

F.No. 10-70/2016-IA-III
Government of India
Ministry of Environment, Forest and Climate Change
(IA.III Section)

Indira Paryavaran Bhawan,
Jor Bagh Road, New Delhi - 3

Date: 20th August, 2020

To,

M/s PNP Maritime Services Pvt Ltd,
(Kind attention: Shri Siddharth Ghosh, DGM - Commercial & Operation)
A-5, Ionic, 18 Arthur Bunder Road, Colaba,
Mumbai - 400005, Maharashtra
E- Mail: pnpport@gmail.com

Subject: Expansion and Modernization of existing PNP Port at Gut No. 346, Dharamtar Creek, Village Shahbaj, District Raigad, Maharashtra by M/s PNP Maritime Services Pvt Ltd - Environmental and CRZ Clearance - reg.

Sir,

This has reference to your online Proposal No. IA/MH/MIS/59562/2016 dated 12 September, 2019, submitted to this Ministry for grant of Environmental and CRZ Clearance in terms of the provisions of the Environment Impact Assessment (EIA) Notification, 2006 and Coastal Regulation Zone (CRZ) Notification, 2011, under the Environment (Protection), Act, 1986.

2. The proposal for 'Expansion and Modernization of existing PNP Port at Gut No. 346, Dharamtar Creek, Village Shahbaj, District Raigad, Maharashtra by M/s PNP Maritime Services Pvt Ltd was considered by the Expert Appraisal Committee (Infra-2) in the Ministry in its 46th meeting held during 25-26 November, 2019 and 53rd meeting held during 23-24 July, 2020.

3. The project/activity is covered under category 'A' of item 7 (e) i.e. 'Ports, harbours, break waters, dredging' of the schedule to the EIA Notification, 2006 and its subsequent amendments, and requires appraisal at Central level by sectoral EAC.

4. The details of the project, as per the documents submitted by the project proponent, and also as informed during the above said EAC meeting, are reported to be as under:-

- (i) Environmental and CRZ Clearance for the Expansion and Modernisation of Existing PNP port located at Dharamtar Creek, village Shahbaj, Taluka Alibaug, District Raigad, Maharashtra. (18°41'59" N latitude and 73°01'33" E longitude)
- (ii) PNP port is located on the western bank of Amba River (i.e. Dharamtar creek) about 25 nautical miles (nm) from Mumbai Port Lighterage area and 18 nm from JNPT (Jawaharlal Nehru Port Trust) Port. The Port was given Environmental Clearance in 2003 from MoEF vide letter No. J-16011/38/2001-IA III dated 06 October, 2003.
- (iii) PNP port (All weather port) has existing facility spread over an area of 60 ha with four (4) working jetties performing Lighterage operations and handles upto 4 MTPA of cargo viz. Coal, Sulphur, Clinker, Rock Phosphate, Bauxite, Steel Coils etc. The expansion along with the modernisation of the port is planned and that will handle cargo up to 19 MTPA. The proposed development comprises eight (8) bulk berths, two (2) Iron & steel product berths, four (4) berths for handling liquid cargo and 200 m berth for container cargo. The proposed development will be over an area of 195 ha (Including existing 60 ha area).
- (iv) Maintenance dredging is proposed to create navigational channel near berthing areas from the main channel (in front of berths only to facilitate new barges i.e. up to

5.3 m CD). The dredged volume is estimated at berthing areas is about 1 Mm³. The material to be dredged is of silty sand and clay material and that will be utilized for site preparation within the port area (Non-CRZ areas).

- (v) Tabular statement indicating details of (a) existing facilities as per existing EC obtained; (b) proposed additional facilities along with modernisation and expansion:

	Existing facilities	Proposed expansion facilities
Area of Land available	60 ha	135 ha (In addition to existing 60 ha area)
No. of jetties/berths	Four (4) Nos.	eight (8) bulk berths, two (2) Iron & steel product berths, four (4) berths for handling liquid cargo and 200 m berth for container cargo
Water frontage available	2000 m	
Cargo handling capacity	<5 MTPA	19 MTPA (including existing 5 MTPA capacity)
Type of cargo being handled	Coal, Sulphur, Clinker, Rock Phosphate, Bauxite, Steel Coils	Coal, Sulphur, Bulk Cargo, Break Bulk cargo, Agro commodities, Clinker, Dolomite, Limestone, Pyroxenite, Iron ore Cement, Slag, Rock Phosphate, Bauxite, Steel Coils, Bitumen, Timber, Tiles, Mill scales, Cotton, Liquid cargo (Non-Hazardous) and Port Based Industries etc.
Depth at berthing areas	-	(-) 5.3 m CD to accommodate the new barges (In front of berths only)
Dredging quantity	-	1 Mm ³
Dredge quantity disposal	-	Utilized for site preparation within the port area (Non-CRZ areas)

- (vi) During construction phase, total water requirement is expected to be 60 KLD which will be met by tanker water. 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 labor force.
- (vii) During operational phase, total water demand of the project is expected to be 73 KLD (33 KLD domestic + 40 KLD dust suppression measures) and same will be met by fresh water from MIDC water supply, Tanker water and recycled water from STP. Wastewater generated (31 KLD) uses will be treated in STP of 50 KLD capacity. 15 KLD of treated wastewater will be recycled for flushing. About 16 KLD will be used for dust suppression and green belt within the premises.
- (viii) The quantity of municipal solid waste generated from canteen and administrative areas is estimated at about 148 kg/day, of which the biodegradable waste (89 kg/day) will be composted using vermin composting pits and will be used as manure. The non-biodegradable waste generated (59 kg/day) will be handed over to authorized local vendor.
- (ix) The total power requirement during construction phase is 2000 kVA and will be met from MSEDCL & DG set and Total power requirement during operation phase is 6.7 MW and will be met from MSEDCL & DG set for emergency backup.
- (x) Rainwater harvesting ponds will be constructed at strategic locations. Being port activity, Energy saving is achieved through efficient lights like LED's
- (xi) Parking facility for 200 four wheelers are proposed to be provided and provision of 550 truck Parking are made.
- (xii) Site is not located within 10 km of any Eco Sensitive areas
- (xiii) Terms of Reference (ToR) for the project was granted by MoEF&CC vide letter No. 10-70/2016-IA-III dated 22 March, 2018.
- (xiv) Public hearing was conducted by Maharashtra State Pollution Control Board (MPCB) on 25 February, 2019 at Collector office, District Raigad, Maharashtra.

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- (xv) Maharashtra State Coastal Zone Management Authority (MCZMA) has recommended the project for CRZ Clearance vide Letter No. CRZ-2017/CR-323/TC 4 dated 24 January, 2019.
- (xvi) Investment/Cost of the project is Rs. 1,058.34 Crore.
- (xvii) The employment potential: The employment potential during the construction phase of the port is estimated as 450 to 500 persons. The expected direct employment during operation phase of the project will be 650 persons. Apart from this, there will be around 300 nos. of people for indirect employment.
- (xviii) Benefit of the project: The proposed expansion of port/ terminal will give more employment/ opportunities for the local people. Other benefits include generation of direct and indirect employment to the local people and surrounding areas. The expansion of Port will be a boon for the development of the region. It will also minimize the traffic load from the Mumbai Port Trust. Due to its location as it offers seamless road, rail connectivity for the transport of materials/ cargo to various hinterland.

5. The project proponent informed the EAC that PNP Maritime Services Pvt. Ltd. is proposing Expansion and Modernization of existing PNP Port at Dharamtar Creek, village Shahabaj, Tehsil Alibaug, District Raigad, Maharashtra. The existing port has received Environmental Clearance in 2003 from MoEF vide letter No. J-16011/38/2001-IA III dated 06.10.2003. At present, Port is handling approx. 4 MTPA of cargo. PNP proposes to augment the port facilities by modernizing/ mechanizing and expanding port capacity. Proposed expansion will envisage increase in cargo handling capacity up to 19 MTPA along with modernizing/ mechanizing of existing port. The Maharashtra Maritime Board (MMB) has approved water frontage of 1,000 m on 18 August, 2008 and additional 1,000 m on 29 March, 2012. The project has received the ToR from MoEF&CC vide letter no. 10-70/2016-IA-III dated 22 March, 2018. MCZMA has recommended the project from CRZ point of view to MoEF&CC dated 24 January, 2019.

The Committee deliberated upon the issues raised during the Public Hearing/Public Consultation meeting conducted by the Maharashtra State Pollution Control Board on 05 April, 2019. The issues were raised regarding increase in pollution due to the coal, affect on the local agriculture fields and ill-effects on the health of local people, effect the passenger services between Alibaug to Pen due to increase in usage of railway line and job opportunities as well as various court case pending against Project. The Committee noted that issues have satisfactorily been responded by the project proponent and incorporated in the final EIA-EMP report. The EAC also deliberated on the certified compliance report letter No. 6-12/2003(ENV)/4664 dated 10 December, 2018 issued by the MoEF&CC's Regional Office (WCZ), Nagpur. As per Compliance report, "it was observed that project is in operation phase. Coal Cement and Steel Coils are being handled at the port. No liquid cargo is being handled at the project. No trade effluent is being generated.

6. In the 53rd meeting held during 23-24 July, 2020, the project proponent informed the EAC that as per the observation of EAC in its previous meeting, action taken report for non-compliance and partially compliance EC conditions was submitted to Regional Office of MoEF&CC vide letter dated 22.01.2020. The Regional Office of MoEF&CC (WCZ) at Nagpur has forwarded the same to the Ministry vide letter 6-12/2003(ENV)/6316 dated 02 March, 2020. The EAC noted that the project proponent has submitted Oil Spill Contingency Plan and point wise reply on the observations of Conservation Action Trust (CAT). The representation received just before this meeting was also shared with project proponent. In this context, project proponent has submitted point wise reply to the Committee vide letter dated 23 July, 2020. The EAC found that the PP has denied all the allegations and confirmed that no mangroves were cut/ destroyed during construction or operation phase of the project. The PP also referred to Hon'ble NGT's ruling in Application No. 95/2014 (WZ) dated. 22 September, 2017. It was also confirmed that that they have not proposed any reclamation in the project and the expansion in mangrove and mangrove buffer area. PP has

submitted that they are operating the port facility as per the permission granted by various authorities and they do not find any merit in allegations made against the project.

7. The EAC in its 53rd meeting held during 23-24 July, 2020, based on the information submitted and clarifications provided by the Project Proponent and detailed discussions held on all the issues, recommended the project for grant of environmental and CRZ clearance with stipulated specific conditions along with other Standard EC Conditions as specified by the Ministry vide OM dated 04 January, 2019 for the said project/activity. As per recommendations of the EAC, the Ministry of Environment, Forest and Climate Change hereby accords Environmental and CRZ Clearance to the project 'Expansion and Modernization of existing PNP Port' at Gut No. 346, Dharamtar Creek, Village Shahbaj, District Raigad, Maharashtra by M/s PNP Maritime Services Pvt Ltd, under the provisions of the EIA Notification, 2006 and amendments/circulars issued thereon and CRZ Notification, 2011, and subject to the specific and general conditions as under:-

A. Specific Conditions:

- (i) The Environmental and CRZ Clearance to the project is primarily under provisions of EIA Notification, 2006 and CRZ Notification, 2011. It does not tantamount to approvals/consent/permissions etc required to be obtained under any other Act/Rule/regulation The Project Proponent is under obligation to obtain approvals /clearances under any other Acts/ Regulations or Statutes as applicable to the project.
- (ii) The project proponent shall abide by all the commitments and recommendations made in the Form-II, EIA and EMP report, submissions made during Public Hearing and also that have been made during their presentation to EAC.
- (iii) Construction activity shall be carried out strictly according to the provisions of the CRZ Notification, 2011. No construction works other than those permitted in Coastal Regulation Zone Notification shall be carried out in Coastal Regulation Zone area.
- (iv) All the recommendations and conditions specified by the Maharashtra State Coastal Zone Management Authority (MCZMA) vide letter No. CRZ-2017/CR-323/TC 4 dated 24 January, 2019 shall be complied with.
- (v) The project proponent shall comply with the air pollution mitigation measures as submitted.
- (vi) The Project proponent shall ensure that no creeks or rivers are blocked due to any activities at the project site and free flow of water is maintained. Creek water monitoring program shall be implemented during the construction phase.
- (vii) No underwater blasting is permitted.
- (viii) Dredging shall not be carried out during the fish breeding season. Dredging, etc. shall be carried out in confined manner to reduce the impacts on marine environment. As committed, Silt curtains shall be used to minimize spreading of silt plume during dredging operation. Turbidity should be monitored during the dredging. No removal of silt curtain unless baseline values are achieved.
- (ix) Wherever possible, dredged material shall be used for bank nourishment. Otherwise, deposit the dredged material within the port premises in non-CRZ areas for land development in a manner that it does not enter the channel. With the enhanced quantities, the impact of dumping on the estuarine environment should be studied and necessary measures shall be taken on priority basis if any adverse impact is observed.
- (x) An independent monitoring be carried out by any Government Agency/Institute to evaluate the impact during dredging. Impact of dredged material on estuarine environment along with shore line changes should be studied by the PP and



- necessary mitigation measures be taken in case any adverse impact is observed. The details shall be submitted along with the six-monthly monitoring report.
- (xi) Marine ecological studies and its mitigation measures for protection of phytoplankton, zooplanktons, macrobenthos, estuaries, sea-grass, algae, sea weeds, Crustaceans, Fishes, coral reefs and mangroves etc. as given in the EIA-EMP Report shall be complied with in letter and spirit.
 - (xii) Marine ecology shall be monitored regularly also in terms of sea weeds, sea grasses, mudflats, sand dunes, fisheries, echinoderms, shrimps, turtles, corals, coastal vegetation, mangroves and other marine biodiversity components as part of the management plan. Marine ecology shall be monitored regularly also in terms of all micro, macro and mega floral and faunal components of marine biodiversity.
 - (xiii) A copy of the Marine and riparian biodiversity management plan duly validated by the State Biodiversity Board shall be obtained and implement in letter and spirit.
 - (xiv) The fresh water requirement of 58 KLD shall be met from MIDC water supply scheme.
 - (xv) Sewage generated will be treated in STP of 50 KLD capacity. The treated water will be used for flushing, gardening and dust suppression within the port premises.
 - (xvi) A continuous monitoring programme covering all the seasons on various aspects of the estuarine environs need to be undertaken by a competent organization available in the State or by entrusting to the National Institutes/renowned Universities/accredited Consultant with rich experiences in marine science aspects. The monitoring should cover various physico-chemical parameters along with PHC coupled with biological indices such as microbes, plankton, benthos and fishes on a periodic basis during construction and operation phase of the project. Any deviations in the parameters shall be given adequate care with suitable measures to conserve the marine environment and its resources.
 - (xvii) Continuous online monitoring of air and water covering the total area shall be carried out and the compliance report of the same shall be submitted along with the 6 monthly compliance report to the regional office of MoEF&CC.
 - (xviii) The material recovered from the cutting activity shall be used for filling low-lying areas within the project boundaries. The actions shall be in accordance with proposed landscape planning concepts to minimize major landscape changes. The change in land use pattern shall be limited to the proposed port limits and be carried out in such a way as to ensure proper drainage by providing surface drainage systems including storm water network.
 - (xix) Suitable preventive measures be taken to trap spillage of fuel / engine oil and lubricants from the construction site. Measures should be taken to contain, control and recover the accidental spills of fuel during cargo handling.
 - (xx) All the recommendations mentioned in the rapid risk assessment report, disaster management plan and safety guidelines shall be implemented.
 - (xxi) Necessary arrangement for general safety and occupational health of people should be done in letter and spirit.
 - (xxii) All the mitigation measures submitted in the EIA report shall be prepared in a matrix format and the compliance for each mitigation plan shall be submitted to the RO, MoEF&CC along with half yearly compliance report.
 - (xxiii) The company shall draw up and implement Corporate Social Responsibility Plan as per the Company's Act of 2013.
 - (xxiv) As per the Ministry's Office Memorandum F.No. 22-65/2017-IA.III dated 01 May, 2018, project proponent has proposed that an amount of Rs. 2.65 Crores (0.25% of the project cost) shall be earmarked under Corporate Environment Responsibility

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(CER) Plan for the activities such as Health, Water supply, Sanitation, Road development, Solar lights in nearby areas and Education etc. The activities proposed under CER shall be restricted to the affected area around the project. The entire activities proposed under the CER shall be treated as project and shall be monitored. The monitoring report shall be submitted to the regional office as a part of half yearly compliance report, and to the District Collector. It should be posted on the website of the project proponent.

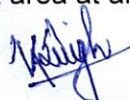
B. Standard Conditions:

I. Statutory compliance:

- i. The project proponent shall obtain forest clearance under the provisions of Forest (Conservation) Act, 1980, in case of the diversion of forest land for non-forest purpose involved in the project.
- ii. The project proponent shall obtain clearance from the National Board for Wildlife, if applicable. No dredging is allowed in protected habitat areas without prior permission from NBWL.
- iii. The project proponent shall prepare a Site-Specific Conservation Plan & Wildlife Management Plan and approved by the Chief Wildlife Warden. The recommendations of the approved Site-Specific Conservation Plan / Wildlife Management Plan shall be implemented in consultation with the State Forest Department. The implementation report shall be furnished along with the six-monthly compliance report (in case of the presence of schedule-I species in the study area).
- iv. Construction activity shall be carried out strictly according to the provisions of CRZ Notification, 2011 and the State Coastal Zone Management Plan as drawn up by the State Government. No construction work other than those permitted in Coastal Regulation Zone Notification shall be carried out in Coastal Regulation Zone area.
- v. All the recommendations and conditions specified by State Coastal Zone Management Authority for the project shall be complied with.
- vi. The project proponent shall obtain Consent to Establish / Operate under the provisions of Air (Prevention & Control of Pollution) Act, 1981 and the Water (Prevention & Control of Pollution) Act, 1974 from the concerned State Pollution Control Board/ Committee.
- vii. The project proponent shall obtain the necessary permission from the Central Ground Water Authority, in case of drawl of ground water / from the competent authority concerned in case of drawl of surface water required for the project.
- viii. All excavation related dewatering shall be as duly authorized by the CGWA. A NOC from the CGWA shall be obtained for all dewatering and ground water abstraction
- ix. A certificate of adequacy of available power from the agency supplying power to the project along with the load allowed for the project should be obtained.
- x. All other statutory clearances such as the approvals for storage of diesel from Chief Controller of Explosives, Fire Department, Coast Guard, Civil Aviation Department shall be obtained, as applicable by project proponents from the respective competent authorities.

II. Air quality monitoring and preservation:

- i. The project proponent shall install system to carryout Ambient Air Quality monitoring for common/criterion parameters relevant to the main pollutants released (e.g. PM₁₀ and PM_{2.5} in reference to PM emission, and SO₂ and NO_x in reference to SO₂ and NO_x emissions) within and outside the project area at least at four locations (one within and three outside the plant area at an angle of 120° each), covering upwind and downwind directions.



- ii. Appropriate Air Pollution Control (APC) system shall be provided for all the dust generating points including fugitive dust from all vulnerable sources, so as to comply prescribed emission standards.
- iii. Shrouding shall be carried out in the work site enclosing the dock/proposed facility area. This will act as dust curtain as well achieving zero dust discharge from the site. These curtain or shroud will be immensely effective in restricting disturbance from wind in affecting the dry dock operations, preventing waste dispersion, improving working conditions through provision of shade for the workers.
- iv. Dust collectors shall be deployed in all areas where blasting (surface cleaning) and painting operations are to be carried out, supplemented by stacks for effective dispersion.
- v. The Vessels shall comply the emission norms prescribed from time to time.
- vi. Diesel power generating sets proposed as source of backup power should be of enclosed type and conform to rules made under the Environment (Protection) Act, 1986. The height of stack of DG sets should be equal to the height needed for the combined capacity of all proposed DG sets. Use of low sulphur diesel. The location of the DG sets may be decided with in consultation with State Pollution Control Board.
- vii. A detailed traffic management and traffic decongestion plan shall be drawn up to ensure that the current level of service of the roads within a 05 kms radius of the project is maintained and improved upon after the implementation of the project. This plan should be based on cumulative impact of all development and increased habitation being carried out or proposed to be carried out by the project or other agencies in this 05 Kms radius of the site in different scenarios of space and time and the traffic management plan shall be duly validated and certified by the State Urban Development department and the P.W.D./ competent authority for road augmentation and shall also have their consent to the implementation of components of the plan which involve the participation of these departments.

III. Water quality monitoring and preservation:

- i. The Project proponent shall ensure that no creeks or rivers are blocked due to any activities at the project site and free flow of water is maintained.
- ii. Appropriate measures must be taken while undertaking digging activities to avoid any likely degradation of water quality. Silt curtains shall be used to contain the spreading of suspended sediment during dredging within the dredging area.
- iii. No ships docking at the proposed project site will discharge its on-board waste water untreated in to the estuary/ channel. All such wastewater load will be diverted to the proposed Effluent Treatment Plant of the project site.
- iv. Measures should be taken to contain, control and recover the accidental spills of fuel and cargo handle.
- v. The project proponents will draw up and implement a plan for the management of temperature differences between intake waters and discharge waters.
- vi. Spillage of fuel / engine oil and lubricants from the construction site are a source of organic pollution which impacts marine life. This shall be prevented by suitable precautions and also by providing necessary mechanisms to trap the spillage.
- vii. Total fresh water use shall not exceed the proposed requirement as provided in the project details. Prior permission from competent authority shall be obtained for use of fresh water.
- viii. Sewage Treatment Plant shall be provided to treat the wastewater generated from the project. Treated water shall be reused for horticulture, flushing, backwash, HVAC purposes and dust suppression.

- ix. A certificate from the competent authority for discharging treated effluent/ untreated effluents into the Public sewer/ disposal/drainage systems along with the final disposal point should be obtained.
- x. No diversion of the natural course of the river shall be made without prior permission from the Ministry of Water resources.
- xi. All the erosion control measures shall be taken at water front facilities. Earth protection work shall be carried out to avoid erosion of soil from the shoreline/boundary line from the land area into the marine water body.

IV. Noise monitoring and prevention:

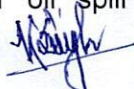
- i. Noise level survey shall be carried as per the prescribed guidelines and report in this regard shall be submitted to Regional Officer of the Ministry as a part of six-monthly compliance report.
- ii. Noise from vehicles, power machinery and equipment on-site should not exceed the prescribed limit. Equipment should be regularly serviced. Attention should also be given to muffler maintenance and enclosure of noisy equipments.
- iii. Acoustic enclosures for DG sets, noise barriers for ground-run bays, ear plugs for operating personnel shall be implemented as mitigation measures for noise impact due to ground sources.
- iv. The ambient noise levels should conform to the standards prescribed under E(P)A Rules, 1986 viz. 75 dB(A) during day time and 70 dB(A) during night time.

V. Energy Conservation measures:

- i. Provide solar power generation on roof tops of buildings, for solar light system for all common areas, street lights, parking around project area and maintain the same regularly;
- ii. Provide LED lights in their offices and residential areas.

VI. Waste management:

- i. Dredged material shall be disposed safely in the designated areas.
- ii. Shoreline should not be disturbed due to dumping. Periodical study on shore line changes shall be conducted and mitigation carried out, if necessary. The details shall be submitted along with the six monthly monitoring report.
- iii. Necessary arrangements for the treatment of the effluents and solid wastes must be made and it must be ensured that they conform to the standards laid down by the competent authorities including the Central or State Pollution Control Board and under the Environment (Protection) Act, 1986.
- iv. The solid wastes shall be managed and disposed as per the norms of the Solid Waste Management Rules, 2016.
- v. Any wastes from construction and demolition activities related thereto shall be managed so as to strictly conform to the Construction and Demolition Waste Management Rules, 2016.
- vi. A certificate from the competent authority handling municipal solid wastes should be obtained, indicating the existing civic capacities of handling and their adequacy to cater to the M.S.W. generated from project.
- vii. Used CFLs and TFLs should be properly collected and disposed off/sent for recycling as per the prevailing guidelines/ rules of the regulatory authority to avoid mercury contamination.
- viii. Oil spill contingency plan shall be prepared and part of DMP to tackle emergencies. The equipment and recovery of oil from a spill would be assessed. Guidelines given in MARPOL and Shipping Acts for oil spill management would be followed.



Mechanism for integration of terminals oil contingency plan with the overall area contingency plan under the co-ordination of Coast should be covered

VII. Green Belt:

- i. Green belt shall be developed in area as provided in project details with a native tree species in accordance with CPCB guidelines. The greenbelt shall inter alia cover the entire periphery of the plant.
- ii. Top soil shall be separately stored and used in the development of green belt.

VIII. Marine Ecology:

- i. Dredging shall not be carried out during the fish breeding and spawning seasons.
- ii. Dredging, etc shall be carried out in the confined manner to reduce the impacts on marine environment.
- iii. The dredging schedule shall be so planned that the turbidity developed is dispersed soon enough to prevent any stress on the fish population.
- iv. While carrying out dredging, an independent monitoring shall be carried out through a Government Agency/Institute to assess the impact and necessary measures shall be taken on priority basis if any adverse impact is observed.
- v. A detailed marine biodiversity management plan shall be prepared through the NIO or any other institute of repute on marine, brackish water and fresh water ecology and biodiversity and submitted to and implemented to the satisfaction of the State Biodiversity Board and the CRZ authority. The report shall be based on a study of the impact of the project activities on the intertidal biotopes, corals and coral communities, molluscs, sea grasses, sea weeds, sub-tidal habitats, fishes, other marine and aquatic micro, macro and mega flora and fauna including benthos, plankton, turtles, birds etc. as also the productivity. The data collection and impact assessment shall be as per standards survey methods and include underwater photography.
- vi. Marine ecology shall be monitored regularly also in terms of sea weeds, sea grasses, mudflats, sand dunes, fisheries, echinoderms, shrimps, turtles, corals, coastal vegetation, mangroves and other marine biodiversity components including all micro, macro and mega floral and faunal components of marine biodiversity.
- vii. The project proponent shall ensure that water traffic does not impact the aquatic wildlife sanctuaries that fall along the stretch of the river.

IX. Public hearing and Human health issues:

- i. The work space shall be maintained as per international standards for occupational health and safety with provision of fresh air respirators, blowers, and fans to prevent any accumulation and inhalation of undesirable levels of pollutants including VOCs.
- ii. Workers shall be strictly enforced to wear personal protective equipments like dust mask, ear muffs or ear plugs, whenever and wherever necessary/ required. Special visco-elastic gloves will be used by labour exposed to hazards from vibration.
- iii. In case of repair of any old vessels, excessive care shall be taken while handling Asbestos & Freon gas. Besides, fully enclosed covering should be provided for the temporary storage of asbestos materials at site before disposal to CTSDf.
- iv. Safety training shall be given to all workers specific to their work area and every worker and employee will be engaged in fire hazard awareness training and mock drills which will be conducted regularly. All standard safety and occupational hazard measures shall be implemented and monitored by the concerned officials to prevent the occurrence of untoward incidents/ accidents.
- v. Emergency preparedness plan based on the Hazard identification and Risk Assessment (HIRA) and Disaster Management Plan shall be implemented.

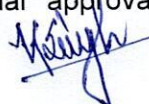
- vi. Provision shall be made for the housing of construction labour within the site with all necessary infrastructure and facilities such as fuel for cooking, mobile toilets, mobile STP, safe drinking water, medical health care, crèche etc. The housing may be in the form of temporary structures to be removed after the completion of the project.
- vii. Occupational health surveillance of the workers shall be done on a regular basis.

X. Corporate Environment Responsibility:

- i. The company shall have a well laid down environmental policy duly approved by the Board of Directors. The environmental policy should prescribe for standard operating procedures to have proper checks and balances and to bring into focus any infringements/deviation/violation of the environmental / forest /wildlife norms/ conditions. The company shall have defined system of reporting infringements / deviation / violation of the environmental / forest / wildlife norms / conditions and / or shareholders / stake holders. The copy of the board resolution in this regard shall be submitted to the MoEF&CC as a part of six-monthly report.
- ii. A separate Environmental Cell both at the project and company head quarter level, with qualified personnel shall be set up under the control of senior Executive, who will directly report to the head of the organization.
- iii. Action plan for implementing EMP and environmental conditions along with responsibility matrix of the company shall be prepared and shall be duly approved by competent authority. The year wise funds earmarked for environmental protection measures shall be kept in separate account and not to be diverted for any other purpose. Year wise progress of implementation of action plan shall be reported to the Ministry/Regional Office along with the Six Monthly Compliance Report.
- iv. Self environmental audit shall be conducted annually. Every three years third party environmental audit shall be carried out.

XI. Miscellaneous:

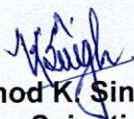
- i. The project proponent shall make public the environmental clearance granted for their project along with the environmental conditions and safeguards at their cost by prominently advertising it at least in two local newspapers of the District or State, of which one shall be in the vernacular language within seven days and in addition this shall also be displayed in the project proponent's website permanently.
- ii. The copies of the environmental clearance shall be submitted by the project proponents to the Heads of local bodies, Panchayats and Municipal Bodies in addition to the relevant offices of the Government who in turn has to display the same for 30 days from the date of receipt.
- iii. The project proponent shall upload the status of compliance of the stipulated environment clearance conditions, including results of monitored data on their website and update the same on half-yearly basis.
- iv. The project proponent shall submit six-monthly reports on the status of the compliance of the stipulated environmental conditions on the website of the ministry of Environment, Forest and Climate Change at environment clearance portal.
- v. The project proponent shall submit the environmental statement for each financial year in Form-V to the concerned State Pollution Control Board as prescribed under the Environment (Protection) Rules, 1986, as amended subsequently and put on the website of the company.
- vi. The criteria pollutant levels namely; PM_{2.5}, PM₁₀, SO₂, NO_x (ambient levels) or critical sectoral parameters, indicated for the project shall be monitored and displayed at a convenient location near the main gate of the company in the public domain.
- vii. The project proponent shall inform the Regional Office as well as the Ministry, the date of financial closure and final approval of the project by the concerned



authorities, commencing the land development work and start of production operation by the project.

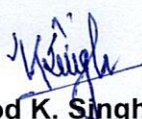
- viii. The project authorities must strictly adhere to the stipulations made by the State Pollution Control Board and the State Government.
- ix. No further expansion or modifications in the plant shall be carried out without prior approval of the Ministry of Environment, Forests and Climate Change (MoEF&CC).
- x. Concealing factual data or submission of false/fabricated data may result in revocation of this environmental clearance and attract action under the provisions of Environment (Protection) Act, 1986.
- xi. The Ministry may revoke or suspend the clearance, if implementation of any of the above conditions is not satisfactory.
- xii. The Ministry reserves the right to stipulate additional conditions if found necessary. The Company in a time bound manner shall implement these conditions.
- xiii. The Regional Office of this Ministry shall monitor compliance of the stipulated conditions. The project authorities should extend full cooperation to the officer (s) of the Regional Office by furnishing the requisite data / information/monitoring reports.
- xiv. The above conditions shall be enforced, inter-alia under the provisions of the Water (Prevention & Control of Pollution) Act, 1974, the Air (Prevention & Control of Pollution) Act, 1981, the Environment (Protection) Act, 1986, Hazardous and Other Wastes (Management and Transboundary Movement) Rules, 2016 and the Public Liability Insurance Act, 1991 along with their amendments and Rules and any other orders passed by the Hon'ble Supreme Court of India / High Courts and any other Court of Law relating to the subject matter.
- xv. Any appeal against this EC shall lie with the National Green Tribunal, if preferred, within a period of 30 days as prescribed under Section 16 of the National Green Tribunal Act, 2010.

8. This issues with the approval of the Competent Authority.


(Dr. Vinod K. Singh)
Scientist E

Copy to:

- 1) The Principal Secretary, Environment Department, Government of Maharashtra, 15th Floor, New Administrative Building, Mantralaya, Mumbai - 400 032.
- 2) The APCCF (C), MoEF&CC, Regional Office (WCZ), Ground Floor, East Wing, New Secretariat Building, Civil Lines, Nagpur - 440001.
- 3) The Chairman, Central Pollution Control Board Parivesh Bhavan, CBD-cum-Office Complex, East Arjun Nagar, New Delhi - 110 032.
- 4) The Chairman, Maharashtra Pollution Control Board, Kalpataru Point, 3rd and 4th floor, Opp. Cine Planet, Sion Circle, Mumbai - 400 022.
- 5) Monitoring Cell, MoEF&CC, Indira Paryavaran Bhavan, New Delhi.
- 6) Guard File/ Record File/ Notice Board/MoEF&CC website.


(Dr. Vinod K. Singh)
Scientist E