F. No. IA-Z-11013/66/2021-IA-I

Government of India
Ministry of Environment, Forest and Climate Change
(IA Division)

Indira Paryavaran Bhawan, Jor Bagh Road, Aliganj New Delhi-110 003

Dated: 23rd December, 2022

To,

Shri. Mukul Garg

Deputy Inspector General (DIG) (ICG Academy Project) Coast Guard Headquarters

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DATE: 9-1-2023

S.O.

DPAR (R & I)

13/1/23 SUE

SUBJECT: EC &CRZ CLEARANCE FOR INDIAN COAST GUARD ACADEMY (TRAINING CENTRE) AT KENJARU VILLAGE, MANGALURU TALUK, DAKSHINA KANNADA DISTRICT, KARNATAKA BY INDIAN COAST GUARD (ICG)-reg

This has reference to your communication no. ICGAP/0138/4/CRZ dated 03 November 2022 regarding the project proposal pertaining to above cited subject. The proposal was considered during the 52nd EAC (N&D) meeting held on 16-17th November 2022.

- 2. The above-mentioned project/activity is covered under category 'B' of item 8(b) 'Township and area development projects' of the Schedule to the EIA Notification, 2006 and its subsequent amendments. Being a time bound Defence project of high strategic significance, as per the EIA amendment Notification No. S.O. 1886(E) dated 20th April 2022, the proposal is submitted for appraisal by EAC (N&D) at the Centre.
- 3. Earlier, Terms of Reference (ToR) for the said proposal was granted by the Ministry vide letter of even number dated 18th August 2021.
- 4. As part of the presentation and various other documents submitted to the Ministry, the PP submitted following information about the project and project site:



i. Location: The infrastructure project for Indian Coast Guard Academy is planned to be located at Kenjaru village, Suratkal Hobli, Mangaluru taluk, Dakshina Kannada district, Karanataka. The latitude and longitude of project site including township are as follows:

| Latitude | Longitude |
|----------------|----------------|
| 12°'57'"17 " N | 74°'51' "15 "E |
| 12°'56'"55"N | 74°'51' "37"E |
| 12°' 56'"49"N | 74°'51' "52"E |
| 12°'57' "9"N | 74°'51' "51"E |

- ii. Land details: The total land area is about 159.03 acres i.e., 643548.70 sq. m. The land has been acquired by the State Government of Karnataka for the use of KIADB under the LA Act 1894 and handed over to MoD for the purpose of establishing Indian Coast Guard Academy. Since, the land is suitable for the establishment of infrastructure facilities for IGCA, no alternative site has been considered. Forest Dept, Govt of Karnataka issued 'No Objection Certificate' as land does not come under deemed forest area.
- iii. Proposed Land-use break-up: The proposed project will have a built-up area of about 1,81,000 sq. m with a ground coverage area of about 70,770 sq. m. About 2,14,516.23 sq. m is earmarked for green belt development. In addition, the facility will facilitate provision of park/garden in an area of about 25,741.96 sq m with an open space of about 1,91,005.25 sq. m. About 77,225.64 sq. m of the land is envisaged for approach roads, roundabouts and patrolling roads. The land for future expansion is about 64,354.37 sq. m.
- iv. Built-up area break-up of proposed core facilities as follows:

| SI. No. | Description | Built-up Area (sq. m.) |
|---------|---------------------------------------------------------------------------------|------------------------|
| 1 | Administrative cum Academic Building | 43147 |
| 2 | Swimming pool complex (Covered) | 4755 |
| 3 | Integrated Sports Complex | 2704 |
| 4 | Auditorium | 2649 |
| 5 | Base Depot Ship | 5369 |
| 6 | Single living accommodation for officers and mess | 16468 |
| 7 | Servants quarter for single living accommodation for officers and mess | 3712 |
| 8 | Single living Accommodation along with co ok house and Dining SO'S, PNVKS&UNVKS | 14409 |
| 9 | Academy Commandant along with servant quarters and garage for 3 cars | 346 |

| | 10 | Chief Instructor along with servant quarters and garage for 2 cars | 250 |
|---|----|-------------------------------------------------------------------------------------------------------|---------|
| | 11 | Deputy Academy Commandant | 250 |
| | 12 | Main Guard Room | 428 |
| | 13 | Sub Guard Room | 156 |
| | 14 | MD accommodation for officers along with servants quarter and garage/parking-Type-IV & V – Two Blocks | 21530 |
| | 15 | MD accommodation for SO's/JCO and type III along with parking space at stilt | 8300 |
| | 16 | MD accommodation for P NVKS/U NVKS and type II along with parking space at stilt | 8305 |
| | 16 | MES Office/ MES- Tradesman shop | 1382 |
| | 17 | MI room with garage | 445 |
| | 18 | Officers Institute | 548 |
| | 19 | Pollution Response and Training Yard | 2599 |
| | 20 | Sailing Club & waterman ship training | 1032 |
| | 21 | Sailors Institute | 316 |
| | 22 | void | 0.10 |
| | 23 | VIP Guest Houses | 430 |
| | 24 | Covered pathway | 1200 |
| | 25 | Watch Tower (10 Nos) | 880 |
| | 26 | Fire services | 376 |
| | 27 | CG School | 806 |
| | 28 | Shopping Complex, Bank, ATM and URC | 3020 |
| | 29 | Mechanical Laundry | 617 |
| | 30 | Family welfare Centre | 512 |
| | 31 | MT Area | 538 |
| | 32 | DSC Single living | 1369 |
| L | 33 | Parade Ground | 12467 |
| L | 34 | Baffle Firing Range | 165 |
| L | 35 | Training Shed-Open | 561 |
| L | 36 | Floating Jetty | - |
| L | 37 | Helipad | 500 |
| | 38 | Underground sump 1 | 466 |
| | 39 | Underground sump 1 | 183.58 |
| | 40 | Underground sump 1 | 183.7 |
| | 41 | Underground sump 1 | 183.58 |
| | 42 | Static water tank for fire fighting | 1306.14 |

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| 43 | MRSS | 482 |
|--------------|-------------------------------------------------|----------------------|
| 44 | DSS 1 to 7 | 1300 |
| 45 DG 1 to 6 | | 300 |
| 46 | Solar Plant | - |
| 47 | Chilled water plant | 5730 |
| 48 | Cooling tower | 1125 |
| 49 | Chilled water plant 2 | 375 |
| 50 | Chilled water plant 3 | 300 |
| 51 | Chilled water plant 4 | 500 |
| 52 | Chilled water plant 5 | 120 |
| 53 | Security light - 7 nos | 90 |
| 54 | Underground sump for fire along with pump house | 100 |
| 55 | Obstacle course | The real of the same |
| 56 | STP | 250 |
| 57 | SLPH | 100 |
| 58 | RCC Trench for MSW composting | 364 |
| 59 | Floating jetty | |
| 60 | Water treatment plant | 5000 |
| | Total built-up area | 1,81,000 |

v. **Offshore Structures:** Floating jetties are planned on the river and river bank side.

vi. Water requirement: During construction phase the total water requirement is expected to be about 300 KLD and the source of the drinking water requirement is Gurupura river upstream and planned to be tapped from the tapping point for the drinking water source. It is planned to draw water from mobile water tankers during initial stage of construction period. During operation phase the estimated water requirement for ICG Academy is about 1.5 MLD and same will be sourced through dedicated water supply pipeline tapped from Gurupura river at about 2.5 km east of the site.

vii. Wastewater generation and treatment: Estimated wastewater generation is about 1050 KLD. It is proposed to install three STPs of 1100 KLD (325KLD+500KLD+275KLD) to treat the wastewater. Treated water of 840KLD will be used for horticulture, gardening etc., There is no trade effluent generation in infrastructure facilities.

viii. **Power requirement:** During construction phase about 0.3 MVA power is required and same will be sourced through by contractor suitably with DG sets, PDB distribution kiosk, necessary cables etc., During operation phase total power requirement is approximately 5.0 MVA and the will be sourced by KPTCL/MESCOM from the existing 220 kV (SRS) substation located at

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Kavoor, Mangalore. In addition, the emergency power supply will be catered by seven (7) numbers of DG sets with different capacities to meet the above load and about 600 KW is planned through non-conventional energy by installing solar power through above ground installation. HSD consumption would be about 750-850 litre/day. The fuel tank for storage of HSD will be located next to DG sets at MRSS building. Details of DG sets as follows:

| SI. No. | Description | Numbers |
|---------|----------------------|---------|
| 1. | 415V 500 KVA DG SET | 1No |
| 2. | 415V 125 KVA DG SET | 1No |
| 3. | 415V 125 KVA DG SET | 1No. |
| 4. | 415V 125 KVA DG SET | 1No. |
| 5. | 415V 125 KVA DG SET | 1No. |
| 6. | 11KV 2000 KVA DG SET | 2 Nos. |

- ix. Manpower requirement: The total man power requirement of the ICG academy is estimated to be about 588 personnel. In addition, ICG academy will also accommodate maximum of 650 trainees at any given time.
- Solid waste Management: Municipal waste (domestic and or commercial X. wastes) i.e. biodegradable waste generation will be about 1180 kg/day and the same will be treated in organic waste convertor which will convert into manure for gardening. A provision is kept for segregation of nonbiodegradable waste and will be disposed thereof through authorized agencies. Sludge generated from the treatment plant of about 110 kgs will converted to manure and will be used inside the campus for green belt development. It has been envisaged to utilize the Dewatered/dried sludge from STP as manure for gardening. The construction wastes expected primarily are the excavated earth and construction debris. It will be reused for landscaping of campus. The solid waste during the construction phase would comprise mainly the concrete debris, steel scrap, scrap from/of insulation material for air-conditioning and packaging material. Hazardous wastes (as per Hazardous Waste Management Rules) are not expected to be generated in the operation of facility. Hazardous waste if any, like waste oil, and discarded containers will be either sold to authorized recyclers.
- xi. Rainwater Harvesting: It is computed from the calculations, that the annual average run-off volume increases from 9,13,323.32 to 11,75,732.34 m³, indicating an increase of 2,62,409.02 m³ of run-off which is amounting to about 28% more in post construction scenario. Since, the increase in run-off is a sizeable quantity, suitable remedial measures like rainwater collection cum recharge pits are planned along the drains, which would be sufficient to control the flood. It is proposed to have three rain water harvesting ponds of 40m × 40m × 3m. The rain water recharge pond will accumulate a volume of about 4810.83 m³. The harvested rain water will



be used either for green belt development, avenue plantation or other

general purposes.

xii. **Tree cutting:** The project activity involves cutting of around 200 trees/Bushes/Shrubs from the site. In this regard, application seeking assessment for disposal of trees for construction of ICG academy, Mangalore was submitted to the "Range Forest Officer", Mangalore vide ICG letter quoting 140/2 dated 09.06.2022.

- Green belt development: As per the conceptual layout, the green belt xiii. development plan will be accounting for 33% of the land area and complying with the MoEF&CC norms. Plant saplings will be planted in pits at about 2-3m intervals so that the minimum tree density of about 2500 trees per ha is achieved. The pits will be filled with a mixture of good quality soil and organic manure and insecticide. The saplings/trees will be watered using the recovered water from the STP and treated discharges from project. They will be manured using sludge generated from the STP and compost produced from MSW trenches. The saplings will be planted just after the commencement of the monsoons to ensure maximum survival. The species selected for plantation will be locally growing varieties with fast growth rate and ability to flourish even in poor quality soils. Plantation development shall be undertaken as a part of the construction phase and about 33% of the total area is likely to be covered under green belt. A green belt width of minimum 7.5m from the compound wall will be developed as green belt. About 52.47 acres of the land will be covered under green belt.
- xiv. Forest Clearance: Land is neither forest land nor deemed forest, and hence Forest Clearance is not required.
- xv. NBWL Clearance: No PA or ESZ in vicinity. NBWL clearance not required
- CRZ Clearance: Out of 159.03 acres of land, 4.1 acres is falling under CRZ II and 0.07 under CRZ IB. So CRZ Clearance is required. The area of the site falling in CRZ II is 16608.14 sq. m, CRZ IB is 272.43 sq. m and out of CRZ is 626646.40 sq. m respectively. The Pollution Response Training yard (Facility No 20) falling in CRZ II and some part is out of CRZ boundary. The area of the Pollution Response Training yard is 1927.17 sq. m and out of CRZ area is 662.89 sq. m. The waterman ship training facility (Facility, No 21) falls in CRZ IB and CRZ II. The area of the CRZ IB is 1.36 sq. m and CRZ II is 722.25 sq. m. Temporary Floating Jetty (Facility No 45) falls in CRZ IVB, CRZ IB and CRZ II. The area of the CRZ IVB is 86.59 sq. m and CRZ IB is 234.02 sq. m and CRZ II is 8.84 sq. m.
- xvii. **SCZMA Recommendation**: PP has submitted the recommendation of Karnataka Coastal Zone Management Authority (KCZMA) dated 29th July, 2022 along with the CRZ /CZMP maps.
- xviii. Court Cases: No court case is pending against the project.
- xix. Change in drainage pattern: No, alteration in drainage will occur due to the proposed project.
- xx. Critically Polluted area: The project site not fall within the critically polluted area.

- xxi. **Eco-Sensitive Zone/area:** The project is not located within 10 km of Eco Sensitive Zone.
- xxii. **Seismic Zone:** seismic zone III i.e., moderate intensity zone as per Bureau of Indian Standards, IS: 1893 (Part 1):2016 and IS 1893 (Part IV):2015.
- xxiii. Public Consultation: NA
- xxiv. Cost of the project: Estimated cost of the project is about 1300 cr as per first quarter of 2021.
- xxv. Benefit of the Project: The establishment of Indian Coast Guard Academy will provide: a. a generation of well-trained ICG professionals, who will start a career at sea, is contributing to maritime and coastal security and safety. b. A truly professional academy of international repute to meet the emerging maritime challenges. c. Improved relations with the littoral countries.
- xxvi. **Consultant:** M/s MECON Limited, Ranchi (Certification no. NABET/EIA/2023/RA0195_Rev01).
- 5. Comments received from the CRZ Division, MoEF&CC on the instant proposal are as follows:
 - The project falls in CRZ II and CRZ IB area and recommended by Karnataka Coastal Zone Management Authority (KCZMA) dated 29th July, 2022.
 - The proposed activity is a permissible for defence and security purpose under para 3 (i) (a) (iv) (a) of CRZ Notification, 2011. However, the adequacy of the marine EIA/EMP report may be ensured by the concerned sector and EAC (N&D) during the appraisal process before taking final decision.
- 6. Earlier the proposal was considered by EAC (N&D) in its 51st meeting held on 06.10.2022; wherein the committee observed various gaps in the presentation vis-àvis the EIA report and other documents submitted to the Ministry and the project was deferred. Accordingly, the Committee deferred the proposal. On submission of detailed point-wise response from the PP wrt the issues raised by the committee, the proposal was re-considered during the 52nd EAC(N&D) meeting on 16th November.
- 7. On the basis of recommendation of EAC (N&D), Ministry of Environment, Forest and Climate Change hereby accords Environmental and CRZ Clearance to the above project viz 'Construction of Indian Coast Guard Academy (Training Centre) at Kenjaru, Mangalore, Karnataka' under EIA Notification, 2006 and CRZ Notification, 2011, subject to compliance of following specific and general conditions:

A. Specific Conditions:

- i. Strict compliance to be ensured for all the conditions as stipulated by Karnataka Coastal Zone Management Authority (KCZMA) in their recommendation letter dated 29th July, 2022.
- ii. Marine Conservation Plan shall be formulated in coordination with National Centre for Sustainable Coastal Zone Management (NCSCM), Chennai and shall be under implementation during construction and operation phase. The

Plan shall focus on mangroves in and around project site. All measures for safeguarding the ecological health of the region shall be enumerated.

iii. Construction site shall be adequately barricaded before the construction begins. Dust, smoke & other air pollution prevention measures shall be provided for the building as well as the site. These measures shall include screens for the building under construction, continuous dust/ wind breaking walls all around the site (at least 3-meter height).

iv. Sand, murram, loose soil, cement, stored on site shall be covered adequately

so as to prevent dust pollution.

v. Wet jet shall be provided for grinding and stone cutting.

vi. Unpaved surfaces and loose soil shall be adequately sprinkled with water to suppress dust.

vii. Ensure use of paver blocks with better permeation of rain water into ground.

viii. All construction and demolition debris shall be stored at the site (and not dumped on the roads or open spaces outside) before they are properly disposed. All demolition and construction waste shall be managed as per the provisions of the Construction and Demolition Waste Management Rules 2016.

ix. Acoustic enclosure shall be provided to the DG sets to mitigate the noise pollution. Low sulphur diesel shall be used. The location of the DG set and exhaust pipe height shall be as per the provisions of the Central Pollution Control Board (CPCB) norms for adequate dispersion of gaseous emissions from DG sets.

x. For indoor air quality the ventilation provisions as per National Building Code

of India to be ensured.

xi. Use of water saving devices/fixtures (viz. low flow flushing systems; use of low flow faucets tap aerators etc) for water conservation shall be incorporated in the building plan.

xii. Separation of grey and black water should be done by the use of dual plumbing system. In case of single stack system separate recirculation lines for

flushing by giving dual plumbing system to be done.

xiii. Water demand during construction should be reduced by use of pre-mixed

concrete, curing agents and other best practices referred.

xiv. The local bye-law provisions on rain water harvesting should be followed. If local bye-law provision is not available, adequate provision for storage and recharge should be followed as per the Ministry of Urban Development Model Building Byelaws, 2016. Rain water harvesting recharge pits/storage tanks shall be provided for ground water recharging as per the CGWB norms.

xv. Onsite MBR (membrane bio reactor) sewage treatment plant with capacity for treatment 100% waste water to be installed. The treated effluent from STP shall be recycled/re-used for flushing, AC make up water and gardening. No treated water shall be disposed in to municipal drain. No sewage or untreated

effluent water would be discharged through storm water drains.

xvi. No ground water shall be used during construction phase of the project. Any usage of GW during operation phase shall be with approval of CGWA.

xvii. Disaster Management Plan and Risk Management Plan shall be in place at all time during construction and operation phase.

- XVIII. Adequate firefighting system comprising of extensive hydrant & sprinkler system, overhead water tank (fire compartment) shall be ensured. xix.
 - The PP shall install solar panels to meet at least 10% of the energy requirement. XX.
- Status of Compliance of EC conditions wrt the project shall be submitted on six monthly bases to IRO of the Ministry.

B. General Conditions:

- 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,
- The approval of the Competent Authority shall be obtained for structural ii. safety of buildings due to earthquakes, adequacy of fire-fighting equipment etc. as per National Building Code including protection measures from lightening etc.
- All other statutory clearances such as the approvals for storage of diesel from iii. Chief Controller of Explosives, Fire Department, Civil Aviation Department etc, as applicable shall be obtained from the respective competent authorities.
- The provisions of the Solid Waste Management Rules, 2016, e-Waste iv. (Management) Rules, 2016, Hazardous Waste Management Rules, 2016 and the Plastics Waste Management Rules, 2022, shall be complied with.
- Energy conservation measures like installation of CFLs/LED for the lighting the area outside the building should be integral part of the project design and should be in place before project commissioning.
- Compliance with the Energy Conservation Building Code (ECBC) of Bureau of vi. Energy Efficiency shall be ensured. Buildings in the States which have notified their own ECBC, shall comply with the State ECBC.
- Provision shall be made for the housing of construction labour within the site vii. with all necessary infrastructure and facilities such as fuel for cooking, mobile toilets, mobile STP, safe drinking water, medical health care, crèche etc. The housing may be in the form of temporary structures to be removed after the completion of the project.
- Occupational health surveillance of the workers shall be done on a regular viii.

This issues with the approval of the Competent Authority.

(Pankaj Verma) Scientist 'E'

Copy to:

1. The Chief Secretary, Government of Karnataka, 3rd floor, Vidhan Soudha, Bengaluru-560001.

- The Additional Chief Secretary (FEE), Govt. of Karnataka, Forests, Environment and Ecology Department, Karnataka Government Secretariat Room No. 448, 4th Floor, Gate No. 2, M. S. Building, Bengaluru-560001.
- The Chairman, Karnataka Coastal Zone Management Authority, Karnataka Government Secretariat, M. S. Building, Bengaluru-560001.
- Member Secretary, Karnataka Coastal Zone Management Authority, Karnataka Government Secretariat, M. S. Building, Bengaluru-560001.
- Deputy Director General of Forests (C), Ministry of Env., Forest and Climate Change, Integrated Regional Office, Kendriya Sadan, 4th Floor, E&F Wings, 17th Main Road, Koramangala II Block, Bangalore – 560034. E-mail: rosz.bngmef@nic.in
- The Chairman, Central Pollution Control Board Parivesh Bhavan, CBD-cum-Office Complex, East Arjun Nagar, New Delhi - 110 032.
- 7. The Chairman, Karnataka State Pollution Control Board, Parisara Bhavan, No. #49. Church Street, Bengaluru-560001. E-mail: chairman@kspcb.gov.in
- 8. Guard File/ Monitoring Cell

(Pankaj Verma)

Scientist 'E'