also being considered. The total water requirement estimated during operation phase is 365 KLD of which 150 KLD is Fresh water requirement while 215 KLD is Treated water requirement. During the construction stage, water will be sourced primarily through tankers arranged by the contractors as per specifications.
- (ix) The main source of drainage generation will be the discharges from toilets (water closet), urinals, sinks, pantry, kitchen and other similar utilities. The total wastewater generation in operation phase will be 215 KLD. The wastewater will be treated in 250 KLD MBBR technologies STP.
- (x) Roof top and surface run-off will be collected and used for replenishing the groundwater aquifers by the system. As per the IMD climate data published for the region, the area experienced a peak rainfall of 237.8 mm in an hour. Based on this information, it is estimated that about 2508.79 m<sup>3</sup> of rainwater can be harvested from rooftop and green areas. To harvest this amount of rainwater, 32 harvesting pits of 71.5 m<sup>3</sup> is proposed.

- (xi) Solid waste during construction phase will be collected and disposed as per established laws and procedures. The organic waste will be treated at site. Approximately 0.00934 MT of construction waste will be generated from the project. During operation phase, the waste shall be collected in three separate bins namely bio-degradable, non-biodegradable and domestic hazardous wastes. The respective wastes shall be handed over to authorized waste collectors who will dispose them as per the direction or notification by the local authorities from time to time. Biodegradable portion of MSW will be treated at site by Organic Waste Converters and manure generated will be sold or used for plantation. Recyclable waste will be disposed-off by selling. Hazardous waste shall be handled in accordance with Hazardous Waste Management Rules, 2016, Batteries waste shall be handled in accordance with Batteries (Management and Handling) Rules, 2001 and E-waste as per E waste Management Rules, 2016. During operation phase, around 0.63 tonnes of waste will be generate per day. Bio Medical Waste shall be collected and disposed in accordance with Bio Medical waste (Management and Handling) Rules, 2016.
- (xii) Total load estimation for Halwara Airport shall be 2500 KVA and will be sourced from Punjab State Power Corporation Limited. 2 DG sets capacity 1500 kVA each shall be kept for emergency power back up.
- (xiii) The project is not located in Critically Polluted area.
- (xiv) The project is not located within 10 km of Eco Sensitive Zone. NBWL Clearance is not required.
- (xv) Forest Clearance is not required.
- (xvi) No tree cutting is involved.
- (xvii) No court case is pending against the project.
- (xviii) CRZ Clearance is not required.
- (xix) The proposed completion schedule for the project is 28 months. The estimated cost of the project is Rs.425 crores. The proposed capital cost for EMP during the construction phase is Rs 5.40 lakhs while the annual recurring cost is Rs.1.47 lakhs. The proposed EMP cost during the operation phase is Rs. 29.85 lakhs as capital cost and Rs. 4.65 lakhs as annual recurring cost. The proponent has earmarked an amount of Rs. 3.19 Crores for the CSR activity which is 0.75 % of the total project cost (Rs. 425 Crores).
- (xx) Employment generation: The direct employment during operation phase in proposed project will be 200 skilled, unskilled and professional workforce including temporary and permanent employees. These workforces shall be hired locally in order to generate the employment to the local people. While during the project operation stage for the purposes of day-today professional and maintenance works, about 190 staff shall be required.
- (xxi) Benefits of the project: The growth of the airport will generate significant demand for employment and enabling economic growth to benefit the whole region through the generation of both direct and indirect economic value.

**2.** The project/activity is covered under Category 'A' of item 7(a) 'Airports' of the Schedule to the EIA Notification, 2006 and its subsequent amendments, and requires appraisal at Central level by sectoral EAC.

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**Annexure -3**

**Background information, details of appraisal during earlier EAC meetings and information submitted by the project proponent in compliance to ADS raised, if any**

**Agenda 102.3.3**

**Revision and Expansion of Residential-cum-Commercial with Multiplex Building Project at Mouza Baramunda, Tehsil Bhubaneswar, District Khurda, Odisha by M/s Harshpriya Constructions Private Limited - Amendment in Environmental Clearance**

**(IA/OR/MIS/297557/2023; F. No. 21-71/2022-IA.III)**

The Project Proponent (M/s Harshpriya Constructions Private Limited) along with his EIA consultant (M/s Grass Roots Research and Creation Private Limited) made a presentation on above said proposal. The EAC took note of following key parameters and salient features of the project as presented during the meeting as well as the details provided in the brief and application for this project:

- (i) The proposal is for amendment in EC dated 12.01.2023
- (ii) Earlier, the project was granted EC for Revision and Expansion by the Ministry vide letter no.21-71/2022-IA.III dated 12.01.2023 for Plot area of 8400.37 sq. m (2.075 acre) and Built-up area of 50,991.911 sq. m.
- (iii) Project details as per EC dated 12.01.2023 are as follows:

<b>S.No.</b>	<b>Particulars</b>	<b>EC Granted for revision and Expansion (sq. m)</b>
1	Total Plot Area	8400.37
2	Permissible Ground Coverage	3360.15 (@40%)
3	Proposed Ground Coverage	3280.815 (39.1%)
4	Permissible FAR	42,001.85 (@ 5)
5	Proposed FAR	37,717.66 (@4.49)
6	Non FAR area	1,708.031
7	Stilt area	1,218.86
8	Basement area	10,347.36
9	Upper Basement	4,569.69
10	Lower Basement	5,777.67
11	Built-up Area (5+6+7+8)	50,991.911
12	Landscape Area	1,709.48 (20.35 % of plot area)
13	Maximum Height of Building (m)	52.5

- (iv) Amendment sought in comparison with EC dated 12.01.2023 is as under:



S.No	Particulars	Existing EC	Amendments sought
1	Total Units Residential • 3BHK • 2BHK • Duplex	265 units • 179 nos. • 83 nos. • 3 nos.	No change
2	Population persons	2583	No change
3	Total Fresh Water Requirement	119 KLD	No change
4	Total Waste Water Generation	132 KLD	No change
5	Total STP Capacity	160 KLD	No change
6	Electric Load	2839 kW + Solar-279.6 kW	1828 kW from TPCODL + Solar-182 kW
7	DG Sets	2250 kVA (3 x 750 kVA)	1320 kVA (2 x 500 kVA & 1 x 320 kVA)
8	Solid Waste	965 kg/day (0.965 TPD)	No change
9	Biodegradable Waste	386 kg/day	No change
10	Non-Biodegradable Waste	579 kg/day	No change
11	RWH Pits	24 nos.	No change
12	Total Cost of the project	INR 75 Cr.	No change
13	Page 4; Point (x)	Total power requirement is 3548.75 kVA and same will be TP Central Odisha Distribution Limited (TPCODL). In addition, three numbers of DG sets with total capacity of 2250 kVA (3 x 750 kVA) is proposed as power backup.	Total power requirement is 1828 kW and same will be supplied by Tata Power Central Odisha Distribution Limited (TPCODL). In addition, three numbers of DG sets with total capacity of 1320 kVA (2 x 500 kVA & 1 x 320) is proposed as power backup.
14.	Page 4; Point (xi)	Solar based lighting in the landscape areas, signage, entry gates and boundary walls (240 kWA) and	Solar power generation by using Solar Photo Voltaic Panels (91 kWp) and LEDs for

		LEDs for internal lighting (115.20 kWA) is proposed as energy saving measures to save about 10 % (355 kWA) of total power requirement (i.e., 3578.75 kWA)	internal lighting (91 kW) is proposed as energy saving measures to save about 10% (182 kW) of total power requirement (i.e., 1828 kW).
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**2.** The project/activity is covered under Category 'B' of item 8(a) 'Building and Construction projects' of the Schedule to the EIA Notification, 2006 and its subsequent amendments, and requires appraisal at State level. However, due to non-existence of SEIAA in Odisha, the proposal required appraisal at Central level by sectoral EAC.

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**Background information, details of appraisal during earlier EAC meetings and information submitted by the project proponent in compliance to ADS raised, if any**

**Agenda 102.3.4**

**Establishment of Integrated Municipal Solid Waste Management Project for Jhumri Telaiya Nagar Parishad at Village Chandordih, Tehsil & District Koderma, Jharkhand by M/s Jhumri Telaiya Nagar Parishad - Further consideration for Environmental Clearance**

**(IA/JH/MIS/157101/2020; F. No. 10-40/2020-IA.III)**

Earlier, the Project Proponent (M/s Jhumri Telaiya Nagar Parishad) along with his EIA consultant (M/s Wolkem India Limited) made a presentation on above said proposal during 93<sup>rd</sup> meeting of EAC held on 05.08.2022. The EAC took note of following key parameters and salient features of the project as presented during the meeting as well as the details provided in the brief and application for this project.

- (i) The project is new.
- (ii) The proposed Integrated Municipal Solid Waste Management Project located near Chandrodih Village, Khasra no-598, Thana no- 290, Jambandi no-18, circle koderma, district-Koderma, Jharkhand. Latitude 24°26'33.19"N and Longitude 85°35'59.00"E.
- (iii) The present solid waste generation in Jhumritelaiya is around 30.01 TPD & 9.81 TPD in koderma which is mostly comprising of domestic and commercial waste and is projected to around 44.48 TPD for Jhumri telaiya & 16.86 TPD for Koderma in 2040.
- (iv) The Integrated municipal solid waste processing facility will be developed for 20 years.
- (v) It is proposed to establish the Integrated Waste Management Facility to handle about 52 TPD with Aerobic Compost Plant of 25TPD, RDF Processing Plant of 20TPD and Sanitary landfill area of 11703 sq. m.
- (vi) Earlier, the Ministry has granted ToR for preparation of Environmental Impact Assessment (EIA) Report and Environment Management Plan (EMP) in respect of Project mentioned in the subject above vide letter no. 10-40/2020-IA-III dated 06<sup>th</sup> August, 2022.
- (vii) Public Hearing was conducted on 24.01.2022 at Utkramit Madhya Vidyalaya, Barsotiyabar, Ward-15, Koderma Nagar Panchayat, Koderma", Jharkhand in accordance with the EIA notification 2006 & SPCB and its proceedings are incorporated in Final EIA/EMP report. The Public Hearing is organised by Jharkhand State Pollution Control Board Ranchi and Presided by Additional Collector, Koderma, Jharkhand.

- (viii) Concerns raised during the public hearing are Pollution Problem, Local Employment, fertilizer availability to the farmer and Mosquitoes Problem. Based on the issues/representation received from the public, project proponent made an statement, commitment and time bound action plan including budgetary provision.
- (ix) Total area of the proposed project is 8.0 acre. Land use break of proposed facility as follows:

S.No.	Description	Size (sq. m)
1	Built up area	280.00
2	Platform area	1543.00
3	Road area	7228.78
4	Greenbelt area	10700.00
5	Landfill area	11703.00
6	Leachate Evaporation Tank	912.00
	Total area	32366.78

- (x) Site selection criteria as per Solid Waste Management rules, 2016 as follows:

Criteria for landfill site	Required as per SWM Rules, 2016	Actual Position
Distance from Pond	>200 m	No pond within 200m from the project boundary.
Distance from Highway	>200 m	NH-31 2.5 km in NW direction
Distance from Habitation	>200 m	Chandrodih village is 0.22 Km in N direction from project site
Distance from Public Parks	>200 m	No public park exit in 200m from the project boundary
Distance from Water supply wells	>200 m	No any water supply well was observed within 200m from the project boundary
Water table*	2mt from bottom liner of landfill	Criteria Complied.
Earthquake zone*	500 m from fault line fracture	The project district comes under seismic zone III .
Airport/Airbase	>20Kms 10-20 Kms	There is no airport in Koderma. The nearest airport is Bodh Gaya Airport in Bihar at 74.51 km in NW direction. Birsa Munda Airport, Ranchi at 128 km in SSW direction.
Floodplains (100 Yrs.) Zone of	Not Allowed	Not Applicable

Coastal Regulations	Not Allowed	
Wetland	Not Allowed	
Critical Habitat Area	Not Allowed	
Sensitive Eco Fragile Area	Not Allowed	
General Conditions: EIA Notification 2006; Project is category A if	EIA Notification 2006; Requirement	Yes, Koderma Wildlife Sanctuary is at distance of 3.3 Km with respect to project site at North direction.
Protected Area under Wildlife	>10 Kms	Yes, Koderma Wildlife Sanctuary is at distance of 3.3 Km with respect to project site at North direction.
Critically Polluted Area under CPCB	>10 Kms	Not Applicable
Notified Eco Sensitive Area	>10 Kms	Yes, Koderma ESZ boundary is at distance of 3.58 Km with respect to project site at NE direction as per MoEFCC gazette notification S.O. 2895(E) dated: 9th August 2019
Interstate Boundaries or International Boundaries Kms	>10	Not Applicable

- (xi) During Construction phase 2.0 KLD fresh water will be required & during Operational phase total water requirement will be 15.5 KL & fresh water will be 6.2 KLD. The water will be sourced from PHED water supply.
- (xii) The estimated power consumption during the operational phase will be 250KVA which will be procured under the agreement with JBVNL. 63 KVA D.G Set for power back up.
- (xiii) The capital cost of project is ₹ 1023.25/- Lakhs. Capital cost of EMP is estimated to be ₹ 52.0/- Lakhs & recurring cost ₹ 15.70/- Lakhs per annum as against the capital cost of Project (₹ 1023.25/- Lakhs).
- (xiv) Leachate Drain System-Proper drain will be provided to collect leachate generated from compost pad. Leachate Collection Pit & Circulation System -A leachate collection pit having suitable capacity has been provided to collect the leachate generated from landfill and will be treated in Leachate Treatment plant of 20 KLD.
- (xv) The domestic wastewater generated (0.8KLD) will be treated through septic tank/soak pit. Wastewater generation (10.4 KLD) through Floor washing/Vehicle maintenance shed & process will be treated in Leachate Treatment Plant and treated water of 9.3 KLD will be recirculated in process.

- (xvi) LED Lamps and Solar panel will be proposed as energy saving conservation in the project area.
- (xvii) Proposed provisions for rainwater harvesting from rooftop, paved areas and landscaping areas. Proposed ₹ 5.0 Lakhs of Capital Cost and ₹ 2 Lakhs Annual recurring cost for Rain Water Harvesting.
- (xviii) The baseline environmental monitoring was carried out during pre-monsoon of year 1<sup>st</sup> October to 31<sup>st</sup> December 2018.
- (xix) Forest clearance is not required.
- (xx) NBWL Clearance is not required.
- (xxi) Project site not located in Critically Polluted area.
- (xxii) CRZ clearance is not required.
- (xxiii) No court case is pending against the project/project site.
- (xxiv) Koderma Wildlife Sanctuary is situated at 3.3 km from the project site at North Direction and Eco sensitive zone boundary of Koderma WLS is at distance of 3.58 Km with respect to project site at NE direction. The distance Certificate from DFO Wildlife Hazaribagh is taken on 29.08.2019 vide letter no.-1775.
- (xxv) Greenbelt has been planned in the periphery of the proposed project site which along with the other planned green areas within the site. Area proposed for green belt development is 10700 sq. m, which represents 36.16% of the project area.
- (xxvi) Employment: During construction phase- 30 persons will be employed. During operational phase- 15 on site (about 150-200 temporary employees will be hired for primary collection, transportation and miscellaneous jobs.

**3.** After detailed deliberation, EAC deferred the proposal in its 93<sup>rd</sup> meeting held on 05.08.2022 and asked the project proponent to provide the following additional information for further consideration:

- (vi) Revalidation of baseline data of EIA/EMP report with fresh baseline data of one month collected during the post-monsoon period. Sampling design and number of samples to be collected should be statistically sound and approved at a high level in the SPCB.
- (vii) Topmost priority has to be accorded in the EMP to ensure pollutants from the facility do not affect the Koderma wildlife sanctuary. For this water management within the proposed facility is the key. The possibility of groundwater contamination should be eliminated by identifying all potential sources for groundwater contamination and providing appropriate mitigation measures. Topographical features should be utilised to ensure surface runoff from the facility does not flow towards the drains leading to Koderma wildlife sanctuary.
- (viii) Koderma settlement located North east to the site is likely to be affected by air pollution emanating from the facility. Adequate mitigation measures, including well designed tree planting, may be proposed in the EMP to protect the residents of this settlement against air pollution coming from the site.

- (ix) Segregation of Hazardous waste has to be ensured and provided with appropriate details in the EMP.
- (x) Details of seepage management, leachate drain system, leachate collection pit and circulation System may be adequately described in the EMP.

**4.** In response proponent has submitted the following information through PARIVESH portal on 15.02.2023 and same was considered by EAC during the present meeting.

- (v) Collected AAQ, Ground Water, Surface Water, Soil & Noise samples in the month of October 2022 (Post monsoon season) and all results are within CPCB norms.
- (vi) The pollutants generated from solid waste material will not enter in any ecologically sensitive areas of the Koderma Wildlife Sanctuary.
- (vii) Our project all activities will be limited within project site. No major impacts will be done by project. The solid waste material will not enter in any ecologically sensitive areas of the Koderma Wildlife Sanctuary. The capital cost of Rs. 10 lakhs and recurring Rs. 3.5 lakhs for green belt development. 33 % green belt will be developed along the periphery of the proposed project which will limit noise reaching outside the project boundary and provide habitat to small birds and mammals.
- (viii) Hazardous waste and bio- medical wastes are not expected to be a part of proposed project/MSW stream; however, if received same should be handed over to the authorized collector for disposal. Input and output analysis reports of heavy & toxic metals will be given during the operational period. All type of sludge cakes and toxic components will be sent to nearest TSDF Adityapur which is approved by Jharkhand State Pollution Control Board, Ranchi and the agreement copy will submit to all concern Government departments.

**5.** The project/activity is covered under category B of item 7(i) Common Municipal Solid Waste Management Facility (CMSWMF)' of the Schedule to the EIA Notification, 2006 and its amendments, and requires appraisal at State Level. However, General Condition is applicable, due the presence of Koderma Wildlife Sanctuary within 3.3 km from the proposed site at North Direction. Accordingly, the project comes under category 'A' and requires appraisal at Central level by Sectoral EAC.

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**Annexure -5**

**Background information, details of appraisal during earlier EAC meetings and information submitted by the project proponent in compliance to ADS raised, if any**

**Agenda 102.3.5**

**Construction of Residential Complex at village Sambalpur, Town-5 (Sakhigopinath), District Sambalpur, Odisha by M/s JAS Construction Pvt. Ltd. – Further consideration for Environmental Clearance under Violation Category**

**(IA/OR/INFRA2/400387/2022; F. No. 21-73/2022-IA-III)**

Earlier, the Project Proponent (M/s JAS Construction Private Limited) along with his EIA consultant (M/s Grass Roots Research and Creation Private Limited) made a presentation on above said proposal during 95<sup>th</sup> meeting held on 15.09.2022, 96<sup>th</sup> meeting held on 23.09.2022 and 97<sup>th</sup> meeting held on 28.10.2022. The EAC took note of following key parameters and salient features of the project as presented during the aforesaid meeting as well as the details provided in the brief and application for this project:

2. Details presented during the 93<sup>rd</sup> EAC meeting is as follows:

- (i) It is an expansion project under violation category.
- (ii) The project site is located at Village-Sambalpur, Town No.-5, Sakhigopinath, Sambalpur, District-Sambalpur, Odisha. Latitude: 21°28'09.10"N and 83°58'42.68"E.
- (iii) Earlier, Terms of Reference (ToR) under violation category has been granted by SEAC vide letter no. 41/SEAC-21/19 dated 09.01.2020.
- (iv) The project comprise of 5 Towers (A, B, C, D1 & D2), 1 Club House, 1 Temple. The details of building are as follows:

<b>S.N o.</b>	<b>Particulars</b>	<b>Phase-I (Sq. m.)</b>	<b>Expansio n (Under Violation) Sq. m.</b>	<b>Total (Phase - I + Violation) (Sq. m.)</b>
1	Plot Area	7057.71	31,431.80	38,489.51
2	Net Plot Area	6634.2474	29,842	36,476.2474
3	Proposed Ground Coverage	2187.8901	7849.3118	10,037.2019
4	Proposed FAR	8,876.86	21735.11	<b>30,611.971</b>
	<b>Phase I</b>	<b>8876.86</b>	Nil	8876.86
	• Block B	4438.43		4438.43
	• Block C	4438.43		4438.43
	<b>Phase II</b>	Nil	<b>20,529.668</b>	20,529.668
	• Block A		3982.41	3982.41
	• Block D1		8273.629	8273.629
	• Block D2		8273.629	8273.629
	<b>Phase III</b>	Nil	<b>1205.443</b>	1205.443



	• Club House		1149.7029	1149.7029
	• Temple		55.741	55.741
5.	<b>Stilt Area</b>	<b>2349.28</b>	<b>5500</b>	<b>7849.28</b>
	• Block B	1174.64	--	1174.64
	• Block C	1174.64	--	1174.64
	• Block A	--	1072.28	1072.28
	• Block D1	--	2213.86	2213.86
	• Block D2	--	2213.86	2213.86
6.	<b>Built-up Area (4+5)</b>	<b>11,226.14</b>	<b>27,235.11</b>	<b>38,461.25</b>
7.	Road and Paved Area	3034.81 5	10617.52	13652.335
8.	Proposed Green Area	1411.54 2	7213.45	8624.992
9.	Future Expansion Area			4161.70

- (v) During construction phase, total water requirement was 63 ML which was met by Private water Tankers. During the construction phase, soak pits and septic tanks were provided for disposal of waste water. Temporary sanitary toilets were provided during peak labour force.
- (vi) During operation phase, the total (existing + expansion) water requirement for the project is 262 KLD out of which domestic demand is 217 KLD. the source of water supply is PHED. Wastewater generated (187 KLD) is treated in an onsite STP of 230 KLD capacity. Treated water of 150 KLD is reused for horticulture & DG Cooling within the premises and surplus treated water is discharged to the external sewer/drain.
- (vii) About 837 Kg/day solid wastes is being generated in the project. The biodegradable waste is 335 kg/day which is being given to approved recyclers. Solid waste was segregated at source itself as Organic and Inorganic and managed through an authorized vendor. Organic Waste and STP sludge (18.98 kg/day) is handover to Municipal Corporation for disposal. Inorganic Waste is handed over to authorized vendors for recycling.
- (viii) The power is being supplied by WESCO (Western Electricity Supply Company of Odisha). The total power requirement is 1464 kWA and 2 nos. DG sets of total 305 kVA capacity (1×125 kVA & 1×180 kVA) installed.
- (ix) 5 Rain Water Harvesting tanks of 100 KL have been installed for collection of rain water.
- (x) Adequate provision has been made for car/vehicle parking at the project site. There is adequate parking provisions for visitors so as not to disturb the traffic and allow smooth movement at the site. Total Proposed parking area is 17,232 m<sup>2</sup> i.e., 282 ECS and electrical vehicle charging facility will be provided for 30% of the parking.
- (xi) The principles of energy conservation is being embedded in the buildings through use of energy efficient fixtures, maximum

availability of natural light and use of solar energy for street lighting, which would save about 5 % of total power load.

- (xii) Total green area measures 8624.992 sq. m., i.e., 22.40 % of the plot area.
- (xiii) The project is not located in Critically Polluted area.
- (xiv) The project is not located within 10 km of Eco Sensitive Zone. NBWL Clearance is not required.
- (xv) No tree cutting is involved.
- (xvi) Forest Clearance is not required.
- (xvii) No court case is pending against the project.
- (xviii) CRZ Clearance is not required.
- (xix) Total cost of the project is ₹ 40 Crores.
- (xx) Employment potential- About 101 individuals.
- (xxi) Benefits of the project: The project is leading to development of the area by providing employment of the local people and better infrastructure.
- (xxii) Damage assessment of biodiversity shows that the biodiversity loss due to the construction of the present project is not much significant or is negligible.
- (xxiii) Damage assessment of water environment shows that low degree of damage has been caused to water resources as a result of the project.
- (xxiv) Damage assessment of land environment shows that no adverse impact/damage on land environment.
- (xxv) Damage assessment of air environment show that medium to high level of impact/damage on air environment during operation phase.
- (xxvi) The Remediation plan with financial liabilities to bridge the gap of damage done in absence of stipulated environmental condition and Remediation Plan for different components of Environment with proposed activities and Budget is given below:

**I. Remediation Plan:**

a. Remediation Plan with Proposed Activities and Budget – Air Environment

<b>Activity</b>	<b>Significant Impact/Damage</b>	<b>Remediation Plan (To be followed for projects in vicinity of site)</b>	<b>Proposed Budget for Remediation (INR)</b>
<ul style="list-style-type: none"> <li>• Site Clearance.</li> <li>• Excavation.</li> <li>• Transportation of material.</li> <li>• Operation of D.G. sets and construction</li> </ul>	<ul style="list-style-type: none"> <li>• Impact on human health –</li> <li>• Respiratory problems</li> <li>• Damage to properties by way of dust deposition and gaseous emissions.</li> </ul>	<ul style="list-style-type: none"> <li>• Dust suppression and water sprinkling system.</li> <li>• Conduction of vehicle check-up camps in the area at regular intervals (in consultation with the Motor Vehicle Department).</li> <li>• Providing</li> </ul>	<ul style="list-style-type: none"> <li>• Dust suppression and water sprinkling system = <b>INR 60,000/-</b></li> <li>• Barricading/ Screening = <b>INR 70,000/-</b></li> <li>• Cost of tarpaulin sheet = <b>INR</b></li> </ul>

<p>equipments /machinery</p> <ul style="list-style-type: none"> <li>•Construction activity.</li> <li>•Temporary stay of construction workers.</li> </ul>	<ul style="list-style-type: none"> <li>•Impact on vegetation/plants – Interference with photosyntheses.</li> </ul>	<p>barricades to Panchayat/Local Municipality for use at other construction sites.</p> <ul style="list-style-type: none"> <li>• Providing tarpaulin sheets to Panchayat /Local Municipality for covering the loose construction material at other construction sites.</li> <li>• Providing Personnel protection equipments to the health department for construction workers.</li> <li>• Ambient air quality monitoring at nearby sensitive locations.</li> </ul>	<p><b>30,000/-</b></p> <ul style="list-style-type: none"> <li>• Vehicle check-up camp = <b>INR 50,000/- (@10,000/camp)</b></li> <li>• Personal protective equipment to construction workers = <b>INR 40,000/-</b></li> <li>• Ambient air quality monitoring at nearby sensitive locations = <b>INR 50,000/- (@6000/month)</b></li> </ul> <p><b>Total budget proposed for Remediation of Air Environment = INR 3,00,000/-</b></p>
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b. Remediation Plan with Proposed Activities and Budget – Water Environment

<b>Activity</b>	<b>Significant Impact/Damage</b>	<b>Remediation Plan (To be followed for projects in vicinity of site)</b>	<b>Proposed Budget for Remediation (INR)</b>
<ul style="list-style-type: none"> <li>•Water consumption for construction activities, drinking</li> </ul>	<ul style="list-style-type: none"> <li>•Water consumed in construction of the project = 63 ML (@2 KL/sqm of built- up area including drinking water consumption of</li> </ul>	<ul style="list-style-type: none"> <li>• Modular STP for waste water treatment in</li> </ul>	<ul style="list-style-type: none"> <li>• Modular STPs = <b>INR 60,000/-</b></li> <li>• Channelization of storm water, RWH</li> </ul>

<p>water and sanitary facilities for construction workers.</p> <ul style="list-style-type: none"> <li>•Waste water generation from construction workers, cleaning machinery / equipment and vehicles</li> <li>•Sediment load generation and contamination of surface runoff due to fugitive dust and construction material</li> </ul>	<p>labour, RMC, cement block/ brick, curing, bricks/block soaking, concrete curing, masonry and cement plastering, flooring works etc.)</p> <ul style="list-style-type: none"> <li>•STP treated water was used for construction activities through tankers.</li> <li>•Drinking water for labour was obtained through tanker.</li> <li>•Discharge of contaminated water from construction machinery to land/ water channel drainage.</li> <li>•Discharge of domestic sewage to the project site.</li> <li>•Deterioration of the water channel/drain due to surface runoff causing impact on aquatic life.</li> </ul>	<p>public buildings .</p> <ul style="list-style-type: none"> <li>• Storm water channelization, cleaning of drains and groundwater recharge in nearby areas.</li> <li>• Mobile type toilets in the nearby area.</li> </ul>	<p>pits, cleaning of public drain system in the area = <b>INR 50,000/-</b></p> <ul style="list-style-type: none"> <li>• Cost of mobile type toilets in the nearby area = <b>INR 70,000/-</b></li> <li>• Drinking water facility in the nearby area = <b>INR 20,000/-</b></li> </ul> <p><b>Total budget proposed for Remediation of Water Environment = INR 2,00,000/-</b></p>
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c. Remediation Plan with Proposed Activities and Budget – Noise Environment

<b>Activity</b>	<b>Significant Impact/Damage</b>	<b>Remediation Plan (To be followed for projects in vicinity of site)</b>	<b>Proposed Budget for Remediation (INR)</b>
<ul style="list-style-type: none"> <li>•Movement of construction equipments and machineries .</li> <li>•Constructio</li> </ul>	<ul style="list-style-type: none"> <li>•Nuisance to the nearby Occupants due to increase in noise and vibration level.</li> <li>•Health</li> </ul>	<ul style="list-style-type: none"> <li>• PPEs to Local Health</li> <li>• Department and regular health check-up camps in the area with free distribution of hearing aids.</li> </ul>	<ul style="list-style-type: none"> <li>• Personal protective equipments, health check-up camps and hearing aids distribution = <b>INR 30,000/-</b></li> <li>• Acoustic enclosure and</li> </ul>

n activities Operation of D.G. set.	impacts on construction workers due to increased noise levels.	<ul style="list-style-type: none"> <li>• Acoustic enclosure for DG sets</li> <li>• Periodic ambient noise quality monitoring at nearby sensitive locations.</li> </ul>	vibration pads for DG sets = <b>INR 40,000/-</b> <ul style="list-style-type: none"> <li>• Ambient noise quality monitoring at nearby sensitive locations = <b>INR 30,000/-</b></li> </ul> <p style="text-align: center;"><b>Total budget proposed for Remediation of Noise Environment = INR 1,00,000 /-</b></p>
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d. Remediation Plan with Proposed Activities and Budget – Socio-Economic Environment

<b>Activity</b>	<b>Significant Impact/Damage</b>	<b>Remediation Plan (To be followed for projects in vicinity of site)</b>	<b>Proposed Budget for Remediation (INR)</b>
Occupational Health	<ul style="list-style-type: none"> <li>• Health impacts on construction workers</li> </ul>	<ul style="list-style-type: none"> <li>• Providing first aid kits to nearby construction sites &amp; primary health centres.</li> <li>• Providing wheel chair (5nos.), stretchers (4 nos.) for the primary health centre.</li> </ul>	<ul style="list-style-type: none"> <li>• First aid kits (5 nos.) = <b>INR 20,000/-</b> (@4000/kit)</li> <li>• Stretchers &amp; Wheelchairs = <b>INR 80,000</b> (@12,000/wheel chair &amp; @5000/stretchers)</li> </ul> <p style="text-align: center;"><b>Total budget proposed for Remediation of Socio-economic Environment = INR 1,00,000 /-</b></p>

e. Remediation Plan with Proposed Activities and Budget – Biological Environment

<b>Activity</b>	<b>Significant Impact/Damage</b>	<b>Remediation Plan (To be followed for projects in vicinity of site)</b>	<b>Proposed Budget for Remediation (INR)</b>
Site clearance of Cutting	<ul style="list-style-type: none"> <li>• Loss of vegetation</li> </ul>	<ul style="list-style-type: none"> <li>• Plantation of 482 native</li> </ul>	<ul style="list-style-type: none"> <li>• Cost of plantation &amp; maintenance of</li> </ul>

existing trees	<p>from project site: No trees were cut at site prior to development of project.</p> <ul style="list-style-type: none"> <li>Habitat loss of native fauna (avi-fauna).</li> </ul>	<p>trees within project site to attract native fauna.</p> <ul style="list-style-type: none"> <li>Development of park, garden (400 native trees) in nearby public roads and other public buildings for habitat compensation.</li> </ul>	<p>total 882 trees @500/tree = <b>INR 4,41,000/-</b></p> <p><b>Total budget proposed for Remediation of Biological Environment = INR 4,41,000/-</b></p>
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f. Remediation Plan with Proposed Activities and Budget – Land Environment

<b>Activity</b>	<b>Significant Impact/Damage</b>	<b>Remediation Plan (To be followed for projects in vicinity of site)</b>	<b>Proposed Budget for Remediation (INR)</b>
<ul style="list-style-type: none"> <li>Excavation</li> <li>Solid waste generation during construction activity.</li> <li>Generation of hazardous wastes like empty cans of varnish, paints etc. during construction activity.</li> </ul>	<ul style="list-style-type: none"> <li>Change in land use – There is no impact on land use as the development of project is in accordance with Master Plan of the area.</li> <li>Loss of productivity and fertility of soil.</li> <li>Chocking of drains due to surface runoff during rainy season.</li> <li>Contamination or degradation of soil water</li> </ul>	<ul style="list-style-type: none"> <li>Assistance to the local farmers for storage of excavated top soil and its reutilization.</li> <li>Constructing Community Waste Bins in nearby villages.</li> <li>Creating awareness for waste segregation and management.</li> </ul>	<ul style="list-style-type: none"> <li>Assistance to local farmers for creating barriers to preserve stored top soil = <b>INR 25,000/-</b></li> <li>Community waste bins in nearby areas = <b>INR 50,000/-</b></li> <li>Solid waste management awareness camps = <b>INR 25,000/-</b></li> </ul> <p><b>Total budget proposed for Remediation of Land</b></p>

	quality from mismanagement of solid, hazardous waste.		<b>Environment = INR 1,00,000 /-</b>
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**Summary**

Sl. No.	COMPONENT OF ENVIRONMENT	PROPOSED REMEDIATION BUDGET (INR)
1.	Air Environment	3,00,000/-
2.	Water Environment	2,00,000/-
3.	Noise Environment	1,00,000/-
4.	Land Environment	1,00,000/-
5.	Biological Environment	4,41,000/-
6.	Socio-economic Environment	1,00,000/-
	<b>Total budget for Remediation Plan</b>	<b>12,41,000/-</b>

**II. Proposed budget for Natural and Community Resource Augmentation:**

Sl. No	Activity	Year-wise implementation Budget (INR)			Total Budget (INR)
		1 <sup>st</sup> Year	2 <sup>nd</sup> Year	3 <sup>rd</sup> Year	
1.	Develop greenery in vicinity of project site along the external roads, greenbelts, parks, etc in consultation with local authorities	10,000	10,000	10,000	30,000
2.	Management/Maintenance of roads & public greenery	13,333	13,333	13,334	40,000
3.	Rainwater harvesting in nearby schools	13,333	13,333	13,334	40,000
4.	Awareness camps for local community on waste minimization and water conservation	10,000	10,000	10,000	30,000
5.	Provision for clean drinking water taps for public	10,000	10,000	10,000	30,000
6.	Up-gradation of community resources including religious places,	16,667	16,667	16,666	50,000

	school and health centres				
7.	Free health check-up camps for residents of nearby areas	16,667	16,667	16,666	50000
8.	Training on developing technical skills for the construction works	10,000	10,000	10,000	30,000
<b>Total budget for Natural &amp; Community Resource Augmentation (INR)</b>					<b>3,00,000</b>

**Cumulative Summary (I+II)**

<b>Sl. No</b>	<b>Particulars</b>	<b>Proposed Budget</b>
1.	Remediation plan	12,41,000
2.	Natural & Community Resource Augmentation plan	3,00,000
<b>Total</b>		<b>15,41,000</b>

**3.** In its 95<sup>th</sup> meeting EAC has observed the followings and decides to further examine the proposal in its next meeting before issuing necessary directions in the matter.

- (v) The details regarding period of violation for which damage assessment has been calculated is not mentioned.
- (vi) Year wise breakup of the turnover of project during period of violation has not been specified.
- (vii) Certain items in the Natural & Community Resource Augmentation plan appear to be highly under-evaluated.
- (viii) Certified balance sheets of the builder company for the concerned period are needed to examine the issue properly.

**4.** Accordingly, EAC examined the proposal in its 96<sup>th</sup> meeting held on 23.09.2022 and deferred the proposal for want of following information/documents:

- (vii) Land use of the project site as per the approved master plan.
- (viii) Traffic management with respect to level of traffic, transportation potential and traffic volume.
- (ix) The details regarding period of violation for which damage assessment has been calculated is not mentioned.
- (x) Year wise breakup of the turnover of project during period of violation has not been specified.
- (xi) Many items in the Natural & Community Resource Augmentation plan appear to be highly under-evaluated and have little relation to the actual needs.
- (xii) Certified balance sheets of the builder company for the concerned period are needed to examine the issue properly.



5. Subsequently, proponent has submitted following replies to above mentioned queries through PARIVESH on 21.10.2022 and the same was examined by EAC in its 97<sup>th</sup> meeting held on 28.10.2022.

(vii) **Reply to ADS 1:** Land use of the project site is 'residential' and it is in accordance with the Master Plan of Sambalpur (Copy submitted).

(viii) **Reply to ADS 2:** Study has been conducted in this regard. Accordingly, followings are submitted.

S.No.	Section	Average Traffic Volume				
		2-Wheeler	3-Wheeler	Car/Taxi	Bicycle	Total
1	Road surrounding the complex	1	1	2	-	4
2	Inside the complex	3	6	36		45

S.No	Section	Year	Average Traffic Volume				
			2-Wheeler	3-Wheeler	Car/Taxi	Bicycle	Total
1	Road surrounding the complex	2021-22	1	1	2	-	4
2	Inside the complex	2021-22	3	6	36	-	45
<b>Total</b>			4	7	38	-	49
1	For Residential Complex	2022-23	4	8	43	0	55
2		2023-24	5	9	49	0	62
3		2024-25	6	10	55	0	70
4		2025-26	6	11	62	0	79
5		2026-27	7	12	71	0	89
6		2027-28	8	13	80	0	101
7		2028-29	9	15	91	0	114
8		2029-30	10	16	102	0	128
9		2030-31	11	18	116	0	145
10		3031-32	12	20	131	0	163

Specific remarks drawn from the present study is as follows:

- It was found that the parking space provided and the area given to parking is adequate and more than the required parking space (> 40 % of total area) based on the guidelines.
- As there are enough parking spaces in the complex it would not hamper the traffic of the adjacent road near the complex, also having provision of visitor's parking spaces.

- In order for entry and exit, further 12.19 m wide roads are provided in the complex premises for maneuver of vehicles keeping in mind the safety parameters for the road users in and outside the complex.
- (ix) **Reply to ADS 3:** Damage assessment has been re-calculated for the period of violation considering start year as 2016 up to current year i.e. 2022. However, the construction of violation part started from 2016 and was completed in 2017. The built-up area (BUA) constructed at project site = 30,611.971 sq. m, out of which BUA of Phase-I is 11,226.14 sq. m and Phase-II + III (under violation) is 27,235.11 sq. m.
- (x) **Reply to ADS 4:** Year-wise breakup of the turnover of project during period of violation (2016 to 2022) is shown below:

S.No.	Year	Turnover Cost (INR)
1	2016	3,89,755
2	2017	19,04,568
3	2018	7,45,193
4	2019	31,21,915
5	2020	1,21,35,693
6	2021	1,03,62,471.92
7	2022	25,36,028.62
<b>Total</b>		<b>INR 3,11,95,624.54</b>

- (xi) **Reply to ADS 5:** Revised budget for Remediation plan and Natural, Community Resource Augmentation plan along with Penalty as per Standard Operating Procedure (SOP) dated 07.07.2021 are presented as under:

a. Revised remediation plan with proposed activities and budget – Air Environment:

Activity	Significant Impact/Damage	Remediation Plan (To be followed for projects in vicinity of site)	Proposed Budget for Remediation (INR)
<ul style="list-style-type: none"> <li>• Site Clearance</li> <li>• Excavation</li> <li>• Transportation of material</li> <li>• Operation of D.G. sets and construction</li> </ul>	<ul style="list-style-type: none"> <li>• Impact on human health – Respiratory problems</li> <li>• Damage to properties by way of dust deposition and</li> </ul>	<ul style="list-style-type: none"> <li>• Dust suppression and water sprinkling system.</li> <li>• Conduction of vehicle check-up camps in the area at regular intervals (in consultation with the Motor Vehicle</li> </ul>	<p>5. Dust suppression and water sprinkling system = INR 60,000/-</p> <p>6. Barricading/Screening = INR 1,00,000/-</p> <p>3. Cost of tarpaulin</p>

<p>n equipment/machinery.</p> <ul style="list-style-type: none"> <li>• Construction activity.</li> <li>• Temporary stay of construction workers.</li> </ul>	<p>gaseous emissions</p> <ul style="list-style-type: none"> <li>• Impact on vegetation/plants – Interference with photosynthesis</li> </ul>	<p>Department)</p> <ul style="list-style-type: none"> <li>• Providing barricades to Panchayat/Local Municipality for use at other construction sites.</li> <li>• Providing tarpaulin sheets to Panchayat/Local Municipality for covering the loose construction material at other construction sites.</li> <li>• Providing Personnel protection equipment to the health department for construction workers.</li> <li>• Ambient air quality monitoring at nearby sensitive locations.</li> </ul>	<p>sheet = INR 50,000/-</p> <p>4. Vehicle check-up camp = INR 1,00,000/- (@10,000/camp)</p> <p>5. Personal protective equipment to construction workers = INR 1,00,000/-</p> <p>8. Ambient air quality monitoring at nearby sensitive locations = INR 1,50,000/- (@6000/month)</p> <p><b>Total budget proposed for Remediation of Air Environment = INR 5,60,000/-</b></p>
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b. Revised remediation plan with proposed activities and budget – Water Environment:

<b>Activity</b>	<b>Significant Impact/Damage</b>	<b>Remediation Plan (To be followed for projects in vicinity of site)</b>	<b>Proposed Budget for Remediation (INR)</b>
<ul style="list-style-type: none"> <li>• Water consumption for construction activities, drinking water and sanitary facilities for construction workers</li> </ul>	<ul style="list-style-type: none"> <li>• Water consumed in construction of the project = 63 ML (@2 KL/sq. m of built-up area including drinking water consumption of labour, RMC, cement</li> </ul>	<ul style="list-style-type: none"> <li>• Modular STP for waste water treatment in public buildings.</li> <li>• Storm water channelization, cleaning of drains and ground water</li> </ul>	<ul style="list-style-type: none"> <li>• Modular STP = INR 2,00,000/</li> <li>• Channelization of storm water, RWH pits, cleaning of public drain system in the area = INR 1,50,000/-</li> </ul>

<ul style="list-style-type: none"> <li>• Waste water generation from construction workers, cleaning machinery/ equipment and vehicles</li> <li>• Sediment load generation and contamination of surface run off due to fugitive dust and construction material</li> </ul>	<p>block/ brick, curing, bricks/block soaking, concrete curing, masonry and cement plastering, flooring works etc.)</p> <ul style="list-style-type: none"> <li>•STP treated water was used for construction activities through tankers.</li> <li>•Drinking water for labour was obtained through tanker.</li> <li>•Discharge of contaminated water from construction machinery to land/ water channel drainage.</li> <li>•Discharge of domestic sewage to the project site.</li> <li>•Deterioration of the water channel/drain due to surface run-off causing impact on aquatic life.</li> </ul>	<p>recharge in nearby areas.</p> <ul style="list-style-type: none"> <li>• Mobile type toilets in the nearby area.</li> </ul>	<ul style="list-style-type: none"> <li>• Cost of mobile type toilets in the nearby area= INR 2,00,000/-</li> </ul> <p><b>Total budget proposed for Remediation of Water Environment = INR 5,50,000/-</b></p>
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**c. Revised remediation plan with proposed activities and budget – Noise Environment**

<b>Activity</b>	<b>Significant Impact/Damage</b>	<b>Remediation Plan</b> (To be followed for projects in vicinity of site)	<b>Proposed Budget for Remediation</b> (INR)
<ul style="list-style-type: none"> <li>• Movement of construction equipment and machineries.</li> <li>• Construction activities</li> <li>• Operation of D.G. set</li> </ul>	<ul style="list-style-type: none"> <li>• Nuisance to the nearby occupants due to increase in noise and vibration level.</li> <li>• Health impacts on construction workers due to increased noise levels.</li> </ul>	<ul style="list-style-type: none"> <li>• PPEs to Local Health Department and regular health check-up camps in the area with free distribution of hearing aids.</li> <li>• Acoustic enclosure for DG sets</li> <li>• Periodic ambient noise quality monitoring at nearby sensitive locations.</li> </ul>	<ul style="list-style-type: none"> <li>• Personal protective equipment, health check-up camps and hearing aids distribution = INR 1,00,000/-</li> <li>• Acoustic enclosure and vibration pads for DG sets = INR 50,000/-</li> <li>• Ambient noise quality monitoring at nearby sensitive locations = INR 50,000/-</li> </ul> <p><b>Total budget proposed for Remediation of Noise Environment = INR 2,00,000 /-</b></p>

**d. Revised remediation plan with proposed activities and budget – Land Environment**

<b>Activity</b>	<b>Significant Impact/Damage</b>	<b>Remediation Plan</b> (To be followed for projects in vicinity of site)	<b>Proposed Budget for Remediation</b> (INR)
<ul style="list-style-type: none"> <li>• Excavation</li> </ul>	<ul style="list-style-type: none"> <li>• Change in landuse -</li> </ul>	<ul style="list-style-type: none"> <li>• Assistance to the local</li> </ul>	<ul style="list-style-type: none"> <li>• Assistance to local farmers</li> </ul>

<ul style="list-style-type: none"> <li>• Solid waste generation during construction activity.</li> <li>• Generation of hazardous wastes like empty cans of varnish, paints etc. during construction activity.</li> </ul>	<p>There is no impact on landuse as the development of project is in accordance with Master Plan of the area.</p> <ul style="list-style-type: none"> <li>• Loss of productivity and fertility of soil.</li> <li>• Chocking of drains due to surface runoff during rainy season.</li> <li>• Contamination or degradation of soil /water quality from mismanagement of solid, hazardous waste.</li> </ul>	<p>farmers for storage of excavated top soil and its reutilization.</p> <ul style="list-style-type: none"> <li>• Constructing Community Waste Bins in nearby villages.</li> <li>• Creating awareness for waste segregation and management.</li> </ul>	<p>for creating barriers to preserve stored top soil = INR 1.00,000/-</p> <ul style="list-style-type: none"> <li>• Community waste bins in nearby areas = 1,00,000/-</li> <li>• Solid waste management awareness camps = INR 50,000/-</li> </ul> <p><b>Total budget proposed for Remediation of Land Environment = INR 2,50,000 /-</b></p>
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**e. Revised remediation plan with proposed activities and budget – Biological Environment**

Activity	Significant Impact/Damage	Remediation Plan	Proposed Budget for Remediation (INR)
<p>1. Site clearance 2. Cutting of existing trees</p>	<ul style="list-style-type: none"> <li>• Loss of vegetation from project site: No trees were cut at site prior to development of project.</li> <li>• Habitat loss of native fauna (avi-fauna).</li> </ul>	<ul style="list-style-type: none"> <li>• Plantation of 482 native trees within project site to attract native fauna.</li> <li>• Development of park, garden (400 native trees) in nearby public roads and other public</li> </ul>	<ul style="list-style-type: none"> <li>• Cost of plantation &amp; maintenance of total 882 trees @600/tree = INR 5,29,200/-</li> </ul> <p><b>Total budget proposed for Remediation of Biological Environment = INR 5,29,200/-</b></p>

		buildings for habitat compensation.	
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**f. Revised remediation plan with proposed activities and budget – Socio-Economic Environment**

<b>Activity</b>	<b>Significant Impact/Damage</b>	<b>Remediation Plan</b> (To be followed for projects in vicinity of site)	<b>Proposed Budget for Remediation (INR)</b>
Occupational Health	Health impacts on construction workers	<ul style="list-style-type: none"> <li>• Providing first aid kits to nearby construction sites &amp; primary health centres.</li> <li>• Providing wheel chair (5 nos.), stretchers (10 nos.) for the primary health centre.</li> </ul>	<ul style="list-style-type: none"> <li>• First aid kits (10 nos.) = INR 40,000/- (@4000/kit)</li> <li>• Stretchers &amp; Wheelchairs = INR 1,10,000 (@12,000/wheel chair &amp; @5000/stretch er)</li> </ul> <p><b>Total budget proposed for Remediation of Socio-economic Environment = INR 1,50,000 /-</b></p>

**g. Revised Total Budget for Remediation Plan:**

<b>S.No.</b>	<b>COMPONENT OF ENVIRONMENT</b>	<b>PROPOSED REMEDIATION BUDGET (INR)</b>
1	Air Environment	5,60,000/-
2	Water Environment	5,50,000/-
3	Noise Environment	2,00,000/-
4	Land Environment	2,50,000/-
5	Biological Environment	5,29,200/-
6	Socio-economic Environment	1,50,000/-
	<b>REVISED TOTAL BUDGET FOR REMEDIATION PLAN</b>	<b>INR 22,39,200/-</b>

**II. Revised Natural & Community Resource Augmentation Plan Budget:**

S.No.	ACTIVITY	YEAR-WISE IMPLEMENTATION BUDGET (INR)			TOTAL BUDGET (INR)
		1 <sup>st</sup> Year	2 <sup>nd</sup> Year	3 <sup>rd</sup> Year	
1	Develop greenery in vicinity of project site along external roads, greenbelts, parks, etc., in consultation with local authorities	30,000	30,000	30,000	90,000/-
2	Management/maintenance of roads & public greenery	50,000	50,000	50,000	1,50,000/-
3	Rain water harvesting in nearby schools	50,000	50,000	50,000	1,50,000/-
4	Awareness camps for local community on waste minimization and water conservation	30,000	30,000	30,000	90,000/-
6	Provision of clean drinking water taps for public	30,000	30,000	30,000	90,000/-
7	Upgradation of Community resources including religious places, school and health centre	30,000	30,000	30,000	90,000/-
8	Free health check-up camps for residents of nearby areas	40,000	40,000	40,000	1,20,000/-
9	Training on developing technical skills for the constructions workers	30,000	30,000	30,000	90,000/-
<b>TOTAL REVISED BUDGET FOR NATURAL &amp; COMMUNITY RESOURCE AUGMENTATION (INR)</b>					<b>8,70,000/-</b>

**III. Revised cumulative budget for Remediation, Natural & Community Resource Augmentation Plan:**

S.No.	PARTICULARS	PROPOSED BUDGET (INR)
1	Remediation Plan	22,39,200/-
2	Natural & Community Resource Augmentation Plan	8,70,000/-
<b>REVISED CUMULATIVE BUDGET FOR REMEDIATION, NATURAL &amp; COMMUNITY RESOURCE AUGMENTATION PLAN</b>		<b>INR 31,09,200/-</b>



#### IV. Revised penalty amount as per SOP of MoEF&CC

Total cost of the project is INR 40 Crore & total turnover cost during the period of violation is INR 3.11 Crore.

Revised Penalty cost for our project will be:

= 20 Lakhs (0.5% of the total project cost) + 0.77 Lakhs (0.25% of the total turnover)

= 20.77 Lakhs

Total revised penalty cost for our project is INR 20.77 Lakhs.

(xii) **Reply to ADS 6:** Certified balance sheets of the builder company for the violation period are submitted.

**6.** After detailed deliberation, EAC in its 97<sup>th</sup> meeting held on 28.10.2022 has observed that the traffic management with respect to the level of traffic, transportation potential and traffic volume has not been assessed correctly. The assessment has been made based on current occupancy of the houses which is actually less than 20% of the total dwelling units. Therefore, the proponent may be asked to assess the traffic management on the basis of projected number of vehicles at the time of full occupancy of the dwelling units. The EAC also expresses dissatisfaction with Natural Resources Augmentation Plan which remains extremely underestimated even after revision by the PP. They need to prepare estimates using the current PWD and Forest Schedule of Rates applicable in the state of Odisha for specific activities and provide for inflation in the coming years. The EAC also requested the MS to find appropriate precedences for penalty assessment in similar situation in the past following which the proposal would be taken up in subsequent meetings of the EAC. Accordingly, EAC defers the proposal in its 97<sup>th</sup> meeting.

**7.** Accordingly, MS (EAC) has communicated the following violation case details to Chairman further examination:

S.No. (A)	Proposal No.and File No. (C)	Total cost of the projec t (in Lakh Rupe es) (F)	Budget allocation (in Lakh Rupees) (G)			Total (H)	% of total cost (Hx10 0/F) (I)
			Remed iation Plan (G1)	NR Augme ntation Plan (G2)	CR Augmen tation Plan (G3)		
1	IA/KL/NCP/ 70171/2017	4310	46.57	13.50	15.00	75.07	1.74
2	IA/HR/MIS/ 84419/2017	19575	99.00	66.00	155.00	320.0 0	1.63

3	IA/HR/MIS/ 84395/2017	9290	133.65	27.00	29.68	190.3 3	2.04
4	IA/DL/MIS/9 1171/2017	77337	369.69	243.49	95.00	708.1 8	0.91
5	IA/DL/MIS/9 5363/2018	46641	222.87	341.00	351.00	914.8 7	1.96
6	IA/KL/NCP/ 70240/2017	9610	29.70	21.50	11.25	62.45	0.649
7	IA/DL/MIS/8 5531/2018	10621	60	10	37.91	107.9 1	1.01
8	IA/HR/MIS/ 84185/2007	39900	275.40	50.00	35.50	360.9 0	0.904
9	IA/HR/MIS/ 84477/2018	3500	64.17	3.20	8.60	75.97	2.17

**8.** Meanwhile, proponent has submitted the following information through PRIVESH portal on 16.02.2023 and same is considered in the present meeting.

- (iii) As advised by EAC, traffic volume has been re-assessed and traffic Management Plan updated accordingly, considering full occupancy of the project. Accordingly revised traffic details are submitted
- (iv) Revised budget for Remediation, Community & Natural Resources Augmentation Plan as well as Penalty is as under:

### **I. Remediation Plan**

#### **a. Revised remediation plan with proposed activities and budget – Air Environment:**

<b>Activity</b>	<b>Significant Impact/Damage</b>	<b>Remediation Plan (To be followed for projects in vicinity of site)</b>	<b>Proposed Budget for Remediation (INR)</b>
<ul style="list-style-type: none"> <li>• Site Clearance</li> <li>• Excavation</li> <li>• Transportation of material</li> <li>• Operation of</li> </ul>	<ul style="list-style-type: none"> <li>• Impact on human health – Respiratory problems</li> <li>• Damage to properties</li> </ul>	<ul style="list-style-type: none"> <li>• Dust suppression and water sprinkling system.</li> <li>• Conduction of vehicle check-up camps in the area</li> </ul>	<p>7. Dust suppression and water sprinkling system = INR 60,000/-</p> <p>8. Barricading/Scr</p>

<p>D.G. sets and construction equipment/machinery.</p> <ul style="list-style-type: none"> <li>• Construction activity.</li> <li>• Temporary stay of construction workers.</li> </ul>	<p>by way of dust deposition and gaseous emissions</p> <ul style="list-style-type: none"> <li>• Impact on vegetation/plants – Interference with photosynthesis</li> </ul>	<p>at regular intervals (in consultation with the Motor Vehicle Department)</p> <ul style="list-style-type: none"> <li>• Providing barricades to Panchayat/Local Municipality for use at other construction sites.</li> <li>• Providing tarpaulin sheets to Panchayat/Local Municipality for covering the loose construction material at other construction sites.</li> <li>• Providing Personnel protection equipment to the health department for construction workers.</li> <li>• Ambient air quality monitoring at nearby sensitive locations.</li> </ul>	<p>eening = INR 1,00,000/-</p> <p>3. Cost of tarpaulin sheet = INR 50,000/-</p> <p>4. Vehicle check-up camp = INR 1,00,000/- (@10,000/camp)</p> <p>5. Personal protective equipment to construction workers = INR 1,00,000/-</p> <p>9. Ambient air quality monitoring at nearby sensitive locations = INR 1,50,000/- (@6000/month)</p> <p><b>Total budget proposed for Remediation of Air Environment = INR 5,60,000/-</b></p>
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**b. Revised remediation plan with proposed activities and budget – Water Environment:**

Activity	Significant Impact/Damage	Remediation Plan (To be followed for projects in vicinity of site)	Proposed Budget for Remediation (INR)
<ul style="list-style-type: none"> <li>• Water consumption for construction activities, drinking water and sanitary</li> </ul>	<ul style="list-style-type: none"> <li>• Water consumed in construction of the project = 63 ML (@2 KL/sq. m of built-up area including</li> </ul>	<ul style="list-style-type: none"> <li>• Modular STP for waste water treatment in public buildings.</li> <li>• Storm water</li> </ul>	<ul style="list-style-type: none"> <li>• Modular STP = INR 2,00,000/</li> <li>• Channelization of storm water, RWH pits, cleaning of</li> </ul>

<p>facilities for construction workers</p> <ul style="list-style-type: none"> <li>Waste water generation from construction workers, cleaning machinery/ equipment and vehicles</li> <li>Sediment load generation and contamination of surface run off due to fugitive dust and construction material</li> </ul>	<p>drinking water consumption of labour, RMC, cement block/ brick, curing, bricks/block soaking, concrete curing, masonry and cement plastering, flooring works etc.)</p> <ul style="list-style-type: none"> <li>STP treated water was used for construction activities through tankers.</li> <li>Drinking water for labour was obtained through tanker.</li> <li>Discharge of contaminated water from construction machinery to land/ water channel drainage.</li> <li>Discharge of domestic sewage to the project site.</li> <li>Deterioration of the water channel/drain due to surface run-off causing impact on aquatic life.</li> </ul>	<p>channelization , cleaning of drains and ground water recharge in nearby areas.</p> <ul style="list-style-type: none"> <li>Mobile type toilets in the nearby area.</li> </ul>	<p>public drain system in the area = INR 1,50,000/-</p> <ul style="list-style-type: none"> <li>Cost of mobile type toilets in the nearby area= INR 2,00,000/-</li> </ul> <p><b>Total budget proposed for Remediation of Water Environment = INR 5,50,000/-</b></p>
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**c. Revised remediation plan with proposed activities and budget – Noise Environment**

<b>Activity</b>	<b>Significant Impact/Damage</b>	<b>Remediation Plan</b> (To be followed for projects in vicinity of site)	<b>Proposed Budget for Remediation</b> (INR)
<ul style="list-style-type: none"> <li>• Movement of construction equipment and machineries.</li> <li>• Construction activities</li> <li>• Operation of D.G. set</li> </ul>	<ul style="list-style-type: none"> <li>• Nuisance to the nearby occupants due to increase in noise and vibration level.</li> <li>• Health impacts on construction workers due to increased noise levels.</li> </ul>	<ul style="list-style-type: none"> <li>• PPEs to Local Health Department and regular health check-up camps in the area with free distribution of hearing aids.</li> <li>• Acoustic enclosure for DG sets</li> <li>• Periodic ambient noise quality monitoring at nearby sensitive locations.</li> </ul>	<ul style="list-style-type: none"> <li>• Personal protective equipment, health check-up camps and hearing aids distribution = INR 1,00,000/-</li> <li>• Acoustic enclosure and vibration pads for DG sets = INR 50,000/-</li> <li>• Ambient noise quality monitoring at nearby sensitive locations = INR 50,000/-</li> </ul> <p><b>Total budget proposed for Remediation of Noise Environment = INR 2,00,000 /-</b></p>

**d. Revised remediation plan with proposed activities and budget – Land Environment**

<b>Activity</b>	<b>Significant Impact/Damage</b>	<b>Remediation Plan</b> (To be followed	<b>Proposed Budget for Remediation</b> (INR)

		for projects in vicinity of site)	
<ul style="list-style-type: none"> <li>Excavation</li> <li>Solid waste generation during construction activity.</li> <li>Generation of hazardous wastes like empty cans of varnish, paints etc. during construction activity.</li> </ul>	<ul style="list-style-type: none"> <li>Change in landuse - There is no impact on landuse as the development of project is in accordance with Master Plan of the area.</li> <li>Loss of productivity and fertility of soil.</li> <li>Chocking of drains due to surface runoff during rainy season.</li> <li>Contamination or degradation of soil /water quality from mismanagement of solid, hazardous waste.</li> </ul>	<ul style="list-style-type: none"> <li>Assistance to the local farmers for storage of excavated top soil and its reutilization.</li> <li>Constructing Community Waste Bins in nearby villages.</li> <li>Creating awareness for waste segregation and management.</li> </ul>	<ul style="list-style-type: none"> <li>Assistance to local farmers for creating barriers to preserve stored top soil = INR 80,000/-</li> <li>Community waste bins in nearby areas = 1,50,000/-</li> <li>Solid waste management awareness camps = INR 20,000/-</li> </ul> <p><b>Total budget proposed for Remediation of Land Environment = INR 2,50,000 /-</b></p>

**e. Revised remediation plan with proposed activities and budget – Biological Environment**

Activity	Significant Impact/Damage	Remediation Plan	Proposed Budget for Remediation (INR)
1. Site clearance 2. Cutting of existing trees	<ul style="list-style-type: none"> <li>Loss of vegetation from project site: No trees were cut at site prior to development of project.</li> <li>Habitat loss of native fauna</li> </ul>	<ul style="list-style-type: none"> <li>Plantation of 482 native trees within project site to attract native fauna.</li> <li>Development of park, garden (400 native trees)</li> </ul>	<ul style="list-style-type: none"> <li>Cost of plantation &amp; maintenance of total 882 trees @600/tree = INR 5,29,200/-</li> </ul> <p><b>Total budget proposed for</b></p>

	(avi-fauna).	in nearby public roads and other public buildings for habitat compensation.	<b>Remediation of Biological Environment = INR 5,29,200/-</b>
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**f. Revised remediation plan with proposed activities and budget – Socio-Economic Environment**

<b>Activity</b>	<b>Significant Impact/Damage</b>	<b>Remediation Plan</b> (To be followed for projects in vicinity of site)	<b>Proposed Budget for Remediation</b> (INR)
Occupational Health	Health impacts on construction workers	<ul style="list-style-type: none"> <li>• Providing first aid kits to nearby construction sites &amp; primary health centres.</li> <li>• Providing wheel chair (5 nos.), stretchers (10 nos.) for the primary health centre.</li> </ul>	<ul style="list-style-type: none"> <li>• First aid kits (10 nos.) = INR 40,000/- (@4000/kit)</li> <li>• Stretchers &amp; Wheelchairs = INR 1,10,000 (@12,000/wheel chair &amp; @5000/stretch er)</li> </ul> <p><b>Total budget proposed for Remediation of Socio-economic Environment = INR 1,50,000 /-</b></p>

**g. Revised Total Budget for Remediation Plan:**

<b>S. No.</b>	<b>COMPONENT OF ENVIRONMENT</b>	<b>PROPOSED REMEDIATION BUDGET (INR)</b>
1	Air Environment	5,60,000/-
2	Water Environment	5,50,000/-
3	Noise Environment	2,00,000/-
4	Land Environment	2,50,000/-
5	Biological Environment	5,29,200/-

6	Socio-economic Environment	1,50,000/-
<b>REVISED TOTAL BUDGET FOR REMEDIATION PLAN</b>		<b>INR 22,39,200/-</b>

## II. NATURAL & COMMUNITY RESOURCE AUGMENTATION PLAN:

Natural and Community resources include Schools, Heritage buildings, Railway Stations, Public Buildings, Open Spaces, Water bodies, Sarai/Shelter homes, Bus stands, Health Care Centres, Forest, Orchards, Religious places, Markets, etc. The extent of impacts are inevitably proportionate to the scale of development and thus it is proposed that for smaller developments [8(a) projects], the natural & community resource augmentation activities should be undertaken upto a radius of 500 m (affected area) from the project site in coordination with local authorities. Natural & Community Resource Augmentation plan has been prepared based on assessment of Community assets and needs. Following activities are proposed for Natural & Community Resource Augmentation plan for this project on the basis of need based assessment of the affected area:

- Develop greenery in vicinity of project site along external roads, greenbelts, parks, etc in consultation with local authorities.
- Long-term management/maintenance of public greenery (external road side plantation, green belts, parks, etc.).
- Upgradation of Community resources including religious place, school and health centre.
- Free health check-up camps for workers engaged at project site and residents of nearby villages.
- Provision of clean drinking water taps for public,
- Training on good construction practices for workers engaged at project site.
- Awareness camps for local community on waste minimization and water conservation.
- Promoting rain water harvesting and construction of RWH pits in nearby school.

### (a) Revised Natural & Community Resource Augmentation Plan Budget:

S.No.	ACTIVITY	YEAR-WISE IMPLEMENTATION BUDGET (INR)			TOTAL BUDGET (INR)
		1 <sup>st</sup> Year	2 <sup>nd</sup> Year	3 <sup>rd</sup> Year	
1	Develop greenery in vicinity of project site along external roads, greenbelts, parks, etc., in consultation with local authorities	1,00,000	1,00,000	1,00,000	3,00,000/-



2	Management/maintenance of roads & public greenery	1,00,000	1,00,000	1,00,000	3,00,000/-
3	Rain water harvesting in nearby schools	1,00,000	1,00,000	1,00,000	3,00,000/-
4	Awareness camps for local community on waste minimization and water conservation	50,000	50,000	50,000	1,50,000/-
6	Provision of clean drinking water taps for public	27,000	27,000	27,000	81,000/-
7	Upgradation of Community resources including religious places, school and health centre	1,50,000	1,50,000	1,50,000	4,50,000/-
8	Free health check-up camps for residents of nearby areas	1,00,000	1,00,000	1,00,000	3,00,000/-
9	Training on developing technical skills for the constructions workers	30,000	30,000	30,000	90,000/-
<b>TOTAL REVISED BUDGET FOR NATURAL &amp; COMMUNITY RESOURCE AUGMENTATION (INR)</b>					<b>17,61,000/-</b>

### III. Revised cumulative budget for Remediation, Natural & Community Resource Augmentation Plan:

S.No.	PARTICULARS	PROPOSED BUDGET (INR)
1	Remediation Plan	22,39,200/-
2	Natural & Community Resource Augmentation Plan	17,61,000/-
<b>REVISED CUMULATIVE BUDGET FOR REMEDIATION, NATURAL &amp; COMMUNITY RESOURCE AUGMENTATION PLAN</b>		<b>INR 40,00,200/-</b>

### IV. Revised penalty amount as per SOP of MoEF&CC

Total cost of the project is INR 40 Crore & total turnover cost during the period of violation is INR 4.09 Crore.

Revised Penalty cost for our project will be:

= Rs. 20 Lakhs (0.5% of the total project cost) + Rs. 1.02 Lakhs (0.25% of the total turnover)

= Rs. 21.02 Lakhs

**Total revised penalty cost is Rs. 21.02 Lakh.**

**8.** The project/activity is covered under Violation category under Category 'B' of item 8(a) 'Building and Construction projects' of the Schedule to the EIA Notification, 2006 and its subsequent amendments, and requires appraisal at State level. However, due to non-existence of SEIAA in Odisha, the proposal required appraisal at Central level by sectoral EAC.

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## Annexure -6

**Background information, details of appraisal during earlier EAC meetings and information submitted by the project proponent in compliance to ADS raised, if any**

### **Agenda 102.3.6**

**Development of Greenfield Airport at Vijayapura, Karnataka by M/s Public Works Department, Vijayapura Division, Government of Karnataka - Further consideration for Terms of Reference**

**(IA/KA/INFRA2/407485/2022; F. No. 21-77/2022-IA.III)**

Earlier, the Project Proponent (M/s Public Works Department, Vijayapura Division, Government of Karnataka) along with his EIA consultant (M/s ABC Techno Labs India Private Limited) made a presentation on above said proposal during 99<sup>th</sup> meeting of EAC held on 21.12.2022. The EAC took note of following key parameters and salient features of the project as presented during the meeting as well as the details provided in the brief and application for this project.

- i. The proposed Vijayapur airport is a Greenfield airport and will serve the city of Bijapur, Karnataka, India.
- ii. The project is new.
- iii. The project is located in Burnapur, Madabhavi & Aliyabad Villages, Vijayapur Taluk, Vijayapur. Geographically, the proposed project site is located at Latitude 16°52'4.56"N to 16°51'44.39"N, Longitude 75°47'20.08"E to 75°49'19.82"E and altitude of 560 – 580 m above MSL.
- iv. The plot area of the proposed project is 727 acres (294.20 ha). Since, the land to the extent of 727 acres (294.20 ha) has been acquired for the purpose of the development works of Vijayapur Airport, no alternative sites have been considered.
- v. The proposed project involves construction of Runway, Airstrip, Taxiway, Apron, Isolation Bay, RESA, Blast Pad, Domestic Terminal Building & Other Allied Works as detailed below:
  - a. Construction of Runway of size 3000m x 45m with provision of runway turn pad to facilitate the 1800 turn of Airbus A321 Neo/ Boeing 737-900 aircraft. The Runway strip of size 3120m x 280m is proposed for Airbus A321 Neo/Boeing 737-900 operations. The graded portion of the runway strip shall extend up to 150m from the center line in width and across a length of 3120 m along the centre line of the runway.

- b. Provision of 60m length Blast pads/Overruns beyond the threshold at 09 end and 27 end are proposed for operations of Airbus A321Neo/Boeing 737-900 aircraft.
- c. Runway End Safety Area (RESA) with dimensions of 240m x 90m are proposed at both 09 and 27 Ends of runway as per DGCA Civil Aviation Requirements.
- d. Provision of 90°link taxiway of length 190.5 m and 15 m wide with shoulders of width 5.5 m on each side of carriageway edge in compliance with requirements of Airbus A321 Neo and Boeing 737-900 aircraft to connect the Runway to the proposed main apron and isolation bay.
- e. Provision of Apron of size 1,40,400 sq. m for operation of 5 nos. of code 3C & 5 nos. of code 4C stands. In addition, Ground Support Equipment (GSE) Area of 12,000 sq. m is provided adjacent to the apron.
- f. Isolation Bay of 12,100 sq. m and provision of 15 m wide Link Taxi Track of length 190.5 m with 5 m shoulder on both sides of carriageway edge to cater for Code - 4C aircraft.
- g. Construction of Terminal Building with an area of 18,500 Sq. m. for 999 peak hour passengers (500 Arrival+ 499 Departure).
- h. Construction of 10 watchtowers are proposed to be placed along the length of the compound wall with an objective of having an unhindered line of sight of 1000 meters.
- i. Construction of ATC Tower and Technical Block with an area of 2,000 sq. m (G+4) Storey to facilitate Aeronautical Information Services, Aerodrome Control, Air Traffic Command, Meteorological and Other Contingency Services.
- j. Construction of Crash Fire Station and Fire watch tower as per standard drawing.
- k. Provision of Mandatory and Information Signage I Markings in the movement area.
- l. Provision of cooling pit and Fire pit as per approved standard drawings.
- m. Construction of Sewage Treatment Plant (STP) of 180 KLD at the lowest point of the airport area.
- n. Construction of Storm Water Drainage pipe culvert of 1200mm dia.
- o. Construction of parking area of 4110 sq. m to accommodate 200 cars.
- p. Construction of Single Storey Pump room of 65 sq. m to house submersible water supply pumps as well as firefighting pumps.
- q. Construction of underground sump of capacity 1,00,000 liter for firefighting and daily use proposed along with steel staging overhead tank.
- r. Construction of fuel farm of area 200 sq. m with parking capacity of 5 fuel bowsers.

- vi. The land use classification of the project site is categorized as Barren/uncultivable Land. The land use break-up for the area acquired for Airport construction is tabulated below:

<b>S.No.</b>	<b>Particulars</b>	<b>Area (Acres)</b>	<b>Percentage (%)</b>
1	Buildings (Terminal, ATC Tower, etc)	5.54	0.76
2	Runway, Taxiway, RESA, Apron, GSE, Isolation Bay, etc	272.90	37.54
3	Internal Roads (Airside, City side, Perimeter Road, etc)	21.60	2.97
4	Parking Area	1.02	0.14
5	Gardening / Green belt	72.70	10.00
6	Remaining Open area	353.25	48.59
Total		727.00	100.00

- vii. Total water demand for all purpose will be 300m<sup>3</sup>/day and the water requirement will be met from Karnataka Urban Water Supply and Drainage Board (KUWDB). About 128 KLD of sewage will be generated after the development of the Airport, which will be treated in STP of capacity 150 KLD. It is proposed to be installed Moving Bed Biofilm Reactor (MBBR) type sewage treatment plant of 150 KLD capacity. Treated water of 115KLD will be used for flushing (68 KLD) and irrigation of greenery and landscaping (47KLD).
- viii. About 1400 kg per day solid waste will be generated during operation after the proposed development activities at Vijayapura Airport, which will be collected, segregated and managed by external agency for disposal as per Solid Waste Management Rules, 2016.
- ix. Total power requirement for the proposed airport operations will be 2000 KVA after the development activities. The power supply shall be drawn from Hubli Electricity Supply Company Limited (HESCOM). There will be power backup through 2 No of DG sets of capacity of 500 KVA and 1 No of standby DG set of capacity of 500 KVA will be used in case of power cut or failure. DG sets will be provided with inbuilt acoustic enclosures and effective safe stack height for proper dispersion of pollutants that will keep the emissions within the permissible limit. The fuel required will be HSD and 3000 Litres per day quantity will be used in Operation Phase.
- x. The total cost estimate for the proposed project is about Rs. 220 Crores.
- xi. NBWL Clearance is not required.
- xii. Forest Clearance is not required.
- xiii. CRZ Clearance is not required.
- xiv. No court case is pending against the project.
- xv. No tree cutting is involved.
- xvi. Employment generation: The proposed project will provide direct employment during construction & operation phases. It is expected

about 600-700 Nos of employments during construction phase and 333 Nos of employment during operational phase of the proposed project. Local workers will be hired from the nearby areas by the contractors during construction phase.

- xvii. Benefits of the project: Better infrastructure facilities for air passengers. Promotion of tourism, trade, commerce etc. Increase in regional economy as it will boost tourism and commercial activities in the region. Generation of more revenue to the state, hence more development of the region. More employment opportunity to people. More business and industrial opportunities.

**2.** EAC in its 99<sup>th</sup> meeting held on 21.12.2022 has noted that alternate sites have not been considered in the instant proposal. In this context, the project proponent has been advised to undertake a serious exercise for proper site selection within a radius of, say, 35 km of the Vijayapura. In this exercise they may first select 4 or 5 best suited airport sites from the point of view of topographical and other obstructions on the landing and take-off passages and then narrow down their choices to three best sites in order of preference using the standard processes of a technoeconomic analysis. The project proponent may then present their request for this airport project again along with the techno economic analysis of these possible sites to enable the EAC to deliberate on the choice of site and make appropriate recommendations. Further, EAC has noted the improper presentation of land use maps and GIS analysis of the study area. Accordingly, the EAC deferred the proposal for want of proper justification in respect of the project site along with proper land use maps.

**3.** In response proponent has submitted the following information through PARIVESH portal on 31.01.2023 and same was considered by EAC during the present meeting.

- (iii) Initially three sites namely i) Bijapur (at Arakeri village near Bhutanal tank), ii) Mulwada iii) Madhubhavi have been considered for the preliminary assessment of proposed Airport. Details as follows:

**Site No.1:-** In the year 1982 it was proposed to develop Aerodrome at Arakeri village in Bijapur Tq/ dist Arakeri Road (near Bhutanaltank). Then this was rejected by the Principal Govt. Flying training School Bangalore, because it found infeasible that the length is about 3500 ft. which is not sufficient to operate a passenger aircraft. There is no scope to get any area beyond 3500 ft, as there is already a village at one end of the area and a tank at the other end, also high tension lines running across the site. The proposed site is therefore found infeasible for the development of Aerodrome. (Letter enclosed)

**Site No.2:-** Mulawad site has been rejected by the committee. This site is located above 30Km away from the Vijayapur City and due to technical reasons/ obstacles like uneven topography, Sugar factory chimney, wind mills, electrical poles, HT towers, Mulawad lift irrigation canal crossing across the proposed site and the flyover constructed on Hubballi- Vijayapur –Kalaburgi NH which is adjacent

to proposed site which may obstruct flight in approach & take off path for the proposed runway 09/27. The proposed site is therefore found infeasible for the development of Aerodrome. (Letter enclosed)

**Site No.3:-** Madhubhavi site is identified by the Principal Govt. Flying training School Bangalore in the year of 1982 near Aliabad and Ainapur village which is about 3 kms from Bijapur on the road leading to Madhubhavi Spinning Mills area of length up to 8,000 to 10,000 feet is available which can be considered for development of Aerodromes. The entire field consists of rocky and murrum soil and possesses good strong strata. Most of the area is covered by Government land. Later In the year 2009 the Vijayapur Greenfield Airport based on the in-principle approval of MoCA, State Government took up the development of Vijayapur Greenfield Airport near Madhubhavi Village on PPP basis, the work was entrusted to MARG Construction Ltd. Chennai. Later it was terminated due to some technical and financial issues. The Airport site was proposed at Madhubhavi village, it was not permitted for construction of high raised structure and any other activities from 2009. In the year 2019, Development of Airport was entrusted to PWD & Madhubhavi sites were identified by Aviation advisor and Pilot KSIIDC Bengaluru for the proposed Airport. The Madhubhavi site is suitable could be considered for the development of Vijayapur Airport

(iv) The land use map, GIS analysis of the study area is submitted.

**2.** The project/activity is covered under category 'A' of item 7(a) 'Airports' of the Schedule to the EIA Notification, 2006 and its subsequent amendments, and requires appraisal at Central level by sectoral EAC.

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