

MINUTES OF 95th MEETING OF EXPERT APPRAISAL COMMITTEE (INFRA) HELD ON 15th September, 2022.

VENUE: Through Video Conferencing.

DATE: 15th September, 2022

PROCEEDINGS

95.1 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.

95.2 Confirmation of Minutes of 94th Meeting of Expert Appraisal Committee (Infra-2) held on 8th September, 2022.

The Expert Appraisal Committee (Infra-2), hereinafter referred to as the EAC (Infra-2), is informed that no representation has been received regarding projects considered in 94th meeting. Minutes of 94th meeting of EAC (Infra-2) were confirmed. The typo errors, if any noticed during processing of these cases may be corrected in the light of facts and figures provided by the respective Project Proponent.

95.3 Consideration of Proposals: The EAC (Infra-2) considered proposals as per the agenda adopted for the 95th meeting. The details of deliberations held and decisions taken in the meeting are as under:

AGENDA ITEM NO: 95.3.1

Integrated Municipal Solid Waste Management Project at Village Champa Danga, Jharkhand by M/s Pakur Nagar Parishad – Environmental Clearance

(IA/JH/MIS/101397/2019; F. No. 10-26/2019-IA.III)

1. The Project Proponent (M/s Pakur Nagar Parishad) along with his EIA consultant (M/s Wolkem India Limited) made a presentation on above said proposal. The EAC (Infra-2) 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) This project is an integrated municipal solid waste management project and proposed for the setting up of processing facilities and sanitary landfill facility in accordance to the Solid Waste Management (SMW) Rules, 2016 at Village Chapadanga, Plot No. 113, 119, 120,

121, 122, 123, 124, 125, 126, 128, 129, 131, 132, 133, 134, 135, 136, 137, District-Pakur, Jharkhand.

- (ii) The project is new.
- (iii) The proposed facility consists of waste collection system, segregation facility, waste processing unit of 25 TPD (Biomethanation) and the sanitary landfill facility for 20 years of operational life.
- (iv) Total land area is 9.54 acre. Land-use break-up of the proposed activity is as follows:

Sl. No	Area	Area (sq. m)
1.	Built Up Area	2,006.9
2.	Platform Area	180
3.	Road Area	1990
4.	Plantation Area	13,000
5.	Landfill Area	9,282
6.	Area for Segregation & plan for Municipal and contractor office	5,052
7.	Open Area	7,087.1243
Total		38,598.0243

- (v) Compliances of selected landfill site as per SWM Rules, 2016 as follows:

Criteria for landfill site	Required as per SWM Rule 2016	Actual Position
Design Life Period	20-25 years	for 20 years
Distance from River	>100 m	No river flowing within 100 m from the project boundary. Nearest river is Toral river which is 378 m in N direction.
Distance from Pond	>200 m	Not applicable
Distance from Highway	>200 m	Distance of highway is more than 200 m from the project boundary Nearest highway is NH 31 which is 8.1 km in ENE direction.
Distance from Habitation	>200 m	No habitation is settled within 200m from the project boundary
Distance from Public Parks	>200 m	No public park exist 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*	2 m from bottomliner of landfill	Criteria complied
Earthquake zone*	500 m from fault line fracture	The project district comes under seismic zone III.

Airport/Airbase	>20 kms	Not applicable
	10-20 kms.	
Floodplains (100 Yrs.)	Not Allowed	Not Applicable
Coastal Zone 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, the project falls under interstate boundary of west Bengal- 4.53 km in ENE direction from project site.
Protected Area under Wildlife	>10 kms	Not Applicable
Critically Polluted Area under CPCB	>10 Kms	Not Applicable
Notified Eco Sensitive Area	>10 kms	Not Applicable
Interstate Boundaries or International Boundaries	>10 kms	Yes, the project falls under interstate boundary of west Bengal- 4.53 km in ENE direction. From project site.

- (vi) Earlier, the Terms of Reference (ToR) was granted by the Ministry vide letter No. 10-26/2019-IA-III dated 27.06.2019 for preparation of EIA/EMP report and Public hearing for the proposed activity.
- (vii) Baseline data's for preparation of EIA report were collected during post monsoon season i.e., 01.10.2019 to 31.12.2019.
- (viii) Public Hearing for the proposed project was conducted on 26.11.2021 in accordance with the EIA notification, 2006 & SPCB. The Public Hearing was organised by Jharkhand State Pollution Control Board Ranchi and Presided by Project Director, ITDA, Pakur Jharkhand. Odour Issues and Environmental Pollution are major the concerns raised during the public hearing. Based on the issues/representation received from the public, project proponent made a time bound action plan including budgetary provision in final EIA/EMP report.
- (ix) During Construction phase 1.0 KLD fresh water will be required & during Operational phase total water requirement will be 86.2 KLD (Fresh water 8.8 KLD + Recycled water 77.4 KLD). Water requirement sourced from PHED water supply. Details of fresh water requirement as follows:

Utility	Water requirement(KLD)
Domestic	0.5
Floor washing /Vehicle maintenance shed	3.0
Makeup water	3.8
Green belt	0.9

Dust suppression	0.6
Total fresh water requirement	8.8

- (x) The generated domestic wastewater (0.5 KLD) will be send to Septic tank/Soak Pit; whereas wastewater generated from floor washing& Vehicle maintenance shed & process (80 KLD) will be treated by ETP of 80 KLD capacity. Treated water of 77.4 KLD will be re-circulated in process.
- (xi) Total power requirement is 100 kVA and same will be sourced from from JBVNL. In addition, one DG set of 63 kVA is proposed as power back-up.
- (xii) LED Lamps and Solar panels are proposed as an energy saving conservation. Proposed energy saving measures would save about 3 % of power requirement.
- (xiii) Leachate treatment plant of 10 KLD is proposed for leachate treatment. The leachate generated from landfill will be collected into leachate collection wells. The leachate collected will be sprayed back into landfill for dust suppression etc., the excess, if any, will be disposed off. The sludge generated in the leachate pond will be sent to land fill.
- (xiv) Acoustic enclosure is proposed for all the high noise generating equipment to mitigate the noise pollution.
- (xv) It is proposed to develop green belt along the periphery of the proposed project in such a way to limit the noise reaching outside the project boundary and provide habitat to small birds and mammals. Area allotted for green belt development is 13000 sq. m.
- (xvi) The cost of the project is ₹ 973.98 Lakhs. Capital cost of EMP is ₹ 57.5 Lakhs & recurring cost is ₹ 14.94 Lakhs per annum as against the capital cost of Project (₹ 973.98 Lakhs).
- (xvii) Proposed provisions for rainwater harvesting from rooftop, paved areas and landscaping areas. Capital cost of rainwater harvesting is ₹ 5.0 Lakhs and annual recurring cost is ₹ 2 Lakhs.
- (xviii) The project is not located in Critically Polluted area.
- (xix) The project is not located within 10 km of Eco Sensitive Zone. NBWL Clearance is not required.
- (xx) Forest Clearance is not required.
- (xxi) No tree cutting is involved.
- (xxii) No court case is pending against the project.
- (xxiii) CRZ Clearance is not required.
- (xxiv) Employment potential: During construction phase, 15 to 20 persons will be employed. During operational phase, 15 people will get employment. (About 250 temporary employees will be hired for primary collection, transportation and miscellaneous jobs).

(xxv) Benefits of the project: As of now, there is no scientific disposal method being followed in this area so this project has the prime requirement in the area. The importance of effective Municipal Solid Waste Management (MSWM) services is to protect public health, the environment and natural resources. To promote the ecological management of solid waste in compliance with the principle of the 4 Rs i.e., Reduce, Reuse, Recycle, Recover and safe disposal. Development of the facility will create more jobs in the area and also present the opportunity to provide improved products or services to people in the area.

2. The EAC (Infra-2) has noted that 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 subsequent amendments, and requires appraisal at State level. However, General Condition is applicable, due to the presence of inter-state boundary of Jharkhand and West Bengal falls within 4.53 km in NE direction from project site. Accordingly, the project comes under category 'A' and requires appraisal at Central level by Sectoral EAC.

3. The EAC (Infra-2), based on the information submitted and clarifications provided by the Project Proponent and detailed discussions held on all the issues, **recommends** the grant of environmental clearance to the project subject to the following specific conditions and other Standard EC Conditions as specified by the Ministry vide OM dated 4th January, 2019 for the said project/activity.

- (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. Online pollutant monitoring shall be provided as per CPCB guidelines for monitoring particulate matter, SO₂, NO_x and CO from the incinerator stack. The periodical monitoring of Dioxins and Furans in the Stack emissions shall be carried out.
- (iii) 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 1 tree that is cut/ non-

- survival of any transplanted tree) shall be done and maintained. Plantations to be ensured species (cut) to species (planted).
- (iv) Project Proponent shall develop green belt in 13,000 sq. m of area as committed.
 - (v) Project proponent shall implement rainwater harvesting from rooftop, paved areas and landscaping areas as committed.
 - (vi) Project proponent should use LED Lamps and Solar panel as energy saving conservation in the project area as committed.
 - (vii) 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 species should not be used for landscaping.
 - (viii) Analysis of Dioxins and Furans shall be done through CSIR-National Institute for Interdisciplinary Science and Technology (NIIST), Thiruvananthapuram or equivalent NABL Accredited laboratory.
 - (ix) Leachate treatment plant of 10KLD should be installed to treat the leachate. Leachate to be collected and utilized within project after proper treatment. PP should submit the details regarding Leachate collection and treatment system to be installed to concerned Integrated Regional Office of the Ministry. Toxicity Characteristic Leaching Procedure (TCLP) test to be performed on leachates.
 - (x) No fresh water to be used except for potable use.
 - (xi) Sufficient number of Piezometer wells shall be installed in and around the project site to monitor the ground water quality in consultation with the Delhi Pollution Control Committee/CPCB. Trend analysis of ground water quality shall be carried out each season and information shall be submitted to the SPCB and the Regional Office of MoEF&CC.
 - (xii) Ground water monitoring for Physico-Chemical parameters to be carried out and record maintained by providing piezometric wells along the flow channel (up and down).
 - (xiii) Ambient air quality monitoring shall be carried out in and around the landfill site at up wind and downwind locations.
 - (xiv) The depth of the land fill site shall be decided based on the ground water table at the site.
 - (xv) Environmental Monitoring Programme shall be implemented as per EIA report and guidelines prescribed by CPCB for hazardous waste facilities. Periodical ground water/soil monitoring to check the contamination in and around the site shall be carried out.
 - (xvi) The Company shall ensure proper handling of all spillages by introducing spill control procedures for various chemicals.
 - (xvii) On line real time continuous monitoring facilities shall be provided as per the CPCB or State Board Directions.

- (xviii) Scrubber water, leachate water or wheel wash shall be treated properly and recycled to achieve zero liquid discharge.
- (xix) Gas generated in the Land fill should be properly collected, monitored and flared.
- (xx) Pre-medical check-up to be carried out on workers at the time of employment and regular medical record to be maintained.
- (xxi) Emergency plan shall be drawn in consultation with 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.
- (xxii) Rainwater runoff from the landfill area shall be collected and treated in the effluent treatment plant.
- (xxiii) Adequate covering arrangement in site should be done to prevent the runoff of rainwater in the project premises.

AGENDA ITEM NO: 95.3.2

Common Hazardous Waste Treatment Storage & Disposal Facility at Khasra No. 1004 to 1022, 1027 & 1028 of Kesda Village, Simga Tehsil, Baloda Bazar District, Chhattisgarh State by M/s Re Sustainability Limited – Environmental Clearance

(IA/CG/MIS/283620/2022; F. No. 10-54/2020-IA.III)

Background

1. Earlier, the project proponent submitted the same proposal bearing proposal no. IA/CG/MIS/171901/2020 (F. No. 21-109/2021-IA-III) to the Ministry. The proposal was considered by EAC in its 78th meeting held on 14-15 December, 2021, 82nd meeting on 82nd meeting held on 15-16 February 2022 and 90th meeting held on 14th June, 2022. During the detailed deliberations during these meetings, the EAC observed several flaws in the proposal, EIA/EMP report, public hearing and authenticity of the EIA consultant due to its debarment by QCI/NABET. The details may be seen in the minutes of above mentioned meetings, which are available in public domain at PARIVESH portal of this Ministry. Further, EAC observed that the name of PP has been changed from M/s Ramky Enviro Engineers Ltd to M/s Re-Sustainability Limited and asked the PP to revise the application as per the recent name change. Accordingly, the proposal was returned in present form.

2. Thereafter, PP submitted proposal (no. IA/CG/MIS/283620/2022) on PRAIVESH portal for change in name of the proponent as mentioned in the ToR letter issued by this Ministry on 03.11.2020. Subsequently, the name of the proponent from M/s Ramky Enviro Engineers Ltd to M/s Re-

Sustainability Limited was approved by the Ministry vide letter dated 30.08.2022. Meanwhile, suspension period of the accreditation is completed and M/s Re Sustainability Solutions Pvt. Ltd. has received the extension of validity of Accreditation till 8th December, 2022 from QCI-NABET Vide Letter No. QCI/NABET/ENV/ACO/22/2518 dated 09th September, 2022.

3. Now, the PP has submitted this proposal for the grant of EC and the same has been considered as a fresh proposal by the EAC (Infra-2) in the present meeting dated 15.09.2022.

4. The details of the project, as per the documents submitted by the project proponent, and also as informed during the 95th meeting is provided below for reference.

- (i) The project is located at Plot Nos: 1004 to 1022, 1027 & 1028 of Kesda Village, Simga Tehsil, Baloda Bazar District, Chhattisgarh.
- (ii) The project is new.
- (iii) The project was issued ToR vide letter no. 10-54/2020-IA.III dated 03.11.2020. The baseline monitoring studies have been carried out during October to December, 2020.
- (iv) The total land area for the proposed project is around 50 acres (20.42 ha). A minimum area of 15 m wide will be left for greenbelt development all along the boundary. The project is proposed to treat hazardous wastes and also comprises of AFRF, paper recycling, plastic recycling, E-waste recycling, used oil/spent oil recycling, drum recycling/decontamination recycling plant, solvent recovery, Aluminum dross reprocessing, Spent Pot Liner (SPL) (Refractory portion) processing & disposal, SPL (Carbon portion) reprocessing, renewable energy facilities. The project details are given as follows:

Sl. No.	Type of Wastes/Unit	Capacity Scalable Up to
1.	Secured landfill (Direct to Landfill)	4,50,000 MTA
2.	Landfill After Treatment	
3.	Hazardous Waste Incineration(Common for Hazardous waste, domestic hazardous waste & Other Incinerable waste)	Incinerator scalable up to 1.5 Tons/hr in modular form
4.	E Waste Recycling	100 TPD
5.	Alternative Fuel and Raw Material Facility (AFRF)	100 TPD
6.	Plastic Recycling (hazardous in nature/contaminated elements)	20 TPD
7.	Paper Recycling (hazardous in nature /contaminated elements)	50 TPD
8.	Solvent Recovery (hazardous in nature/contaminated elements)	18 KLD

9.	Aluminum Dross	100 TPD
10.	Used/Spent Oil Recycling	15 KLD
11.	Renewable Energy	2 MW
12.	SPL (Carbon Portion)-Hazardous in nature and contaminated elements	100 TPD
13.	SPL (Refractory Portion)-Hazardous in Nature/Contaminated elements	100 TPD
14.	Drum/Decontamination Recycling Plant	200 Drum/day

(v) The land area requirement for the project is given as follows:

S1. No.	Proposed Facility	Land Area in Acre (approx.)
1.	Landfill	28.18
2.	Greenbelt	10.77
3.	Facilities	2.43
4.	Paved roads	2.14
5.	Open spaces/ future expansion	6.83
6.	Parking	0.06
Total Area (approx.)		50.41

(vi) Water requirement is 100 KLD i.e. 50 KLD of treated water and 50 KLD of fresh water sourced from bore well to be dug with prior permission of CGWA.

(vii) Around 57.2 KLD of wastewater will be generated in the project. The leachate generated from landfill will be collected into leachate collection ponds. The leachate collected will partly treated and will be sent in to spray drier of incinerator and a part is sprayed back onto landfill for dust suppression, stabilization of hazardous waste, etc. The wastewater from TSDF operations, floor washings, workshop etc., will be collected, disinfected and then treated for oil and suspended solids by skimming and settling in sedimentation tank and the clarified water would be recycle for incinerator spray drier, washing, spraying on landfill and for dust suppression, etc., The waste water generated from boiler and cooling tower would be used in ash quenching and for greenbelt development purpose. Around 3.6 KLD of sewage generated will be treated in septic tank. There will not be any wastewater discharge to any nearby water body and the proposed project adopts zero wastewater discharge concept. The details of wastewater generation and management are given as follows:

Process/Facility	Wastewater Generation (KLD)	Remarks
Secured Land Fill	1.4	Sent for Leachate treatment & reused

Incinerator + plant - wet & venturi scrubber	30.2	Sent to wastewater treatment scheme for treatment & reuse
Boiler spent solvent & used oil recovery	18.2	
Plastic, Paper, & E-waste	2.4	
Truck wheel wash	1.4	
Sub Total	53.6	
Domestic	3.6	Sent to septic tank or soak pit
Greenbelt	-	
Grand Total	57.2	

- (viii) An estimation of around 24 kg/day municipal solid waste is expected to be generated from the facility and shall be sent to nearest municipal facility for disposal. Hazardous & domestic hazardous waste generated within the premises shall be disposed of in incinerator or landfilled as required within the proposed facility. The ash coming from the incinerator and power plant will be used as a daily cover for landfill along with soil and mud.
- (ix) The drainage pattern in the study area can be described as subdendritic to dendritic. Seonath River is located at 9.3 km west; it is tributary of Mahanadi. Ghughua tank is located at 1.7 km west from the site. A man-made canal namely Bhatpara branch canal is located at a distance of 0.6 km west.
- (x) The power required for operations is 320 kVA, which will be taken from Chhattisgarh State Power Distribution Company Limited. 320 kVA DG set (standby) will be used as backup power during emergency requirement.
- (xi) In the proposed project it is intended to set up 2 MW solar power project in the closed landfill after evaluating the recent developments in solar energy on closed landfill on following criteria. a) Solar power system considerations with respect to landfill applications, b) Landfill technical and engineering considerations, and Regulatory considerations.
- (xii) No rainwater harvesting system or other artificial structures for ground water recharge are proposed within the facility, due to the nature of facility being hazardous waste management, to eliminate the probability of groundwater contamination. However, it is proposed to make proper utilization of rainwater collected from within the facility. A rainwater collection pond has been designed to hold rainwater. The rainwater thus collected, after treatment as necessary, shall be used for various uses (dust suppression, floor washings, toiler flushing, greenbelt, etc.).
- (xiii) The gases coming out of the incinerator stack are passed through

scrubber, multi cyclone and bag filter for the removal of particulates. For proper dispersion of SO₂ and NO_x emissions into atmosphere, incinerator stack height meeting MoEF&CC/CPCB guidelines will be provided. To prevent the formation of dioxins, the flue gas temperature is rapidly lowered from 500°C to less than 200°C by adopting rapid quench/catalyst/adsorption by activated carbon.

- (xiv) Adequate greenbelt will be developed for the proposed project in an area of 10.7 acres (43,601 sq. m). It includes greenbelt along the boundary, roads and open spaces. 10 m wide green buffer shall be developed along the boundary of the project and 1 m wide buffer along the road (two sides).
- (xv) The project is not located in Critically Polluted area.
- (xvi) The project is not located within 10 km of Eco Sensitive Zone. NBWL Clearance is not required.
- (xvii) Forest Clearance is not required.
- (xviii) No court case is pending against the project.
- (xix) The project is expected to be completed within 12 (twelve) months. xx. Public Hearing was held on 07.08.2021 at around 11 A.M. at Ground situated in front of Venkatarmana Poultry Farm of Village Kesda under Tehsil Simga, District Balodabazar.
- (xx) Investment/Cost of the project is estimated to be around ₹ 36 Crores. Budget of EMP is ₹ 3.2 Crores with a Recurring cost of ₹ 32 Lakhs/annum. The overall project cost works out to be around ₹ 75.10 Crores, which includes land and other CSIDCL regulatory costs.
- (xxi) Employment potential – About 50 persons shall be deployed during the construction phase. Once the facility is operational, about 40 persons including skilled and unskilled workers shall be deployed.
- (xxii) Benefits of the project: Wastes generated from existing industries will be addressed in a better and environmentally safe way. It provides a one stop solution for the management of various types of wastes such as hazardous waste and domestic hazardous waste etc. Minimizes pollution load on environment with an additional benefit of green and clean surroundings. Possibility for recovery of materials thereby conserving the natural resources. Management of wastes is relatively easier and economically viable at a common facility. Most viable option in the absence or availability of expertise. Reduced environmental liability due to captive storage of hazardous waste in the premises of industries. Prevention of natural resource contamination. Employment opportunity is envisioned for the nearby inhabitants thereby improving their lifestyle & economic conditions. New infrastructure and development of amenities in and around the project site is expected.

5. The EAC has also noted that earlier committee (the then EAC Infra-2),

during its 78th meeting held on 14-15 December 2021 has raised 20 ADS point in respect of various issues related to the project. Project Proponent provided pointwise clarification in respect of each ADS during 82nd meeting of EAC held on 15-16 February 2022. However, the EAC was not completely satisfied with the response to the queries raised. The EAC deferred the proposal and asked for the following additional information/clarifications:

- (i) The proposed leachate management system requires further clarification. The details of leachate management system do not given any ETP design or components of ETP. The water balance diagram does not clarify the final disposal of leachate.
- (ii) Fire potential and its critical relevance is not captured: The response is very vague and generic. It does not give any details of possible hazards/risks and specific mitigation measures. SOP to manage fire and other hazards need to be spelled out specifically.
- (iii) Clarifications were sought on generation of landfill gas from TSDF facility. Any waste that goes into a secure landfill must be pretreated, stabilized and immobilized. The response maintains generation of landfill gas like methane, carbon dioxide, oxygen, hydrogen sulphide. There is no clarification how and why the gas is generated from stabilized/immobilized waste. This needs to be clarified.
- (iv) ADS sought characteristics of possible waste coming to the facility from industries and anticipated quantities. This has not been provided.
- (v) The response is vague. Needs clarification/explanation on the nature of pre-treatment and probable quantity of materials to be consumed and stored in the facility.
- (vi) The response sought was regarding capacity utilization and estimated stack emissions including dioxin and furan level based on their experience of operating 17 TSDFs across the country. The response does not provide the details of Dioxin and Furan measurement.

6. The EAC has further noted that proposal was again considered in the 90th meeting held on 14.06.2022 wherein the Project Proponent was not allowed to make presentation due to: (i) debarment of consultant by NABET from attending any EC related activities; (ii) name of the proponent has been from M/s Ramky Enviro Engineers Ltd to M/s Re-Sustainability Limited. In view of this, PP was asked to revise the application as per the recent name change. Accordingly, the proposal was returned in present form.

7. Thereafter, PP submitted proposal for name change in ToR dated 03.11.2020 vide proposal no. IA/CG/MIS/283620/2022 on PRAIVESH portal and the same was approved vide letter dated 30.08.2022. Meanwhile, suspension period of the accreditation is completed and M/s Re Sustainability Solutions Pvt. Ltd. has received the extension of validity of Accreditation till 8th December, 2022 from QCI-NABET Vide Letter No. QCI/NABET/ENV/ACO/22/2518 dated 09th September, 2022.

8. Now, the PP has submitted this proposal for the grant of EC and the same has been considered as a fresh proposal by the EAC (Infra-2) and discussed in the present meeting dated 15.09.2022. In this meeting, the proponent described the project as mentioned above and also provided following clarification/information in respect of ADS raised on 82nd meeting of EAC (Infra-2) held on 15-16 February 2022 regarding the project bearing proposal no. IA/CG/MIS/171901/2020 (F. No. 21-109/2021-IA-III).

- (i) The leachate collection system shall be designed at the base of the landfill and shall comprise of Drainage layer and Perforated pipe collection system for collection and removal using a sump. Leachate will be removed from the landfill by (a) pumping in vertical wells or chimneys (b) pumping inside slope risers, or (c) by gravity drains through the base of a landfill in above-ground and sloped landfills. Side slope risers may be preferred to vertical wells to avoid any down drag problems. Submersible pumps shall be used for pumping, educator pumps are also being increasingly used the leachate may be stored in a holding tank before being sent for treatment. The details of the leachate management system are shown below and the same has been enclosed as Attachment- 1 for enlarged presentation. The following are the leachate management system proposed for TSDF: 1) Mixing and solidification of the leachate through waste, reagents, and other solids 2) Spraying of the leachate on the landfill and during operation 3) Solar Evaporation Pond: A double liner system-based Solar Evaporation pond shall be constructed wherein the leachate shall be stored for forced evaporation. The dry sludge post evaporation of leachate shall be treated and disposed of in the landfill. 4) Spray Dryer of common hazardous waste incinerator: The leachate shall be used for quenching in the spray dryer of the incinerator for flue gas management as leachate has high TDS and shall be helpful in exchanging the heat. However, leachate shall be treated prior to its use to achieve a COD <250 mg/l. 5) Effluent Treatment Plant (ETP): Depending upon the requirement, an ETP having suitable technology may also be considered for installation for the treatment of leachate. 6) Multi-Effect Evaporator (MEE): If required, MEE of adequate capacity shall also be considered for the management of leachate.
- (ii) Critical infrastructure/waste processing facilities like incinerator area, incinerable waste storage area, stabilization unit, plastic recycling unit, paper recycling unit, used/spent oil recycling unit, spent solvent recovery unit, SPL – carbon portion & a refractory portion will have a fire protection system through heat & smoke detectors, sprinkler system and fire extinguishers of suitable capacities and classes to mitigate the fire hazards. In other facilities like admin buildings, laboratories, etc., fire extinguishers of suitable capacity and class will also be provided. In every 30 m, fire hydrant valves will be set up along the boundary of the project as well as in the vicinity of the facilities. An adequate number of around 15- 20 fire extinguishers will be provided as per fire norms followed by approval from the fire

department. A fire pump house of suitable capacity with an electrical pump, diesel pump, and jockey pump will be provided as per the fire norms. An emergency control center will be constructed, which would act as a command center during any emergency if any. The control center would house emergency equipment like self-controlled breathing apparatus (SCBA) sets, fire extinguishers, safety jackets, safety helmets with face shields, safety goggles, safety gloves, gumboots, etc. These equipments will be provided in suitable numbers to successfully extinguish any hazards. The following is the SOP for managing fire and other hazards:

- a. **Access to building:** The premises is proposed to be located 60 meters wide and the accessible through a 10-meter wide main gate & allaround 6 meters to the incineration shed which meets the requirement as per UBBL – 2016.
- b. **Number, width, Type, and arrangement of exits:** All staircases shall meet the requirement of travel distance, width, and construction as per UBBL-16/NBC-IV. Clear-cut width of existing/staircases shall be maintained at the time of completion. (UBBL- Unified Building ByeLaws, NBC- National Building Code).
- c. **Protection of existing by means of fire check doors and or pressurization:** The fire check doors of minimum 02hrs fire resistance rating shall be provided as per NBC part-IV, wherever applicable. The exit minimum width of exit doorways shall be equivalent to the width of the staircase as per clause 7.12.2 of UBBL 2016. The exit doorway shall be operated from the side which serves as clause 7.12.5 of UBBL 2016. The fire check door shall confirm to IS 3614:2021
- d. **Compartmentation:** The building shall be suitably compartmentalized so that the fire/smoke remains confined to the area where the fire incident has occurred and does not spread to the remaining part of the building. This shall confirm clause 8.4.6 of UBBL 2016 and NBC-IV. There shall be no opening /window assemblies with a rating of 60 minutes as per clause 4.4.2.4.3.4 of NBC-IV.
- e. **Smoke management system:** smoke venting facilities shall be provided as per NBC 2016 Part – IV.
- f. **Fire Extinguishers:** Fire extinguishers of ISI (Indian Standards Institution) mark suitable to risk at all floors shall be provided as per clause 9.3.9 of UBBL- 2016 in accordance with IS 210-1992
- g. **First Aid Hose Reel:** A hose reel containing 30m length of 20 mm bore terminating into a shut-off nozzle of 5mm outlet connected directly to riser shall be provided as per clause 9.3.9 of UBBL- 2016. This shall be provided as per clause 9.3.9 of UBBL- 2016. This shall conform to IS: 884/1998.

- h. **Automatic Fire Detection and Alarming Systems:** Automatic fire detection system i.e. smoke/heat detection system shall be provided in the entire building in all area including machine rooms as per clause 9.3.9 of UBBL – 2016. The system shall be connected to a fire alarm system and shall conform to IS: 2189/1999
- i. **Manually operated Fire Alarm System:** Manually operated electric fire alarm (MOEFA) including talkback system shall be provided as per clause 9.3.9 of UBBL-2016/ NBC part –IV and the same shall conform to IS: 2189/1999
- j. **Public Address System:** The public address system shall be provided in the building having loudspeakers in the common area. The microphone and control switches of the public address system shall be installed as per clause 9.3.10 of UBBL-2016
- k. **Internal Hydrant and Yard Hydrant:** Wet riser/down comer system in the building near staircases shall be provided as per clause 9.3.9 of UBBL – 2016 and it shall conform to IS 3844 – 1989. Hose box of suitable dimensions shall be provided near each internal hydrant. Its design shall be such that it can be readily opened in an emergency. Each box shall contain two lengths of 63 mm diameter, 15m length, rubber lined delivery hoses conforming to IS: 636 complete with 63mm instantaneous coupling conforming to IS: 903 with a nozzle of 16 mm diameter. Yard hydrants shall be provided in the premises as shown on plans and the same shall conform to IS 13039/1991.
- l. **Pumping Arrangements:** A fire pump house having 02 number of electrical engine driven pump of 2280 LPM capacity, 01 number of Diesel Engine Driven Pump of similar capacity and 02 number of Jockey pump of 180 LPM capacity with suitable head shall be provided as per part – IV NBC 2016. The pump house shall be directly accessible. A suitable orifice plate/ reduce shall be provided to maintain the requisite pressure. Additional terrace pump of 900 LPM capacity with 40-meter head shall be provided. All the pumps shall be automatic in operation.
- m. **Exit Signs:** Exit signage shall be provided in the building at an appropriate location. Floor level marking, all existing waymarking signs (green in color) in the entire building must be illuminated and wired to an independent circuit supplied by alternate source of power supply. Wiring for the illuminated / glowing strips paint shall be provided at each level to guide the direction for escaping towards a safe place. The size and color of the exit signs shall be as per IS 9457: 1980
- n. **Special Fire Protection Systems for protections of special risks:** The electric sub-station, if constructed, installation of

Transformer, LT & HT panel shall be as per the provisions specified by the Electric Authority.

- (iii) As a preventive measure gas venting system is proposed; mixed waste having biodegradable constituents may cause gas generation. As per the criteria for hazardous waste landfills, series: HAZWAMS/17/2000-01, Landfill gas is generated as a product of waste biodegradation or on account of the presence of VOCs in the waste. Gas generation can be reduced or eliminated by avoiding the disposal of biodegradable/organic wastes. For HW landfills where gaseous emissions are anticipated (as in the case of mixed waste) shall be regulated by (a) controlled passive venting or (b) controlled collection and treatment/reuse.
- (iv) The following are the possible waste coming to the facility from various industries

Sl. No.	Name of the Industries	Expected Waste Description
1.	Balco	SPL refractory, Shot blast dust,
2.	Vijay Transmission	ETP Sludge
3.	Nandan Steel	ETP Sludge
4.	Hira Group	ETP Sludge
5.	Gevra open cast mine, SECL	Waste Containing oil, ETP Sludge
6.	IOTL	Bottom oily sludge from tank
7.	Kusmunda Open cast Mine, SECL	Waste containing oil, ETP Sludge
8.	Dipka Open Cast Mine, SECL	Waste containing oil, ETP SLUDGE
9.	NTPC Korba	Glass wool, Asbestos sheet, Silica
10.	Apollo India	ETP Sludge
11.	Star Processor	Used puff, Waste glass
12.	ACB India ltd	Glass wool
13.	Jindal Power	Glass wool
14.	Chirmiri Open cast Mine	Used filter, ETP Sludge
15.	Godavari Power	Glass wool
16.	CSPGCL East	Glass wool
17.	Dspm Korba	Glass wool
18.	NTPC, Lara	Resin Waste, Waste contains oil
19.	NTPC SIPAT Bilaspur	Glass wool
20.	HPCL Mandirhasod	Paint sludge
21.	NMDC	Resin Waste, Waste contains oil
22.	JSPL	Glass wool
23.	SKS ISPAT	Resin Waste, Waste contains oil

SIDC is developing Industrial Parks/Estates in the State of Chhattisgarh. CSIDC proposes for setting up and operating the Common Hazardous Waste Treatment, Storage and Disposal Facility (HWTSDF) through private sector participation for Hazardous Waste generated from

Industries located in the State of Chhattisgarh. As per the recent study conducted by the CECB, the total hazardous waste generation of Chhattisgarh State in the year 2018 is Approx. 3, 14,903 MT, and the details are shown in Table:

Sl. No	Type of Wastes	Quantity in MT
1.	Landfillable Waste	31594
2.	Recyclable Waste	259821
3.	Incinerable Waste	23488
Total		314903

Total hazardous waste generation in the year 2018 in Chhattisgarh state is Approx. 55082 MT /Annum (excluding the Recyclable Waste) (Source: CSIDC Tender doc.)

- (v) In Landfill after treatment, due to moisture, heavy metals content required stabilization using reagents like, sawdust, fly ash, lime, cement, etc. Based on the concentration of the heavy metal and chemical composition the lab decides the percentage of reagents to be used to neutralize the waste which requires approx. 20 – 70% of reagent consumption. The waste sample shall be analyzed by the site Lab team and based on the outcome of the comprehensive analysis report, the pre-treatment method shall be decided. The quantity and type of reagent to be used for pre-treatment vary based on the characteristic of waste. Accordingly, reagents like lime, fly ash, cement etc. of a minimum quantity of 100 tons are to be stored in the facility and used as per the lab prescription for pre-treatment.
- (vi) The stack emission report of Ramky Facilities at Madhya Pradesh and Telangana is enclosed as Attachment-5 for kind reference which indicates that the stack emissions including dioxin and furans are within the prescribed limits.

9. The EAC (Infra-2) noted that the project/activity is covered under category 'A' of item 7(d) 'Common hazardous waste treatment, storage and disposal facilities (TSDFs)' of the Schedule to the EIA Notification, 2006 and its subsequent amendments, and requires appraisal at Central level by sectoral EAC.

10. Based on the information submitted and clarifications provided by the Project Proponent and detailed discussions held on all the issues, the EAC has observed the following:

- (i) The clarifications provided by the PP in respect of ADS related to land use breakup for various activities and details of source of waste are not included in the EIA/EMP report. In the revised EIA/EMP report, the proponent is required to incorporate all the details related to these two ADS points. It is ensured that all details of various ADS points raised by EAC in its previous meetings is adequately incorporated in the EIA/EMP report.
- (ii) The proponent has proposed a total of 14 waste management activities (given in table under para 4(iv) above) involving huge amount of

distinct hazardous and non-hazardous waste material. Handling such a huge quantity would require adequate space for its operation in the facility and storage. The storage sheds for the hazardous waste should be designed as per CPCB's norms. In view of this, the proponent is required to provide item wise calculation for space (area) requirement for handling various types of waste materials along with the proper justification as per extant rules, regulations and guidelines issued by this Ministry and/or CPCB. Minimum requirement of the space (area) for storing various hazardous materials as per norms set by the Ministry/CPCB should also be mentioned.

- (iii) Some of the activities mentioned in the proposal are not covered under EIA Notification, 2006 as amended. Proponent is required to specify such activities along with the reason/justification for including them in the proposal. Such activities can be included only if there is enough additional space (area) is available after fulfilling the minimum requirement for carrying out operation-cum-storage of those activities covered under the EIA Notification, 2006 as amended. Otherwise, such activities including e-waste should be removed from the proposal and the EIA/EMP report be revised accordingly.
- (iv) The proposed green belt coverage is only 21%. However, at least 33% of total area should be ensured while making adequate provisions for all other facilities besides adequate storage for various types of wastes. In view of this, proponent is required to revise the green belt plan accordingly.
- (v) All changes suggested above should also be incorporated in the layout of the project. The proponent is required to provide details on requirement of minimum space (area) for operation-cum-storage of each activity considered and same is to be clearly depicted in the layout. The layout of the proposed project should be revised accordingly.
- (vi) The various chapters/sections of the EIA/EMP report including proposed mitigation measures and environmental management plan shall also be revised in accordance to the above suggested changes.

Considering above, the EAC **defers** the proposal and asks the PP to provide explicit clarification and documentation to address above mentioned issues.

AGENDA ITEM NO: 95.3.3**Residential Colony Project at Mouza Dumduma, Tehsil Bhubaneswar, District Khurda, Odisha by M/s Falcon Real Estate Pvt. Ltd. – Environmental Clearance****(IA/OR/INFRA/400382/2022; F. No. 21-69/2022-IA.III)**

1. The Project Proponent (M/s Falcon Real Estate Pvt. Ltd.) along with his consultant (M/s Grass Roots Research & Creation India (P) Ltd.) 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 proposed Residential Colony Project by M/s Falcon Real Estate Pvt. Ltd., is located at Plot No. 499/6204, 499/6202, 499/6203, 499/6207, 499/6206, 501, 499/4493, 496/2534, 496/6452, 496/6453, 496/4145, 497, 498, 496/6335, 495, 500, 499/4454, Khata No. 432/5085, 432/5086, 432/4870, 432/5190, 476/2, 432/4995, 432/2254, 432/5370, 432/5369, 432/5368, 463/48, 432/2128, 432/2465, 2618, 432/5408, Mouza- Dumduma, Tehsil- Bhubaneswar, District- Khurda, Odisha. (Latitude 20°15'5.112"N and 85°47'9.744"E Longitude).
- (ii) It is a new project.
- (iii) The total plot area is 17,248.51 sq. m and total construction (Built-up) area is 94,209.41 sq. m. The project will comprise of five numbers of Buildings. Maximum height of the building is 58.10 m.
- (iv) Project consists of Residential DUs (3 BHK: 68 Nos, 3.5 BHK: 128 Nos, 4 BHK: 68 Nos, Penthouse: 4 Nos.), Club and Departmental Store .
- (v) The details of building are as follows:-

Sl. No.	Particulars	Area (sq. m.)
1.	Total Plot Area	17,248.51
a.	Land affected by road	429.32
b.	Land affected by drain	962.81
c.	Net Plot Area (a-b)	15,856.37
2.	Permissible Ground coverage (@30% of net plot area)	4,756.91
3.	Proposed Ground coverage (@ 28.65 % of net plot area)	4,543.20
4.	Permissible F.A.R (@ 6% of net plot area)	95,138.22
5.	Proposed F.A.R (@ 4.12% of net plot area)	65,392.80
a.	Residential	64,028.52
b.	Society area	1,364.28
6.	Non FAR	7,256.11
a.	Residential	7,240.92
b.	Society area	15.19
7.	Basement Area	21,560.504
a.	Basement level-1	10,987.677

b.	Basement level- 2	10,572.827
8.	Built up area (5+6+7)	94,209.41
9.	Maximum Height of the Building (m) (2B+G+17) (Till Mumty)	58.10 m
10.	Landscape area (21.43 % of net plot area)	3,398.26

- (vi) During construction phase, total water requirement is expected to be 190 KLD which will be met by Private water Tankers. During the construction phase, soak pits and septic tanks will be provided for disposal of waste water. Temporary sanitary toilets will be provided during peak labour force.
- (vii) During operational phase, total water requirement of the project is expected to be 187 KLD (131 KLD of fresh water and 56 KLD Recycled Water). Freshwater requirement will be met by ground water/bore wells. Estimated Wastewater generation is 139 KLD and the same will be treated in STP of total 170 KLD capacities. 56 KLD of treated wastewater will be recycled and reused for flushing and horticulture. Surplus water of 69 KLD will be used for watering the external road, side plantation, supply to nearby construction sites, private water tanker agency.
- (viii) About 1,160 Kg/day solid wastes will be generated in the project. The biodegradable waste 464 kg/day will be processed in OWC and the non-biodegradable waste generated 696 kg/day will be handed over to authorized local vendor. Horticultural Waste and STP sludge would be used as manure. Spent oil from DG sets will be disposed off through approved recyclers.
- (ix) The total power requirement during operation phase is 4,139 kVA and will be met from State Electricity Board. In addition, two DG Set (2×1250 kVA) of total 2500 kVA capacity is proposed for power back up.
- (x) Rooftop rainwater of buildings will be collected in 2 RWH tank with capacity of 125 m³ and 120 m³.
- (xi) Adequate provision will be made for car/vehicle parking at the project site. There shall also be adequate parking provisions for visitors so as not to disturb the traffic and allow smooth movement at the site. Total proposed parking area is 19636.49 m² i.e., 618 ECS and electrical vehicle charging facility will be provided for 30% of the parking.
- (xii) Solar based lighting is proposed in the landscape area, signage, entry gates and boundary walls etc., to save about 10.12% of total power requirement.
- (xiii) Proposed area for green belt development is 3,398.26 sq. m i.e. 21.43 % of the net plot area; the list of trees/plants to be planted is Neem (*Azadirachta indica*), Sunari (*Cassia fistula*), Arjun (*Terminalia arjuna*) and Palash (*Butea monosperma*). Total numbers of tree proposed is 200 @ 1 tree/80 sq. m.

- (xiv) The project is not located in Critically Polluted area.
- (xv) The project is not located within 10 km of Eco Sensitive Zone. NBWL Clearance is not required.
- (xvi) No tree cutting is involved.
- (xvii) Forest Clearance is not required.
- (xviii) No court case is pending against the project.
- (xix) CRZ Clearance is not required.
- (xx) Expected timeline for completion of the project is 24-36 months.
- (xxi) Total cost of the project is ₹ 450 Crores.
- (xxii) Employment potential: About 90 individuals.
- (xxiii) Benefits of the project: The project is leading to development of the area by providing employment of the local people and better infrastructure.

2. 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 as Category B project by sectoral EAC.

3. The EAC, based on the information submitted and clarifications provided by the Project Proponent and detailed discussions held on all the issues, **recommends** granting environmental clearance to the project subject to the following specific conditions and other Standard EC Conditions as specified by the Ministry vide OM dated 4th January, 2019 for the said project/activity, while considering for accord of environmental clearance:

- (i) 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.
- (ii) The PP shall obtain a distance certificate from the concerned Divisional Forest Officer wrt 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 EC letter.
- (iii) Abstraction of ground water shall be subject to the permission of Central Ground Water Authority (CGWA). Fresh water requirement shall not exceed 131 KLD during operational phase.
- (iv) As proposed, wastewater shall be treated in onsite STP of 170 KLD capacity. At least 56 KLD of treated water from the STP shall be recycled and re-used for flushing (42 KLD) and for Horticulture (14 KLD). Excess treated water (about 69 KLD) shall be given for watering the external roadside plantation, supply to nearby construction sites,

and private water tanker agency as committed. PP shall submit MoU for the disposal of excess treated water (outside the site) to the concerned Integrated Regional Office of MoEF&CC along with six-monthly compliance report.

- (v) 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.
- (vi) Area for greenery shall be provided as per the details provided in the project document i.e., area under plantation/greenery will be 3,398.26 sq. m i.e. 21.43 % of the net plot area. As proposed, at least 200 trees shall be maintained within the project premises. The landscape planning should include plantation of native species as proposed i.e., Neem (*Azadirachta indica*), Sunari (*Cassia fistula*), Arjun (*Terminalia arjuna*) and Palash (*Butea monosperma*). A minimum of 01 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.
- (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 Housing and Urban Affairs (erstwhile Ministry of Urban Development), Model Building Byelaws, 2016. As proposed, 2 RWH tank with capacity of 125 m³ and 120 m³ shall be provided by PP 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 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.
- (ix) The PP shall provide electric charging points for 30% of the parking in parking areas for e- vehicles as committed.
- (x) As committed, PP shall ensure installation of solar-based lighting and LEDs to meet 10.12% of total power requirement (i.e. 4,139 kVA).
- (xi) 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 ITEM NO: 95.3.4

Revision and Expansion of Residential Colony Project at Mouza Pratapnagari, District Cuttack, Odisha by M/s Builders Consortium Tridev – Environmental Clearance

(IA/OR/INFRA2/400381/2022; F. No. 21-70/2022-IA-III)

1. The Project Proponent (M/s Builders Consortium Tridev) along with his consultant (M/s Grass Roots Research & Creation India (P) Ltd.) made a presentation on above said proposal. The EAC (Infra-2) 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 site is located at Plot No. 1966, 1967, 1977/3199, 1978, 1981, 1987, 1988, 1989/6084, 1990, 1991, 1993, 1995, 1998, 1999, 2001, 2004, 2005, 2006, 2009, 2029, Khata No.932,922/210, 918, 985/385,11D- 1,863,90,365,985/665,985/666, 937, 938, 985/668, 985/667, 916,363, 985/667,985/668,985/669, 922/210, Mouza-Pratapnagari, District-Cuttack, Bhubaneswar, Odisha.
- (ii) It is an expansion project.
- (iii) The project was earlier granted Environment Clearance by SEIAA, Odisha vide letter no. 230667/51-MIS/09-2021 dated 7th May, 2022 for Plot area of 16,156.74 sq. m (3.99 acres) and built-up area of 39,757.3 sq. m.
- (iv) The total plot area is 16,156.74 sq. m and total construction (Built-up) area of 1,01,781.0 sq. m. The project will comprise of 03 No Building. Maximum height of the building is 71.5 m.
- (v) The details of proposed expansion in comparison with existing EC is as follows:

Sl. No.	Particulars	Earlier EC (m²)	Expansion (m²)	After revision and Expansion (m²)
1.	Total Plot Area	16,156.74	-	16,156.74
2.	Permissible Ground Coverage	8,078.37 (@ 50%)	-1,495.674	6,582.696 (@ 40%)
3.	Proposed Ground Coverage	8,062.213 (@ 40.15%)	-1,615.674	6,446.539 (@ 39.90%)
4.	Permissible FAR	1,06,097.18 (@ 7.0%)
5.	Proposed FAR	31,505.95	36,250.91	67,756.86

		(@1.95%)		(@ 4.19%)
6.	Non FAR area	8,251.35	13,823.6	22,074.95
a.	Service Area	597.43	225.4	822.83
b.	Mumty Area	266.99	-102.89	164.1
c.	Stilt Parking area	7,386.93	9,630.03	17,016.96
d.	Fire tower area	-	4,071.06	4,071.06
7.	Basement area	-	11,949.19	11,949.19
8.	Total Built-up Area (5+6+7)	39,757.3	62,023.7	1,01,781.0
9.	Required Parking (@25% of FAR area)	7876.49	9,062.73	16,939.22
10.	Proposed Parking Area	9565.56 (@ 30.36% of FAR area)	18,980.57	28,546.13 (@ 42.13% of FAR area)
11.	Proposed Green Area	5368.88 (@ 33.23% of the plot area)	1,299.4	6,371.73 (@ 39.43% of the plot area)
12.	Height of the tallest Building (m)	14.95	...	71.5

(vi) Comparative analysis of existing/envisioned pollution load (in case of expansion/modernization).

Sl. No.	Particulars	Existing	After Revision & Expansion
1.	Total Units Residential 3BHK 2BHK	265 units	504 units • 324 nos. • 180 nos.
2.	Population	1659 persons	4010 persons
3.	Total Water Requirement	210 KLD	308 KLD
4.	Total Fresh Water Requirement	123 KLD	205 KLD
5.	Total Waste Water Generation	163 KLD	240 KLD
6.	Treated Water	147 KLD	216 KLD
7.	Total STP Capacity	196 KLD	300 KLD
8.	Parking Provision	299 ECS	580 ECS
9.	Electric Load	1968 kW (LED-124.13 kW + Solar-372.39 kW)	4252 kW (LED-221 KW + Solar- 220 kW)
10.	DG Sets	250 kVA (1×250 kVA)	1750 kVA (1×1000 kVA + 1 × 750 kVA)

11.	Solid Waste	749 kg/day	1720 kg/day
a)	Biodegradable Waste	449 kg/day	688 kg/day
b)	Non-Biodegradable Waste	300 kg/day	1032 kg/day
12.	RWH Tanks	4 nos.	16 nos.
13.	Total Cost of the project	₹ 95.55 Crores	₹ 111.08 Crores

- (vii) During construction phase, total water requirement will be 102 KLD and the same will be met by private water tankers. During the construction phase, soak pits and septic tanks will be provided for disposal of waste water. Temporary sanitary toilets will be provided during peak labour force.
- (viii) During operational phase, total water requirement of the project is expected to be 308 KLD and same will be met by 206 KLD of fresh water from groundwater/bore well source and 102 KLD of recycled Water. Wastewater generated (240 KLD) will be treated in STP of total 300 KLD capacity. Total treated water availability will be 216 KLD. Of which, 102 KLD of treated wastewater will be recycled and reused for flushing, for gardening etc.), and surplus water of 114 KLD will be used for watering the external road, side plantation, supply to nearby construction sites, private water tanker agency.
- (ix) About 1720 Kg/day solid wastes will be generated in the project. The biodegradable waste 688 kg/day will be processed in OWC and the non-biodegradable waste generated 1032 kg/day will be handed over to authorized local vendor.
- (x) The total power requirement during operation phase is 4,252 kWA and will be met from TP Central Odisha Distribution Limited (TPCODL). In addition two DG sets (1× 1000 kVA + 1 × 750 kVA) of total of 1,750 kVA are proposed for power back up in the Project.
- (xi) Proposed 16 RWH tanks (volume of each tank is 18.75 m³) for collection of rooftop rainwater.
- (xii) Adequate provision will be made for car/vehicle parking at the project site. There shall also be adequate parking provisions for visitors so as not to disturb the traffic and allow smooth movement at the site. Total Proposed parking area is 17,360 m² i.e., 580 ECS and electrical vehicle charging facility will be provided for 30% of the parking.
- (xiii) Solar based lighting in the landscape areas, signage, entry gates and boundary walls (220 kWA) and LEDs for internal lighting (221 kWA) is proposed as energy saving measures to save about 10.3 % of total power requirement.
- (xxiv) Area proposed for green belt development is 6,871.73 sq. m (39.43 % of the plot area). Total numbers of tree proposed is 287 @ 1 tree/80sq.m.

- (xiv) The project is not located in Critically Polluted area.
- (xv) The project is not located within 10 km of Eco Sensitive Zone. NBWL Clearance is not required.
- (xvi) No tree cutting is involved.
- (xvii) Forest Clearance is not required.
- (xviii) No court case is pending against the project.
- (xix) CRZ Clearance is not required.
- (xx) Expected timeline for completion of the project is 24-36 months.
- (xxi) Total cost of the project is ₹111.08 Crores.
- (xxii) Employment potential: About 264 individuals.
- (xxiii) Benefits of the project: The project is leading to development of the area by providing employment of the local people and better infrastructure.

2. The EAC (Infra-2) 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 as Category B project by sectoral EAC.

3. The EAC (Infra-2), based on the information submitted and clarifications provided by the Project Proponent and detailed discussions held on all the issues, **recommends** granting environmental clearance to the project subject to submission of Certified Compliance Report (CCR) from the concerned IRO-MoEF&CC and compliance of the following specific conditions and other Standard EC Conditions as specified by the Ministry vide OM dated 4th January, 2019 for the said project/activity, while considering for accord of environmental clearance:

- (i) 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.
- (ii) The PP should carry out geotechnical and hydrological studies to assess the impact and suitable mitigation measures.
- (iii) The PP shall obtain a distance certificate from the concerned Divisional Forest Officer wrt 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.
- (iv) Abstraction of ground water shall be subject to the permission of Central Ground Water Authority (CGWA). Fresh water requirement shall not exceed 206 KLD during operational phase.

- (v) As proposed, wastewater shall be treated in onsite STP of 300 KLD capacity. At least 102 KLD of treated water from the STP shall be recycled and re-used for flushing (76 KLD) and for Horticulture (26 KLD). Excess treated water (about 114 KLD) shall be given for watering the external roadside plantation, supply to nearby construction sites, and private water tanker agency as committed. PP shall submit MoU for the disposal of excess treated water (outside the site) to the concerned Integrated Regional Office of MoEF&CC along with six-monthly compliance report.
- (vi) 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.
- (vii) Area for greenery shall be provided as per the details provided in the project document i.e., area under plantation/greenery will be 6,871.73 sq. m (39.43 % of the plot area). As proposed, at least 287 trees shall be maintained within the project premises. The landscape planning should include plantation of native species as proposed i.e., *Alstonia scholaris*, *Lagerstroemia Flosreginae*, *Azadirachta Indica*, *Mimusops Elengi*, *Tamarindus Indica*, *Syzygium Cumini* and *Mangifera Indica*. A minimum of 01 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.
- (viii) 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. As proposed, 16 RWH tanks (volume of each tank is 18.75 m³) shall be provided by PP for rain water harvesting after filtration.
- (ix) 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.
- (x) The PP shall provide electric charging points for 30% of the parking in parking areas for e- vehicles as committed.

- (xi) As committed, PP shall ensure installation of solar-based lighting (220 kWA) and LED lighting (221 kWA) to meet 10.3% of total power requirement (i.e. 4,252 kWA).
- (xii) 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 ITEM NO: 95.3.5

Revision and Expansion of Residential-cum-Commercial with Multiplex Building Project at Mouza Baramunda, Tehsil Bhubaneswar, District Khurda, Odisha by M/s Harshpriya Constructions Pvt. Ltd – Environmental Clearance

(IA/OR/INFRA2/400383/2022; F. No. 21-71/2022-IA-III)

1. The Project Proponent (M/s Harshpriya Constructions Pvt. Ltd) along with his consultant (M/s Grass Roots Research & Creation India (P) Ltd.) made a presentation on above said proposal. The EAC (Infra-2) 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 site is located at plot No.: 1140, 1141, 1141/4157, 1142, 1142/2350, 1143, 1146, 1147, 1138, 1148, 1146/2198 & 1161, Mouza- Baramunda, Tehsil- Bhubaneswar, District- Khurda, Odisha. Latitude 20° 16' 18.08" N and 85° 48' 16.49" E Longitude.
- (ii) It is an expansion project.
- (iii) The project was earlier granted Environment Clearance by SEIAA, Odisha vide letter no. 8427/SEIAA dated 17.06.2020 for plot area of 7809.2 sq. m (2.07 acre) and built-up area of 26,812.794 sq. m.
- (iv) Since, the project has undergone some modification in planning, plot area is increased from 7809.2 sq. m. to 8400.37 sq. m and built-up is increased from 26,812.794 sq. m. to 50,991.911 sq. m. Maximum height of the building is 52.5 m.
- (v) The details of proposed expansion in comparison with existing EC is as follows:

Sl. No.	Particulars	Existing EC (sq. m)	Expansion proposed (sq. m)	After revision and Expansion (sq. m)
1.	Total Plot Area	7809.2	591.17	8400.37
2.	Permissible Ground Coverage	3904.6 (@50%)	- 544.45	3360.15 (@40%)
3.	Proposed Ground Coverage	3135.373 (@40.15%)	145.442	3280.815 (39.1%)

4.	Permissible FAR	23,427.6 (@ 3.0%)	18,574.25	42,001.85 (@ 5%)
5.	Proposed FAR	19,101.30 (@2.446%)	18,616.36	37,717.66 (@4.49%)
6.	Non FAR area	7,711.494	- 6,003.463	1,708.031
7.	Stilt area	-	1,218.86	1,218.86
8.	Basement area	-	10,347.36	10,347.36
a.	Upper Basement	-	4,569.69	4,569.69
b.	Lower Basement	-	5,777.67	5,777.67
9.	Built-up Area (5+6+7+8)	26,812.794	24,179.117	50,991.911
10.	Landscape Area	1,590 (@ 20.35% of plot area)	119.48	1,709.48 (@20.35 % of plot area)
11.	Maximum Height of the Building (m)	30	22.5	52.5

- (vi) Comparative analysis of existing /envisioned pollution load (in case of expansion/modernization).

Sl. No.	Particulars	Existing	After Revision & Expansion
1.	Total Units Residential • 3BHK • 2BHK • Duplex	118 units	265 units • 179 nos. • 83 nos. • 3 nos.
2.	Population	2350 persons	2583 persons
3.	Total Fresh Water Requirement	115 KLD	119 KLD
4.	Total Waste Water Generation	146.15 KLD	132 KLD
5.	Total STP Capacity	180 KLD	160 KLD
6.	Electric Load	1467 kW (CESU-1422 kW + Solar-45 kW)	(2839 kW + Solar- 279.6 kW) (3548.75 kVA)
7.	DG Sets	1000 kVA (2×500 kVA)	2250 kVA (3 × 750 kVA)
8.	Solid Waste	315 kg/day	965 kg/day (0.965 TPD)
a)	Biodegradable Waste	126 kg/day	386 kg/day
b)	Non-Biodegradable Waste	189 kg/day	579 kg/day
9.	RWH Pits	15 nos.	24 nos.
10.	Total Cost of the project	₹70 Crores	₹ 75 Crores.

- (vii) During construction phase, total water requirement is 102 KLD which is being met by private water tankers. During the construction phase, soak pits and septic tanks are being provided for disposal of waste water. Temporary sanitary toilets are being provided during peak labour force.

- (viii) During operational phase, total water requirement of the project is expected to be 171 KLD and same will be met by 119 KLD of fresh water from groundwater/bore well source and 52 KLD of recycled Water. Wastewater generated (132 KLD) will be treated in STP of total 160 KLD capacity. Total treated water availability will be 118 KLD. Of which, 52 KLD of treated wastewater will be recycled and reused for flushing, for gardening etc.), and surplus water of 66 KLD will be used for watering the external road, side plantation, supply to nearby construction sites, private water tanker agency.
- (ix) About 965 kg/day solid wastes will be generated in the project. The biodegradable waste 386 kg/day will be processed in OWC and the non-biodegradable waste generated 579 kg/day will be handed over to authorized local vendor.
- (x) The total power requirement during operation phase is 3,548.75 kVA and will be met from TPCODL and solar power. In addition, three DG sets (3 × 750 kVA) of total 2,250 kVA are proposed for power back-up in the project.
- (xi) Solar based lighting in the landscape areas, signage, entry gates and boundary walls (240 kWA) and LEDs for internal lighting (115 kWA) is proposed as energy saving measures to save about 10 % (355 kWA) of total power requirement (i.e., 3,548.75 kWA).
- (xii) 24 RWH pits (volume of each pit is 11.3 m³) are proposed for collection of rooftop rainwater.
- (xiii) Adequate provision will be made for car/vehicle parking at the project site. There shall also be adequate parking provisions for visitors so as not to disturb the traffic and allow smooth movement at the site. Total proposed parking area is 11,179.84 sq. m, i.e., 397 ECS and electrical vehicle charging facility will be provided for 30% of the parking.
- (xiv) Area proposed for green belt development is 1,709.48 sq. m (20.35% of the net plot area). Total number of trees proposed is 110 no's @1 tree/80 sq. m.
- (xv) The project is not located in Critically Polluted area.
- (xvi) The project is not located within 10 km of Eco Sensitive Zone. NBWL Clearance is not required.
- (xvii) No tree cutting is involved.
- (xviii) Forest Clearance is not required.
- (xix) No court case is pending against the project.
- (xx) CRZ Clearance is not required.
- (xxi) Expected timeline for completion of the project is 24-36 months.
- (xxii) Total cost of the project is ₹ 75 Crores.
- (xxiii) Employment potential: About 245 individuals.

(xxiv) Benefits of the project: The project is leading to development of the area by providing employment of the local people and better infrastructure.

2. The EAC (Infra-2) 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 as Category B project by sectoral EAC.

3. The EAC (Infra-2), based on the information submitted and clarifications provided by the Project Proponent and detailed discussions held on all the issues, **recommends** granting environmental clearance to the project subject to submission of Certified Compliance Report (CCR) from the concerned IRO-MoEF&CC and compliance the following specific conditions and other Standard EC Conditions as specified by the Ministry vide OM dated 4th January, 2019 for the said project/activity, while considering for accord of environmental clearance:

- (i) 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.
- (ii) The PP should carry out geotechnical and hydrological studies to assess the impact and suitable mitigation measures.
- (iii) The PP shall obtain a distance certificate from the concerned Divisional Forest Officer wrt 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.
- (iv) Abstraction of ground water shall be subject to the permission of Central Ground Water Authority (CGWA). Fresh water requirement shall not exceed 119 KLD during operational phase.
- (v) As proposed, wastewater shall be treated in onsite STP of 160 KLD capacity. At least 52 KLD of treated water from the STP shall be recycled and re-used for flushing (45 KLD) and for Horticulture (07 KLD). Excess treated water (about 66 KLD) shall be given for watering the external roadside plantation, supply to nearby construction sites, and private water tanker agency as committed. PP shall submit MoU for the disposal of excess treated water (outside the site) to the concerned Integrated Regional Office of MoEF&CC along with six-monthly compliance report.
- (vi) 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.

- (vii) Area for greenery shall be provided as per the details provided in the project document i.e., area under plantation/greenery will be 1,709.48 sq. m (20.35 % of the net plot area). As proposed, at least 110 trees shall be maintained within the project premises. The landscape planning should include plantation of native species as proposed i.e., *Alstonia scholaris*, *Lagerstroemia Flosreginae*, *Azadirachta Indica*, *Mimusops Elengi*, *Tamarindus Indica*, *Syzygium Cumini* and *Mangifera Indica*. A minimum of 01 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.
- (viii) 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. As proposed, 24 RWH pits (volume of each tank is 11.3 m³) shall be provided by PP for rain water harvesting after filtration.
- (ix) 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.
- (x) The PP shall provide electric charging points for 30% of the parking in parking areas for e- vehicles as committed.
- (xi) As committed, PP shall ensure installation of solar-based lighting (240 kWA) and LED lighting (115 kWA) to meet 10.3% (355 kWA) of total power requirement (i.e. 3,548.75 kWA).
- (xii) 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 ITEM NO: 95.3.6

Affordable Residential Apartment Project at Plot No. 36 & 36/328, Mouza Gadajagasara, Tehsil Jatni, District Khurda, Odisha by M/s Sri Jagannath Promoters & Builders Private Limited – Environmental Clearance.

(IA/OR/INFRA2/400380/2022; F. No. 21-72/2022-IA-III)

1. The Project Proponent (Sri Jagannath Promoters & Builders Private Limited) along with his consultant (M/s Grass Roots Research & Creation India (P) Ltd.) made a presentation on above said proposal. The EAC (Infra-2) 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 site is located at plot no. 36/36/328, Mouza Gadajagasara, Tehsil- Jatni, District- Khurda, Odisha. Latitude 20°14'23.48"N and 85°43'10.70"E Longitude
- (ii) It is a new project.
- (iii) The total plot area of the project is 13,015.37 sq. m and total construction (Built-up) area is 38,288.18 sq. m. Maximum height of the building is 14.99 m. The details of building are as follows:

Sl. No.	Particulars	Area (sq. m)
1.	Total Plot area	13,015.37
2.	Plot area under Possession	12,857.48
3.	Area left for road access to the adjacent land locked plots	913.74
4.	Drain affected area	250.93
5.	Net Plot Area (2 – (3 + 4))	11,692.81
6.	Permissible Ground coverage @ 30% of net plot area)	350,784.3
7.	Proposed Ground coverage @ 73.36% of net plot area)	8,577.99
8.	Total Permissible F.A.R Permissible FAR (@ 2 of net plot area) Extra FAR against MIG Housing (@ 25% of net plot area)	26,308.82 23,385.62 2,923.20
9.	FAR to be purchased	3,864.66
10.	Proposed F.A.R (@ 2.58 of net plot area)	30,173.48
11.	Non FAR area	8,114.7
12.	Total Built-up Area (10+11)	38,288.18
13.	Landscape area (20.77% of net plot area)	2,428.76
14.	Maximum Height of the Building (m) (S + 5)	14.99 m

- (iv) During construction phase, total water requirement is expected to be 76 KLD which will be met by Private water Tankers. During the construction phase, soak pits and septic tanks will be provided for disposal of waste water. Temporary sanitary toilets will be provided during peak labour force.
- (v) During operational phase, total water requirement of the project is expected to be 135 KLD and same will be met by 93 KLD of fresh water from groundwater/bore well source and 42 KLD of recycled Water. Wastewater generated (106 KLD) will be treated in STP of total 130 KLD capacity. Total treated water availability will be 95 KLD. Of which, 42 KLD of treated wastewater will be recycled and reused for flushing, for gardening etc.), and surplus water of 53 KLD will be used for watering the external road, side plantation, supply to nearby construction sites, private water tanker agency.
- (vi) About 746 kg/day solid wastes will be generated in the project. The biodegradable waste 298 kg/day will be processed in OWC and the non-biodegradable waste generated 448 kg/day will be handed over to authorized local vendor.
- (vii) Total power requirement is 1647.26 kWA and same will be TP Central Odisha Distribution Limited (TPCODL). In addition, two numbers of DG sets with total capacity of 700 kVA (1 × 320 kVA + 1 × 380 kVA) is proposed as power backup.
- (viii) Solar based lighting in the landscape areas, signage, entry gates and boundary walls (210.048 kWA) and LEDs for internal lighting (205.06 kWA) is proposed as energy saving measures to save about 20.15 % (415.108 kWA) of total power requirement.
- (ix) 21 RWH pits (volume of each pit is 18.0 m³) are proposed for collection of rooftop rainwater.
- (x) Adequate provision will be made for car/vehicle parking at the project site. There shall also be adequate parking provisions for visitors so as not to disturb the traffic and allow smooth movement at the site. Total Proposed parking area is 8218.82 sq. m., i.e. 392 ECS and electrical vehicle charging facility will be provided for 30% of the parking.
- (xi) Area proposed for green belt development is 2,428.76 sq. m (20.77% of the net plot area). Total number of trees proposed is 160 no's @1 tree/80 sq. m.
- (xii) The project is not located in Critically Polluted area.
- (xiii) The project is not located within 10 km of Eco Sensitive Zone. NBWL Clearance is not required.
- (xiv) No tree cutting is involved.
- (xv) Forest Clearance is not required.
- (xvi) No court case is pending against the project.

- (xvii) CRZ Clearance is not required.
- (xviii) Expected timeline for completion of the project is 24-36 months from the date of grant of EC.
- (xix) Total cost of the project is ₹ 70 Crores.
- (xx) Employment potential: About 69 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.

2. The EAC (Infra-2) 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 as Category B project by sectoral EAC.

3. The EAC (Infra-2), based on the information submitted and clarifications provided by the Project Proponent and detailed discussions held on all the issues, **recommends** granting environmental clearance to the project subject to the following specific conditions and other Standard EC Conditions as specified by the Ministry vide OM dated 4th January, 2019 for the said project/activity, while considering for accord of environmental clearance:

- (i) 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.
- (ii) The PP shall obtain a distance certificate from the concerned Divisional Forest Officer wrt 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.
- (iii) Abstraction of ground water shall be subject to the permission of Central Ground Water Authority (CGWA). Fresh water requirement shall not exceed 93 KLD during operational phase.
- (iv) As proposed, wastewater shall be treated in onsite STP of 130 KLD capacity. At least 42 KLD of treated water from the STP shall be recycled and re-used for flushing (32 KLD) and for Horticulture (10 KLD). Excess treated water (about 53 KLD) shall be given for watering the external roadside plantation, supply to nearby construction sites, and private water tanker agency as committed. PP shall submit MoU for the disposal of excess treated water (outside the site) to the concerned Integrated Regional Office of MoEF&CC along with six-monthly compliance report.
- (v) 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.

- (vi) Area for greenery shall be provided as per the details provided in the project document i.e., area under plantation/greenery will be 2428.76 sq. m (20.77 % of the net plot area). As proposed, at least 160 trees shall be maintained within the project premises. The landscape planning should include plantation of native species as proposed i.e., *Azadirachta indica*, *Cassia fistula*, *Terminalia arjuna* and *Butea monosperma*. A minimum of 01 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.
- (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 Housing and Urban Affairs (erstwhile Ministry of Urban Development), Model Building Byelaws, 2016. As proposed, 21 RWH pits (volume of each pit is 18.0 m³) shall be provided by PP 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 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.
- (ix) The PP shall provide electric charging points for 30% of the parking in parking areas for e- vehicles as committed.
- (x) As committed, PP shall ensure installation of solar-based lighting (210.048 kWA) and LED lighting (205.06 kWA) to meet 20.5% (415.108 kWA) of total power requirement.
- (xi) 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 ITEM NO: 95.3.7

Residential Project at Plot No. 2828/10227, 2892,2893, 2920, 2921, 2922, 2923, 2925, 2929, 2929/3952, 2994, 2994/3954, 2996, 2895/3773, 2830, 2829/10228, 2891/3981, 2891, 2918, 2919, 2922/3881, 2928, Mouza Shankarpur, Tehsil Bhubaneswar, District Khurda, Odisha by M/s Sri Jagannath Promoters & Builders Private Limited – Environmental Clearance.

(IA/OR/INFRA2/400386/2022; F. No. 21-68/2022-IA.III)

1. The Project Proponent (Sri Jagannath Promoters & Builders Private Limited) along with his consultant (M/s Grass Roots Research & Creation India (P) Ltd.) made a presentation on above said proposal. The EAC (Infra-2) 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 site is located at plot No. 2828/10227, 2892,2920,2921, 2922, 2923, 2925, 2928, 2929, 2994, 2994/3954, 2996,2829/10228, 2893, 2929/3952, 2895/3773, 2918, 2919, 2922/3881, 2891, 2891/3981, 2830, Mouza Shankarpur, Tehsil Bhubaneswar, District Khurda, Odisha. Latitude 20°15'4.11"N and 85°46'18.68"E Longitude.
- (ii) It is a new project.
- (iii) The total plot area of the project site is 19,476.50 sq. m (4.811 acres) and net plot area 10,943.38 sq. m (2.703 acres). The project will comprise of 02 Blocks. Total built-up area is 60,956.209 sq. m. Maximum height of the building is 70.21 m. The project facilities include dwelling units of 240 nos (B+2S+20), Club and Swimming pool. The details of building are as follows:

Sl. No.	Particulars	Area (sq. m.)
1.	Plot area	19,476.50
a.	Land left for roads	5,234.48
b.	Future expansion	3,298.64
2.	Net Plot area	10,943.38
3.	Permissible Ground coverage (@40% of the plot	4,377.35
4.	Proposed Ground coverage @ 35.31 % of plot area)	3,864.88
5.	Permissible F.A.R (@ 5 of net plot area)	54,716.9
6.	Proposed F.A.R (4.12 of net plot area)	45,087.589
7.	Non FAR area	2081.351
8.	Basement Area	7,133.52
9.	Total Stilt area	6,653.749
a.	Lower Stilt area (S1)	3,231.62
b.	Upper Stilt area (S2)	3,422.129
10.	Total Built-up Area (6+7+8+9)	60,956.209
11.	Maximum Height of the Building (m) (B+2S+20)	70.21 m
12.	Landscape area (21.31% of plot area)	2,332.31

- (iv) During construction phase, total water requirement is expected to be 121.91 MLD which will be met by private water tankers. During the construction phase, soak pits and septic tanks will be provided for disposal of waste water. Temporary sanitary toilets will be provided during peak labour force.
- (v) During operational phase, total water requirement of the project is expected to be 153 KLD and same will be met by 105 KLD of fresh water from groundwater/bore well source and 48 KLD of recycled Water. Wastewater generated (119 KLD) will be treated in STP of total 200 KLD capacity. Total treated water availability will be 107 KLD. Of which, 48 KLD of treated wastewater will be recycled and reused for flushing, for gardening etc.), and surplus water of 59 KLD will be used for watering the external road- side plantation, supply to nearby construction sites and private water tanker.
- (vi) About 846 kg/day solid wastes will be generated in the project. The biodegradable waste 338 kg/day will be processed in OWC and the non-biodegradable waste generated 508 kg/day will be handed over to authorized local vendor. Horticultural Waste and STP sludge would be used as manure. Spent oil from DG sets will be disposed off through approved recyclers.
- (vii) Total power requirement is 2,250 kWA and same will be TP Central Odisha Distribution Limited (TPCODL). In addition, two numbers of DG sets with total capacity of 1,250 kVA (2 × 625 kVA) is proposed as power backup.
- (viii) Solar based lighting in the landscape areas, signage, entry gates and boundary walls (112.5 kWA) and LEDs for internal lighting (115.20 kWA) is proposed as energy saving measures to save about 10.12 % (227.7 kWA) of total power requirement (i.e., 2,250 kWA).
- (ix) 24 RWH pits (volume of each pit is 14.13 m³) are proposed for artificial ground water recharge.
- (x) Adequate provision will be made for car/vehicle parking at the project site. There shall also be adequate parking provisions for visitors so as not to disturb the traffic and allow smooth movement at the site. Total Proposed parking area is 14939.88 sq. m., i.e., 522 ECS and electrical vehicle charging facility will be provided for 30% of the parking.
- (xi) Area proposed for green belt development is 2,332.31 sq. m. Total number of tree to be planted is 140 @ @ 1 tree/80 sq. m.
- (xii) The project is not located in Critically Polluted area.
- (xiii) The project is not located within 10 km of Eco Sensitive Zone. NBWL Clearance is not required.
- (xiv) No tree cutting is involved.
- (xv) Forest Clearance is not required.
- (xvi) No court case is pending against the project.

- (xvii) CRZ Clearance is not required.
- (xviii) Expected timeline for completion of the project is 24-36 months from the date of grant of EC.
- (xix) Total cost of the project is ₹ 131 Crores.
- (xx) Employment potential: About 131 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.

2. The EAC (Infra-2) 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 as Category B project by sectoral EAC.

3. The EAC (Infra-2), based on the information submitted and clarifications provided by the Project Proponent and detailed discussions held on all the issues, **recommends** granting environmental clearance to the project subject to the following specific conditions and other Standard EC Conditions as specified by the Ministry vide OM dated 4th January, 2019 for the said project/activity, while considering for accord of environmental clearance:

- (i) 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.
- (ii) The PP shall obtain a distance certificate from the concerned Divisional Forest Officer wrt 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.
- (iii) Abstraction of ground water shall be subject to the permission of Central Ground Water Authority (CGWA). Fresh water requirement shall not exceed 105 KLD during operational phase.
- (iv) As proposed, wastewater shall be treated in onsite STP of 200 KLD capacity. At least 48 KLD of treated water from the STP shall be recycled and re-used for flushing (38 KLD) and for Horticulture (10 KLD). Excess treated water (about 59 KLD) shall be given for watering the external roadside plantation, supply to nearby construction sites, and private water tanker agency as committed. PP shall submit MoU for the disposal of excess treated water (outside the site) to the concerned Integrated Regional Office of MoEF&CC along with six-monthly compliance report.

- (v) 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.
- (vi) Area for greenery shall be provided as per the details provided in the project document i.e., area under plantation/greenery will be 2,332.31 sq. m (21.31 % of the net plot area). As proposed, at least 140 trees shall be maintained within the project premises. The landscape planning should include plantation of native species as proposed i.e., *Alstonia scholaris*, *Lagerstroemia flos-reginae*, *Azadirachta indica*, *Mimusops elengi*, *Tamarindus indica* and *Syzygium cumini*. A minimum of 01 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.
- (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 Housing and Urban Affairs (erstwhile Ministry of Urban Development), Model Building Byelaws, 2016. As proposed, 24 RWH pits (volume of each pit is 14.13 m³) shall be provided by PP 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 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.
- (ix) The PP shall provide electric charging points for 30% of the parking in parking areas for e- vehicles as committed.
- (x) As committed, PP shall ensure installation of solar-based lighting (112.5 kWA) and LED lighting (115.20 kWA) to meet 10.12% (227.7 kWA) of total power requirement (i.e., 2,250 kWA).
- (xi) 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 ITEM NO: 95.3.8**Construction of Residential Complex at village Sambalpur, Town-5 (Sakhigopinath), District Sambalpur, Odisha by M/s JAS Construction Pvt. Ltd. – Environmental Clearance under Violation Category.****(IA/OR/INFRA2/400387/2022; F. No. 21-73/2022-IA-III)**

1. The Project Proponent (Sri Jagannath Promoters & Builders Private Limited) along with his consultant (M/s Grass Roots Research & Creation India (P) Ltd.) made a presentation on above said proposal. The EAC (Infra-2) 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 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.
- (ii) It is an expansion project under violation category.
- (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:-

Sl. No.	Particulars	Phase-I (Sq. m.)	Expansion (Under Violation) Sq. m.	Total (Phase - I + Violation) (Sq. m.)
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	30,611.971
	Phase I	8876.86	Nil	8876.86
	• Block B	4438.43		4438.43
	• Block C	4438.43		4438.43
	Phase II	Nil	20,529.668	20,529.668
	• Block A		3982.41	3982.41
	• Block D1		8273.629	8273.629
	• Block D2		8273.629	8273.629
	Phase III	Nil	1205.443	1205.443
	• Club House		1149.7029	1149.7029
	• Temple		55.741	55.741
5.	Stilt Area	2349.28	5500	7849.28
	• Block B	1174.64	--	1174.64
	• Block C	1174.64	--	1174.64
		--	1072.28	1072.28

	<ul style="list-style-type: none"> • Block A • Block D1 • Block D2 	--	2213.86	2213.86
		--	2213.86	2213.86
6.	Built-up Area (4+5)	11,226.14	27,235.11	38,461.25
7.	Road and Paved Area	3034.815	10617.52	13652.335
8.	Proposed Green Area	1411.542	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 m² 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

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"> • Site Clearance. • Excavation. • Transportation of material. • Operation of D.G. sets and construction equipments/ machinery 	<ul style="list-style-type: none"> • Impact on human health – • Respiratory problems • Damage to properties by way of dust deposition and gaseous 	<ul style="list-style-type: none"> • Dust suppression and water sprinkling system. • Conduction of vehicle check-up camps in the area at regular intervals (in consultation with the Motor Vehicle Department). 	<ul style="list-style-type: none"> • Dust suppression and water sprinkling system = INR 60,000/- • Barricading/Screening = INR 70,000/- • Cost of

<ul style="list-style-type: none"> • Construction activity. • Temporary stay of construction workers. 	<p>emissions.</p> <ul style="list-style-type: none"> • Impact on vegetation/plants – Interference with photosynthesis 	<ul style="list-style-type: none"> • Providing barricades to Panchayat/Local Municipality for use at other construction sites. • Providing tarpaulin sheets to Panchayat/Local Municipality for covering the loose construction material at other construction sites. • Providing Personnel protection equipments to the health department for construction workers. • Ambient air quality monitoring at nearby sensitive locations. 	<p>tarpaulin sheet = INR 30,000/-</p> <ul style="list-style-type: none"> • Vehicle check-up camp = INR 50,000/- (@10,000/camp) • Personal protective equipment to construction workers = INR 40,000/- • Ambient air quality monitoring at nearby sensitive locations = INR 50,000/- (@6000/month) <p>Total budget proposed for Remediation of Air Environment = INR 3,00,000/-</p>
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b. 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"> • Water consumption for construction activities, drinking water and sanitary facilities for 	<ul style="list-style-type: none"> • Water consumed in construction of the project = 63 ML (@2 KL/sqm of built-up area including drinking water consumption of labour, RMC, cement block/brick, curing, bricks/block soaking, 	<ul style="list-style-type: none"> • Modular STP for waste water treatment in public buildings. • Storm water 	<ul style="list-style-type: none"> • Modular STPs = INR 60,000/- • Channelization of storm water, RWH pits, cleaning of public drain system in the

<p>construction workers.</p> <ul style="list-style-type: none"> • Waste water generation from construction workers, cleaning machinery/ equipment and vehicles • Sediment load generation and contamination of surface run off due to fugitive dust and construction material 	<p>concrete curing, masonry and cement plastering, flooring works etc.)</p> <ul style="list-style-type: none"> • STP treated water was used for construction activities through tankers. • Drinking water for labour was obtained through tanker. • Discharge of contaminated water from construction machinery to land/ water channel drainage. • Discharge of domestic sewage to the project site. • Deterioration of the water channel/drain due to surface run-off causing impact on aquatic life. 	<p>channelization, cleaning of drains and ground water recharge in nearby areas.</p> <ul style="list-style-type: none"> • Mobile type toilets in the nearby area. 	<p>area = INR 50,000/-</p> <ul style="list-style-type: none"> • Cost of mobile type toilets in the nearby area = INR 70,000/- • Drinking water facility in the nearby area = INR 20,000/- <p>Total budget proposed for Remediation of Water Environment = INR 2,00,000/-</p>
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c. 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"> • Movement of construction equipments and machineries. • Construction activities Operation of D.G. set. 	<ul style="list-style-type: none"> • Nuisance to the nearby Occupants due to increase in noise and vibration level. • Health impacts on construction workers due to increased noise levels. 	<ul style="list-style-type: none"> • PPEs to Local Health • Department and regular health check-up camps in the area with free distribution of hearing aids. • Acoustic enclosure for DG sets • Periodic ambient noise quality monitoring at nearby sensitive locations. 	<ul style="list-style-type: none"> • Personal protective equipments, health check-up camps and hearing aids distribution = INR 30,000/- • Acoustic enclosure and vibration pads for DG sets = INR 40,000/- • Ambient noise quality monitoring at nearby sensitive locations = INR 30,000/- <p>Total budget proposed for Remediation of</p>

			Noise Environment = INR 1,00,000 /-
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d. 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	<ul style="list-style-type: none"> Health impacts on construction workers 	<ul style="list-style-type: none"> Providing first aid kits to nearby construction sites & primary health centres. Providing wheel chair (5nos.), stretchers (4 nos.) for the primary health centre. 	<ul style="list-style-type: none"> First aid kits (5 nos.) = INR 20,000/- (@4000/kit) Stretchers & Wheelchairs = INR 80,000 (@12,000/wheel chair & @5000/stretcher) <p style="text-align: center;">Total budget proposed for Remediation of Socio-economic Environment = INR 1,00,000 /-</p>

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

Activity	Significant Impact/Damage	Remediation Plan (To be followed for projects in vicinity of site)	Proposed Budget for Remediation (INR)
Site clearance Cutting of existing trees	<ul style="list-style-type: none"> Loss of vegetation from project site: No trees were cut at site prior to development of project. Habitat loss of native fauna (avi-fauna). 	<ul style="list-style-type: none"> Plantation of 482 native trees within project site to attract native fauna. Development of park, garden (400 native trees) in nearby public roads and other public buildings for habitat compensation. 	<ul style="list-style-type: none"> Cost of plantation & maintenance of total 882 trees @500/tree = INR 4,41,000/- <p style="text-align: center;">Total budget proposed for Remediation of Biological Environment = INR 4,41,000/</p>

f. Remediation Plan with Proposed Activities and Budget – Land 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"> Excavation Solid waste generation during construction activity. Generation of hazardous wastes like empty cans of varnish, paints etc. during construction activity. 	<ul style="list-style-type: none"> 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. Loss of productivity and fertility of soil. Chocking of drains due to surface runoff during rainy season. Contamination or degradation of soil water quality from mismanagement of solid, hazardous waste. 	<ul style="list-style-type: none"> Assistance to the local farmers for storage of excavated top soil and its reutilization. Constructing Community Waste Bins in nearby villages. Creating awareness for waste segregation and management. 	<ul style="list-style-type: none"> Assistance to local farmers for creating barriers to preserve stored top soil = INR 25,000/- Community waste bins in nearby areas = INR 50,000/- Solid waste management awareness camps = INR 25,000/- <p>Total budget proposed for Remediation of Land Environment = INR 1,00,000 /-</p>

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/-
	Total budget for Remediation Plan	12,41,000/-

II. Proposed budget for Natural and Community Resource Augmentation:

Sl. No	Activity	Year-wise implementation Budget (INR)			Total Budget (INR)
		1 st Year	2 nd Year	3 rd 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, school and health centres	16,667	16,667	16,666	50,000
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
Total budget for Natural & Community Resource Augmentation (INR)					3,00,000

Cumulative Summary (I+II)

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

2. The EAC (Infra-2) has noted that the initially the project proponent constructed Phase-I of project having plot area of 7057.71 sq. m and built-up area of 11,226.14 sq. m, which does not fall under the purview of EIA Notification, 2006; whereas, in post expansion (Phase-II & III), the total plot area became 38,489.51 sq. m, Net plot area - 36,476.2474 sq. m and built-up area - 38,461.25 sq. m. The Project proponent has completed the construction of project of expansion part without obtaining Environment Clearance. Part of the project is under operation also. Therefore, the project falls 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 as Category B project by sectoral EAC.

3. Based on the information submitted and clarifications provided by the Project Proponent and detailed discussions were held on it but no final decision could be arrived at for want for full information. The EAC (Infra-2) observed the following:

- (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.

The EAC hereby decides to further examine the proposal in its next meeting before issuing necessary directions in the matter.

LIST OF PARTICIPANTS OF EAC (INFRASTRUCTURE-2) IN 95th MEETING OF EAC (INFRA-2) HELD ON 15th September, 2022

Sl. No.	Name	Designation	Attendance	Remarks
1.	Dr. Promode Kant	Chairman	Present	Virtual
2.	Shri Monish Mullick	Member	Present	Virtual
3.	Dr. Satish C. Garkoti	Member	Present	Virtual
4.	Dr. Arun Jyoti Nath	Member	Present	Virtual
5.	Prof. Inderjit Singh	Member	Present	Virtual
6.	Prof P. K Joshi	Member	Present	Virtual
7.	Dr. Arun Kumar Saraf	Member	Present	Virtual
8.	Dr. Hema Achyuthan	Member	Present	Virtual
9.	Dr. Harish C. Nainwal	Member	Present	Virtual
10.	Shri Ashwani Kumar	Member	Present	Virtual
11.	Dr. Meenakshi Dhote	Member	Absent	-
12.	Dr. Ragavan P	Special Invitee	Present	Virtual
14.	Dr. Ashish Kumar	Additional Director & Member Secretary	Present	Virtual
