



31st May, 2021

To,
The Director
Regional Office (West Central Zone),
Ministry of Environment, Forest and Climate Change,
Ground Floor, East wing,
New Secretariat Building,
Civil lane, Nagpur-440001

Subject: Half-yearly Compliance Report:
October 2020 to March 2021

Project PNP Maritime Services Private Limited
construction of minor jetty at Dharmatar Creek, project at
District Raigad.

EC No. F. No. 10-70/2016-IA-III, Dated 20th August, 2020

Dear Sir,

We are submitting half-yearly Compliance Report (hard & soft copy) in respect of the of stipulated terms and conditions of 'Prior Environmental Clearance' as specified in 'Environment Clearance' Notification Clause No. 10(ii).

Thanking you,
Yours faithfully,

For. PNP Maritime Services Private Limited



Project Proponent

Enclosure: A hard copy of the compliance and monitoring report

CC copy to:

1. Regional officer, Maharashtra Pollution Control Board, SRO Raigad I
2. Member Secretary, Maharashtra Pollution Control Board, Sion, Mumbai
3. Member Secretary, State Environmental Impact Assessment Authority, Govt. of Maharashtra, Mumbai

PNP MARITIME SERVICES PVT. LTD.

Regd. Office: A-5, Ionic, 18, Arthur Bunder Road, Colaba, Mumbai 400 005, India.
Admin. Office: 2nd Floor, Lensdowne House, Mahakavi Bhushan Road, Colaba, Mumbai 400 001.
Tel: 2288 4536/37/38/39/40 Fax: 2288 4535
Port Office: PNP Port Dharmatar at Shehabaj, Dist. Raigad. Tel: +91-2143-320786.
Website: www.pnpport.com CIN: U63090MH1999PTC121481

M/s PNP Maritime Services Pvt. Ltd.

Environmental Clearance Compliance Report

October 2020 to March 2021

PNP Port

Gut No. 346, Dharamtar Creek, Village Shahbaj,
District Raigad

**(Environmental Clearance Letter No. F. No, 10-
70/2016-IA-III Dated 20.08.2020)**

CONSULTANT



Mahabal Enviro Engineers Pvt. Ltd.

Engineers, Consultants, Environmental Monitoring Laboratory & Contractors

F-7, Road 21, MIDC Wagle Estate, Thane-400604. Phone:022-25823154 thane@mahabal.com

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Compliance Status of EC Conditions

Environment Clearance F. No, 10-70/2016-IA-III Dated 20.08.2020

No	Condition	Compliance	☑	P
	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.	MCZMA has recommended the project for CRZ Clearance vide Letter No. CRZ-2017/CR-323/TC4 dated 24 January,2019		
(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.	PP agrees with the condition		
(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.	Local and central rules and regulations including those under CRZ Notification 1991 and its amendments have been followed during construction and operation phase		
(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.	PP will comply with the condition		
(v)	The project proponent shall comply with the air pollution mitigation measures as submitted.	Regular monitoring has been carried out by a MoEF&CC recognized laboratory. The monitoring report has been attached.		
(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.	No creeks or rivers are blocked due to any activities at the project site. Regular monitoring is being carried out by a MoEF&CC recognized laboratory.	✓	

		The monitoring report has been attached.		
(vii)	No underwater blasting is permitted.	PP agrees with the condition		
(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.	No dredging is carried out during the fish breeding season. All measures will be taken to reduce the impacts on marine environment Regular monitoring has been carried out by a MoEF&CC recognized laboratory. The monitoring report has been attached.	✓	
(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.	Dredged material will be used for land development with all necessary measures for adverse impact		
(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.	PP agrees with the condition. Regular monitoring has been carried out by a MoEF&CC recognized laboratory. The six-monthly monitoring report is attached.	✓	
(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	PP will comply with the condition		
(xii)	Marine ecology shall be monitored regularly also in terms of sea weeds, sea grasses, mudflats, sand dunes, fisheries, echinoderms, shrimps, turtles, corals,	PP agrees with the condition		

	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	Marine ecology will 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.	Noted		
(xiv)	The fresh water requirement of 58 KLD shall be met from MIDC water supply scheme.	PP agrees with the condition.		
(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.	PP will comply with the condition		
(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.	PP agrees with the condition.		
(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.	PP agrees with the condition. Regular monitoring has been carried out by a MoEF recognized laboratory. The monitoring report has been attached.	✓	
(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	The material will be stored and used for back filling and landscape.		

	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.	PP will comply with the condition		
(xx)	All the recommendations mentioned in the rapid risk assessment report, disaster management plan and safety guidelines shall be implemented.	PP will comply with the condition		
(xxi)	Necessary arrangement for general safety and occupational health of people should be done in letter and spirit.	PP agreed with the condition		
(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.	PP has been submitted half yearly compliance report		
(xxiii)	The company shall draw up and implement Corporate Social Responsibility Plan as per the Company's Act of 2013.	PP will comply with the condition		
(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 (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.	Noted		
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.	Noted		
(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.	Noted		

(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 I 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).	Noted		
(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 works other than those permitted in Coastal Regulation Zone Notification shall be carried out in Coastal Regulation Zone area.	PP agrees with the condition		
(v)	All the recommendations and conditions specified by State Coastal Zone Management Authority for the project shall be complied with.	PP will comply with condition		
(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.	Consent to operate vide Consent no. BO/MPCB/RO/(HQ)/RD323 1- 16/CR/B-3912 dated: 19.03.2016 has been obtained from MPCB and PP has applied for consent to Establish (expansion) The Minutes of Meeting stating approval of consent to Establish are attached as annexure.	✓	
(vii)	The project proponent shall obtain the necessary permission from the Central Ground Water Authority, in case of drawl of ground water I from the competent authority concerned in case of drawl of surface water required for the project.	Noted		
(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	Noted		
(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.	Noted		
(x)	All other statutory clearances such as the approvals for storage of diesel from Chief Controller of Explosives, Fire Department,	Noted		

	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 SO ₂ and NO _x in reference to SO ₂ 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	PP agrees with the condition. Regular monitoring has been carried out by a MoEF recognized laboratory. The monitoring report has been attached.		
(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.	PP agrees with the condition.		
(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.	PP will comply with the condition.		
(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.	PP will comply with the condition		
(v)	The Vessels shall comply the emission norms prescribed from time to time.	Noted		
(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.	DG set will used enclosed type and will be used only in case of power failure.		
(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	Noted		

	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.	No creeks or rivers are blocked due to any activities at the project site		
(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.	PP agree with the condition		
(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.	10 KLD STP provided as per earlier EC, Now PP has proposed 50 KLD STP for proposed expansion		
(iv)	Measures should be taken to contain, control and recover the accidental spills of fuel and cargo handle.	Noted		
(v)	The project proponents will draw up and implement a plan for the management of temperature differences between intake waters and discharge waters.	PP will comply with the condition		
(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.	PP will comply with the condition		
(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.	Noted		
(viii)	Sewage Treatment Plant shall be provided to treat the wastewater generated from the project. Treated water shall be reused for	PP will comply with the condition.		

	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	Noted		
(x)	No diversion of the natural course of the river shall be made without prior permission from the Ministry of Water resources.	Noted		
(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.	PP will comply with the condition		
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.	Regular monitoring has been carried out by a MoEF&CC recognized laboratory. The monitoring report has been attached.	✓	
(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 equipment's.	The ambient noise levels will be monitored. Construction activities will not be carried out during night time. Efforts will be taken to reduce noise levels during construction phase.		
(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.	Regular monitoring has been carried out by a MoEF&CC recognized laboratory. The monitoring report has been attached.		
(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.	The ambient noise levels will be monitored. Construction activities will not be carried out during night time. Efforts will be taken to reduce noise levels during construction phase.		
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;	PP agree with the condition		

(ii)	Provide LED lights in their offices and residential areas.	PP will comply with the condition		
VI	Waste management:			
(i)	Dredged material shall be disposed safely in the designated areas.	PP will comply with the condition		
(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.	Noted		
(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	PP agrees with the condition		
(iv)	The solid wastes shall be managed and disposed as per the norms of the Solid Waste Management Rules, 2016.	PP agrees with the condition		
(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.	PP agrees with the condition		
(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.	Noted		
(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.	Noted		
(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.	Noted		
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.	Plantation will be done as per CPCB guidelines		

(ii)	Top soil shall be separately stored and used in the development of green belt.	Top soil will be stored and will be used for the green belt development		
VIII	Marine Ecology:			
(i)	Dredging shall not be carried out during the fish breeding and spawning seasons.	Noted		
(ii)	Dredging, etc. shall be carried out in the confined manner to reduce the impacts on marine environment.	PP agrees with the condition		
(iii)	The dredging schedule shall be so planned that the turbidity developed is dispersed soon enough to prevent any stress on the fish population.	Noted		
(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.	Regular monitoring has been carried out by a MoEF&CC recognized laboratory. The monitoring report has been attached		
(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.	Noted		
(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	Noted		
(vii)	The project proponent shall ensure that water traffic does not impact the aquatic wildlife sanctuaries that fall along the stretch of the river.	Noted		
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.	PP will comply with the condition		
(ii)	Workers shall be strictly enforced to wear personal protective equipment's 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.	PP agrees with condition		
(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.	PP will comply with the condition		
(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.	PP agrees with the condition		
(v)	Emergency preparedness plan based on the Hazard identification and Risk Assessment (HIRA) and Disaster Management Plan shall be implemented.	Noted		
(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, creche etc. The housing may be in the form of temporary structures to be removed after the completion of the project.	PP agrees with the condition		
(vii)	Occupational health surveillance of the workers shall be done on a regular basis.	PP will comply with the condition		
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	Noted		

	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.	PP has made provision for environment management cell with qualified staff for the implementation of the stipulated environmental safeguards.		
(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.	Noted		
(iv)	Self-environmental audit shall be conducted annually. Every three years third party environmental audit shall be carried out.	Noted		
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.	PP will comply with the condition		
(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.	Noted		
(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.	Noted		
(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.	Compliance report for the period of October 2020 to March 2021 is currently being submitted.		

		The half yearly compliance report to MPCB regularly submitted.		
(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	Noted		
(vi)	The criteria pollutant levels namely; PM _{2.5} , PM ₁₀ , SO ₂ , 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	Noted and PP will be complied with.		
(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.	Noted		
(viii)	The project authorities must strictly adhere to the stipulations made by the State Pollution Control Board and the State Government.	Noted		
(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).	Noted		
(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.	PP understand the issue and shall be abided accordingly.		
(xi)	The Ministry may revoke or suspend the clearance, if implementation of any of the above conditions is not satisfactory.	Noted		
(xii)	The Ministry reserves the right to stipulate additional conditions if found necessary. The Company in a time bound manner shall implement these conditions.	Noted		
(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.	PP have cooperated with the officials for 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,	Noted. The provisions of the approved Coastal Zone Management Plan of Maharashtra and the		

	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	Supreme Court's order have been complied with.		
(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.	Noted		
8	This issues with the approval of the Competent Authority.	Noted		

CONDITIONS OF CONSENT TO OPERATE

Renewal to existing Consent to Operate vide file no.: Format1.0/CC/UAN No.0000103714/CR 210400133 dated 27.04.2021

Sr.	Conditions	Compliance	☑	P															
1.	The consent to renewal is granted for a period up to 31/12/2025.	Noted. Consent will be renewed well in advance.																	
2.	The capital investment of the project is Rs. 73.66 Crs. (As per C.A Certificate submitted by industry Existing CI is Rs.3.21 Crs. + Expansion/Increase in CI- Rs. 70.45 Crs.)	C.A Certificate was submitted to the MPCB.																	
3.	<p>Consent is valid for handling of:</p> <table border="1"> <thead> <tr> <th>Sr. No.</th> <th>Product name</th> <th>Maximum Quantity</th> <th>UOM</th> </tr> </thead> <tbody> <tr> <td colspan="4">Products</td> </tr> <tr> <td>1</td> <td>Jetty: for Cargo handling, Handling of Coal, Sulphur, Rock Phosphate, Iron Ore, Bauxite and Edible Oil Cargo</td> <td>5</td> <td>MT/A</td> </tr> </tbody> </table> <p>The Consent is valid for the operation of Jetty (100 Mtrs, North Side of the Nallah (North of Khochi) Dharamtar Creek</p>	Sr. No.	Product name	Maximum Quantity	UOM	Products				1	Jetty: for Cargo handling, Handling of Coal, Sulphur, Rock Phosphate, Iron Ore, Bauxite and Edible Oil Cargo	5	MT/A	Noted.					
Sr. No.	Product name	Maximum Quantity	UOM																
Products																			
1	Jetty: for Cargo handling, Handling of Coal, Sulphur, Rock Phosphate, Iron Ore, Bauxite and Edible Oil Cargo	5	MT/A																
4.	<p>Conditions under Water (P&CP), 1974 Act for discharge of effluent</p> <table border="1"> <thead> <tr> <th>Sr. No.</th> <th>Description</th> <th>Permitted (in CMD)</th> <th>Standard to</th> <th>Disposal Path</th> </tr> </thead> <tbody> <tr> <td>1</td> <td>Trade effluent</td> <td>0</td> <td>As per Schedule-I</td> <td>Not Applicable</td> </tr> <tr> <td>2</td> <td>Domestic Effluent</td> <td>7.5</td> <td>As per Schedule-I</td> <td>On land for gardening</td> </tr> </tbody> </table>	Sr. No.	Description	Permitted (in CMD)	Standard to	Disposal Path	1	Trade effluent	0	As per Schedule-I	Not Applicable	2	Domestic Effluent	7.5	As per Schedule-I	On land for gardening	The 7.5 m ³ /day of sewage generated is treated in Sewage Treatment Plant of 10 m ³ /day capacity.		
Sr. No.	Description	Permitted (in CMD)	Standard to	Disposal Path															
1	Trade effluent	0	As per Schedule-I	Not Applicable															
2	Domestic Effluent	7.5	As per Schedule-I	On land for gardening															
5.	<p>Conditions under Air (P& CP) Act, 1981 for air emissions:</p> <table border="1"> <thead> <tr> <th>Sr. No.</th> <th>Stack No.</th> <th>Description of Stack/ source</th> <th>Number of Stack</th> <th>Standard to be achieved</th> </tr> </thead> <tbody> <tr> <td>1</td> <td>Not Applicable</td> <td>Not Applicable</td> <td>0</td> <td>As per Schedule -II</td> </tr> </tbody> </table>	Sr. No.	Stack No.	Description of Stack/ source	Number of Stack	Standard to be achieved	1	Not Applicable	Not Applicable	0	As per Schedule -II	Not Applicable							
Sr. No.	Stack No.	Description of Stack/ source	Number of Stack	Standard to be achieved															
1	Not Applicable	Not Applicable	0	As per Schedule -II															

6.	Non-Hazardous Wastes:					Not Applicable		
	Sr. No.	Type of Waste	Quantity	UoM	Treatment	Disposal		
	1	Not Applicable	0	-NA-	Not Applicable	Not Applicable		
7.	Conditions under Hazardous & Other Wastes (M&TM) Rules 2016 for treatment and disposal of hazardous waste:					Used oil will be handed over to authorized reprocessor		
	Sr. No.	Category No./ Type	Quantity	UoM	Treatment	Disposal		
	1	5.2 Wastes or residues containing oil	500	MT/A	Sale to authorized processor/CH WTS DF	Sale to authorized processor/CH WTS DF		
8.	The Board reserves the right to review, amend, suspend, revoke this consent and the same shall be binding on the industry.					Noted		
9.	This consent should not be construed as exemption from obtaining necessary NOC/permission from any other Government authorities.					Noted		
10.	The applicant shall make an application for renewal of consent 60 days prior to date of expiry of the consent (Operate/ Renewal)					Noted		
11.	The applicant shall comply with the conditions of the CRZ clearance granted vide letter No.J-160011/38/2001-A-III dt. 06/10/2003					The conditions given in the CRZ clearance e dated 06.10.2003 will be complied with.		
12.	The applicant shall comply with the conditions of the Environmental Clearance & CRZ Clearance granted vide letter No. F.No. 10-70/2016-1A-III dt. 20/08/2020					The conditions given in the Environmental Clearance & CRZ Clearance dated 20.08.2020 will be complied with.		
13.	Industry shall submit Bank Guarantee of Rs. 5 Lakhs towards compliance of Consent conditions & Conditions stipulated in Environmental Clearance & CRZ clearance.					The bank guarantee has been submitted to the MPCB		

SCHEDULE-I**TERMS & CONDITIONS FOR COMPLIANCE OF WATER POLLUTION CONTROL**

Sr.	Conditions	Compliance	<input type="checkbox"/>	P																																
1.	A] Generation- As per your application the treated effluent generation is Nil. B] Treatment- NA C] Disposal- NA	Not Applicable																																		
2.	<p>A] As per your application, you have provided Sewage Treatment Plant of designed capacity 10 CMD for the treatment of 7.5 CMD of sewage.</p> <p>B] The application shall operate the sewage treatment system to treat the sewage so as to achieve the following standards.</p> <table border="1" data-bbox="300 792 916 1285"> <thead> <tr> <th data-bbox="306 801 373 869">Sr. No</th> <th data-bbox="383 801 549 869">Parameters</th> <th colspan="2" data-bbox="558 801 909 869">Standards</th> </tr> </thead> <tbody> <tr> <td data-bbox="306 880 373 925">1</td> <td data-bbox="383 880 549 925">pH</td> <td data-bbox="558 880 772 925">Not to exceed</td> <td data-bbox="782 880 909 925">5.5-9.0</td> </tr> <tr> <td data-bbox="306 936 373 981">2</td> <td data-bbox="383 936 549 981">BOD</td> <td data-bbox="558 936 772 981">Not to exceed</td> <td data-bbox="782 936 909 981">10</td> </tr> <tr> <td data-bbox="306 992 373 1037">3</td> <td data-bbox="383 992 549 1037">COD</td> <td data-bbox="558 992 772 1037">Not to exceed</td> <td data-bbox="782 992 909 1037">50</td> </tr> <tr> <td data-bbox="306 1048 373 1093">4</td> <td data-bbox="383 1048 549 1093">TSS</td> <td data-bbox="558 1048 772 1093">Not to exceed</td> <td data-bbox="782 1048 909 1093">20</td> </tr> <tr> <td data-bbox="306 1104 373 1149">5</td> <td data-bbox="383 1104 549 1149">NH4 N</td> <td data-bbox="558 1104 772 1149">Not to exceed</td> <td data-bbox="782 1104 909 1149">5</td> </tr> <tr> <td data-bbox="306 1160 373 1205">6</td> <td data-bbox="383 1160 549 1205">N-total</td> <td data-bbox="558 1160 772 1205">Not to exceed</td> <td data-bbox="782 1160 909 1205">10</td> </tr> <tr> <td data-bbox="306 1216 373 1283">7</td> <td data-bbox="383 1216 549 1283">Fecal Coliform</td> <td data-bbox="558 1216 772 1283">Not to exceed</td> <td data-bbox="782 1216 909 1283">Less than 100</td> </tr> </tbody> </table> <p>C] The treated sewage shall be recycled for secondary purposes to the maximum extent and remaining shall be discharged on land for gardening within premise after confirming above standards. In no case, sewage shall find its way for gardening/ outside factory premises.</p>	Sr. No	Parameters	Standards		1	pH	Not to exceed	5.5-9.0	2	BOD	Not to exceed	10	3	COD	Not to exceed	50	4	TSS	Not to exceed	20	5	NH4 N	Not to exceed	5	6	N-total	Not to exceed	10	7	Fecal Coliform	Not to exceed	Less than 100	Noted		
Sr. No	Parameters	Standards																																		
1	pH	Not to exceed	5.5-9.0																																	
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6	N-total	Not to exceed	10																																	
7	Fecal Coliform	Not to exceed	Less than 100																																	
3.	The Board reserves its rights to review plans, specifications or other data relating to plant setup for the treatment of waterworks for the purification there of & the system for the disposal of sewage or trade effluent or in connection with the grant of any consent conditions. The applicant shall obtain prior consent of the Board to take steps to establish the unit or establish any treatment and disposal system or an extension or addition thereto.	Noted																																		
4.	The industry shall ensure replacement of pollution control system or its part after expiry of its expected life as defined by manufacture	Agreed																																		

	so as to ensure the compliance of the standards and safety of the operation thereof.																				
5.	<p>The applicant shall comply with the provisions of the Water (Prevention & Control of Pollution) Act, 1974 and as amended, by installing water meters and other provisions as contained in the said act:</p> <table border="1"> <thead> <tr> <th>Sr. No.</th> <th>Purpose for water consumed</th> <th>Water consumption quantity (CMD)</th> </tr> </thead> <tbody> <tr> <td>1.</td> <td>Industrial Cooling, spraying in mine pits or boiler feed</td> <td>10.00</td> </tr> <tr> <td>2.</td> <td>Domestic purpose</td> <td>10.00</td> </tr> <tr> <td>3.</td> <td>Processing whereby water gets polluted & pollutants are easily biodegradable</td> <td>0.00</td> </tr> <tr> <td>4.</td> <td>Processing whereby water gets polluted & pollutants are not easily biodegradable and are toxic</td> <td>0.00</td> </tr> <tr> <td>5.</td> <td>Gardening</td> <td>10</td> </tr> </tbody> </table>	Sr. No.	Purpose for water consumed	Water consumption quantity (CMD)	1.	Industrial Cooling, spraying in mine pits or boiler feed	10.00	2.	Domestic purpose	10.00	3.	Processing whereby water gets polluted & pollutants are easily biodegradable	0.00	4.	Processing whereby water gets polluted & pollutants are not easily biodegradable and are toxic	0.00	5.	Gardening	10	Agreed	
Sr. No.	Purpose for water consumed	Water consumption quantity (CMD)																			
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4.	Processing whereby water gets polluted & pollutants are not easily biodegradable and are toxic	0.00																			
5.	Gardening	10																			
6.	The Applicant shall provide Specific Water Pollution control system as per the conditions of EP Act, 1986 and rule made there under from time to time/ Environmental Clearance/CREP guidelines.	STP of 10 m ³ /day has been provided on the site.																			

SCHEDULE-II**TERMS & CONDITIONS FOR COMPLIANCE OF AIR POLLUTION CONTROL**

Sr.	Conditions	Compliance	☑	P																
1.	<p>As per your application, you have provided the Air pollution control (APC) system and erected following stack (s) to observe the following fuel pattern:</p> <table border="1" data-bbox="300 528 970 824"> <thead> <tr> <th data-bbox="300 528 384 719">Stack No.</th> <th data-bbox="392 528 493 719">Stack Attached To</th> <th data-bbox="501 528 585 719">APC System</th> <th data-bbox="593 528 678 719">Height In Mtrs.</th> <th data-bbox="686 528 770 719">Type of Fuel</th> <th data-bbox="778 528 863 719">Quantity</th> <th data-bbox="871 528 956 719">S %</th> <th data-bbox="963 528 970 719">SO₂</th> </tr> </thead> <tbody> <tr> <td data-bbox="300 730 384 824">Not Applicable</td> <td data-bbox="392 730 493 824">Not Applicable</td> <td data-bbox="501 730 585 824">Not Applicable</td> <td data-bbox="593 730 678 824">Not Applicable</td> <td data-bbox="686 730 770 824">Not Applicable</td> <td data-bbox="778 730 863 824">--</td> <td data-bbox="871 730 956 824">--</td> <td data-bbox="963 730 970 824">--</td> </tr> </tbody> </table>	Stack No.	Stack Attached To	APC System	Height In Mtrs.	Type of Fuel	Quantity	S %	SO ₂	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable	--	--	--	Noted		
Stack No.	Stack Attached To	APC System	Height In Mtrs.	Type of Fuel	Quantity	S %	SO ₂													
Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable	--	--	--													
2.	The Applicant shall provide Specific Air Pollution control equipments as per the conditions of EP Act, 1986 and rule made there under from time to time/ Environmental Clearance/CREP guidelines.	PP agrees with the condition.																		
3.	<p>The applicant shall operate and maintain above mentioned air pollution control system, so as to achieve the level of pollutants to the following standards:</p> <table border="1" data-bbox="300 1144 978 1335"> <thead> <tr> <th data-bbox="300 1144 544 1205">Parameters</th> <th colspan="2" data-bbox="552 1144 978 1205">Standards</th> </tr> </thead> <tbody> <tr> <td data-bbox="300 1216 544 1335">Total Particulate Matter</td> <td data-bbox="552 1216 762 1335">Not to exceed</td> <td data-bbox="770 1216 978 1335">150 mg/Nm³</td> </tr> </tbody> </table>	Parameters	Standards		Total Particulate Matter	Not to exceed	150 mg/Nm ³	Agreed												
Parameters	Standards																			
Total Particulate Matter	Not to exceed	150 mg/Nm ³																		
4.	The Applicant shall obtain necessary prior permission for providing additional control equipment with necessary specifications and operation thereof or alteration or replacement/ alternation well before its life come to an end or erection or new pollution control equipment.	PP agrees with the condition.																		
5.	The Board reserves its rights to vary all or any of the condition in the consent, if due to any technological improvement or otherwise such variation (including the change of any control equipment other in whole or in part in necessary)	Noted																		

SCHEDULE-III**DETAILS OF BANK GUARANTEES:**

Sr.	Consent (C2E/C2O/C2R)	Amt of BG Imposed	Submission Period	Purpose of BG	Compliance Period	Validity Date	Compliance
1	Consent to Operate	Rs.5 lakh	15 Days	Towards O and M of pollution control system Compliance consent conditions	31/12/2025	30/04/2026	The BG in Format required by MPCB was submitted

BG FORFEITURE HISTORY

Sr.	Consent (C2E/C2O/C2R)	Amt of BG Imposed	Submission Period	Purpose of BG	Amount of BG Forfeiture	Reason of BG Forfeiture
NA						

BG RETURN DETAILS

Sr.	Consent (C2E/C2O/C2R)	BG Imposed	Submission Period	Purpose of BG	Amount of BG Returned
NA					

SCHEDULE-IV

Sr.	Conditions	Compliance	☑	P
	<u>General Conditions</u>			
1.	The Energy source for lighting purpose shall preferably be LED based	Yes, LED lighting is being provided.		
2.	The PP shall harvest rainwater from roof tops of the building and Storm water drains to the recharge the ground water and utilize the same for different industrial applications within the plant	Rainwater harvesting system has been provided		
3.	<p>Conditions for D.G Set</p> <p>a) Noise from the D.G Set Should be controlled by providing an acoustic enclosure or by treating the room acoustically.</p> <p>b) Industry should provide acoustic enclosure for control of noise. The acoustic enclosure/ acoustic treatment of the room should be designed for minimum 25 db(A) insertion loss or for meeting the ambient noise standards, whichever is on higher side. A suitable exhaust muffler with insertion loss of 25 db(A) shall be provided. The measurement of insertion loss will be done at different points at 0.5 meters from acoustic enclosure/room and then average.</p> <p>c) Industry should make efforts to bring down noise level due to D.G set, outside industrial premises, within ambient noise requirement by proper siting and control measures.</p> <p>d) Installation of D.G Set must be strictly in compliance with recommendations of D.G Set manufacturer.</p> <p>e) A proper routine and preventive maintenance procedure for D.G set should set and followed in consultation with the DG manufacturer which would help to prevent noise levels of DG set from deteriorating with use.</p> <p>f) DG Set shall be operated only in case of power failure.</p> <p>g) The application should not cause any nuisance in the surrounding area due to operation of D.G Set.</p> <p>h) The applicant shall comply with the notification of MoEFCC, India on Environment (Protection) second Amendment Rules vide GSR 371 (E) dated 17.05.2002 and its amendments regarding noise limit for generator sets run with diesel.</p>	<p>Acoustic enclosures have been provided to the D.G Sets.</p> <p>D.G Sets installed are strictly in compliance with recommendations of D.G Set manufacturer</p> <p>DG Set will be operated only in case of power failure.</p>		

4.	The applicant shall maintain good housekeeping.	Proper housekeeping practices are followed.		
5.	The non-hazardous solid waste arising in the factory premises, sweepings, etc. be disposed of scientifically so as not to cause any nuisance/pollution. The applicant shall take necessary permissions from civic authorities for disposal of solid waste.	Noted and is being complied with.		
6.	The applicant shall not change or alter the quantity, the rate of discharge, temperature or the mode of the effluent/emissions or hazardous wastes or control equipments provided for without previous written permission of the Board. The industry will not carry out any activity, for which this consent has not been granted/without prior consent of the Board.	No changes in emissions/effluent will be brought about without requisite permissions.		
7.	The industry shall ensure that fugitive emissions from the activity are controlled so as to maintain clean and safe environment in and around the factory premises.	Noted and is being complied with.		
8.	The industry shall submit quarterly statement in respect of industries obligations towards consent and pollution control compliance duly supported with documentary evidences (format can be downloaded from MPCB official site)	Agreed and will be complied with.		
9.	The industry shall submit official e-mail address and any change will be duly informed to MPCB.	Noted		
10.	The industry shall achieve the National Ambient Air Quality Standards prescribed vide Government of India, Notification No. B-29016/20/90/PCI-L dated 18.11.2009 as amended.	Air sampling and testing is carried out by a MoEF&CC approved lab. The parameters are within the prescribed limits. Copy of monitoring report has been attached.		
11.	The Board reserves its rights to review plans, specifications or other data relating to plant setup for the treatment of waterworks for the purification thereof & the system for the disposal of sewage or trade effluent or in connection with the grant of any consent conditions. The Applicant shall obtain prior consent of the Board to take steps to establish the unit or establish any treatment and disposal system or an extension or addition thereto.	Noted		
12.	The industry shall ensure replacement of pollution control system or its parts after expiry of its expected life as defined by manufacturer so as to	Agreed		

	ensure the compliance of standards and safety of the operation thereof.			
13.	The PP shall provide personal protection equipment as per norms of the Factory Act	Personal Protection Equipment's are provided to the workers wherever required.		
14.	Industry should monitor effluent quality, stack emissions and ambient air quality monthly/quarterly.	Regular air quality monitoring has been carried out by MoEF&CC approved lab. Copy of monitoring report has been attached.	✓	
15.	Whenever due to any accident or other unforeseen act or even emissions occur or is apprehended to occur in excess of standards laid down, such information shall be forthwith Reported to Board, concerned Police Station, office of Directorate of Health Services, Department of Explosives, Inspectorate of Factories and Local Body. In ae of failure of pollution control equipments, the production process connected to it shall be stopped.	Agreed		
16.	The applicant shall provide an alternate electric power source sufficient to operate all pollution control facilities installed to maintain compliance with the terms and conditions of the consent. In the absence, the applicant shall stop, reduce or otherwise, consent	D.G set of 500 kva capacity has been provided on the site for back up in case of power failure.		
17.	The industry shall recycle/reprocess/reuse/recover Hazardous Waste as per the provision contain in the Hazardous and Other Wastes (M& TM) Rules 2016, which can be recycled /processed /reused /recovered and only waste which has to be incinerated shall go to incineration and waste which can be used for landfilling and cannot be recycled/ reprocessed etc. should go for that purpose, in order to reduce load on incineration and landfill site/environment.	Agreed		
18.	An inspection book shall be opened and made available to the Board's officers during their visit to the applicant.	Agreed. Inspection book will be made available to the Board's officer during the site visit.		
19.	Industry shall strictly comply with water (P&PC) Act, 1974, Air (P&CP) Act 1981 and Environmental Protection Act, 1986 and industry specific standard under EP Rules 1986 which are available on MPCB website (www.mpcb.gov.in).	PP will comply with water (P&PC) Act, 1974, Air (P&CP) Act 1981 and Environmental		

		Protection Act, 1986 and industry specific standard under EP Rules 1986		
20.	Separate drainage system shall be provided for collection of trade and sewage effluents. Terminal manholes shall be provided at the end of the collection system with arrangement for measuring the flow. No effluent shall be admitted in the pipes/sewers downstream of the terminal manholes. No effluent shall find its way other than in designed and provided collection system.	Separate drainage system has been provided and no external effluent is admitted into the collection system		
21.	Neither storm water nor discharge from other premises shall be allowed to mix the effluent from the factory.	Wastewater and storm water are not allowed to mix with the effluent.		
22.	The industry should not cause any nuisance in surrounding area.	Agreed. The industry will not cause any nuisance in surrounding area.		
23.	The industry shall take adequate measure for control of noise levels from its own sources within the premises so as to maintain ambient air quality standard in respect of noise to less than 75 db(A) during day time and 70 db(A) during night time. Day time is reckoned in between 6 a.m and 10 p.m and night time is reckoned between 10 p.m and 6 a.m.	The ambient noise levels will be monitored. Construction activities will not be carried out during night time. Efforts will be taken to reduce noise levels during construction phase.		
24.	The industry shall create the Environment Cell by appointing an Environmental Engineer, Chemist and Agriculture expert for looking after day to day activities related to Environment and irrigation field where treated effluent is used for irrigation	An Environment Cell has been created which is responsible for implementing the Environment Management Plan on the project site.		
25.	The applicant shall provide ports in the chimney/(s) and facilities such as ladder, platform etc. for monitoring the air emissions and the same shall be open for inspection to/and for use of the Board's Staff. The chimney(s) vents attached to various sources	Not applicable.		
26.	The industry should comply with the Hazardous and Other Wastes (M&TM) Rules, 2016 and submit the Annual Returns as per Rule 6(5) & 20 (2) of Hazardous and other Wastes (M& TM) Rules, 2016 for the preceding year April to March in Form-IV by 30 th June of every year.	Form IV is regularly submitted by 30 th June of every year.		

27.	The applicant shall install a separate meter showing the consumption of energy for operation of domestic and industrial effluent treatment plants and air pollution control system. A register showing consumption of chemicals used for treatment shall be maintained.	Separate meters have been provided.		
28.	The applicant shall bring minimum 33% of the available open land under green coverage/plantation. The applicant shall submit a yearly statement by 30 th September every year on available open plot area, number of trees surviving as on 31 st March of the year and number of trees planted by September end.	Green Belt of has been provided with nearly 2000 nos. trees planted. Trees have been planted as per the CPCB guidelines.		
29.	The Board reserves its right to review plans, specifications or other data relating to plant setup for the treatment of waterworks for purification thereof & the system for disposal of sewage or trade effluent or in connection with the grant of any consent conditions.	Noted		
30.	The firm shall submit to this office, the 30 th day of September every year, the Environment Statement Report for the financial year ending 31 st March in the prescribed FORM-V as per the provisions of Rule 14 of the Environment (Protection) (second Amendment) Rules,1992.	Form V is submitted regularly. Acknowledgement copy has been attached.		
31.	The Applicant shall obtain necessary prior permissions for providing additional control equipment with necessary specification and operation thereof or alteration or replacement/alteration well before its life come to an end or erection of new pollution control equipment.	Noted		
32.	The Board reserves its rights to vary all or any of the conditions in the consent, if due to any technological improvement or otherwise such variation (including the change of any control equipment, other in whole or in part is necessary).	Noted		
33.	The applicant shall provide facility for collection of environmental samples and samples of trade and sewage effluents. air emissions and hazardous waste to the Board staff at the terminal or designated points and shall pay the Board for the services rendered in this behalf.	Agreed		

ANNEXURE I
PREVIOUS COMPLIANCE REPORT
ACKNOWLEDGEMENT COPY

(As per EC condition: li)



Ajeet Kumar CMD <mahabal.thane@gmail.com>

Compliance and Monitoring Report for period of April 2020 to September 2020_PNP Maritime Services Private Limited

mahabal.thane@gmail.com <mahabal.thane@gmail.com>

Thu, Dec 3, 2020 at 11:22 AM

To: eccompliance-mh@gov.in

Cc: Ajeet Kumar <mahabal.cmd@gmail.com>

Dear Sir/Madam,

As per MoEF&CC Notification dated 26.11.2018 "In the said notification, in paragraph 10, in sub-paragraph (ii) for the words "hard and soft copies" the words "soft copy" shall be substituted."

With the reference of above, please find the attached Compliance & Monitoring report for the period of April 2020 to September 2020 for PNP Maritime Services Private Limited.

--

Regards, Divya Mistry 8976621023

=====

Office of: [Mahabal Enviro Engineers Pvt. Ltd.- THANE BRANCH](#)

Plot F 7, Road 21, MIDC Wagle Estate, Thane West-400604

(Turn opp. Toyota showroom @ Golden Nest Hotel >>straight>> 550m)

Phone: [022-25823154](tel:022-25823154)/[0658/1663/3543](tel:065816633543) Email: mahabal.thane@gmail.com

PLEASE NOTE THIS IS COMMON EMAIL ID USED BY ALL STAFF MEMBERS FOR GENERAL COMMUNICATION ONLY.

**Compliance and Monitoring Report_PNP Maritime Services Private Limited_April 2020 to September****2020.pdf**

20792K



1st October, 2020

To,
The Director
Regional Office (West Central Zone),
Ministry of Environment, Forest and Climate Change,
Ground Floor, East wing,
New Secretariat Building,
Civil lane, Nagpur-440001

Subject: Half-yearly Compliance Report:
April 2020 to September 2020

Project PNP Maritime Services Private Limited
construction of minor jetty at Dharmatar Creek, project
at District Raigad

EC No. F. No. 10-70/2016-IA-III, Dated 20th August, 2020

Dear Sir,

We are submitting half-yearly Compliance Report (hard & soft copy) in respect of the of stipulated terms and conditions of 'Prior Environmental Clearance' as specified in 'Environment Clearance' Notification Clause No. 10(ii).

Thanking you,
Yours faithfully,
For. PNP Maritime Services Private Limited



9/10/2020

महाराष्ट्र प्रदूषण नियंत्रण मंडळ,
राज्य प्रदूषण नियंत्रण मंडळ,
सी.बी.डी. बेलपुर, मुंबई

Project Proponent

Enclosure: A hard copy of the compliance and monitoring report

- CC copy to:**
1. Regional officer, Maharashtra Pollution Control Board, Belapur
 2. Member Secretary, Maharashtra Pollution Control Board, Sion, Mumbai
 3. Member Secretary, State Environmental Impact Assessment Authority, Govt. of Maharashtra, Mumbai

o/c

PNP MARITIME SERVICES PVT. LTD.

Regd. Office: A-5, Ionic, 1B, Arthur Bunder Road, Colaba, Mumbai 400 005, India.
Admin. Office: 2nd Floor, Lensdowne House, Mahakavi Bhushan Road, Colaba, Mumbai 400 001.
Tel: 2288 4536/37/38/39/40 Fax: 2288 4535
Port Office: PNP Port Dharmatar at Shehaji, Dist. Raigad. Tel: +91-2143-320766.
Website: www.pnpport.com CIN: U63090MH1999PTC121461

ANNEXURE II
SITE PHOTOGRAPHS

Construction Site



Drinking water facility



PPE provided to the Workers



Site Office



Water Tank



ANNEXURE III
ENVIRONMENT MONITORING REPORT



TC-5509



AMBIENT AIR QUALITY MONITORING REPORT

Sample ID: AA/03/21/5119	Report No: AA/03/21/5119	Report Date	08/03/2021
Name & Address of Customer	PNP Maritime Services Private Limited 2nd Floor, Lansdowne House Building, M.B. Marg, Near Regal Cinema, Apollo Bunder, Colaba, Mumbai - 400 001		
Sample Collected by	Laboratory	Sample Description/ Type	Ambient Air (Group: Atmospheric Pollution, Sub Group: Ambient Air Quality)
Sampling Location	Near Main Gate	Date-Sampling	01/03/2021 to 02/03/2021
Sample Quantity/ Packing	PM ₁₀ , BaP, Metals: Filter paper 1 x 3 no. PM _{2.5} : Filter paper 1 x 1 no. SO ₂ : 30 ml x 6 no. plastic bottle NO ₂ : 30 ml x 6 no. plastic bottle NH ₃ : 10 ml x 24 no. plastic bottle Ozone: 10 ml x 1 no. plastic bottle C ₆ H ₆ : 6 no. charcoal tubes CO: 1 no. Bladder	Date-Receipt of Sample	04/03/2021
Sampling Procedure	As per Method Reference	Date-Start of Analysis	04/03/2021
Order Reference	As per PO No. PNP/February/2019- 2020/013 Dated 26/02/2020	Date-Completion of Analysis	08/03/2021

Meteorological Data / Environmental Conditions

Average Wind Velocity 9 km/h	Wind Direction W	Relative Humidity (Max./Min.): 61/51 %	Temperature (Max./Min.): 35/19°C	Duration of Survey 24 h
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CHEMICAL TESTING

Parameter	Results	NAAQS # 2009	Unit	Method
Sulphur Dioxide (SO ₂)	8.2	80	µg/m ³	IS 5182 (Part 2): 2006, RA 2017
Nitrogen Dioxide (NO ₂)	28.9	80	µg/m ³	IS 5182 (Part 6): 2006, RA 2017
Particulate Matter (size less than 10 µm) or PM ₁₀	382	100	µg/m ³	IS 5182 (Part 20): 2006, RA 2017
Particulate Matter (size less than 2.5µm) or PM _{2.5}	178	60	µg/m ³	USEPA CFR 40, Part 50, Appendix I
Ozone (O ₃)	33.7	180	µg/m ³	AWMA 3rd Ed. Method 41 Page no. 403, 1988
Lead (Pb)	<0.02	1	µg/m ³	EPA/625/R-96/010 a Compendium Method 0-31 B 3.2, Jun 1999
Carbon Monoxide (CO)	2.11	4	mg/m ³	CPCB Guidelines, 31/2012-01, Page no.16
Ammonia (NH ₃)	<4	400	µg/m ³	AEC/C/SAP/AA-7
Benzene (C ₆ H ₆)	1.31	5	µg/m ³	IS 5182 (Part 11): 2006, RA 2017
Benzo (a) Pyrene (BaP) - particulate phase only	<0.2	1	ng/m ³	IS 5182 (Part 12): 2006, RA 2017
Arsenic (As)	<0.3	6	ng/m ³	EPA/625/R-96/010 a Compendium Method 0-31 B 3.2, Jun 1999
Nickel (Ni)	<3	20	ng/m ³	EPA/625/R-96/010 a Compendium Method 0-31 B 3.2, Jun 1999

TWA Time Weighted Average

NAAQS (National Ambient Air Quality Standards (Industrial, Residential, Rural and other Area) specified as: 24 hours TWA in case of Sulphur Dioxide, Nitrogen Dioxide, PM₁₀, PM_{2.5}, Lead and Ammonia, 1 hour TWA in case of Carbon Monoxide and Ozone, Annual TWA in case of Benzene, Benzo (a) Pyrene, Arsenic and Nickel


 Ninad Soundankar
 Technical Manager (Chemical)
 Reviewed & Authorised by



End of Report

Note:

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TC-5509



AMBIENT AIR QUALITY MONITORING REPORT

Sample ID: AA/03/21/5120	Report No: AA/03/21/5120	Report Date: 08/03/2021
Name & Address of Customer	PNP Maritime Services Private Limited 2nd Floor, Lansdowne House Building, M.B. Marg, Near Regal Cinema, Apollo Bunder, Colaba, Mumbai - 400 001	
Sample Collected by	Laboratory	Sample Description/ Type Ambient Air (Group: Atmospheric Pollution, Sub Group: Ambient Air Quality)
Sampling Location	Near Jetty No. 1	Date-Sampling 01/03/2021 to 02/03/2021
Sample Quantity/ Packing	PM ₁₀ : BaP, Metals: Filter paper 1 x 3 no. PM _{2.5} : Filter paper 1 x 1 no. SO ₂ : 30 ml x 6 no. plastic bottle NO ₂ : 30 ml x 6 no. plastic bottle NH ₃ : 10 ml x 24 no. plastic bottle Ozone: 10 ml x 1 no. plastic bottle C ₂ H ₆ : 6 no. charcoal tubes CO: 1 no. Bladder	Date-Receipt of Sample 04/03/2021
Sampling Procedure	As per Method Reference	Date-Start of Analysis 04/03/2021
Order Reference	As per PO No. PNP/February/2019- 2020/013 Dated 26/02/2020	Date-Completion of Analysis 08/03/2021

Meteorological Data / Environmental Conditions

Average Wind Velocity 9 km/h	Wind Direction W	Relative Humidity (Max./Min.): 61/51 %	Temperature (Max./Min.): 35/19°C	Duration of Survey 24 h
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CHEMICAL TESTING

Parameter	Results	NAAQS # 2009	Unit	Method
Sulphur Dioxide (SO ₂)	7.2	80	µg/m ³	IS 5182 (Part 2): 2001, RA 2017
Nitrogen Dioxide (NO ₂)	28.3	80	µg/m ³	IS 5182 (Part 6): 2008, RA 2017
Particulate Matter (size less than 10 µm) or PM ₁₀	369	100	µg/m ³	IS 5182 (Part 23): 2006, RA 2017
Particulate Matter (size less than 2.5µm) or PM _{2.5}	142	60	µg/m ³	USEPA CFR 40, Part 50, Appendix I
Ozone (O ₃)	29.5	180	µg/m ³	AWMA 3rd Ed. Method 40, Page no. 403, 1988
Lead (Pb)	<0.02	1	µg/m ³	EPA/625/R-96/010 a Compendium Method ID-316 3.2, Jun 1995
Carbon Monoxide (CO)	1.69	4	mg/m ³	CPCB Guidelines, 37/2012-Q, Page no. 6
Ammonia (NH ₃)	<4	400	µg/m ³	NIC/C/SAP/AA-7
Benzene (C ₆ H ₆)	2.41	5	µg/m ³	IS 5182 (Part 8): 2008, RA 2017
Benzo (a) Pyrene (BaP) - particulate phase only	<0.2	1	ng/m ³	IS 5182 (Part 12): 2004, RA 2015
Arsenic (As)	<0.3	6	ng/m ³	EPA/625/R-96/010 a Compendium Method ID-316 3.2, Jun 1995
Nickel (Ni)	<3	20	ng/m ³	EPA/625/R-96/010 a Compendium Method ID-316 3.2, Jun 1995

TWA Time Weighted Average
 # NAAQS (National Ambient Air Quality Standards (Industrial, Residential, Rural and other Area) specified as: 24 hours TWA in case of Sulphur Dioxide, Nitrogen Dioxide, PM₁₀, PM_{2.5}, Lead and Ammonia, 1 hour TWA in case of Carbon Monoxide and Ozone, Annual TWA in case of Benzene, Benzo (a) Pyrene, Arsenic and Nickel

Ninad Soundankar
 Ninad Soundankar
 Technical Manager (Chemical)

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AMBIENT AIR QUALITY MONITORING REPORT

Sample ID: AA/03/21/5121	Report No: AA/03/21/5121	Report Date	06/03/2021
Name & Address of Customer	PNP Maritime Services Private Limited 2nd Floor, Lansdowne House Building, M.B. Marg, Near Regal Cinema, Apollo Bunder, Colaba, Mumbai - 400 001		
Sample Collected by	Laboratory	Sample Description/ Type	Ambient Air (Group: Atmospheric Pollution, Sub Group: Ambient Air Quality)
Sampling Location	Near Jetty No. 2	Date-Sampling	01/03/2021 to 02/03/2021
Sample Quantity/ Packing	PM ₁₀ , BaP, Metals: Filter paper 1 x 3 no. PM _{2.5} : Filter paper 1 x 1 no. SO ₂ : 30 ml x 6 no. plastic bottle NO ₂ : 30 ml x 6 no. plastic bottle NH ₃ : 10 ml x 24 no. plastic bottle Ozone: 10 ml x 1 no. plastic bottle C ₆ H ₆ : 6 no. charcoal tubes CO: 1 no. Bladder	Date-Receipt of Sample	04/03/2021
Sampling Procedure:	As per Method Reference	Date-Start of Analysis	04/03/2021
Order Reference	As per PO No. PNP/February/2019- 2020/013 Dated 26/02/2020	Date-Completion of Analysis	06/03/2021

Meteorological Data / Environmental Conditions

Average Wind Velocity 9 km/h	Wind Direction W	Relative Humidity (Max./Min.): 61/51 %	Temperature (Max./Min.): 35/19°C	Duration of Survey 24 h
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CHEMICAL TESTING					
Parameter	Results	NAAQS # 2009	Unit	Method	
Sulphur Dioxide (SO ₂)	7.7	80	µg/m ³	IS 582 (Part 2): 2006, RA 2017	
Nitrogen Dioxide (NO ₂)	25.3	80	µg/m ³	IS 582 (Part 2): 2006, RA 2017	
Particulate Matter (size less than 10 µm) or PM ₁₀	365	100	µg/m ³	IS 582 (Part 23): 2006, RA 2017	
Particulate Matter (size less than 2.5µm) or PM _{2.5}	153	60	µg/m ³	US EPA CFR 40, Part 50, Appendix I	
Ozone (O ₃)	33.7	180	µg/m ³	AWMA 3rd Ed., Method 40, Page no. 402, 1988	
Lead (Pb)	<0.02	1	µg/m ³	EPA/625/R-95/010 a Compendium Method 0-316 3.2, Jun 1999	
Carbon Monoxide (CO)	1.83	4	mg/m ³	CPCB Guidelines: 37/2012 (2), Page no.16	
Ammonia (NH ₃)	<4	400	µg/m ³	AEC/C/SAP/AA-7	
Benzene (C ₆ H ₆)	1.48	5	µg/m ³	IS 582 (Part 11): 2006, RA 2017	
Benzo (a) Pyrene (BaP) - particulate phase only	<0.2	1	ng/m ³	IS 582 (Part 12): 2004, RA 2016	
Arsenic (As)	<0.3	6	ng/m ³	EPA/625/R-95/010 a Compendium Method 0-316 3.2, Jun 1999	
Nickel (Ni)	<3	20	ng/m ³	EPA/625/R-95/010 a Compendium Method 0-316 3.2, Jun 1999	

TWA Time Weighted Average
 # NAAQS (National Ambient Air Quality Standards (Industrial, Residential, Rural and other Area) specified as: 24 hours TWA in case of Sulphur Dioxide, Nitrogen Dioxide, PM₁₀, PM_{2.5}, Lead and Ammonia, 1 hour TWA in case of Carbon Monoxide and Ozone, Annual TWA in case of Benzene, Benzo (a) Pyrene, Arsenic and Nickel.


 Ninad Soundankar
 Technical Manager (Chemical)
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AMBIENT AIR QUALITY MONITORING REPORT

Sample ID: AA/03/21/5122	Report No: AA/03/21/5122	Report Date	08/03/2021
Name & Address of Customer	PNP Maritime Services Private Limited 2nd Floor, Lansdowne House Building, M.B. Marg, Near Regal Cinema, Apollo Bunder, Colaba, Mumbai - 400 001		
Sample Collected by	Laboratory	Sample Description/ Type	Ambient Air (Group: Atmospheric Pollution, Sub Group: Ambient Air Quality)
Sampling Location	Near Jetty No. 3	Date-Sampling	01/03/2021 to 02/03/2021
Sample Quantity/ Packing	PM ₁₀ , BaP, Metals: Filter paper 1 x 3 no. PM _{2.5} : Filter paper 1 x 1 no. SO ₂ : 30 ml x 6 no. plastic bottle NO ₂ : 30 ml x 6 no. plastic bottle NH ₃ : 10 ml x 24 no. plastic bottle Ozone: 10 ml x 1 no. plastic bottle C ₆ H ₆ : 6 no. charcoal tubes CO: 1 no. Bladder	Date-Receipt of Sample	04/03/2021
Sampling Procedure	As per Method Reference	Date-Start of Analysis	04/03/2021
Order Reference	As per PO No. PNP/February/2019- 2020/013 Dated 26/02/2020	Date-Completion of Analysis	08/03/2021

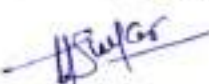
Meteorological Data / Environmental Conditions

Average Wind Velocity 9 km/h	Wind Direction W	Relative Humidity (Max./Min.): 61/51 %	Temperature (Max./Min.): 35/19°C	Duration of Survey 24 h
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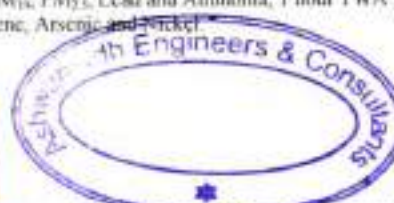
CHEMICAL TESTING

Parameter	Results	NAAQS # 2009	Unit	Method
Sulphur Dioxide (SO ₂)	8.4	80	µg/m ³	IS 5182 (Part 2): 2001, RA 2017
Nitrogen Dioxide (NO ₂)	30.9	80	µg/m ³	IS 5182 (Part 6): 2006, RA 2017
Particulate Matter (size less than 10 µm) or PM ₁₀	383	100	µg/m ³	IS 5182 (Part 23): 2006, RA 2017
Particulate Matter (size less than 2.5µm) or PM _{2.5}	174	60	µg/m ³	IS 5182 (Part 23): 2006, RA 2017
Ozone (O ₃)	25.3	180	µg/m ³	AWMA 3rd Ed., Method 410, Page no. 403, 1988
Lead (Pb)	<0.02	1	µg/m ³	EPA/625/R-96/010 a Compendium Method 10-318 3.2, Jun 1999
Carbon Monoxide (CO)	1.31	4	mg/m ³	CPCB Guidelines, 27/2012-13, Page no.16
Ammonia (NH ₃)	<4	400	µg/m ³	AEC/C/SAP/AA-7
Benzene (C ₆ H ₆)	2.03	5	µg/m ³	IS 5182 (Part 11): 2006, RA 2017
Benzo (a) Pyrene (BaP) - particulate phase only	<0.2	1	ng/m ³	IS 5182 (Part 12): 2004, RA 2019
Arsenic (As)	<0.3	6	ng/m ³	EPA/625/R-96/010 a Compendium Method 10-318 3.2, Jun 1999
Nickel (Ni)	<3	20	ng/m ³	EPA/625/R-96/010 a Compendium Method 10-318 3.2, Jun 1999

TWA Time Weighted Average
 # NAAQS (National Ambient Air Quality Standards (Industrial, Residential, Rural and other Area) specified as: 24 hours TWA in case of Sulphur Dioxide, Nitrogen Dioxide, PM₁₀, PM_{2.5}, Lead and Ammonia, 1 hour TWA in case of Carbon Monoxide and Ozone, Annual TWA in case of Benzene, Benzo (a) Pyrene, Arsenic and Nickel


 Ninad Soundankar

Technical Manager (Chemical)
 Reviewed & Authorised by



End of Report

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AMBIENT AIR QUALITY MONITORING REPORT

Sample ID: AA/03/21/5123	Report No: AA/03/21/5123	Report Date	08/03/2021
Name & Address of Customer	PNP Maritime Services Private Limited 2nd Floor, Lansdowne House Building, M.B. Marg, Near Regal Cinema, Apollo Bunder, Colaba, Mumbai - 400 001		
Sample Collected by	Laboratory	Sample Description/ Type	Ambient Air (Group: Atmospheric Pollution, Sub Group: Ambient Air Quality)
Sampling Location	Near Jetty No.5	Date-Sampling	01/03/2021 to 02/03/2021
Sample Quantity/ Packing	PM ₁₀ , BaP, Metals: Filter paper 1 x 3 no. PM _{2.5} : Filter paper 1 x 1 no. SO ₂ : 30 ml x 6 no. plastic bottle NO ₂ : 30 ml x 6 no. plastic bottle NH ₃ : 10 ml x 24 no. plastic bottle Ozone: 10 ml x 1 no. plastic bottle C ₆ H ₆ : 6 no. charcoal tubes CO: 1 no. Bladder	Date-Receipt of Sample	04/03/2021
Sampling Procedure	As per Method Reference	Date-Start of Analysis	04/03/2021
Order Reference	As per PO No. PNP/February/2019- 2020/013 Dated 26/02/2020	Date-Completion of Analysis	08/03/2021

Meteorological Data / Environmental Conditions

Average Wind Velocity 9 km/h	Wind Direction W	Relative Humidity (Max./Min.): 61/51 %	Temperature (Max./Min.): 35/19°C	Duration of Survey 24 h
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CHEMICAL TESTING

Parameter	Results	NAAQS # 2009	Unit	Method
Sulphur Dioxide (SO ₂)	6.5	80	µg/m ³	IS 5182 (Part 2): 2001, RA 2017
Nitrogen Dioxide (NO ₂)	24.3	80	µg/m ³	IS 5182 (Part 6): 2006, RA 2017
Particulate Matter (size less than 10 µm) or PM ₁₀	334	100	µg/m ³	IS 5182 (Part 22): 2006, RA 2017
Particulate Matter (size less than 2.5µm) or PM _{2.5}	132	60	µg/m ³	BSEPA CFR 40, Part 50, Appendix L
Ozone (O ₃)	26.7	180	µg/m ³	AWMA 2nd Ed, Method 401, Page no. 403, 1988
Lead (Pb)	<0.02	1	µg/m ³	EPA/625/R-96/010 a Compendium Method 10-31 & 3.2, Jan 1999
Carbon Monoxide (CO)	1.83	4	mg/m ³	CPCB Guidelines: 37/2012-13, Page no.16
Ammonia (NH ₃)	<4	400	µg/m ³	AEC/C/SAP/AA-7
Benzene (C ₆ H ₆)	1.32	5	µg/m ³	IS 5182 (Part 8): 2006, RA 2017
Benzo (a) Pyrene (BaP) - particulate phase only	<0.2	1	ng/m ³	IS 5182 (Part 12): 2004, RA 2019
Arsenic (As)	<0.3	6	ng/m ³	EPA/625/R-96/010 a Compendium Method 10-31 & 3.2, Jan 1999
Nickel (Ni)	<3	20	ng/m ³	EPA/625/R-96/010 a Compendium Method 10-31 & 3.2, Jan 1999

TWA Time Weighted Average

NAAQS (National Ambient Air Quality Standards (Industrial, Residential, Rural and other Area) specified as: 24 hours TWA in case of Sulphur Dioxide, Nitrogen Dioxide, PM₁₀, PM_{2.5}, Lead and Ammonia, 1 hour TWA in case of Carbon Monoxide and Ozone, Annual TWA in case of Benzene, Benzo (a) Pyrene, Arsenic and Nickel.

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 Reviewed & Authorised by



End of Report

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AMBIENT AIR QUALITY MONITORING REPORT

Sample ID: AA/03/21/5124	Report No.: AA/03/21/5124	Report Date	08/03/2021
Name & Address of Customer	PNP Maritime Services Private Limited 2nd Floor, Lansdowne House Building, M.B. Marg, Near Regal Cinema, Apollo Bunder, Colaba, Mumbai - 400 001		
Sample Collected by	Laboratory	Sample Description/ Type	Ambient Air (Group: Atmospheric Pollution, Sub Group: Ambient Air Quality)
Sampling Location	Near Weight Bridge	Date-Sampling	01/03/2021 to 02/03/2021
Sample Quantity/ Packing	PM ₁₀ , BaP, Metals: Filter paper 1 x 3 no. PM _{2.5} : Filter paper 1 x 1 no. SO ₂ : 30 ml x 6 no. plastic bottle NO ₂ : 30 ml x 6 no. plastic bottle NH ₃ : 10 ml x 24 no. plastic bottle Ozone: 10 ml x 1 no. plastic bottle C ₆ H ₆ : 6 no. charcoal tubes CO: 1 no. Bladder	Date-Receipt of Sample	04/03/2021
Sampling Procedure	As per Method Reference	Date-Start of Analysis	04/03/2021
Order Reference	As per PO No. PNP/February/2019- 2020/013 Dated 26/02/2020	Date-Completion of Analysis	08/03/2021

Meteorological Data / Environmental Conditions

Average Wind Velocity 9 km/h	Wind Direction W	Relative Humidity (Max./Min.): 61/51 %	Temperature (Max./Min.): 35/19°C	Duration of Survey 24 h
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CHEMICAL TESTING

Parameter	Results	NAAQS # 2009	Unit	Method
Sulphur Dioxide (SO ₂)	8.8	80	µg/m ³	IS 5182 (Part 2): 2001, RA 2017
Nitrogen Dioxide (NO ₂)	34.3	80	µg/m ³	IS 5182 (Part 6): 2006, RA 2017
Particulate Matter (size less than 10 µm) or PM ₁₀	379	100	µg/m ³	IS 5182 (Part 73): 2006, RA 2017
Particulate Matter (size less than 2.5µm) or PM _{2.5}	163	60	µg/m ³	USEPA CFR 40, Part 50, Appendix L
Ozone (O ₃)	33.7	180	µg/m ³	AMMA 3rd Ed. Method 40 Page no. 403, 1998
Lead (Pb)	<0.02	1	µg/m ³	EPA/625/R-96/010 a Compendium Method ID-316 3.2, Jan 1998
Carbon Monoxide (CO)	2.8	4	mg/m ³	CPCB Guidelines, 37/2012-13, Page no.16
Ammonia (NH ₃)	<4	400	µg/m ³	AEC/C/SAP/AA-7
Benzene (C ₆ H ₆)	2.21	5	µg/m ³	IS 5182 (Part 11): 2006, RA 2017
Benzo (a) Pyrene (BaP) - particulate phase only	<0.2	1	ng/m ³	IS 5182 (Part 12): 2004, RA 2018
Arsenic (As)	<0.3	6	ng/m ³	EPA/625/R-96/010 a Compendium Method ID-316 3.2, Jan 1998
Nickel (Ni)	<3	20	ng/m ³	EPA/625/R-96/010 a Compendium Method ID-316 3.2, Jan 1998

TWA Time Weighted Average

NAAQS (National Ambient Air Quality Standards (Industrial, Residential, Rural and other Area) specified as: 24 hours TWA in case of Sulphur Dioxide, Nitrogen Dioxide, PM₁₀, PM_{2.5}, Lead and Ammonia, 1 hour TWA in case of Carbon Monoxide and Ozone, Annual TWA in case of Benzene, Benzo (a) Pyrene, Arsenic and Nickel.


 Ninad Soundankar
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 Reviewed & Authorised by



End of Report

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TC-5509



AMBIENT AIR QUALITY MONITORING REPORT

Sample ID: AA/03/21/5125	Report No: AA/03/21/5125	Report Date	08/03/2021
Name & Address of Customer	PNP Maritime Services Private Limited 2nd Floor, Lansdowne House Building, M.B. Marg, Near Regal Cinema, Apollo Bunder, Colaba, Mumbai - 400 001		
Sample Collected by	Laboratory	Sample Description/ Type	Ambient Air (Group: Atmospheric Pollution, Sub Group: Ambient Air Quality)
Sampling Location	Near Custom Building	Date-Sampling	01/03/2021 to 02/03/2021
Sample Quantity/ Packing	PM ₁₀ , BaP, Metals: Filter paper 1 x 3 no. PM _{2.5} : Filter paper 1 x 1 no. SO ₂ : 30 ml x 6 no. plastic bottle NO ₂ : 30 ml x 6 no. plastic bottle NH ₃ : 10 ml x 24 no. plastic bottle Ozone: 10 ml x 1 no. plastic bottle C ₆ H ₆ : 6 no. charcoal tubes CO: 1 no. Bladder	Date-Receipt of Sample	04/03/2021
Sampling Procedure	As per Method Reference	Date-Start of Analysis	04/03/2021
Order Reference	As per PO No. PNP/February/2019- 2020/013 Dated 26/02/2020	Date-Completion of Analysis	08/03/2021

Meteorological Data / Environmental Conditions

Average Wind Velocity 9 km/h	Wind Direction W	Relative Humidity (Max./Min.): 61/51 %	Temperature (Max./Min.): 35/19°C	Duration of Survey 24 h
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CHEMICAL TESTING

Parameter	Results	NAAQS # 2009	Unit	Method
Sulphur Dioxide (SO ₂)	7.4	80	µg/m ³	IS 5182 (Part 2): 2001, RA 2017
Nitrogen Dioxide (NO ₂)	26.8	80	µg/m ³	IS 5182 (Part 6): 2006, RA 2017
Particulate Matter (size less than 10 µm) or PM ₁₀	370	100	µg/m ³	IS 5182 (Part 23): 2006 RA 2017
Particulate Matter (size less than 2.5µm) or PM _{2.5}	134	60	µg/m ³	ESEPA CFR 40, Part 50, Appendix I
Ozone (O ₃)	36.5	180	µg/m ³	AWMA 3rd Ed. Method 48 Page no. 403/1988
Lead (Pb)	<0.02	1	µg/m ³	EPA/625/R-96/D10 a Compendium Method 10-31 & 3.2, Jan 1999
Carbon Monoxide (CO)	1.74	4	mg/m ³	EPCB Guidelines, 37/2012-13, Page no.16
Ammonia (NH ₃)	<4	400	µg/m ³	AEC/L/SAP/AA-7
Benzene (C ₆ H ₆)	1.80	5	µg/m ³	IS 5182 (Part 11): 2006, RA 2017
Benzo (a) Pyrene (BaP) - particulate phase only	<0.2	1	ng/m ³	IS 5182 (Part 12): 2004 RA 2019
Arsenic (As)	<0.3	6	ng/m ³	EPA/625/R-96/D10 a Compendium Method 10-31 & 3.2, Jan 1999
Nickel (Ni)	<3	20	ng/m ³	EPA/625/R-96/D10 a Compendium Method 10-31 & 3.2, Jan 1999

TWA Time Weighted Average
 # NAAQS (National Ambient Air Quality Standards (Industrial, Residential, Rural and other Area) specified as: 24 hours TWA in case of Sulphur Dioxide, Nitrogen Dioxide, PM₁₀, PM_{2.5}, Lead and Ammonia, 1 hour TWA in case of Carbon Monoxide and Ozone, Annual TWA in case of Benzene, Benzo (a) Pyrene, Arsenic and Nickel


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TC-5509



AMBIENT AIR QUALITY MONITORING REPORT

Sample ID: AA/03/21/5126	Report No: AA/03/21/5126	Report Date	08/03/2021
Name & Address of Customer	PNP Maritime Services Private Limited 2nd Floor, Lansdowne House Building, M.B. Marg, Near Regal Cinema, Apollo Bunder, Colaba, Mumbai - 400 001		
Sample Collected by	Laboratory	Sample Description/ Type	Ambient Air (Group: Atmospheric Pollution, Sub Group: Ambient Air Quality)
Sampling Location	Near Lal Gate	Date-Sampling	01/03/2021 to 02/03/2021
Sample Quantity/ Packing	PM ₁₀ , BaP, Metals: Filter paper 1 x 3 no. PM _{2.5} : Filter paper 1 x 1 no. SO ₂ : 30 ml x 6 no. plastic bottle NO ₂ : 30 ml x 6 no. plastic bottle NH ₃ : 10 ml x 24 no. plastic bottle Ozone: 10 ml x 1 no. plastic bottle C ₆ H ₆ : 6 no. charcoal tubes CO: 1 no. Bladder	Date-Receipt of Sample	04/03/2021
Sampling Procedure	As per Method Reference	Date-Start of Analysis	04/03/2021
Order Reference	As per PO No. PNP/February/2019- 2020/013 Dated 26/02/2020	Date-Completion of Analysis	08/03/2021

Meteorological Data / Environmental Conditions

Average Wind Velocity 9 km/h	Wind Direction W	Relative Humidity (Max./Min.): 61/51 %	Temperature (Max./Min.): 35/19°C	Duration of Survey 24 h
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CHEMICAL TESTING

Parameter	Results	NAAQS # 2009	Unit	Method
Sulphur Dioxide (SO ₂)	6.7	80	µg/m ³	IS 502 (Part 2): 2006, RA 2017
Nitrogen Dioxide (NO ₂)	28.9	80	µg/m ³	IS 502 (Part 6): 2006, RA 2017
Particulate Matter (size less than 10 µm) or PM ₁₀	384	100	µg/m ³	IS 502 (Part 23): 2006, RA 2017
Particulate Matter (size less than 2.5µm) or PM _{2.5}	153	60	µg/m ³	USEPA CFR 40, Part 50, Appendix I
Ozone (O ₃)	32.3	180	µg/m ³	NWMA 3rd Ed. Method A1, Page no. 403, 1999
Lead (Pb)	<0.02	1	µg/m ³	EPA/625/R-96/010 a Compendium Method 10-31 8 3.2, Jan 1999
Carbon Monoxide (CO)	1.83	4	mg/m ³	SPC8 Guidelines, 37/2012, 13, Page no 16
Ammonia (NH ₃)	<4	400	µg/m ³	AEC/C/SAP/AA-7
Benzene (C ₆ H ₆)	1.60	5	µg/m ³	IS 502 (Part 8): 2006, RA 2017
Benzo (a) Pyrene (BaP) - particulate phase only	<0.2	1	ng/m ³	IS 502 (Part 12): 2004, RA 2019
Arsenic (As)	<0.3	6	ng/m ³	EPA/625/R-96/010 a Compendium Method 10-31 8 3.2, Jan 1999
Nickel (Ni)	<3	20	ng/m ³	EPA/625/R-96/010 a Compendium Method 10-31 8 3.2, Jan 1999

TWA Time Weighted Average

* NAAQS (National Ambient Air Quality Standards (Industrial, Residential, Rural and other Area) specified as: 24 hours TWA in case of Sulphur Dioxide, Nitrogen Dioxide, PM₁₀, PM_{2.5}, Lead and Ammonia, 1 hour TWA in case of Carbon Monoxide and Ozone, Annual TWA in case of Benzene, Benzo (a) Pyrene, Arsenic and Nickel


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AMBIENT AIR QUALITY MONITORING REPORT

Sample ID: AA/03/21/5127	Report No: AA/03/21/5127	Report Date	08/03/2021
Name & Address of Customer	PNP Maritime Services Private Limited 2nd Floor, Lansdowne House Building, M.B. Marg, Near Regal Cinema, Apollo Bunder, Colaba, Mumbai - 400 001		
Sample Collected by	Laboratory	Sample Description/ Type	Ambient Air (Group: Atmospheric Pollution, Sub Group: Ambient Air Quality)
Sampling Location	Near DIL Main Gate	Date-Sampling	01/03/2021 to 02/03/2021
Sample Quantity/ Packing	PM ₁₀ , BaP, Metals: Filter paper 1 x 3 no. PM _{2.5} : Filter paper 1 x 1 no. SO ₂ : 30 ml x 6 no. plastic bottle NO ₂ : 30 ml x 6 no. plastic bottle NH ₃ : 10 ml x 24 no. plastic bottle Ozone: 10 ml x 1 no. plastic bottle C ₆ H ₆ : 6 no. charcoal tubes CO: 1 no. Bladder	Date-Receipt of Sample	04/03/2021
Sampling Procedure	As per Method Reference	Date-Start of Analysis	04/03/2021
Order Reference	As per PO No. PNP/February/2019- 2020/013 Dated 26/02/2020	Date-Completion of Analysis	08/03/2021

Meteorological Data / Environmental Conditions

Average Wind Velocity 9 km/h	Wind Direction W	Relative Humidity (Max./Min.): 61/51 %	Temperature (Max./Min.): 35/19°C	Duration of Survey 24 h
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CHEMICAL TESTING

Parameter	Results	NAAQS # 2009	Unit	Method
Sulphur Dioxide (SO ₂)	8.6	80	µg/m ³	IS 5182 (Part 2): 2006, RA 2017
Nitrogen Dioxide (NO ₂)	30	80	µg/m ³	IS 5182 (Part 6): 2006, RA 2017
Particulate Matter (size less than 10 µm) or PM ₁₀	391	100	µg/m ³	IS 5182 (Part 23): 2006, RA 2017
Particulate Matter (size less than 2.5 µm) or PM _{2.5}	163	60	µg/m ³	US EPA CFR 40, Part 50, Appendix I
Ozone (O ₃)	37.9	180	µg/m ³	AMMA, 3rd Ed., Method 40, Page no. 403, 1999
Lead (Pb)	<0.02	1	µg/m ³	EPA/625/R-96/010 a Compendium Method 10-31 B 3.2, Jun 1999
Carbon Monoxide (CO)	1.44	4	mg/m ³	CPCB Guidelines, 37/2012-43, Page no. 6
Ammonia (NH ₃)	<4	400	µg/m ³	AEC/C/SAP/AA-7
Benzene (C ₆ H ₆)	2.21	5	µg/m ³	IS 5182 (Part 8): 2006, RA 2017
Benzo (a) Pyrene (BaP) - particulate phase only	<0.2	1	ng/m ³	IS 5182 (Part 12): 2006, RA 2017
Arsenic (As)	<0.3	6	ng/m ³	EPA/625/R-96/010 a Compendium Method 10-31 B 3.2, Jun 1999
Nickel (Ni)	<3	20	ng/m ³	EPA/625/R-96/010 a Compendium Method 10-31 B 3.2, Jun 1999

TWA Time Weighted Average

NAAQS (National Ambient Air Quality Standards (Industrial, Residential, Rural and other Area) specified as: 24 hours TWA in case of Sulphur Dioxide, Nitrogen Dioxide, PM₁₀, PM_{2.5}, Lead and Ammonia, 1 hour TWA in case of Carbon Monoxide and Ozone, Annual TWA in case of Benzene, Benzo (a) Pyrene, Arsenic and Nickel

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AMBIENT AIR QUALITY MONITORING REPORT

Sample ID: AA/03/21/5128	Report No: AA/03/21/5128	Report Date	06/03/2021
Name & Address of Customer	PNP Maritime Services Private Limited 2nd Floor, Lansdowne House Building, M.B. Marg, Near Regal Cinema, Apollo Bunder, Colaba, Mumbai – 400 001		
Sample Collected by	Laboratory	Sample Description/ Type	Ambient Air (Group: Atmospheric Pollution, Sub Group: Ambient Air Quality)
Sampling Location	DIL Godown Back Side	Date-Sampling	01/03/2021 to 02/03/2021
Sample Quantity/ Packing	PM ₁₀ , BaP, Metals: Filter paper 1 x 3 no. PM _{2.5} : Filter paper 1 x 1 no. SO ₂ : 30 ml x 6 no. plastic bottle NO ₂ : 30 ml x 6 no. plastic bottle NH ₃ : 10 ml x 24 no. plastic bottle Ozone: 10 ml x 1 no. plastic bottle C ₆ H ₆ : 6 no. charcoal tubes CO: 1 no. Bladder	Date-Receipt of Sample	04/03/2021
Sampling Procedure	As per Method Reference	Date-Start of Analysis	04/03/2021
Order Reference	As per PO No. PNP/February/2019- 2020/013 Dated 26/02/2020	Date-Completion of Analysis	08/03/2021

Meteorological Data / Environmental Conditions

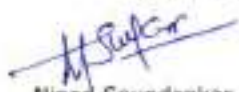
Average Wind Velocity 9 km/h	Wind Direction W	Relative Humidity (Max./Min.): 61/51 %	Temperature (Max./Min.): 35/19°C	Duration of Survey 24 h
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CHEMICAL TESTING

Parameter	Results	NAAQS # 2009	Unit	Method
Sulphur Dioxide (SO ₂)	8.1	80	µg/m ³	IS 5182 (Part 2): 2001, RA 2017
Nitrogen Dioxide (NO ₂)	25.3	80	µg/m ³	IS 5182 (Part 6): 2006, RA 2017
Particulate Matter (size less than 10 µm) or PM ₁₀	321	100	µg/m ³	IS 5182 (Part 23): 2006, RA 2017
Particulate Matter (size less than 2.5µm) or PM _{2.5}	119	60	µg/m ³	USEPA CFR 40 Part 50, Appendix I
Ozone (O ₃)	<19.6	180	µg/m ³	AWMA, 3rd Ed., Method 41 Page no. 403, 1988
Lead (Pb)	<0.02	1	µg/m ³	EPA/625/R-96/D10 a Compendium Method 10-31 § 3.2, Jan 1998
Carbon Monoxide (CO)	1.90	4	mg/m ³	CPCB Guidelines, 37/2012-13, Page no.16
Ammonia (NH ₃)	<4	400	µg/m ³	AEC/L/SAP/AA-7
Benzene (C ₆ H ₆)	1.60	5	µg/m ³	IS 5182 (Part 11): 2006, RA 2017
Benzo (a) Pyrene (BaP) - particulate phase only	<0.2	1	ng/m ³	IS 5182 (Part 12): 2004, RA 2015
Arsenic (As)	<0.3	6	ng/m ³	EPA/625/R-96/D10 a Compendium Method 10-31 § 3.2, Jan 1998
Nickel (Ni)	<3	20	ng/m ³	EPA/625/R-96/D10 a Compendium Method 10-31 § 3.2, Jan 1998

TWA Time Weighted Average

NAAQS (National Ambient Air Quality Standards (Industrial, Residential, Rural and other Area) specified as: 24 hours TWA in case of Sulphur Dioxide, Nitrogen Dioxide, PM₁₀, PM_{2.5}, Lead and Ammonia, 1 hour TWA in case of Carbon Monoxide and Ozone, Annual TWA in case of Benzene, Benzo (a) Pyrene, Arsenic and Nickel.


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AMBIENT AIR QUALITY MONITORING REPORT

Sample ID: AA/03/21/5299	Report No.: AA/03/21/5299	Report Date	11/03/2021
Name & Address of Customer	PNP Maritime Services Private Limited 2nd Floor, Lansdowne House Building, M.B. Marg, Near Regal Cinema, Apollo Bunder, Colaba, Mumbai - 400 001		
Sample Collected by	Laboratory	Sample Description/ Type	Ambient Air (Group: Atmospheric Pollution, Sub Group: Ambient Air Quality)
Sampling Location	Near Main Gate	Date-Sampling	04/03/2021 to 05/03/2021
Sample Quantity/ Packing	PM ₁₀ : BaP, Metals: Filter paper 1 x 3 no. PM _{2.5} : Filter paper 1 x 1 no. SO ₂ : 30 ml x 6 no. plastic bottle NO ₂ : 30 ml x 6 no. plastic bottle NH ₃ : 10 ml x 24 no. plastic bottle Ozone: 10 ml x 1 no. plastic bottle C ₆ H ₆ : 6 no. charcoal tubes CO: 1 no. Bladder	Date-Receipt of Sample	08/03/2021
Sampling Procedure	As per Method Reference	Date-Start of Analysis	08/03/2021
Order Reference	As per PO No. PNP/February/2019- 2020/013 Dated 26/02/2020	Date-Completion of Analysis	11/03/2021

Meteorological Data / Environmental Conditions

Average Wind Velocity 9 km/h	Wind Direction ENE	Relative Humidity (Max./Min.): 45/33 %	Temperature (Max./Min.): 39/21°C	Duration of Survey 24 h
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CHEMICAL TESTING

Parameter	Results	NAAQS # 2009	Unit	Method
Sulphur Dioxide (SO ₂)	7.7	80	µg/m ³	IS 5182 (Part 2): 2001, RA 2007
Nitrogen Dioxide (NO ₂)	30.2	80	µg/m ³	IS 5182 (Part 6): 2006, RA 2007
Particulate Matter (size less than 10 µm) or PM ₁₀	371	100	µg/m ³	IS 5182 (Part 23): 2006, RA 2007
Particulate Matter (size less than 2.5µm) or PM _{2.5}	164	60	µg/m ³	USEPA CFR 40, Part 50, Appendix I
Ozone (O ₃)	32.3	180	µg/m ³	AWMA 3rd Ed. Method 40 Page no. 403 1988
Lead (Pb)	<0.02	1	µg/m ³	EPA/825/R-96/010 a Compendium Method 10-31 B 3.2, Jan 1996
Carbon Monoxide (CO)	3.13	4	mg/m ³	CPCB Guidelines, 31/2002 13, Page no.16
Ammonia (NH ₃)	<4	400	µg/m ³	AEC/C/SAP/AA-3
Benzene (C ₆ H ₆)	2.22	5	µg/m ³	IS 5182 (Part II): 2006, RA 2007
Benzo (a) Pyrene (BaP) - particulate phase only	<0.2	1	ng/m ³	IS 5182 (Part 12): 2004, RA 2006
Arsenic (As)	<0.3	6	ng/m ³	EPA/825/R-96/010 a Compendium Method 10-31 B 3.2, Jan 1996
Nickel (Ni)	<3	20	ng/m ³	EPA/825/R-96/010 a Compendium Method 10-31 B 3.2, Jan 1996

TWA Time Weighted Average

NAAQS (National Ambient Air Quality Standards (Industrial, Residential, Rural and other Area) specified as: 24 hours TWA in case of Sulphur Dioxide, Nitrogen Dioxide, PM₁₀, PM_{2.5}, Lead and Ammonia, 1 hour TWA in case of Carbon Monoxide and Ozone, Annual TWA in case of Benzene, Benzo (a) Pyrene, Arsenic and Nickel


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AMBIENT AIR QUALITY MONITORING REPORT

Sample ID: AA/03/21/5300	Report No: AA/03/21/5300	Report Date	11/03/2021
Name & Address of Customer	PNP Maritime Services Private Limited 2nd Floor, Lansdowne House Building, M.B. Marg, Near Regal Cinema, Apollo Bunder, Colaba, Mumbai - 400 001		
Sample Collected by	Laboratory	Sample Description/ Type	Ambient Air (Group: Atmospheric Pollution, Sub Group: Ambient Air Quality)
Sampling Location	Near Jetty No. 1	Date-Sampling	04/03/2021 to 05/03/2021
Sample Quantity/ Packing	PM ₁₀ , BaP, Metals: Filter paper 1 x 3 no. PM _{2.5} : Filter paper 1 x 1 no. SO ₂ : 30 ml x 6 no. plastic bottle NO ₂ : 30 ml x 6 no. plastic bottle NH ₃ : 10 ml x 24 no. plastic bottle Ozone: 10 ml x 1 no. plastic bottle C ₆ H ₆ : 6 no. charcoal tubes CO: 1 no. Bladder	Date-Receipt of Sample	08/03/2021
Sampling Procedure	As per Method Reference	Date-Start of Analysis	08/03/2021
Order Reference	As per PO No. PNP/February/2019- 2020/013 Dated 26/02/2020	Date-Completion of Analysis	11/03/2021

Meteorological Data / Environmental Conditions

Average Wind Velocity 9 km/h	Wind Direction ENE	Relative Humidity (Max./Min.): 45/33 %	Temperature (Max./Min.): 39/21°C	Duration of Survey 24 h
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CHEMICAL TESTING				
Parameter	Results	NAAQS # 2009	Unit	Method
Sulphur Dioxide (SO ₂)	7.8	80	µg/m ³	IS 5082 (Part 2): 2001, RA 2017
Nitrogen Dioxide (NO ₂)	30	80	µg/m ³	IS 5082 (Part 6): 2006, RA 2017
Particulate Matter (size less than 10 µm) or PM ₁₀	371	100	µg/m ³	IS 5082 (Part 23): 2006, RA 2017
Particulate Matter (size less than 2.5µm) or PM _{2.5}	153	60	µg/m ³	USEPA CFR 40, Part 50, Appendix I
Ozone (O ₃)	32.3	180	µg/m ³	AWMA 3rd Ed. Method 40, Page no. 403.5099
Lead (Pb)	<0.02	1	µg/m ³	EPA/625/R-96/010 a Compendium Method 10-316.3.2, Jun 1999
Carbon Monoxide (CO)	1.74	4	mg/m ³	CPCB Guidelines: 37/2002-G3, Page no. 6
Ammonia (NH ₃)	<4	400	µg/m ³	NEC/C/SAP/AA-7
Benzene (C ₆ H ₆)	2.90	5	µg/m ³	IS 5082 (Part 11): 2006, RA 2017
Benzo (a) Pyrene (BaP) - particulate phase only	<0.2	1	ng/m ³	IS 5082 (Part 12): 2006, RA 2017
Arsenic (As)	<0.3	6	ng/m ³	EPA/625/R-96/010 a Compendium Method 10-316.3.2, Jun 1999
Nickel (Ni)	<3	20	ng/m ³	EPA/625/R-96/010 a Compendium Method 10-316.3.2, Jun 1999

TWA Time Weighted Average
 # NAAQS (National Ambient Air Quality Standards (Industrial, Residential, Rural and other Area) specified as: 24 hours TWA in case of Sulphur Dioxide, Nitrogen Dioxide, PM₁₀, PM_{2.5}, Lead and Ammonia, 1 hour TWA in case of Carbon Monoxide and Ozone, Annual TWA in case of Benzene, Benzo (a) Pyrene, Arsenic and Nickel

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TC-5509



AMBIENT AIR QUALITY MONITORING REPORT

Sample ID: AA/03/21/5301	Report No.: AA/03/21/5301	Report Date	11/03/2021
Name & Address of Customer	PNP Maritime Services Private Limited 2nd Floor, Lansdowne House Building, M.B. Marg, Near Regal Cinema, Apollo Bunder, Colaba, Mumbai - 400 001		
Sample Collected by	Laboratory	Sample Description/ Type	Ambient Air (Group: Atmospheric Pollution, Sub Group: Ambient Air Quality)
Sampling Location	Near Jetty No. 2	Date-Sampling	04/03/2021 to 05/03/2021
Sample Quantity/ Packing	PM ₁₀ , BaP, Metals: Filter paper 1 x 3 no. PM _{2.5} : Filter paper 1 x 1 no. SO ₂ : 30 ml x 6 no. plastic bottle NO ₂ : 30 ml x 6 no. plastic bottle NH ₃ : 10 ml x 24 no. plastic bottle Ozone: 10 ml x 1 no. plastic bottle C ₆ H ₆ : 6 no. charcoal tubes CO: 1 no. Bladder	Date-Receipt of Sample	08/03/2021
Sampling Procedure	As per Method Reference	Date-Start of Analysis	08/03/2021
Order Reference	As per PO No. PNP/February/2019- 2020/013 Dated 26/02/2020	Date-Completion of Analysis	11/03/2021

Meteorological Data / Environmental Conditions

Average Wind Velocity 9 km/h	Wind Direction ENE	Relative Humidity (Max./Min.): 45/33 %	Temperature (Max./Min.): 39/21°C	Duration of Survey 24 h
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CHEMICAL TESTING

Parameter	Results	NAAQS # 2009	Unit	Method
Sulphur Dioxide (SO ₂)	7.2	80	µg/m ³	IS 5882 (Part 7): 2000, RA 2007
Nitrogen Dioxide (NO ₂)	27.3	80	µg/m ³	IS 5882 (Part 6): 2006, RA 2007
Particulate Matter (size less than 10 µm) or PM ₁₀	374	100	µg/m ³	IS 5882 (Part 22): 2006, RA 2007
Particulate Matter (size less than 2.5µm) or PM _{2.5}	163	60	µg/m ³	US EPA CFR 40, Part 50, Appendix I
Ozone (O ₃)	30.9	180	µg/m ³	AWWA 3rd Ed. Method 40, Page no. 403/1988
Lead (Pb)	<0.02	1	µg/m ³	EPA/625/R-96/010 a Compendium Method 10-316 3.2, Jun 1999
Carbon Monoxide (CO)	1.68	4	mg/m ³	CPCB Guidelines, 31/2012-12, Page no.16
Ammonia (NH ₃)	<4	400	µg/m ³	AEC/C/SAP/AA-7
Benzene (C ₆ H ₆)	1.83	5	µg/m ³	IS 5882 (Part 10): 2006, RA 2007
Benzo (a) Pyrene (BaP) - particulate phase only	<0.2	1	ng/m ³	IS 5882 (Part 12): 2004, RA 2009
Arsenic (As)	<0.3	6	ng/m ³	EPA/625/R-96/010 a Compendium Method 10-316 3.2, Jun 1999
Nickel (Ni)	<3	20	ng/m ³	EPA/625/R-96/010 a Compendium Method 10-316 3.2, Jun 1999

TWA Time Weighted Average

NAAQS (National Ambient Air Quality Standards (Industrial, Residential, Rural and other Area) specified as: 24 hours TWA in case of Sulphur Dioxide, Nitrogen Dioxide, PM₁₀, PM_{2.5}, Lead and Ammonia, 1 hour TWA in case of Carbon Monoxide and Ozone, Annual TWA in case of Benzene, Benzo (a) Pyrene, Arsenic and Nickel

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TC-5509



AMBIENT AIR QUALITY MONITORING REPORT

Sample ID: AA/03/21/5302	Report No: AA/03/21/5302	Report Date	11/03/2021
Name & Address of Customer	PNP Maritime Services Private Limited 2nd Floor, Lansdowne House Building, M.B. Marg, Near Regal Cinema, Apollo Bunder, Colaba, Mumbai - 400 001		
Sample Collected by	Laboratory	Sample Description/ Type	Ambient Air (Group: Atmospheric Pollution, Sub Group: Ambient Air Quality)
Sampling Location	Near Jetty No. 3	Date-Sampling	04/03/2021 to 05/03/2021
Sample Quantity/ Packing	PM ₁₀ : BaP, Metals: Filter paper 1 x 3 no. PM _{2.5} : Filter paper 1 x 1 no. SO ₂ : 30 ml x 6 no. plastic bottle NO ₂ : 30 ml x 6 no. plastic bottle NH ₃ : 10 ml x 24 no. plastic bottle Ozone: 10 ml x 1 no. plastic bottle C ₆ H ₆ : 6 no. charcoal tubes CO: 1 no. Bladder	Date-Receipt of Sample	08/03/2021
Sampling Procedure	As per Method Reference	Date-Start of Analysis	08/03/2021
Order Reference	As per PO No. PNP/February/2019- 2020/013 Dated 26/02/2020	Date-Completion of Analysis	11/03/2021

Meteorological Data / Environmental Conditions

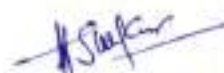
Average Wind Velocity 9 km/h	Wind Direction ENE	Relative Humidity (Max./Min.): 45/33 %	Temperature (Max./Min.): 39/21°C	Duration of Survey 24 h
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CHEMICAL TESTING

Parameter	Results	NAAQS # 2009	Unit	Method
Sulphur Dioxide (SO ₂)	7.8	80	µg/m ³	IS 5182 (Part 2): 2008, RA 2007
Nitrogen Dioxide (NO ₂)	33.4	80	µg/m ³	IS 5182 (Part 6): 2008, RA 2007
Particulate Matter (size less than 10 µm) or PM ₁₀	378	100	µg/m ³	IS 5182 (Part 23): 2008, RA 2007
Particulate Matter (size less than 2.5µm) or PM _{2.5}	163	60	µg/m ³	USEPA CFR 40, Part 50, Appendix I
Ozone (O ₃)	26.7	180	µg/m ³	AWMA 3rd Ed. Method 41, Page no. 403, 1998
Lead (Pb)	<0.02	1	µg/m ³	EPA/625/R-96/010 a Compendium Method 10-316 3.2, Jun 1996
Carbon Monoxide (CO)	1.43	4	mg/m ³	CPCR Guidelines, 27/2002-03, Page no.16
Ammonia (NH ₃)	<4	400	µg/m ³	AEC/C/SAP/AA-7
Benzene (C ₆ H ₆)	2.37	5	µg/m ³	IS 5182 (Part 11): 2008, RA 2007
Benzo (a) Pyrene (BaP) - particulate phase only	<0.2	1	ng/m ³	IS 5182 (Part 12): 2008, RA 2007
Arsenic (As)	<0.3	6	ng/m ³	EPA/625/R-96/010 a Compendium Method 10-316 3.2, Jun 1996
Nickel (Ni)	<3	20	ng/m ³	EPA/625/R-96/010 a Compendium Method 10-316 3.2, Jun 1996

TWA Time Weighted Average

NAAQS (National Ambient Air Quality Standards (Industrial, Residential, Rural and other Area) specified as: 24 hours TWA in case of Sulphur Dioxide, Nitrogen Dioxide, PM₁₀, PM_{2.5}, Lead and Ammonia, 1 hour TWA in case of Carbon Monoxide and Ozone, Annual TWA in case of Benzene, Benzo (a) Pyrene, Arsenic and Nickel.



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TC-5509



AMBIENT AIR QUALITY MONITORING REPORT

Sample ID: AA/03/21/5303	Report No: AA/03/21/5303	Report Date	11/03/2021
Name & Address of Customer	PNP Maritime Services Private Limited 2nd Floor, Lansdowne House Building, M.B. Marg, Near Regal Cinema, Apollo Bunder, Colaba, Mumbai - 400 001		
Sample Collected by	Laboratory	Sample Description/ Type	Ambient Air (Group: Atmospheric Pollution, Sub-Group: Ambient Air Quality)
Sampling Location	Near Jetty No.5	Date-Sampling	04/03/2021 to 05/03/2021
Sample Quantity/ Packing	PM ₁₀ , BaP, Metals: Filter paper 1 x 3 no. PM _{2.5} : Filter paper 1 x 1 no. SO ₂ : 30 ml x 6 no. plastic bottle NO ₂ : 30 ml x 6 no. plastic bottle NH ₃ : 10 ml x 24 no. plastic bottle Ozone: 10 ml x 1 no. plastic bottle C ₆ H ₆ : 6 no. charcoal tubes CO: 1 no. Bladder	Date-Receipt of Sample	08/03/2021
Sampling Procedure	As per Method Reference	Date-Start of Analysis	08/03/2021
Order Reference	As per PO No. PNP/February/2019- 2020/013 Dated 26/02/2020	Date-Completion of Analysis	11/03/2021

Meteorological Data / Environmental Conditions

Average Wind Velocity 9 km/h	Wind Direction ENE	Relative Humidity (Max./Min.): 45/33 %	Temperature (Max./Min.): 39/21°C	Duration of Survey 24 h
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CHEMICAL TESTING

Parameter	Results	NAAQS # 2009	Unit	Method
Sulphur Dioxide (SO ₂)	6.8	80	µg/m ³	IS 5182 (Part 2): 2006, RA 2017
Nitrogen Dioxide (NO ₂)	26.6	80	µg/m ³	IS 5182 (Part 6): 2006, RA 2017
Particulate Matter (size less than 10 µm) or PM ₁₀	344	100	µg/m ³	IS 5182 (Part 23): 2006, RA 2017
Particulate Matter (size less than 2.5µm) or PM _{2.5}	138	60	µg/m ³	USEPA CFR 40, Part 50, Appendix I
Ozone (O ₃)	29.5	180	µg/m ³	NWMA 3rd Ed. Method 40, Page no. 403, 1999
Lead (Pb)	<0.02	1	µg/m ³	EPA/625/R-96/010 a Compendium Method 10-316.3.2, Jun 1999
Carbon Monoxide (CO)	1.74	4	mg/m ³	CPCB Guidelines, 27/2002-G, Page no.16
Ammonia (NH ₃)	<4	400	µg/m ³	AEC/C/SAP/AA-7
Benzene (C ₆ H ₆)	2.62	5	µg/m ³	IS 5182 (Part 8): 2006, RA 2017
Benzo (a) Pyrene (BaP) - particulate phase only	<0.2	1	ng/m ³	IS 5182 (Part 2): 2004, RA 2019
Arsenic (As)	<0.3	6	ng/m ³	EPA/625/R-96/010 a Compendium Method 10-316.3.2, Jun 1999
Nickel (Ni)	<3	20	ng/m ³	EPA/625/R-96/010 a Compendium Method 10-316.3.2, Jun 1999

TWA Time Weighted Average

NAAQS (National Ambient Air Quality Standards (Industrial, Residential, Rural and other Area) specified as: 24 hours TWA in case of Sulphur Dioxide, Nitrogen Dioxide, PM₁₀, PM_{2.5}, Lead and Ammonia, 1 hour TWA in case of Carbon Monoxide and Ozone, Annual TWA in case of Benzene, Benzo (a) Pyrene, Arsenic and Nickel

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AMBIENT AIR QUALITY MONITORING REPORT

Sample ID: AA/03/21/5304	Report No.: AA/03/21/5304	Report Date	11/03/2021
Name & Address of Customer	PNP Maritime Services Private Limited 2nd Floor, Lansdowne House Building, M.B. Marg, Near Regal Cinema, Apollo Bunder, Colaba, Mumbai - 400 001.		
Sample Collected by	Laboratory	Sample Description/ Type	Ambient Air (Group: Atmospheric Pollution, Sub Group: Ambient Air Quality)
Sampling Location	Near Weight Bridge	Date-Sampling	04/03/2021 to 05/03/2021
Sample Quantity/ Packing	PM ₁₀ : BaP, Metals: Filter paper 1 x 3 no. PM _{2.5} : Filter paper 1 x 1 no. SO ₂ : 30 ml x 6 no. plastic bottle NO ₂ : 30 ml x 6 no. plastic bottle NH ₃ : 10 ml x 24 no. plastic bottle Ozone: 10 ml x 1 no. plastic bottle C ₆ H ₆ : 6 no. charcoal tubes CO: 1 no. Bladder	Date-Receipt of Sample	08/03/2021
Sampling Procedure	As per Method Reference	Date-Start of Analysis	08/03/2021
Order Reference	As per PO No. PNP/February/2019- 2020/013 Dated 26/02/2020	Date-Completion of Analysis	11/03/2021

Meteorological Data / Environmental Conditions

Average Wind Velocity 9 km/h	Wind Direction ENE	Relative Humidity (Max./Min.): 45/33 %	Temperature (Max./Min.): 39/21°C	Duration of Survey 24 h
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CHEMICAL TESTING

Parameter	Results	NAAQS # 2009	Unit	Method
Sulphur Dioxide (SO ₂)	8.2	80	µg/m ³	IS 5182 (Part 2): 2006, RA 2017
Nitrogen Dioxide (NO ₂)	35.8	80	µg/m ³	IS 5182 (Part 6): 2006, RA 2017
Particulate Matter (size less than 10 µm) or PM ₁₀	366	100	µg/m ³	IS 5182 (Part 20): 2006, RA 2017
Particulate Matter (size less than 2.5µm) or PM _{2.5}	153	60	µg/m ³	USEPA CFR 40, Part 50, Appendix I
Ozone (O ₃)	35.1	180	µg/m ³	AWMA 3rd Ed. Method 41, Page no. 402, 1998
Lead (Pb)	<0.02	1	µg/m ³	EPA/625/R-96/010 a Compendium Method 10-316 3.2, Jun 1999
Carbon Monoxide (CO)	2.2	4	mg/m ³	CPCB Guidelines, 3T/2002-03, Page no.6
Ammonia (NH ₃)	<4	400	µg/m ³	AEC/C/SAP/AA-1
Benzene (C ₆ H ₆)	1.88	5	µg/m ³	IS 5182 (Part 11): 2006, RA 2017
Benzo (a) Pyrene (BaP) - particulate phase only	<0.2	1	ng/m ³	IS 5182 (Part 07): 2004, RA 2016
Arsenic (As)	<0.3	6	ng/m ³	EPA/625/R-96/010 a Compendium Method 10-316 3.2, Jun 1999
Nickel (Ni)	<3	20	ng/m ³	EPA/625/R-96/010 a Compendium Method 10-316 3.2, Jun 1999

TWA Time Weighted Average
 # NAAQS (National Ambient Air Quality Standards (Industrial, Residential, Rural and other Area) specified as: 24 hours TWA in case of Sulphur Dioxide, Nitrogen Dioxide, PM₁₀, PM_{2.5}, Lead and Ammonia, 1 hour TWA in case of Carbon Monoxide and Ozone, Annual TWA in case of Benzene, Benzo (a) Pyrene, Arsenic, and Nickel


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AMBIENT AIR QUALITY MONITORING REPORT

Sample ID: AA/03/21/5305	Report No.: AA/03/21/5305	Report Date	11/03/2021
Name & Address of Customer	PNP Maritime Services Private Limited 2nd Floor, Lansdowne House Building, M.B. Marg, Near Regal Cinema, Apollo Bunder, Colaba, Mumbai - 400 001		
Sample Collected by	Laboratory	Sample Description/ Type	Ambient Air (Group: Atmospheric Pollution, Sub Group: Ambient Air Quality)
Sampling Location	Near Custom Building	Date-Sampling	04/03/2021 to 05/03/2021
Sample Quantity/ Packing	PM ₁₀ , BaP, Metals: Filter paper 1 x 3 no. PM _{2.5} : Filter paper 1 x 1 no. SO ₂ : 30 ml x 6 no. plastic bottle NO ₂ : 30 ml x 6 no. plastic bottle NH ₃ : 10 ml x 24 no. plastic bottle Ozone: 10 ml x 1 no. plastic bottle C ₆ H ₆ : 6 no. charcoal tubes CO: 1 no. Bladder	Date-Receipt of Sample	08/03/2021
Sampling Procedure	As per Method Reference	Date-Start of Analysis	08/03/2021
Order Reference	As per PO No. PNP/February/2019- 2020/013 Dated 26/02/2020	Date-Completion of Analysis	11/03/2021

Meteorological Data / Environmental Conditions

Average Wind Velocity 9 km/h	Wind Direction ENE	Relative Humidity (Max./Min.): 45/33 %	Temperature (Max./Min.): 39/21°C	Duration of Survey 24 h
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CHEMICAL TESTING

Parameter	Results	NAAQS # 2009	Unit	Method
Sulphur Dioxide (SO ₂)	7.9	80	µg/m ³	IS 5182 (Part 2): 2001, RA 2017
Nitrogen Dioxide (NO ₂)	27.5	80	µg/m ³	IS 5182 (Part 6): 2006, RA 2017
Particulate Matter (size less than 10 µm) or PM ₁₀	378	100	µg/m ³	IS 5182 (Part 23): 2006, RA 2017
Particulate Matter (size less than 2.5µm) or PM _{2.5}	148	60	µg/m ³	IS 5182 (Part 23): 2006, RA 2017
Ozone (O ₃)	37.9	180	µg/m ³	IS 5182 (Part 23): 2006, RA 2017
Lead (Pb)	<0.02	1	µg/m ³	EPA/625/R-96/010 a Compendium Method 10-31 6 3.2, Jan 1998
Carbon Monoxide (CO)	1.68	4	mg/m ³	CPCB Guidelines, 31/2002-03, Page no 16
Ammonia (NH ₃)	<4	400	µg/m ³	AEC/C/SAP/AA-7
Benzene (C ₆ H ₆)	1.68	5	µg/m ³	IS 5182 (Part 10): 2006, RA 2017
Benzo (a) Pyrene (BaP) - particulate phase only	<0.2	1	ng/m ³	IS 5182 (Part 12): 2004, RA 2017
Arsenic (As)	<0.3	6	ng/m ³	EPA/625/R-96/010 a Compendium Method 10-31 6 3.2, Jan 1998
Nickel (Ni)	<3	20	ng/m ³	EPA/625/R-96/010 a Compendium Method 10-31 6 3.2, Jan 1998

TWA Time Weighted Average

NAAQS (National Ambient Air Quality Standards (Industrial, Residential, Rural and other Area) specified as: 24 hours TWA in case of Sulphur Dioxide, Nitrogen Dioxide, PM₁₀, PM_{2.5}, Lead and Ammonia, 1 hour TWA in case of Carbon Monoxide and Ozone, Annual TWA in case of Benzene, Benzo (a) Pyrene, Arsenic and Nickel.

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AMBIENT AIR QUALITY MONITORING REPORT

Sample ID: AA/03/21/5306	Report No: AA/03/21/5306	Report Date: 11/03/2021
Name & Address of Customer	PNP Maritime Services Private Limited 2nd Floor, Lansdowne House Building, M.B. Marg, Near Regal Cinema, Apollo Bunder, Colaba, Mumbai - 400 001	
Sample Collected by	Laboratory	Sample Description/ Type Ambient Air (Group: Atmospheric Pollution, Sub Group: Ambient Air Quality)
Sampling Location	Near Lal Gate	Date-Sampling 04/03/2021 to 05/03/2021
Sample Quantity/ Packing	PM ₁₀ , BaP, Metals: Filter paper 1 x 3 no. PM _{2.5} : Filter paper 1 x 1 no. SO ₂ : 30 ml x 6 no. plastic bottle NO ₂ : 30 ml x 6 no. plastic bottle NH ₃ : 10 ml x 24 no. plastic bottle Ozone: 10 ml x 1 no. plastic bottle C ₆ H ₆ : 6 no. charcoal tubes CO: 1 no. Bladder	Date-Receipt of Sample 08/03/2021
Sampling Procedure	As per Method Reference	Date-Start of Analysis 08/03/2021
Order Reference	As per PO No. PNP/February/2019- 2020/013 Dated 26/02/2020	Date-Completion of Analysis 11/03/2021

Meteorological Data / Environmental Conditions

Average Wind Velocity 9 km/h	Wind Direction ENE	Relative Humidity (Max./Min.): 45/33 %	Temperature (Max./Min.): 39/21°C	Duration of Survey 24 h
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CHEMICAL TESTING				
Parameter	Results	NAAQS # 2009	Unit	Method
Sulphur Dioxide (SO ₂)	7.3	80	µg/m ³	IS 5082 (Part 2): 2001 RA 2007
Nitrogen Dioxide (NO ₂)	30.2	80	µg/m ³	IS 5082 (Part 6): 2006 RA 2007
Particulate Matter (size less than 10 µm) or PM ₁₀	374	100	µg/m ³	IS 5082 (Part 23): 2006 RA 2007
Particulate Matter (size less than 2.5µm) or PM _{2.5}	168	60	µg/m ³	USEPA CFR 40, Part 50, Appendix I
Ozone (O ₃)	35.1	180	µg/m ³	AWMA 3rd Ed. Method 40, Page no. 403 1990
Lead (Pb)	<0.02	1	µg/m ³	EPA/625/R-95/010 a Compendium Method 0-316 3.2, Jun 1999
Carbon Monoxide (CO)	1.79	4	mg/m ³	CPCB Guidelines, 27/2002-03, Page no.16
Ammonia (NH ₃)	<4	400	µg/m ³	AEC/C/SAP/AA-7
Benzene (C ₆ H ₆)	2.03	5	µg/m ³	IS 5082 (Part 10): 2006 RA 2007
Benzo (a) Pyrene (BaP) - particulate phase only	<0.2	1	ng/m ³	IS 5082 (Part 02): 2004 RA 2009
Arsenic (As)	<0.3	6	ng/m ³	EPA/625/R-95/010 a Compendium Method 0-316 3.2, Jun 1999
Nickel (Ni)	<3	20	ng/m ³	EPA/625/R-95/010 a Compendium Method 0-316 3.2, Jun 1999

TWA Time Weighted Average
 # NAAQS (National Ambient Air Quality Standards (Industrial, Residential, Rural and other Area) specified as: 24 hours TWA in case of Sulphur Dioxide, Nitrogen Dioxide, PM₁₀, PM_{2.5}, Lead and Ammonia, 1 hour TWA in case of Carbon Monoxide and Ozone, Annual TWA in case of Benzene, Benzo (a) Pyrene, Arsenic and Nickel.

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AMBIENT AIR QUALITY MONITORING REPORT

Sample ID: AA/03/21/5307	Report No: AA/03/21/5307	Report Date	11/03/2021
Name & Address of Customer	PNP Maritime Services Private Limited 2nd Floor, Lansdowne House Building, M.B. Marg, Near Regal Cinema, Apollo Bunder, Colaba, Mumbai - 400 001		
Sample Collected by	Laboratory	Sample Description/ Type	Ambient Air (Group: Atmospheric Pollution, Sub Group: Ambient Air Quality)
Sampling Location	Near DIL Main Gate	Date-Sampling	04/03/2021 to 05/03/2021
Sample Quantity/ Packing	PM ₁₀ , BaP, Metals: Filter paper 1 x 3 no. PM _{2.5} : Filter paper 1 x 1 no. SO ₂ : 30 ml x 6 no. plastic bottle NO ₂ : 30 ml x 6 no. plastic bottle NH ₃ : 10 ml x 24 no. plastic bottle Ozone: 10 ml x 1 no. plastic bottle C ₆ H ₆ : 6 no. charcoal tubes CO: 1 no. Bladder	Date-Receipt of Sample	08/03/2021
Sampling Procedure	As per Method Reference	Date-Start of Analysis	08/03/2021
Order Reference	As per PO No. PNP/February/2019- 2020/013 Dated 26/02/2020	Date-Completion of Analysis	11/03/2021

Meteorological Data / Environmental Conditions

Average Wind Velocity 9 km/h	Wind Direction ENE	Relative Humidity (Max./Min.): 45/33 %	Temperature (Max./Min.): 39/21°C	Duration of Survey 24 h.
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CHEMICAL TESTING

Parameter	Results	NAAQS # 2009	Unit	Method
Sulphur Dioxide (SO ₂)	8.4	80	µg/m ³	IS 5182 (Part 2): 2001, RA 2017
Nitrogen Dioxide (NO ₂)	32.1	80	µg/m ³	IS 5182 (Part 6): 2006, RA 2017
Particulate Matter (size less than 10 µm) or PM ₁₀	372	100	µg/m ³	IS 5182 (Part 22): 2006, RA 2017
Particulate Matter (size less than 2.5µm) or PM _{2.5}	160	60	µg/m ³	USEPA CFR 40, Part 50, Appendix I
Ozone (O ₃)	36.5	180	µg/m ³	AWMA 3rd Ed., Method 40 Page no. 403, 1998
Lead (Pb)	<0.02	1	µg/m ³	EPA/625/R-96/D10 a Compendium Method 10-31 6 3.2, Jun 1999
Carbon Monoxide (CO)	1.64	4	mg/m ³	CPCB Guidelines 37/2017-G, Page no 16
Ammonia (NH ₃)	<4	400	µg/m ³	AEC/C/SAP/M-7
Benzene (C ₆ H ₆)	1.64	5	µg/m ³	IS 5182 (Part 10): 2006, RA 2017
Benzo (a) Pyrene (BaP) - particulate phase only	<0.2	1	ng/m ³	IS 5182 (Part 12): 2004, RA 2019
Arsenic (As)	<0.3	6	ng/m ³	EPA/625/R-96/D10 a Compendium Method 10-31 6 3.2, Jun 1999
Nickel (Ni)	<3	20	ng/m ³	EPA/625/R-96/D10 a Compendium Method 10-31 6 3.2, Jun 1999

TWA Time Weighted Average

NAAQS (National Ambient Air Quality Standards (Industrial, Residential, Rural and other Area) specified as: 24 hours TWA in case of Sulphur Dioxide, Nitrogen Dioxide, PM₁₀, PM_{2.5}, Lead and Ammonia, 1 hour TWA in case of Carbon Monoxide and Ozone, Annual TWA in case of Benzene, Benzo (a) Pyrene, Arsenic and Nickel

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AMBIENT AIR QUALITY MONITORING REPORT

Sample ID: AA/03/21/5308	Report No.: AA/03/21/5308	Report Date	11/03/2021
Name & Address of Customer	PNP Maritime Services Private Limited 2nd Floor, Lansdowne House Building, M.B. Marg, Near Regal Cinema, Apollo Bunder, Colaba, Mumbai - 400 001		
Sample Collected by	Laboratory	Sample Description/ Type	Ambient Air (Group: Atmospheric Pollution, Sub Group: Ambient Air Quality)
Sampling Location	DIL Godown Back Side	Date-Sampling	04/03/2021 to 05/03/2021
Sample Quantity/ Packing	PM ₁₀ , BaP, Metals: Filter paper 1 x 3 no. PM _{2.5} : Filter paper 1 x 1 no. SO ₂ : 30 ml x 6 no. plastic bottle NO ₂ : 30 ml x 6 no. plastic bottle NH ₃ : 10 ml x 24 no. plastic bottle Ozone: 10 ml x 1 no. plastic bottle C ₆ H ₆ : 6 no. charcoal tubes CO: 1 no. Bladder	Date-Receipt of Sample	08/03/2021
Sampling Procedure	As per Method Reference	Date-Start of Analysis	08/03/2021
Order Reference	As per PO No. PNP/February/2019- 2020/013 Dated 26/02/2020	Date-Completion of Analysis	11/03/2021

Meteorological Data / Environmental Conditions

Average Wind Velocity 9 km/h	Wind Direction ENE	Relative Humidity (Max./Min.): 45/33 %	Temperature (Max./Min.): 39/21°C	Duration of Survey 24 h
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CHEMICAL TESTING

Parameter	Results	NAAQS # 2009	Unit	Method
Sulphur Dioxide (SO ₂)	8.4	80	µg/m ³	IS 5182 (Part 2): 2001, RA 2017
Nitrogen Dioxide (NO ₂)	27.7	80	µg/m ³	IS 5182 (Part 6): 2006, RA 2017
Particulate Matter (size less than 10 µm) or PM ₁₀	332	100	µg/m ³	IS 5182 (Part 23): 2006, RA 2017
Particulate Matter (size less than 2.5µm) or PM _{2.5}	128	60	µg/m ³	USEPA CFR 40, Part 50, Appendix I
Ozone (O ₃)	<19.6	180	µg/m ³	NWMA 3rd Ed. Method 41/ Page no. 403, 1999
Lead (Pb)	<0.02	1	µg/m ³	EPA/625/R-96/010 a Compendium Method 10-31 6 3.2, Jan 1999
Carbon Monoxide (CO)	1.4	4	mg/m ³	DPCB Guidelines, 27/2002-03, Page no.16
Ammonia (NH ₃)	<4	400	µg/m ³	AEC/C/SAP/AA-7
Benzene (C ₆ H ₆)	1.94	5	µg/m ³	IS 5182 (Part 8): 2006, RA 2017
Benzo (a) Pyrene (BaP) - particulate phase only	<0.2	1	ng/m ³	IS 5182 (Part 12): 2004, RA 2019
Arsenic (As)	<0.3	6	ng/m ³	EPA/625/R-96/010 a Compendium Method 10-31 6 3.2, Jan 1999
Nickel (Ni)	<3	20	ng/m ³	EPA/625/R-96/010 a Compendium Method 10-31 6 3.2, Jan 1999

TWA Time Weighted Average

NAAQS (National Ambient Air Quality Standards (Industrial, Residential, Rural and other Area) specified as: 24 hours TWA in case of Sulphur Dioxide, Nitrogen Dioxide, PM₁₀, PM_{2.5}, Lead and Ammonia, 1 hour TWA in case of Carbon Monoxide and Ozone, Annual TWA in case of Benzene, Benzo (a) Pyrene, Arsenic and Nickel

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AMBIENT AIR QUALITY MONITORING REPORT

Sample ID: AA/03/21/5446	Report No: AA/03/21/5446	Report Date	15/03/2021
Name & Address of Customer	PNP Maritime Services Private Limited 2nd Floor, Lansdowne House Building, M.B. Marg, Near Regal Cinema, Apollo Bunder, Colaba, Mumbai - 400 001		
Sample Collected by	Laboratory	Sample Description/ Type	Ambient Air (Group: Atmospheric Pollution, Sub Group: Ambient Air Quality)
Sampling Location	Near Main Gate	Date-Sampling	08/03/2021 to 09/03/2021
Sample Quantity/ Packing	PM ₁₀ : BaP, Metals: Filter paper 1 x 3 no. PM _{2.5} : Filter paper 1 x 1 no. SO ₂ : 30 ml x 6 no. plastic bottle NO ₂ : 30 ml x 6 no. plastic bottle NH ₃ : 10 ml x 24 no. plastic bottle Ozone: 10 ml x 1 no. plastic bottle C ₆ H ₆ : 6 no. charcoal tubes CO: 1 no. Bladder	Date-Receipt of Sample	11/03/2021
Sampling Procedure	As per Method Reference	Date-Start of Analysis	11/03/2021
Order Reference	As per PO No. PNP/February/2019- 2020/013 Dated 26/02/2020	Date-Completion of Analysis	15/03/2021

Meteorological Data / Environmental Conditions

Average Wind Velocity 8 km/h	Wind Direction E	Relative Humidity (Max./Min.): 56/44%	Temperature (Max./Min.): 36/19°C	Duration of Survey 24 h
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CHEMICAL TESTING

Parameter	Results	NAAQS # 2009	Unit	Method
Sulphur Dioxide (SO ₂)	7.3	80	µg/m ³	IS 5182 (Part 2): 2006, RA 2017
Nitrogen Dioxide (NO ₂)	31.3	80	µg/m ³	IS 5182 (Part 6): 2006, RA 2017
Particulate Matter (size less than 10 µm) or PM ₁₀	367	100	µg/m ³	IS 5182 (Part 23): 2006, RA 2017
Particulate Matter (size less than 2.5µm) or PM _{2.5}	157	60	µg/m ³	USEPA CFR 40, Part 50, Appendix I
Ozone (O ₃)	33.7	180	µg/m ³	AWMA 3rd Ed. Method 40, Page no. 403, 1988
Lead (Pb)	<0.02	1	µg/m ³	EPA/625/R-96/010 a Compendium Method 10-31 & 3.2, Jan 1999
Carbon Monoxide (CO)	2.98	4	mg/m ³	CPCB Guidelines, 37/2012-13, Page no.16
Ammonia (NH ₃)	<4	400	µg/m ³	AEC/C/SAP/AA-7
Benzene (C ₆ H ₆)	2.02	5	µg/m ³	IS 5182 (Part 10): 2006, RA 2017
Benzo (a) Pyrene (BaP) - particulate phase only	<0.2	1	ng/m ³	IS 5182 (Part 12): 2004, RA 2015
Arsenic (As)	<0.3	6	ng/m ³	EPA/625/R-96/010 a Compendium Method 10-31 & 3.2, Jan 1999
Nickel (Ni)	<3	20	ng/m ³	EPA/625/R-96/010 a Compendium Method 10-31 & 3.2, Jan 1999

TWA Time Weighted Average

NAAQS (National Ambient Air Quality Standards (Industrial, Residential, Rural and other Area) specified as: 24 hours TWA in case of Sulphur Dioxide, Nitrogen Dioxide, PM₁₀, PM_{2.5}, Lead and Ammonia, 1 hour TWA in case of Carbon Monoxide and Ozone, Annual TWA in case of Benzene, Benzo (a) Pyrene, Arsenic and Nickel

M. Soundankar

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TC-5509



AMBIENT AIR QUALITY MONITORING REPORT

Sample ID: AA/03/21/5447	Report No: AA/03/21/5447	Report Date	15/03/2021
Name & Address of Customer	PNP Maritime Services Private Limited 2nd Floor, Lansdowne House Building, M.B. Marg, Near Regal Cinema, Apollo Bunder, Colaba, Mumbai - 400 001		
Sample Collected by	Laboratory	Sample Description/ Type	Ambient Air (Group: Atmospheric Pollution, Sub Group: Ambient Air Quality)
Sampling Location	Near Jetty No. 1	Date-Sampling	08/03/2021 to 09/03/2021
Sample Quantity/ Packing	PM ₁₀ , BaP, Metals: Filter paper 1 x 3 no. PM _{2.5} : Filter paper 1 x 1 no. SO ₂ : 30 ml x 6 no. plastic bottle NO ₂ : 30 ml x 6 no. plastic bottle NH ₃ : 10 ml x 24 no. plastic bottle Ozone: 10 ml x 1 no. plastic bottle C ₆ H ₆ : 6 no. charcoal tubes CO: 1 no. Bladder	Date-Receipt of Sample	11/03/2021
Sampling Procedure	As per Method Reference	Date-Start of Analysis	11/03/2021
Order Reference	As per PO No. PNP/February/2019- 2020/013 Dated 26/02/2020	Date-Completion of Analysis	15/03/2021

Meteorological Data / Environmental Conditions

Average Wind Velocity 8 km/h	Wind Direction E	Relative Humidity (Max./Min.): 56/44%	Temperature (Max./Min.): 36/19°C	Duration of Survey 24 h
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CHEMICAL TESTING

Parameter	Results	NAAQS # 2009	Unit	Method
Sulphur Dioxide (SO ₂)	8.2	80	µg/m ³	IS 5182 (Part 2): 2001, RA 2007
Nitrogen Dioxide (NO ₂)	33.2	80	µg/m ³	IS 5182 (Part 6): 2006, RA 2007
Particulate Matter (size less than 10 µm) or PM ₁₀	386	160	µg/m ³	IS 5182 (Part 23): 2006, RA 2007
Particulate Matter (size less than 2.5µm) or PM _{2.5}	167	60	µg/m ³	USEPA CFR 40, Part 50, Appendix I
Ozone (O ₃)	29.5	180	µg/m ³	ANMA 3rd Ed., Method 40, Page no. 403 1999
Lead (Pb)	<0.02	1	µg/m ³	EPA/825/R-96/D00 a Compendium Method III-31 & 3.2, Jun 1999
Carbon Monoxide (CO)	1.74	4	mg/m ³	CPCB Guidelines, 37/2002-Q3, Page no.16
Ammonia (NH ₃)	<4	400	µg/m ³	AEC/C/SAP/AA-7
Benzene (C ₆ H ₆)	1.81	5	µg/m ³	IS 5182 (Part 11): 2006, RA 2007
Benzo (a) Pyrene (BaP) - particulate phase only	<0.2	1	ng/m ³	IS 5182 (Part 12): 2004, RA 2009
Arsenic (As)	<0.3	6	ng/m ³	EPA/825/R-96/D00 a Compendium Method III-31 & 3.2, Jun 1999
Nickel (Ni)	<3	20	ng/m ³	EPA/825/R-96/D00 a Compendium Method III-31 & 3.2, Jun 1999

TWA Time Weighted Average

NAAQS (National Ambient Air Quality Standards (Industrial, Residential, Rural and other Area) specified as: 24 hours TWA in case of Sulphur Dioxide, Nitrogen Dioxide, PM₁₀, PM_{2.5}, Lead and Ammonia, 1 hour TWA in case of Carbon Monoxide and Ozone, Annual TWA in case of Benzene, Benzo (a) Pyrene, Arsenic and Nickel


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TC-5509



AMBIENT AIR QUALITY MONITORING REPORT

Sample ID: AA/03/21/5448	Report No: AA/03/21/5448	Report Date	15/03/2021
Name & Address of Customer	PNP Maritime Services Private Limited 2nd Floor, Lansdowne House Building, M.B. Marg, Near Regal Cinema, Apollo Bunder, Colaba, Mumbai - 400 001		
Sample Collected by	Laboratory	Sample Description/ Type	Ambient Air (Group: Atmospheric Pollution, Sub Group: Ambient Air Quality)
Sampling Location	Near Jetty No. 2	Date-Sampling	08/03/2021 to 09/03/2021
Sample Quantity/ Packing	PM ₁₀ , BaP, Metals: Filter paper 1 x 3 no. PM _{2.5} : Filter paper 1 x 1 no. SO ₂ : 30 ml x 6 no. plastic bottle NO ₂ : 30 ml x 6 no. plastic bottle NH ₃ : 10 ml x 24 no. plastic bottle Ozone: 10 ml x 1 no. plastic bottle C ₆ H ₆ : 6 no. charcoal tubes CO: 1 no. Bladder	Date-Receipt of Sample	11/03/2021
Sampling Procedure	As per Method Reference	Date-Start of Analysis	11/03/2021
Order Reference	As per PO No. PNP/February/2019- 2020/013 Dated 26/02/2020	Date-Completion of Analysis	15/03/2021

Meteorological Data / Environmental Conditions

Average Wind Velocity 8 km/h	Wind Direction E	Relative Humidity (Max./Min.): 56/44%	Temperature (Max./Min.): 36/19°C	Duration of Survey 24 h
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CHEMICAL TESTING

Parameter	Results	NAAQS # 2009	Unit	Method
Sulphur Dioxide (SO ₂)	7.0	80	µg/m ³	IS 5982 (Part 2): 2006, RA 2017
Nitrogen Dioxide (NO ₂)	28.3	80	µg/m ³	IS 5982 (Part 6): 2006, RA 2017
Particulate Matter (size less than 10 µm) or PM ₁₀	388	100	µg/m ³	IS 5982 (Part 22): 2006, RA 2017
Particulate Matter (size less than 2.5 µm) or PM _{2.5}	155	60	µg/m ³	USEPA CFR 40, Part 50, Appendix I
Ozone (O ₃)	32.3	180	µg/m ³	AWMA 3rd Ed. Method 40, Page no. 402, 1999
Lead (Pb)	<0.02	1	µg/m ³	EPA/625/R-96/010 a Compendium Method 10-316 3.2, Jan 1996
Carbon Monoxide (CO)	1.78	4	mg/m ³	CPCB Guidelines, 27/2002-03, Page no.6
Ammonia (NH ₃)	<4	400	µg/m ³	AEC/C/SAP/AA-7
Benzene (C ₆ H ₆)	1.74	5	µg/m ³	IS 5982 (Part 11): 2006, RA 2017
Benzo (a) Pyrene (BaP) - particulate phase only	<0.2	1	ng/m ³	IS 5982 (Part 12): 2006, RA 2017
Arsenic (As)	<0.3	6	ng/m ³	EPA/625/R-96/010 a Compendium Method 10-316 3.2, Jan 1996
Nickel (Ni)	<3	20	ng/m ³	EPA/625/R-96/010 a Compendium Method 10-316 3.2, Jan 1996

TWA Time Weighted Average

NAAQS (National Ambient Air Quality Standards (Industrial, Residential, Rural and other Area) specified as: 24 hours TWA in case of Sulphur Dioxide, Nitrogen Dioxide, PM₁₀, PM_{2.5}, Lead and Ammonia, 1 hour TWA in case of Carbon Monoxide and Ozone, Annual TWA in case of Benzene, Benzo (a) Pyrene, Arsenic and Nickel


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AMBIENT AIR QUALITY MONITORING REPORT

Sample ID: AA/03/21/5449	Report No: AA/03/21/5449	Report Date	15/03/2021
Name & Address of Customer	PNP Maritime Services Private Limited 2nd Floor, Lansdowne House Building, M.B. Marg, Near Regal Cinema, Apollo Bunder, Colaba, Mumbai - 400 001		
Sample Collected by	Laboratory	Sample Description/ Type	Ambient Air (Group: Atmospheric Pollution, Sub Group: Ambient Air Quality)
Sampling Location	Near Jetty No. 3	Date-Sampling	08/03/2021 to 09/03/2021
Sample Quantity/ Packing	PM ₁₀ , BaP, Metals: Filter paper 1 x 3 no. PM _{2.5} : Filter paper 1 x 1 no. SO ₂ : 30 ml x 6 no. plastic bottle NO ₂ : 30 ml x 6 no. plastic bottle NH ₃ : 10 ml x 24 no. plastic bottle Ozone: 10 ml x 1 no. plastic bottle C ₆ H ₆ : 6 no. charcoal tubes CO: 1 no. Bladder	Date-Receipt of Sample	11/03/2021
Sampling Procedure	As per Method Reference	Date-Start of Analysis	11/03/2021
Order Reference	As per PO No. PNP/February/2019- 2020/013 Dated 26/02/2020	Date-Completion of Analysis	15/03/2021

Meteorological Data / Environmental Conditions


Average Wind Velocity 8 km/h	Wind Direction E	Relative Humidity (Max./Min.): 56/44%	Temperature (Max./Min.): 36/19°C	Duration of Survey 24 h
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CHEMICAL TESTING

Parameter	Results	NAAQS # 2009	Unit	Method
Sulphur Dioxide (SO ₂)	8.4	80	µg/m ³	IS 5182 (Part 2): 2001 RA 2007
Nitrogen Dioxide (NO ₂)	35.4	80	µg/m ³	IS 5182 (Part 6): 2006 RA 2007
Particulate Matter (size less than 10 µm) or PM ₁₀	381	100	µg/m ³	IS 5182 (Part 23): 2006 RA 2007
Particulate Matter (size less than 2.5µm) or PM _{2.5}	156	60	µg/m ³	USEPA CFR 40, Part 50, Appendix I
Ozone (O ₃)	25.3	180	µg/m ³	AWMA 3rd Ed. Method 40, Page no. 402/388
Lead (Pb)	<0.02	1	µg/m ³	EPA/625/P-96/010 a Compendium Method 10-31 E 3.2, Jan 1999
Carbon Monoxide (CO)	1.78	4	mg/m ³	CPCB Guidelines, 31/2012-13, Page no.16
Ammonia (NH ₃)	<4	400	µg/m ³	AEC/C/SAP/AA 7
Benzene (C ₆ H ₆)	1.82	5	µg/m ³	IS 5182 (Part 10): 2006 RA 2007
Benzo (a) Pyrene (BaP) - particulate phase only	<0.2	1	ng/m ³	IS 5182 (Part 12): 2004 RA 2015
Arsenic (As)	<0.3	6	ng/m ³	EPA/625/P-96/010 a Compendium Method 10-31 E 3.2, Jan 1999
Nickel (Ni)	<3	20	ng/m ³	EPA/625/P-96/010 a Compendium Method 10-31 E 3.2, Jan 1999

TWA Time Weighted Average

NAAQS (National Ambient Air Quality Standards (Industrial, Residential, Rural and other Area) specified as: 24 hours TWA in case of Sulphur Dioxide, Nitrogen Dioxide, PM₁₀, PM_{2.5}, Lead and Ammonia, 1 hour TWA in case of Carbon Monoxide and Ozone, Annual TWA in case of Benzene, Benzo (a) Pyrene, Arsenic and Nickel.



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AMBIENT AIR QUALITY MONITORING REPORT

Sample ID: AA/03/21/5450	Report No: AA/03/21/5450	Report Date	15/03/2021
Name & Address of Customer	PNP Maritime Services Private Limited 2nd Floor, Lansdowne House Building, M.B. Marg, Near Regal Cinema, Apollo Bunder, Colaba, Mumbai - 400 001		
Sample Collected by	Laboratory	Sample Description/ Type	Ambient Air (Group: Atmospheric Pollution, Sub Group: Ambient Air Quality)
Sampling Location	Near Jetty No.5	Date-Sampling	08/03/2021 to 09/03/2021
Sample Quantity/ Packing	PM ₁₀ : BaP, Metals: Filter paper 1 x 3 no. PM _{2.5} : Filter paper 1 x 1 no. SO ₂ : 30 ml x 6 no. plastic bottle NO ₂ : 30 ml x 6 no. plastic bottle NH ₃ : 10 ml x 24 no. plastic bottle Ozone: 10 ml x 1 no. plastic bottle C ₆ H ₆ : 6 no. charcoal tubes CO: 1 no. Bladder	Date-Receipt of Sample	11/03/2021
Sampling Procedure	As per Method Reference	Date-Start of Analysis	11/03/2021
Order Reference	As per PO No. PNP/February/2019- 2020/013 Dated 26/02/2020	Date-Completion of Analysis	15/03/2021

Meteorological Data / Environmental Conditions

Average Wind Velocity 8 km/h	Wind Direction E	Relative Humidity (Max./Min.): 56/44%	Temperature (Max./Min.): 36/19°C	Duration of Survey 24 h
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CHEMICAL TESTING

Parameter	Results	NAAQS # 2009	Unit	Method
Sulphur Dioxide (SO ₂)	7.4	80	µg/m ³	IS 5182 (Part 2): 2001, RA 2017
Nitrogen Dioxide (NO ₂)	28.3	80	µg/m ³	IS 5182 (Part 6): 2006, RA 2017
Particulate Matter (size less than 10 µm) or PM ₁₀	361	100	µg/m ³	IS 5182 (Part 23): 2006, RA 2017
Particulate Matter (size less than 2.5µm) or PM _{2.5}	155	60	µg/m ³	USEPA CFR 40, Part 50, Appendix I
Ozone (O ₃)	30.9	180	µg/m ³	AWMA, 3rd Ed. Method 40 Page no. 403/1988
Lead (Pb)	<0.02	1	µg/m ³	EPA/625/R-96/010 a Compendium Method 10-31 E 3.2, Jan 1999
Carbon Monoxide (CO)	2.11	4	mg/m ³	CPCB Guidelines, 37/2012-13, Page no 16
Ammonia (NH ₃)	<4	400	µg/m ³	AEC/C/SAP/NA-7
Benzene (C ₆ H ₆)	1.62	5	µg/m ³	IS 5182 (Part 10): 2006, RA 2017
Benzo (a) Pyrene (BaP) - particulate phase only	<0.2	1	ng/m ³	IS 5182 (Part 12): 2004 RA 2016
Arsenic (As)	<0.3	6	ng/m ³	EPA/625/R-96/010 a Compendium Method 10-31 E 3.2, Jan 1999
Nickel (Ni)	<3	20	ng/m ³	EPA/625/R-96/010 a Compendium Method 10-31 E 3.2, Jan 1999

TWA Time Weighted Average

NAAQS (National Ambient Air Quality Standards (Industrial, Residential, Rural and other Area) specified as: 24 hours TWA in case of Sulphur Dioxide, Nitrogen Dioxide, PM₁₀, PM_{2.5}, Lead and Ammonia, 1 hour TWA in case of Carbon Monoxide and Ozone, Annual TWA in case of Benzene, Benzo (a) Pyrene, Arsenic and Nickel

(Signature)

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AMBIENT AIR QUALITY MONITORING REPORT

Sample ID: AA/03/21/5451	Report No: AA/03/21/5451	Report Date: 15/03/2021
Name & Address of Customer	PNP Maritime Services Private Limited 2nd Floor, Lansdowne House Building, M.B. Marg, Near Regal Cinema, Apollo Bunder, Colaba, Mumbai – 400 001	
Sample Collected by	Laboratory	Sample Description/ Type Ambient Air (Group: Atmospheric Pollution, Sub Group: Ambient Air Quality)
Sampling Location	Near Weight Bridge	Date-Sampling 08/03/2021 to 09/03/2021
Sample Quantity/ Packing	PM ₁₀ : BaP, Metals: Filter paper 1 x 3 no. PM _{2.5} : Filter paper 1 x 1 no. SO ₂ : 30 ml x 6 no. plastic bottle NO ₂ : 30 ml x 6 no. plastic bottle NH ₃ : 10 ml x 24 no. plastic bottle Ozone: 10 ml x 1 no. plastic bottle C ₆ H ₆ : 6 no. charcoal tubes CO: 1 no. Bladder	Date-Receipt of Sample 11/03/2021
Sampling Procedure	As per Method Reference	Date-Start of Analysis 11/03/2021
Order Reference	As per PO No. PNP/February/2019- 2020/013 Dated 26/02/2020	Date-Completion of Analysis 15/03/2021

Meteorological Data / Environmental Conditions

Average Wind Velocity 8 km/h	Wind Direction E	Relative Humidity (Max./Min.): 56/44%	Temperature (Max./Min.): 36/19°C	Duration of Survey 24 h
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CHEMICAL TESTING

Parameter	Results	NAAQS # 2009	Unit	Method
Sulphur Dioxide (SO ₂)	7.8	80	µg/m ³	IS 582 (Part 2): 2001, RA 2017
Nitrogen Dioxide (NO ₂)	37.5	80	µg/m ³	IS 582 (Part 6): 2006, RA 2017
Particulate Matter (size less than 10 µm) or PM ₁₀	354	100	µg/m ³	IS 582 (Part 23): 2006, RA 2017
Particulate Matter (size less than 2.5 µm) or PM _{2.5}	143	60	µg/m ³	IS 582 (Part 23): 2006, RA 2017
Ozone (O ₃)	33.7	180	µg/m ³	ANMA, 2nd Ed., Method 48 Page no. 403, 1988
Lead (Pb)	<0.02	1	µg/m ³	EPA/625/R-96/010 a Compendium Method ID-316.3.2, Jun 1999
Carbon Monoxide (CO)	2.21	4	mg/m ³	CPCB Guidelines: 37/2012-12, Page no.16
Ammonia (NH ₃)	<4	400	µg/m ³	AEC/C/SAP/AA-7
Benzene (C ₆ H ₆)	1.68	5	µg/m ³	IS 582 (Part 8): 2006, RA 2017
Benzo (a) Pyrene (BaP) - particulate phase only	<0.2	1	ng/m ³	IS 582 (Part 12): 2004, RA 2019
Arsenic (As)	<0.3	6	ng/m ³	EPA/625/R-96/010 a Compendium Method ID-316.3.2, Jun 1999
Nickel (Ni)	<3	20	ng/m ³	EPA/625/R-96/010 a Compendium Method ID-316.3.2, Jun 1999

TWA Time Weighted Average

NAAQS (National Ambient Air Quality Standards (Industrial, Residential, Rural and other Area) specified as: 24 hours TWA in case of Sulphur Dioxide, Nitrogen Dioxide, PM₁₀, PM_{2.5}, Lead and Ammonia, 1 hour TWA in case of Carbon Monoxide and Ozone, Annual TWA in case of Benzene, Benzo (a) Pyrene, Arsenic and Nickel


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TC-5509



AMBIENT AIR QUALITY MONITORING REPORT

Sample ID: AA/03/21/5452	Report No: AA/03/21/5452	Report Date	15/03/2021
Name & Address of Customer	PNP Maritime Services Private Limited 2nd Floor, Lansdowne House Building, M.B. Marg, Near Regal Cinema, Apollo Bunder, Colaba, Mumbai - 400 001		
Sample Collected by	Laboratory	Sample Description/ Type	Ambient Air (Group: Atmospheric Pollution, Sub Group: Ambient Air Quality)
Sampling Location	Near Custom Building	Date-Sampling	08/03/2021 to 09/03/2021
Sample Quantity/ Packing	PM ₁₀ , BaP, Metals: Filter paper 1 x 3 no. PM _{2.5} : Filter paper 1 x 1 no. SO ₂ : 30 ml x 6 no. plastic bottle NO ₂ : 30 ml x 6 no. plastic bottle NH ₃ : 10 ml x 24 no. plastic bottle Ozone: 10 ml x 1 no. plastic bottle C ₆ H ₆ : 6 no. charcoal tubes CO: 1 no. Bladder	Date-Receipt of Sample	11/03/2021
Sampling Procedure	As per Method Reference	Date-Start of Analysis	11/03/2021
Order Reference	As per PO No. PNP/February/2019- 2020/013 Dated 26/02/2020	Date-Completion of Analysis	15/03/2021

Meteorological Data / Environmental Conditions

Average Wind Velocity 8 km/h	Wind Direction E	Relative Humidity (Max./Min.): 56/44%	Temperature (Max./Min.): 36/19°C	Duration of Survey 24 h
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CHEMICAL TESTING

Parameter	Results	NAAQS # 2009	Unit	Method
Sulphur Dioxide (SO ₂)	8.4	80	µg/m ³	IS 5182 (Part 2): 2006, RA 2017
Nitrogen Dioxide (NO ₂)	28.5	80	µg/m ³	IS 5182 (Part 6): 2006, RA 2017
Particulate Matter (size less than 10 µm) or PM ₁₀	358	100	µg/m ³	IS 5182 (Part 25): 2006, RA 2017
Particulate Matter (size less than 2.5µm) or PM _{2.5}	164	60	µg/m ³	USEPA CFR 40, Part 50, Appendix I
Ozone (O ₃)	39.3	180	µg/m ³	AWMA, 3rd Ed., Method 41, Page no. 403, 1988
Lead (Pb)	<0.02	1	µg/m ³	EPA/625/R-96/010 a Compendium Method 10-31 & 3.2, Jan 1999
Carbon Monoxide (CO)	2.31	4	mg/m ³	CPCB Guidelines, 27/2012-13, Page no.16
Ammonia (NH ₃)	<4	400	µg/m ³	AEC/C/SAP/AA-7
Benzene (C ₆ H ₆)	1.66	5	µg/m ³	IS 5182 (Part 11): 2006, RA 2017
Benzo (a) Pyrene (BaP) - particulate phase only	<0.2	1	ng/m ³	IS 5182 (Part 12): 2004, RA 2019
Arsenic (As)	<0.3	6	ng/m ³	EPA/625/R-96/010 a Compendium Method 10-31 & 3.2, Jan 1999
Nickel (Ni)	<3	20	ng/m ³	EPA/625/R-96/010 a Compendium Method 10-31 & 3.2, Jan 1999

TWA Time Weighted Average

NAAQS (National Ambient Air Quality Standards (Industrial, Residential, Rural and other Area) specified as: 24 hours TWA in case of Sulphur Dioxide, Nitrogen Dioxide, PM₁₀, PM_{2.5}, Lead and Ammonia, 1 hour TWA in case of Carbon Monoxide and Ozone, Annual TWA in case of Benzene, Benzo (a) Pyrene, Arsenic and Nickel.

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AMBIENT AIR QUALITY MONITORING REPORT

Sample ID: AA/03/21/5453	Report No: AA/03/21/5453	Report Date: 15/03/2021
Name & Address of Customer	PNP Maritime Services Private Limited 2nd Floor, Lansdowne House Building, M.B. Marg, Near Regal Cinema, Apollo Bunder, Colaba, Mumbai - 400 001.	
Sample Collected by	Laboratory	Sample Description/ Type Ambient Air (Group: Atmospheric Pollution, Sub Group: Ambient Air Quality)
Sampling Location	Near Lal Gate	Date-Sampling 08/03/2021 to 09/03/2021
Sample Quantity/ Packing	PM ₁₀ : BaP, Metals: Filter paper 1 x 3 no. PM _{2.5} : Filter paper 1 x 1 no. SO ₂ : 30 ml x 6 no. plastic bottle NO ₂ : 30 ml x 6 no. plastic bottle NH ₃ : 10 ml x 24 no. plastic bottle Ozone: 10 ml x 1 no. plastic bottle C ₆ H ₆ : 6 no. charcoal tubes CO: 1 no. Bladder	Date-Receipt of Sample 11/03/2021
Sampling Procedure	As per Method Reference	Date-Start of Analysis 11/03/2021
Order Reference	As per PO No. PNP/February/2019- 2020/013 Dated 26/02/2020	Date-Completion of Analysis 15/03/2021

Meteorological Data / Environmental Conditions

Average Wind Velocity 8 km/h	Wind Direction E	Relative Humidity (Max./Min.): 56/44%	Temperature (Max./Min.): 36/19°C	Duration of Survey 24 h
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CHEMICAL TESTING

Parameter	Results	NAAQS # 2009	Unit	Method
Sulphur Dioxide (SO ₂)	6.8	80	µg/m ³	IS 5182 (Part 2): 2001, RA 2017
Nitrogen Dioxide (NO ₂)	32.1	80	µg/m ³	IS 5182 (Part 5): 2006, RA 2017
Particulate Matter (size less than 10 µm) or PM ₁₀	366	100	µg/m ³	IS 5182 (Part 20): 2006, RA 2017
Particulate Matter (size less than 2.5µm) or PM _{2.5}	172	60	µg/m ³	USEPA CFR 40, Part 50, Appendix I
Ozone (O ₃)	36.5	180	µg/m ³	AWMA 3rd Ed. Method 41/ Page no. 403, 988
Lead (Pb)	<0.02	1	µg/m ³	EPA/625/R-96/010 a Compendium Method ID-31 B 3.2, Jan 1999
Carbon Monoxide (CO)	2.31	4	mg/m ³	CPCB Guidelines 37/2012-12, Page no.16
Ammonia (NH ₃)	<4	400	µg/m ³	AEC/C/SAP/AA-7
Benzene (C ₆ H ₆)	1.84	5	µg/m ³	IS 5182 (Part 11): 2006, RA 2017
Benzo (a) Pyrene (BaP) - particulate phase only	<0.2	1	ng/m ³	IS 5182 (Part 12): 2004, RA 2019
Arsenic (As)	<0.3	6	ng/m ³	EPA/625/R-96/010 a Compendium Method ID-31 B 3.2, Jan 1999
Nickel (Ni)	<3	20	ng/m ³	EPA/625/R-96/010 a Compendium Method ID-31 B 3.2, Jan 1999

TWA Time Weighted Average

NAAQS (National Ambient Air Quality Standards (Industrial, Residential, Rural and other Area) specified as: 24 hours TWA in case of Sulphur Dioxide, Nitrogen Dioxide, PM₁₀, PM_{2.5}, Lead and Ammonia, 1 hour TWA in case of Carbon Monoxide and Ozone, Annual TWA in case of Benzene, Benzo (a) Pyrene, Arsenic and Nickel

H. Soundankar

Ninad Soundankar
 Technical Manager (Chemical)
 Reviewed & Authorised by



End of Report

Note:

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TC-5509



AMBIENT AIR QUALITY MONITORING REPORT

Sample ID: AA/03/21/5454	Report No: AA/03/21/5454	Report Date	15/03/2021
Name & Address of Customer	PNP Maritime Services Private Limited 2nd Floor, Lansdowne House Building, M.B. Marg, Near Regal Cinema, Apollo Bunder, Colaba, Mumbai - 400 003		
Sample Collected by	Laboratory	Sample Description/ Type	Ambient Air (Group: Atmospheric Pollution, Sub Group: Ambient Air Quality)
Sampling Location	Near DIL Main Gate	Date-Sampling	08/03/2021 to 09/03/2021
Sample Quantity/ Packing	PM ₁₀ , BaP, Metals: Filter paper 1 x 3 no. PM _{2.5} : Filter paper 1 x 1 no. SO ₂ : 30 ml x 6 no. plastic bottle NO ₂ : 30 ml x 6 no. plastic bottle NH ₃ : 10 ml x 24 no. plastic bottle Ozone: 10 ml x 1 no. plastic bottle C ₆ H ₆ : 6 no. charcoal tubes CO: 1 no. Bladder	Date-Receipt of Sample	11/03/2021
Sampling Procedure	As per Method Reference	Date-Start of Analysis	11/03/2021
Order Reference	As per PO No. PNP/February/2019- 2020/013 Dated 26/02/2020	Date-Completion of Analysis	15/03/2021

Meteorological Data / Environmental Conditions

Average Wind Velocity 8 km/h	Wind Direction E	Relative Humidity (Max./Min.): 56/44%	Temperature (Max./Min.): 36/19°C	Duration of Survey 24 h
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CHEMICAL TESTING

Parameter	Results	NAAQS # 2009	Unit	Method
Sulphur Dioxide (SO ₂)	7.8	80	µg/m ³	IS 502 (Part 2): 2001, RA 2017
Nitrogen Dioxide (NO ₂)	35.1	80	µg/m ³	IS 502 (Part 5): 2006, RA 2017
Particulate Matter (size less than 10 µm) or PM ₁₀	381	100	µg/m ³	IS 502 (Part 20): 2006, RA 2017
Particulate Matter (size less than 2.5µm) or PM _{2.5}	152	60	µg/m ³	USEPA CFR 40, Part 50, Appendix I
Ozone (O ₃)	33.7	180	µg/m ³	AMMA 3rd Ed. Method 40 Page no. 402/1998
Lead (Pb)	<0.02	1	µg/m ³	EPA/625/R-96/010 a Compendium Method 10-31 6 2.2, Jan 1999
Carbon Monoxide (CO)	2.21	4	mg/m ³	EPCB Guidelines, 37/2012-13, Page no.16
Ammonia (NH ₃)	<4	400	µg/m ³	AEC/C/SMP/A-7
Benzene (C ₆ H ₆)	1.70	5	µg/m ³	IS 502 (Part 11): 2006, RA 2017
Benzo (a) Pyrene (BaP) - particulate phase only	<0.2	1	ng/m ³	IS 502 (Part 12): 2004, RA 2009
Arsenic (As)	<0.3	6	ng/m ³	EPA/625/R-96/010 a Compendium Method 10-31 6 2.2, Jan 1999
Nickel (Ni)	<3	20	ng/m ³	EPA/625/R-96/010 a Compendium Method 10-31 6 2.2, Jan 1999

TWA Time Weighted Average

NAAQS (National Ambient Air Quality Standards (Industrial, Residential, Rural and other Area) specified as: 24 hours TWA in case of Sulphur Dioxide, Nitrogen Dioxide, PM₁₀, PM_{2.5}, Lead and Ammonia, 1 hour TWA in case of Carbon Monoxide and Ozone, Annual TWA in case of Benzene, Benzo (a) Pyrene, Arsenic and Nickel

N. Soundankar

Ninad Soundankar
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 Reviewed & Authorised by



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AMBIENT AIR QUALITY MONITORING REPORT

Sample ID: AA/03/21/5455	Report No.: AA/03/21/5455	Report Date	15/03/2021
Name & Address of Customer	PNP Maritime Services Private Limited 2nd Floor, Lansdowne House Building, M.B. Marg, Near Regal Cinema, Apollo Bunder, Colaba, Mumbai - 400 001		
Sample Collected by	Laboratory	Sample Description/ Type	Ambient Air (Group: Atmospheric Pollution, Sub Group: Ambient Air Quality)
Sampling Location	DIL Godown Back Side	Date-Sampling	08/03/2021 to 09/03/2021
Sample Quantity/ Packing	PM ₁₀ , BaP, Metals: Filter paper 1 x 3 no. PM _{2.5} : Filter paper 1 x 1 no. SO ₂ : 30 ml x 6 no. plastic bottle NO ₂ : 30 ml x 6 no. plastic bottle NH ₃ : 10 ml x 24 no. plastic bottle Ozone: 10 ml x 1 no. plastic bottle C ₆ H ₆ : 6 no. charcoal tubes CO: 1 no. Bladder	Date-Receipt of Sample	11/03/2021
Sampling Procedure	As per Method Reference	Date-Start of Analysis	11/03/2021
Order Reference	As per PO No. PNP/February/2019- 2020/013 Dated 26/02/2020	Date-Completion of Analysis	15/03/2021

Meteorological Data / Environmental Conditions

Average Wind Velocity 8 km/h	Wind Direction E	Relative Humidity (Max./Min.): 56/44%	Temperature (Max./Min.): 36/19°C	Duration of Survey 24 h
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CHEMICAL TESTING				
Parameter	Results	NAAQS # 2009	Unit	Method
Sulphur Dioxide (SO ₂)	7.4	80	µg/m ³	IS 5882 (Part 2): 2006, IA 2007
Nitrogen Dioxide (NO ₂)	26.4	80	µg/m ³	IS 5882 (Part 6): 2006, IA 2007
Particulate Matter (size less than 10 µm) or PM ₁₀	344	100	µg/m ³	IS 5882 (Part 23): 2006, IA 2007
Particulate Matter (size less than 2.5µm) or PM _{2.5}	132	60	µg/m ³	USEPA CFR 40, Part 50, Appendix L
Ozone (O ₃)	<19.6	180	µg/m ³	NMMA 3rd Ed., Method 4B, Page no. 403, 1999
Lead (Pb)	<0.02	1	µg/m ³	EPA/625/R-96/010 a Compendium Method 10-31 B 3.2, Jan 1999
Carbon Monoxide (CO)	1.11	4	mg/m ³	CPCB Guidelines, 27/2002 G3, Page no.16
Ammonia (NH ₃)	<4	400	µg/m ³	AEC/C/SAP/AA-7
Benzene (C ₆ H ₆)	1.56	5	µg/m ³	IS 5882 (Part 12): 2006, IA 2007
Benzo (a) Pyrene (BaP) - particulate phase only	<0.2	1	ng/m ³	IS 5882 (Part 12): 2006, IA 2007
Arsenic (As)	<0.3	6	ng/m ³	EPA/625/R-96/010 a Compendium Method 10-31 B 3.2, Jan 1999
Nickel (Ni)	<3	20	ng/m ³	EPA/625/R-96/010 a Compendium Method 10-31 B 3.2, Jan 1999

TWA Time Weighted Average
 # NAAQS (National Ambient Air Quality Standards (Industrial, Residential, Rural and other Area) specified as: 24 hours TWA in case of Sulphur Dioxide, Nitrogen Dioxide, PM₁₀, PM_{2.5}, Lead and Ammonia, 1 hour TWA in case of Carbon Monoxide and Ozone, Annual TWA in case of Benzene, Benzo (a) Pyrene, Arsenic and Nickel

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AMBIENT AIR QUALITY MONITORING REPORT

Sample ID: AA/03/21/5593	Report No.: AA/03/21/5593	Report Date	18/03/2021
Name & Address of Customer	PNP Maritime Services Private Limited 2nd Floor, Lansdowne House Building, M.B. Marg, Near Regal Cinema, Apollo Bunder, Colaba, Mumbai - 400 001		
Sample Collected by	Laboratory	Sample Description/ Type	Ambient Air (Group: Atmospheric Pollution, Sub Group: Ambient Air Quality)
Sampling Location	Near Main Gate	Date-Sampling	11/03/2021 to 12/03/2021
Sample Quantity/ Packing	PM ₁₀ : BaP, Metals: Filter paper 1 x 3 no. PM _{2.5} : Filter paper 1 x 1 no. SO ₂ : 30 ml x 6 no. plastic bottle NO ₂ : 30 ml x 6 no. plastic bottle NH ₃ : 10 ml x 24 no. plastic bottle Ozone: 10 ml x 1 no. plastic bottle C ₆ H ₆ : 6 no. charcoal tubes CO: 1 no. Bladder	Date-Receipt of Sample	14/03/2021
Sampling Procedure	As per Method Reference	Date-Start of Analysis	14/03/2021
Order Reference	As per PO No. PNP/February/2019- 2020/013 Dated 26/02/2020	Date-Completion of Analysis	18/03/2021

Meteorological Data / Environmental Conditions

Average Wind Velocity 18 km/h	Wind Direction WNW	Relative Humidity (Max./Min.): 55/43%	Temperature (Max./Min.): 34/20°C	Duration of Survey 24 h
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CHEMICAL TESTING

Parameter	Results	NAAQS # 2009	Unit	Method
Sulphur Dioxide (SO ₂)	6.7	80	µg/m ³	IS 5182 (Part 2): 2001, RA 2007
Nitrogen Dioxide (NO ₂)	29.4	80	µg/m ³	IS 5182 (Part 5): 2006, RA 2007
Particulate Matter (size less than 10 µm) or PM ₁₀	357	100	µg/m ³	IS 5182 (Part 23): 2006, RA 2007
Particulate Matter (size less than 2.5µm) or PM _{2.5}	157	60	µg/m ³	USEPA CFR 40, Part 50, Appendix I
Ozone (O ₃)	35.1	180	µg/m ³	ANMA 2nd Ed. Method 41, Page no. 403, 1988
Lead (Pb)	<0.02	1	µg/m ³	EPA/825/R-96/010 a Compendium Method ID-316 3.2, Jun 1998
Carbon Monoxide (CO)	2.41	4	mg/m ³	CPCB Guidelines, 37/2002-Cl, Page no 16
Ammonia (NH ₃)	<4	400	µg/m ³	AEC/C/SAP/AA-7
Benzene (C ₆ H ₆)	1.77	5	µg/m ³	IS 5182 (Part 8): 2006, RA 2007
Benzo (a) Pyrene (BaP) - particulate phase only	<0.2	1	ng/m ³	IS 5182 (Part 12): 2004, RA 2008
Arsenic (As)	<0.3	6	ng/m ³	EPA/825/R-96/010 a Compendium Method ID-316 3.2, Jun 1998
Nickel (Ni)	<3	20	ng/m ³	EPA/825/R-96/010 a Compendium Method ID-316 3.2, Jun 1998

TWA Time Weighted Average
 # NAAQS (National Ambient Air Quality Standards (Industrial, Residential, Rural and other Area) specified as: 24 hours TWA in case of Sulphur Dioxide, Nitrogen Dioxide, PM₁₀, PM_{2.5}, Lead and Ammonia, 1 hour TWA in case of Carbon Monoxide and Ozone, Annual TWA in case of Benzene, Benzo (a) Pyrene, Arsenic and Nickel.


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TC-5509



AMBIENT AIR QUALITY MONITORING REPORT

Sample ID: AA/03/21/5594	Report No.: AA/03/21/5594	Report Date	18/03/2021
Name & Address of Customer	PNP Maritime Services Private Limited 2nd Floor, Lansdowne House Building, M.B. Marg, Near Regal Cinema, Apollo Bunder, Colaba, Mumbai - 400 001		
Sample Collected by	Laboratory	Sample Description/ Type	Ambient Air (Group: Atmospheric Pollution, Sub Group: Ambient Air Quality)
Sampling Location	Near Jetty No. 1	Date-Sampling	11/03/2021 to 12/03/2021
Sample Quantity/ Packing	PM ₁₀ , BaP, Metals: Filter paper 1 x 3 no. PM _{2.5} : Filter paper 1 x 1 no. SO ₂ : 30 ml x 6 no. plastic bottle NO ₂ : 30 ml x 6 no. plastic bottle NH ₃ : 10 ml x 24 no. plastic bottle Ozone: 10 ml x 1 no. plastic bottle C ₆ H ₆ : 6 no. charcoal tubes CO: 1 no. Bladder	Date-Receipt of Sample	14/03/2021
Sampling Procedure	As per Method Reference	Date-Start of Analysis	14/03/2021
Order Reference	As per PO No. PNP/February/2019- 2020/013 Dated 26/02/2020	Date-Completion of Analysis	18/03/2021

Meteorological Data / Environmental Conditions

Average Wind Velocity 18 km/h	Wind Direction WNW	Relative Humidity (Max./Min.): 55/43%	Temperature (Max./Min.): 34/20°C	Duration of Survey 24 h
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CHEMICAL TESTING

Parameter	Results	NAAQS # 2009	Unit	Method
Sulphur Dioxide (SO ₂)	7.8	80	µg/m ³	IS 5182 (Part 2): 2001, RA 2017
Nitrogen Dioxide (NO ₂)	31.5	80	µg/m ³	IS 5182 (Part 6): 2006, RA 2017
Particulate Matter (size less than 10 µm) or PM ₁₀	375	100	µg/m ³	IS 5182 (Part 23): 2006, RA 2017
Particulate Matter (size less than 2.5µm) or PM _{2.5}	155	60	µg/m ³	USEPA CFR 40, Part 50, Appendix I
Ozone (O ₃)	30.9	180	µg/m ³	AWMA 3rd Ed. Method 40, Page no. 403 1988
Lead (Pb)	<0.02	1	µg/m ³	EPA/825/R-96/010 a Compendium Method 10-31 B 3.2, Jun 1999
Carbon Monoxide (CO)	2.11	4	mg/m ³	CPCB Guidelines 37/2002 B, Page no.16
Ammonia (NH ₃)	<4	400	µg/m ³	AEC/C/SAP/AA-7
Benzene (C ₆ H ₆)	1.85	5	µg/m ³	IS 5182 (Part 8): 2006, RA 2017
Benzo (a) Pyrene (BaP) - particulate phase only	<0.2	1	ng/m ³	IS 5182 (Part 12): 2004, RA 2018
Arsenic (As)	<0.3	6	ng/m ³	EPA/825/R-96/010 a Compendium Method 10-31 B 3.2, Jun 1999
Nickel (Ni)	<3	20	ng/m ³	EPA/825/R-96/010 a Compendium Method 10-31 B 3.2, Jun 1999

TWA Time Weighted Average

NAAQS (National Ambient Air Quality Standards (Industrial, Residential, Rural and other Area) specified as: 24 hours TWA in case of Sulphur Dioxide, Nitrogen Dioxide, PM₁₀, PM_{2.5}, Lead and Ammonia, 1 hour TWA in case of Carbon Monoxide and Ozone, Annual TWA in case of Benzene, Benzo (a) Pyrene, Arsenic and Nickel


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AMBIENT AIR QUALITY MONITORING REPORT

Sample ID: AA/03/21/5595	Report No: AA/03/21/5595	Report Date	18/03/2021
Name & Address of Customer	PNP Maritime Services Private Limited 2nd Floor, Lansdowne House Building, M.B. Marg, Near Regal Cinema, Apollo Bunder, Colaba, Mumbai - 400 001		
Sample Collected by	Laboratory	Sample Description/ Type	Ambient Air (Group: Atmospheric Pollution, Sub Group: Ambient Air Quality)
Sampling Location	Near Jetty No. 2	Date-Sampling	11/03/2021 to 12/03/2021
Sample Quantity/ Packing	PM ₁₀ : BaP, Metals: Filter paper 1 x 3 no. PM _{2.5} : Filter paper 1 x 1 no. SO ₂ : 30 ml x 6 no. plastic bottle NO ₂ : 30 ml x 6 no. plastic bottle NH ₃ : 10 ml x 24 no. plastic bottle Ozone: 10 ml x 1 no. plastic bottle C ₆ H ₆ : 6 no. charcoal tubes CO: 1 no. Bladder	Date-Receipt of Sample	14/03/2021
Sampling Procedure	As per Method Reference	Date-Start of Analysis	14/03/2021
Order Reference	As per PO No. PNP/February/2019- 2020/013 Dated 26/02/2020	Date-Completion of Analysis	18/03/2021

Meteorological Data / Environmental Conditions

Average Wind Velocity 18 km/h	Wind Direction WNW	Relative Humidity (Max./Min.): 55/43%	Temperature (Max./Min.): 34/20°C	Duration of Survey 24 h
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CHEMICAL TESTING

Parameter	Results	NAAQS # 2009	Unit	Method
Sulphur Dioxide (SO ₂)	6.5	80	µg/m ³	IS 5082 (Part 2): 2008, RA 2007
Nitrogen Dioxide (NO ₂)	27.9	80	µg/m ³	IS 5082 (Part 6): 2006, RA 2007
Particulate Matter (size less than 10 µm) or PM ₁₀	371	100	µg/m ³	IS 5082 (Part 23): 2006, RA 2007
Particulate Matter (size less than 2.5µm) or PM _{2.5}	161	60	µg/m ³	USEPA CFR 40, Part 50, Appendix I
Ozone (O ₃)	35.1	180	µg/m ³	AWMA 3rd Ed. Method 40/ Page no. 403, 1988
Lead (Pb)	<0.02	1	µg/m ³	EPA/625/R-96/010 a Compendium Method ID-316 3.2, Jan 1999
Carbon Monoxide (CO)	1.83	4	mg/m ³	DPCB Guidelines: 37/2002-G, Page no. 6
Ammonia (NH ₃)	<4	400	µg/m ³	AEC/E/SAP/AA-7
Benzene (C ₆ H ₆)	1.66	5	µg/m ³	IS 5082 (Part II): 2006, RA 2007
Benzo (a) Pyrene (BaP) - particulate phase only	<0.2	1	ng/m ³	IS 5082 (Part 12): 2004, RA 2009
Arsenic (As)	<0.3	6	ng/m ³	EPA/625/R-96/010 a Compendium Method ID-316 3.2, Jan 1999
Nickel (Ni)	<3	20	ng/m ³	EPA/625/R-96/010 a Compendium Method ID-316 3.2, Jan 1999

TWA Time Weighted Average

8 NAAQS (National Ambient Air Quality Standards (Industrial, Residential, Rural and other Area) specified as: 24 hours TWA in case of Sulphur Dioxide, Nitrogen Dioxide, PM₁₀, PM_{2.5}, Lead and Ammonia, 1 hour TWA in case of Carbon Monoxide and Ozone, Annual TWA in case of Benzene, Benzo (a) Pyrene, Arsenic and Nickel


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TC-5509



AMBIENT AIR QUALITY MONITORING REPORT

Sample ID: AA/03/21/5596	Report No: AA/03/21/5596	Report Date: 18/03/2021
Name & Address of Customer	PNP Maritime Services Private Limited 2nd Floor, Lansdowne House Building, M.B. Marg, Near Regal Cinema, Apollo Bunder, Colaba, Mumbai - 400 001	
Sample Collected by	Laboratory	Sample Description/ Type Ambient Air (Group: Atmospheric Pollution, Sub Group: Ambient Air Quality)
Sampling Location	Near Jetty No. 3	Date-Sampling 11/03/2021 to 12/03/2021
Sample Quantity/ Packing	PM ₁₀ , BaP, Metals: Filter paper 1 x 3 no. PM _{2.5} : Filter paper 1 x 1 no. SO ₂ : 30 ml x 6 no. plastic bottle NO ₂ : 30 ml x 6 no. plastic bottle NH ₃ : 10 ml x 24 no. plastic bottle Ozone: 10 ml x 1 no. plastic bottle C ₆ H ₆ : 6 no. charcoal tubes CO: 1 no. Bladder	Date-Receipt of Sample 14/03/2021
Sampling Procedure	As per Method Reference	Date-Start of Analysis 14/03/2021
Order Reference	As per PO No. PNP/February/2019- 2020/013 Dated 26/02/2020	Date-Completion of Analysis 18/03/2021

Meteorological Data / Environmental Conditions

Average Wind Velocity 18 km/h	Wind Direction WNW	Relative Humidity (Max./Min.): 55/43%	Temperature (Max./Min.): 34/20°C	Duration of Survey 24 h
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CHEMICAL TESTING

Parameter	Results	NAAQS # 2009	Unit	Method
Sulphur Dioxide (SO ₂)	7.7	80	µg/m ³	IS 5882 (Part 2): 2006, RA 2007
Nitrogen Dioxide (NO ₂)	34.3	80	µg/m ³	IS 5882 (Part 6): 2006, RA 2007
Particulate Matter (size less than 10 µm) or PM ₁₀	374	100	µg/m ³	IS 5882 (Part 73): 2006, RA 2007
Particulate Matter (size less than 2.5µm) or PM _{2.5}	146	60	µg/m ³	USEPA CFR 40, Part 50, Appendix I
Ozone (O ₃)	22.5	180	µg/m ³	AWWA 3rd Ed. Method 40, Page no. 403, 988
Lead (Pb)	<0.02	1	µg/m ³	EPA/625/R-96/010 a Compendium Method ID-316 3.2, Jun 1999
Carbon Monoxide (CO)	1.83	4	mg/m ³	CPCB Guidelines, 07/2002-12, Page no.16
Ammonia (NH ₃)	<4	400	µg/m ³	AEC/C/SAP/AA-7
Benzene (C ₆ H ₆)	1.89	5	µg/m ³	IS 5882 (Part 11): 2006, RA 2007
Benzo (a) Pyrene (BaP) - particulate phase only	<0.2	1	ng/m ³	IS 5882 (Part 21): 2004, RA 2006
Arsenic (As)	<0.3	6	ng/m ³	EPA/625/R-96/010 a Compendium Method ID-316 3.2, Jun 1999
Nickel (Ni)	<3	20	ng/m ³	EPA/625/R-96/010 a Compendium Method ID-316 3.2, Jun 1999

TWA Time Weighted Average

NAAQS (National Ambient Air Quality Standards (Industrial, Residential, Rural and other Area) specified as: 24 hours TWA in case of Sulphur Dioxide, Nitrogen Dioxide, PM₁₀, PM_{2.5}, Lead and Ammonia, 1 hour TWA in case of Carbon Monoxide and Ozone, Annual TWA in case of Benzene, Benzo (a) Pyrene, Arsenic and Nickel



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TC-5509



AMBIENT AIR QUALITY MONITORING REPORT

Sample ID: AA/03/21/5597	Report No: AA/03/21/5597	Report Date	18/03/2021
Name & Address of Customer	PNP Maritime Services Private Limited 2nd Floor, Lansdowne House Building, M.B. Marg, Near Regal Cinema, Apollo Bunder, Colaba, Mumbai - 400 001		
Sample Collected by	Laboratory	Sample Description/ Type	Ambient Air (Group: Atmospheric Pollution, Sub Group: Ambient Air Quality)
Sampling Location	Near Jetty No.5	Date-Sampling	11/03/2021 to 12/03/2021
Sample Quantity/ Packing	PM ₁₀ , BaP, Metals: Filter paper 1 x 3 no. PM _{2.5} : Filter paper 1 x 1 no. SO ₂ : 30 ml x 6 no. plastic bottle NO ₂ : 30 ml x 6 no. plastic bottle NH ₃ : 10 ml x 24 no. plastic bottle Ozone: 10 ml x 1 no. plastic bottle C ₆ H ₆ : 6 no. charcoal tubes CO: 1 no. Bladder	Date-Receipt of Sample	14/03/2021
Sampling Procedure	As per Method Reference	Date-Start of Analysis	14/03/2021
Order Reference	As per PO No. PNP/February/2019- 2020/013 Dated 26/02/2020	Date-Completion of Analysis	18/03/2021

Meteorological Data / Environmental Conditions

Average Wind Velocity 18 km/h	Wind Direction WNW	Relative Humidity (Max./Min.): 55/43%	Temperature (Max./Min.): 34/20°C	Duration of Survey 24 h
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CHEMICAL TESTING

Parameter	Results	NAAQS # 2009	Unit	Method
Sulphur Dioxide (SO ₂)	6.8	80	µg/m ³	IS 5182 (Part 2): 2008, RA 2017
Nitrogen Dioxide (NO ₂)	26.2	80	µg/m ³	IS 5182 (Part 6): 2006, RA 2017
Particulate Matter (size less than 10 µm) or PM ₁₀	374	100	µg/m ³	IS 5182 (Part 22): 2006, RA 2017
Particulate Matter (size less than 2.5µm) or PM _{2.5}	144	60	µg/m ³	USEPA CFR 40, Part 50, Appendix I
Ozone (O ₃)	32.3	180	µg/m ³	AWMA, 3rd Ed., Method 40, Page no. 402, 1988
Lead (Pb)	<0.02	1	µg/m ³	EPA/625/R-96/010 a Compendium Method 10-3.1 & 3.2, Jun 1999
Carbon Monoxide (CO)	1.88	4	mg/m ³	CPCB Guidelines, 37/2012-13, Page no.16
Ammonia (NH ₃)	<4	400	µg/m ³	AEC/C/SAP/MA-7
Benzene (C ₆ H ₆)	1.73	5	µg/m ³	IS 5182 (Part 11): 2006, RA 2017
Benzo (a) Pyrene (BaP) - particulate phase only	<0.2	1	ng/m ³	IS 5182 (Part 6): 2006, RA 2017
Arsenic (As)	<0.3	6	ng/m ³	EPA/625/R-96/010 a Compendium Method 10-3.1 & 3.2, Jun 1999
Nickel (Ni)	<3	20	ng/m ³	EPA/625/R-96/010 a Compendium Method 10-3.1 & 3.2, Jun 1999

TWA Time Weighted Average

NAAQS (National Ambient Air Quality Standards (Industrial, Residential, Rural and other Area) specified as: 24 hours TWA in case of Sulphur Dioxide, Nitrogen Dioxide, PM₁₀, PM_{2.5}, Lead and Ammonia, 1 hour TWA in case of Carbon Monoxide and Ozone, Annual TWA in case of Benzene, Benzo (a) Pyrene, Arsenic and Nickel

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TC-5509



AMBIENT AIR QUALITY MONITORING REPORT

Sample ID: AA/03/21/5598	Report No.: AA/03/21/5598	Report Date	18/03/2021
Name & Address of Customer	PNP Maritime Services Private Limited 2nd Floor, Lansdowne House Building, M.B. Marg, Near Regal Cinema, Apollo Bunder, Colaba, Mumbai - 400 001		
Sample Collected by	Laboratory	Sample Description/ Type	Ambient Air (Group: Atmospheric Pollution, Sub Group: Ambient Air Quality)
Sampling Location	Near Weight Bridge	Date-Sampling	11/03/2021 to 12/03/2021
Sample Quantity/ Packing	PM ₁₀ : BaP, Metals: Filter paper 1 x 3 no. PM _{2.5} : Filter paper 1 x 1 no. SO ₂ : 30 ml x 6 no. plastic bottle NO ₂ : 30 ml x 6 no. plastic bottle NH ₃ : 10 ml x 24 no. plastic bottle Ozone: 10 ml x 1 no. plastic bottle C ₆ H ₆ : 6 no. charcoal tubes CO: 1 no. Bladder	Date-Receipt of Sample	14/03/2021
Sampling Procedure	As per Method Reference	Date-Start of Analysis	14/03/2021
Order Reference	As per PO No. PNP/February/2019- 2020/013 Dated 26/02/2020	Date-Completion of Analysis	18/03/2021

Meteorological Data / Environmental Conditions

Average Wind Velocity 18 km/h	Wind Direction WNW	Relative Humidity (Max./Min.): 55/43%	Temperature (Max./Min.): 34/20°C	Duration of Survey 24 h
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CHEMICAL TESTING

Parameter	Results	NAAQS # 2009	Unit	Method
Sulphur Dioxide (SO ₂)	8.4	80	µg/m ³	IS 5182 (Part 2): 2006, RA 2017
Nitrogen Dioxide (NO ₂)	35.3	80	µg/m ³	IS 5182 (Part 6): 2006, RA 2017
Particulate Matter (size less than 10 µm) or PM ₁₀	371	100	µg/m ³	IS 5182 (Part 23): 2006, RA 2017
Particulate Matter (size less than 2.5 µm) or PM _{2.5}	153	60	µg/m ³	ISIPACR 40, Part 50, Appendix I
Ozone (O ₃)	35.1	180	µg/m ³	AWMA, 3rd Ed. Method 48, Page no. 403, 1993
Lead (Pb)	<0.02	1	µg/m ³	EPA/625/R-96/010 a Compendium Method 10-31 B 3.2, Jun 1998
Carbon Monoxide (CO)	2.44	4	mg/m ³	CPCB Guidelines, 27/2002-GI, Page no.16
Ammonia (NH ₃)	<4	400	µg/m ³	AEC/C/SAP/AA-7
Benzene (C ₆ H ₆)	1.64	5	µg/m ³	IS 5182 (Part 8): 2006, RA 2017
Benzo (a) Pyrene (BaP) - particulate phase only	<0.2	1	ng/m ³	IS 5182 (Part 12): 2006, RA 2017
Arsenic (As)	<0.3	6	ng/m ³	EPA/625/R-96/010 a Compendium Method 10-31 B 3.2, Jun 1998
Nickel (Ni)	<3	20	ng/m ³	EPA/625/R-96/010 a Compendium Method 10-31 B 3.2, Jun 1998

TWA Time Weighted Average

NAAQS (National Ambient Air Quality Standards (Industrial, Residential, Rural and other Area) specified as: 24 hours TWA in case of Sulphur Dioxide, Nitrogen Dioxide, PM₁₀, PM_{2.5}, Lead and Ammonia, 1 hour TWA in case of Carbon Monoxide and Ozone, Annual TWA in case of Benzene, Benzo (a) Pyrene, Arsenic and Nickel.

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AMBIENT AIR QUALITY MONITORING REPORT

Sample ID: AA/03/21/5599	Report No.: AA/03/21/5599	Report Date	18/03/2021
Name & Address of Customer	PNP Maritime Services Private Limited 2nd Floor, Lansdowne House Building, M.B. Marg, Near Regal Cinema, Apollo Bunder, Colaba, Mumbai - 400 001		
Sample Collected by	Laboratory	Sample Description/ Type	Ambient Air (Group: Atmospheric Pollution, Sub Group: Ambient Air Quality)
Sampling Location	Near Custom Building	Date-Sampling	11/03/2021 to 12/03/2021
Sample Quantity/ Packing	PM ₁₀ , BaP, Metals: Filter paper 1 x 3 no. PM _{2.5} : Filter paper 1 x 1 no. SO ₂ : 30 ml x 6 no. plastic bottle NO ₂ : 30 ml x 6 no. plastic bottle NH ₃ : 10 ml x 24 no. plastic bottle Ozone: 10 ml x 1 no. plastic bottle C ₆ H ₆ : 6 no. charcoal tubes CO: 1 no. Bladder	Date-Receipt of Sample	14/03/2021
Sampling Procedure	As per Method Reference	Date-Start of Analysis	14/03/2021
Order Reference	As per PO No. PNP/February/2019- 2020/013 Dated 26/02/2020	Date-Completion of Analysis	18/03/2021

Meteorological Data / Environmental Conditions

Average Wind Velocity 18 km/h	Wind Direction WNW	Relative Humidity (Max./Min.): 55/43%	Temperature (Max./Min.): 34/20°C	Duration of Survey 24 h
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CHEMICAL TESTING				
Parameter	Results	NAAQS # 2009	Unit	Method
Sulphur Dioxide (SO ₂)	7.9	80	µg/m ³	IS 5182 (Part 2): 2001, RA 2007
Nitrogen Dioxide (NO ₂)	24.0	80	µg/m ³	IS 5182 (Part 6): 2006, RA 2007
Particulate Matter (size less than 10 µm) or PM ₁₀	345	100	µg/m ³	IS 5182 (Part 23): 2006, RA 2007
Particulate Matter (size less than 2.5µm) or PM _{2.5}	153	60	µg/m ³	US EPA CFR 40, Part 50, Appendix I
Ozone (O ₃)	40.7	180	µg/m ³	AWMA 3rd Ed. Method 40, Page no. 403, 1999
Lead (Pb)	<0.02	1	µg/m ³	EPA/625/R-96/010 a Compendium Method 10-316 3.2, Jun 1999
Carbon Monoxide (CO)	2.44	4	mg/m ³	CPCB Guidelines, 37/2002-03, Page no. 6
Ammonia (NH ₃)	<4	400	µg/m ³	NEC/C/SAP/AA-7
Benzene (C ₆ H ₆)	1.63	5	µg/m ³	IS 5182 (Part II): 2006, RA 2007
Benzo (a) Pyrene (BaP) - particulate phase only	<0.2	1	ng/m ³	IS 5182 (Part 12): 2004, RA 2009
Arsenic (As)	<0.3	6	ng/m ³	EPA/625/R-96/010 a Compendium Method 10-316 3.2, Jun 1999
Nickel (Ni)	<3	20	ng/m ³	EPA/625/R-96/010 a Compendium Method 10-316 3.2, Jun 1999

TWA Time Weighted Average
 # NAAQS (National Ambient Air Quality Standards (Industrial, Residential, Rural and other Area) specified as: 24 hours TWA in case of Sulphur Dioxide, Nitrogen Dioxide, PM₁₀, PM_{2.5}, Lead and Ammonia, 1 hour TWA in case of Carbon Monoxide and Ozone, Annual TWA in case of Benzene, Benzo (a) Pyrene, Arsenic and Nickel


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AMBIENT AIR QUALITY MONITORING REPORT

Sample ID: AA/03/21/5600	Report No: AA/03/21/5600	Report Date	18/03/2021
Name & Address of Customer:	PNP Maritime Services Private Limited 2nd Floor, Lansdowne House Building, M.B. Marg, Near Regal Cinema, Apollo Bunder, Colaba, Mumbai - 400 001		
Sample Collected by	Laboratory	Sample Description/ Type	Ambient Air (Group: Atmospheric Pollution, Sub Group: Ambient Air Quality)
Sampling Location	Near Lai Gate	Date-Sampling	11/03/2021 to 12/03/2021
Sample Quantity/ Packing	PM ₁₀ , BaP, Metals: Filter paper 1 x 3 no. PM _{2.5} : Filter paper 1 x 1 no. SO ₂ : 30 ml x 6 no. plastic bottle NO ₂ : 30 ml x 6 no. plastic bottle NH ₃ : 10 ml x 24 no. plastic bottle Ozone: 10 ml x 1 no. plastic bottle C ₆ H ₆ : 6 no. charcoal tubes CO: 1 no. Bladder	Date-Receipt of Sample:	14/03/2021
Sampling Procedure	As per Method Reference	Date-Start of Analysis:	14/03/2021
Order Reference	As per PO No. PNP/February/2019- 2020/013 Dated 26/02/2020	Date-Completion of Analysis	18/03/2021

Meteorological Data / Environmental Conditions

Average Wind Velocity 18 km/h	Wind Direction WNW	Relative Humidity (Max./Min.): 55/43%	Temperature (Max./Min.): 34/20°C	Duration of Survey 24 h
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CHEMICAL TESTING

Parameter	Results	NAAQS # 2009	Unit	Method
Sulphur Dioxide (SO ₂)	7.3	80	µg/m ³	IS 5182 (Part 2): 2008, RA 2017
Nitrogen Dioxide (NO ₂)	33	80	µg/m ³	IS 5182 (Part 6): 2006, RA 2017
Particulate Matter (size less than 10 µm) or PM ₁₀	358	100	µg/m ³	IS 5182 (Part 28): 2006, RA 2017
Particulate Matter (size less than 2.5µm) or PM _{2.5}	189	60	µg/m ³	USEPA CFR 40, Part 50, Appendix I
Ozone (O ₃)	35.1	180	µg/m ³	AWMA, 3rd Ed., Method 40, Page no. A02.0388
Lead (Pb)	<0.02	1	µg/m ³	EPA/625/R-96/010 a Compendium Method 10-3.1.6 3.2, Jun 1999
Carbon Monoxide (CO)	2.41	4	mg/m ³	CPCB Guidelines, 37/2012-13, Page no.16
Ammonia (NH ₃)	<4	400	µg/m ³	AEC/C/SAP/AA-1
Benzene (C ₆ H ₆)	1.86	5	µg/m ³	IS 5182 (Part 11): 2006, RA 2017
Benzo (a) Pyrene (BaP) - particulate phase only	<0.2	1	ng/m ³	IS 5182 (Part 12): 2004, RA 2017
Arsenic (As)	<0.3	6	ng/m ³	EPA/625/R-96/010 a Compendium Method 10-3.1.6 3.2, Jun 1999
Nickel (Ni)	<3	20	ng/m ³	EPA/625/R-96/010 a Compendium Method 10-3.1.6 3.2, Jun 1999

TWA Time Weighted Average

NAAQS (National Ambient Air Quality Standards (Industrial, Residential, Rural and other Area) specified as: 24 hours TWA in case of Sulphur Dioxide, Nitrogen Dioxide, PM₁₀, PM_{2.5}, Lead and Ammonia, 1 hour TWA in case of Carbon Monoxide and Ozone, Annual TWA in case of Benzene, Benzo (a) Pyrene, Arsenic and Nickel



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AMBIENT AIR QUALITY MONITORING REPORT

Sample ID: AA/03/21/5601	Report No.: AA/03/21/5601	Report Date:	18/03/2021
Name & Address of Customer	PNP Maritime Services Private Limited 2nd Floor, Lansdowne House Building, M.B. Marg, Near Regal Cinema, Apollo Bunder, Colaba, Mumbai - 400 001		
Sample Collected by	Laboratory	Sample Description/ Type	Ambient Air (Group: Atmospheric Pollution, Sub Group: Ambient Air Quality)
Sampling Location	Near DIL Main Gate	Date-Sampling	11/03/2021 to 12/03/2021
Sample Quantity/ Packing	PM ₁₀ , BaP, Metals: Filter paper 1 x 3 no. PM _{2.5} : Filter paper 1 x 1 no. SO ₂ : 30 ml x 6 no. plastic bottle NO ₂ : 30 ml x 6 no. plastic bottle NH ₃ : 10 ml x 24 no. plastic bottle Ozone: 10 ml x 1 no. plastic bottle C ₆ H ₆ : 6 no. charcoal tubes CO: 1 no. Bladder	Date-Receipt of Sample	14/03/2021
Sampling Procedure	As per Method Reference	Date-Start of Analysis	14/03/2021
Order Reference	As per PO No. PNP/February/2019- 2020/013 Dated 26/02/2020	Date-Completion of Analysis	18/03/2021

Meteorological Data / Environmental Conditions

Average Wind Velocity 18 km/h	Wind Direction WNW	Relative Humidity (Max./Min.): 55/43%	Temperature (Max./Min.): 34/20°C	Duration of Survey 24 h
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CHEMICAL TESTING

Parameter	Results	NAAQS # 2009	Unit	Method
Sulphur Dioxide (SO ₂)	6.4	80	µg/m ³	IS 5182 (Part 2): 2006, RA 2017
Nitrogen Dioxide (NO ₂)	33.6	80	µg/m ³	IS 5182 (Part 1): 2006, RA 2017
Particulate Matter (size less than 10 µm) or PM ₁₀	387	100	µg/m ³	IS 5182 (Part 23): 2006, RA 2017
Particulate Matter (size less than 2.5µm) or PM _{2.5}	164	60	µg/m ³	USEPA CFR 40, Part 50, Appendix I
Ozone (O ₃)	35.1	180	µg/m ³	AWWA, 3rd Ed., Method 401, Page no. 403, 1988
Lead (Pb)	<0.02	1	µg/m ³	EPA/625/R-95/010 a Compendium Method 10-31 8 3.2, Jan 1995
Carbon Monoxide (CO)	1.66	4	mg/m ³	CPCB Guidelines, 27/2002-G, Page no 16
Ammonia (NH ₃)	<4	400	µg/m ³	AEC/C/SAP/AA-7
Benzene (C ₆ H ₆)	1.73	5	µg/m ³	IS 5182 (Part 8): 2006, RA 2017
Benzo (a) Pyrene (BaP) - particulate phase only	<0.2	1	ng/m ³	IS 5182 (Part 12): 2004, RA 2019
Arsenic (As)	<0.3	6	ng/m ³	EPA/625/R-95/010 a Compendium Method 10-31 8 3.2, Jan 1995
Nickel (Ni)	<3	20	ng/m ³	EPA/625/R-95/010 a Compendium Method 10-31 8 3.2, Jan 1995

TWA Time Weighted Average

NAAQS (National Ambient Air Quality Standards (Industrial, Residential, Rural and other Area) specified as: 24 hours TWA in case of Sulphur Dioxide, Nitrogen Dioxide, PM₁₀, PM_{2.5}, Lead and Ammonia, 1 hour TWA in case of Carbon Monoxide and Ozone, Annual TWA in case of Benzene, Benzo (a) Pyrene, Arsenic and Nickel


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AMBIENT AIR QUALITY MONITORING REPORT

Sample ID	AA/03/21/5602	Report No.	AA/03/21/5602	Report Date	18/03/2021
Name & Address of Customer	PNP Maritime Services Private Limited 2nd Floor, Lansdowne House Building, M.B. Marg, Near Regal Cinema, Apollo Bunder, Colaba, Mumbai - 400 001				
Sample Collected by	Laboratory	Sample Description/ Type	Ambient Air (Group: Atmospheric Pollution, Sub Group: Ambient Air Quality)		
Sampling Location	DIL Godown Back Side	Date-Sampling	11/03/2021 to 12/03/2021		
Sample Quantity/ Packing	PM ₁₀ , BaP, Metals: Filter paper 1 x 3 no. PM _{2.5} : Filter paper 1 x 1 no. SO ₂ : 30 ml x 6 no. plastic bottle NO ₂ : 30 ml x 6 no. plastic bottle NH ₃ : 10 ml x 24 no. plastic bottle Ozone: 10 ml x 1 no. plastic bottle C ₆ H ₆ : 6 no. charcoal tubes CO: 1 no. Bladder	Date-Receipt of Sample	14/03/2021		
Sampling Procedure	As per Method Reference	Date-Start of Analysis	14/03/2021		
Order Reference	As per PO No. PNP/February/2019- 2020/013 Dated 26/02/2020	Date-Completion of Analysis	18/03/2021		

Meteorological Data / Environmental Conditions

Average Wind Velocity 18 km/h	Wind Direction WNW	Relative Humidity (Max./Min.): 55/43%	Temperature (Max./Min.): 34/20°C	Duration of Survey 24 h
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CHEMICAL TESTING

Parameter	Results	NAAQS # 2009	Unit	Method
Sulphur Dioxide (SO ₂)	6.8	80	µg/m ³	IS 5182 (Part 2): 2008, RA 2017
Nitrogen Dioxide (NO ₂)	23.2	80	µg/m ³	IS 5182 (Part 6): 2006, RA 2017
Particulate Matter (size less than 10 µm) or PM ₁₀	354	100	µg/m ³	IS 5182 (Part 23): 2006, RA 2017
Particulate Matter (size less than 2.5µm) or PM _{2.5}	152	60	µg/m ³	USEPA CFR 40, Part 50, Appendix I
Ozone (O ₃)	<19.6	180	µg/m ³	AWMA 2nd Ed. Method 40, Page no. 403/1988
Lead (Pb)	<0.02	1	µg/m ³	EPA/625/R-96/010 a Compendium Method 10-316 3.2, Jun 1999
Carbon Monoxide (CO)	1.83	4	mg/m ³	CPCB Guidelines, 37/2002-01, Page no.16
Ammonia (NH ₃)	<4	400	µg/m ³	NEC/C/SAP/AA-7
Benzene (C ₆ H ₆)	1.57	5	µg/m ³	IS 5182 (Part 8): 2006, RA 2017
Benzo (a) Pyrene (BaP) - particulate phase only	<0.2	1	ng/m ³	IS 5182 (Part 12): 2004, RA 2018
Arsenic (As)	<0.3	6	ng/m ³	EPA/625/R-96/010 a Compendium Method 10-316 3.2, Jun 1999
Nickel (Ni)	<3	20	ng/m ³	EPA/625/R-96/010 a Compendium Method 10-316 3.2, Jun 1999

TWA Time Weighted Average

NAAQS (National Ambient Air Quality Standards (Industrial, Residential, Rural and other Area) specified as: 24 hours TWA in case of Sulphur Dioxide, Nitrogen Dioxide, PM₁₀, PM_{2.5}, Lead and Ammonia, 1 hour TWA in case of Carbon Monoxide and Ozone, Annual TWA in case of Benzene, Benzo (a) Pyrene, Arsenic and Nickel

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AMBIENT AIR QUALITY MONITORING REPORT

Sample ID: AA/03/21/5721	Report No.: AA/03/21/5721	Report Date	22/03/2021
Name & Address of Customer	PNP Maritime Services Private Limited 2nd Floor, Lansdowne House Building, M.B. Marg, Near Regal Cinema, Apollo Bunder, Colaba, Mumbai - 400 001		
Sample Collected by	Laboratory	Sample Description/ Type	Ambient Air (Group: Atmospheric Pollution, Sub Group: Ambient Air Quality)
Sampling Location	Near Main Gate	Date-Sampling	15/03/2021 to 16/03/2021
Sample Quantity/ Packing	PM ₁₀ , BaP, Metals: Filter paper 1 x 3 no. PM _{2.5} : Filter paper 1 x 1 no. SO ₂ : 30 ml x 6 no. plastic bottle NO ₂ : 30 ml x 6 no. plastic bottle NH ₃ : 10 ml x 24 no. plastic bottle Ozone: 10 ml x 1 no. plastic bottle C ₆ H ₆ : 6 no. charcoal tubes CO: 1 no. Bladder	Date-Receipt of Sample	18/03/2021
Sampling Procedure	As per Method Reference	Date-Start of Analysis	18/03/2021
Order Reference	As per PO No. PNP/February/2019- 2020/013 Dated 26/02/2020	Date-Completion of Analysis	22/03/2021

Meteorological Data / Environmental Conditions

Average Wind Velocity 5 km/h	Wind Direction NE	Relative Humidity (Max./Min.): 60/48 %	Temperature (Max./Min.): 37/22 °C	Duration of Survey 24 h
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CHEMICAL TESTING

Parameter	Results	NAAQS # 2009	Unit	Method
Sulphur Dioxide (SO ₂)	8.1	80	µg/m ³	IS 5182 (Part 2): 2001, RA 2007
Nitrogen Dioxide (NO ₂)	31.5	80	µg/m ³	IS 5182 (Part 2): 2001, RA 2007
Particulate Matter (size less than 10 µm) or PM ₁₀	364	100	µg/m ³	IS 5182 (Part 23): 2006, RA 2007
Particulate Matter (size less than 2.5µm) or PM _{2.5}	143	60	µg/m ³	USEPA CFR 40, Part 50, Appendix I
Ozone (O ₃)	29.5	180	µg/m ³	NWMA 3rd Ed. Method 401 Page no. 402 1988
Lead (Pb)	<0.02	1	µg/m ³	EPA/625/R-96/010 a Compendium Method ID-316 3.2, Jun 1999
Carbon Monoxide (CO)	2.20	4	mg/m ³	CPCB Guidelines: 37/2002-03, Page no.6
Ammonia (NH ₃)	<4	400	µg/m ³	AEC/C/SAP/AA-7
Benzene (C ₆ H ₆)	1.85	5	µg/m ³	IS 5182 (Part II): 2006, RA 2007
Benzo (a) Pyrene (BaP) - particulate phase only	<0.2	1	ng/m ³	IS 5182 (Part 17): 2004, RA 2009
Arsenic (As)	<0.3	6	ng/m ³	EPA/625/R-96/010 a Compendium Method ID-316 3.2, Jun 1999
Nickel (Ni)	<3	20	ng/m ³	EPA/625/R-96/010 a Compendium Method ID-316 3.2, Jun 1999

TWA Time Weighted Average

NAAQS (National Ambient Air Quality Standards (Industrial, Residential, Rural and other Area) specified as: 24 hours TWA in case of Sulphur Dioxide, Nitrogen Dioxide, PM₁₀, PM_{2.5}, Lead and Ammonia, 1 hour TWA in case of Carbon Monoxide and Ozone, Annual TWA in case of Benzene, Benzo (a) Pyrene, Arsenic and Nickel



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AMBIENT AIR QUALITY MONITORING REPORT

Sample ID: AA/03/21/5722	Report No.: AA/03/21/5722	Report Date:	22/03/2021
Name & Address of Customer	PNP Maritime Services Private Limited 2nd Floor, Lansdowne House Building, M.B. Marg, Near Regal Cinema, Apollo Bunder, Colaba, Mumbai - 400 001		
Sample Collected by	Laboratory	Sample Description/ Type	Ambient Air (Group: Atmospheric Pollution, Sub Group: Ambient Air Quality)
Sampling Location	Near Jetty No. 1	Date-Sampling	15/03/2021 to 16/03/2021
Sample Quantity/ Packing	PM ₁₀ , BaP, Metals: Filter paper 1 x 3 no. PM _{2.5} : Filter paper 1 x 1 no. SO ₂ : 30 ml x 6 no. plastic bottle NO ₂ : 30 ml x 6 no. plastic bottle NH ₃ : 10 ml x 24 no. plastic bottle Ozone: 10 ml x 1 no. plastic bottle C ₆ H ₆ : 6 no. charcoal tubes CO: 1 no. Bladder	Date-Receipt of Sample	18/03/2021
Sampling Procedure	As per Method Reference	Date-Start of Analysis	18/03/2021
Order Reference	As per PO No. PNP/February/2019- 2020/013 Dated 26/02/2020	Date-Completion of Analysis	22/03/2021

Meteorological Data / Environmental Conditions

Average Wind Velocity 5 km/h	Wind Direction NE	Relative Humidity (Max./Min.): 60/48 %	Temperature (Max./Min.): 37/22 °C	Duration of Survey 24 h
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CHEMICAL TESTING

Parameter	Results	NAAQS # 2009	Unit	Method
Sulphur Dioxide (SO ₂)	6.8	80	µg/m ³	IS 5182 (Part 2): 2001, RA 2017
Nitrogen Dioxide (NO ₂)	28.3	80	µg/m ³	IS 5182 (Part 2): 2001, RA 2017
Particulate Matter (size less than 10 µm) or PM ₁₀	374	100	µg/m ³	IS 5182 (Part 21): 2006, RA 2017
Particulate Matter (size less than 2.5µm) or PM _{2.5}	172	60	µg/m ³	IS 5182 (Part 21): 2006, RA 2017
Ozone (O ₃)	26.7	180	µg/m ³	IS 5182 (Part 21): 2006, RA 2017
Lead (Pb)	<0.02	1	µg/m ³	EPA/825/P-96/010 a Compendium Method 10-31 & 3.2, Jan 1999
Carbon Monoxide (CO)	1.63	4	mg/m ³	EPCB Guidelines, 37/2012-03, Page no 16
Ammonia (NH ₃)	<4	400	µg/m ³	AEC/C/SAP/AA-7
Benzene (C ₆ H ₆)	1.53	5	µg/m ³	IS 5182 (Part 2): 2001, RA 2017
Benzo (a) Pyrene (BaP) - particulate phase only	<0.2	1	ng/m ³	IS 5182 (Part 2): 2004, RA 2017
Arsenic (As)	<0.3	6	ng/m ³	EPA/825/P-96/010 a Compendium Method 10-31 & 3.2, Jan 1999
Nickel (Ni)	<3	20	ng/m ³	EPA/825/P-96/010 a Compendium Method 10-31 & 3.2, Jan 1999

TWA Time Weighted Average

NAAQS (National Ambient Air Quality Standards (Industrial, Residential, Rural and other Area) specified as: 24 hours TWA in case of Sulphur Dioxide, Nitrogen Dioxide, PM₁₀, PM_{2.5}, Lead and Ammonia, 1 hour TWA in case of Carbon Monoxide and Ozone, Annual TWA in case of Benzene, Benzo (a) Pyrene, Arsenic and Nickel.

(Signature)

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TC-5509



AMBIENT AIR QUALITY MONITORING REPORT

Sample ID: AA/03/21/5723	Report No: AA/03/21/5723	Report Date	22/03/2021
Name & Address of Customer	PNP Maritime Services Private Limited 2nd Floor, Lansdowne House Building, M.B. Marg, Near Regal Cinema, Apollo Bunder, Colaba, Mumbai - 400 001		
Sample Collected by	Laboratory	Sample Description/ Type	Ambient Air (Group: Atmospheric Pollution, Sub Group: Ambient Air Quality)
Sampling Location	Near Jetty No. 2	Date-Sampling	15/03/2021 to 16/03/2021
Sample Quantity/ Packing	PM ₁₀ , BaP, Metals: Filter paper 1 x 3 no. PM _{2.5} : Filter paper 1 x 1 no. SO ₂ : 30 ml x 6 no. plastic bottle NO ₂ : 30 ml x 6 no. plastic bottle NH ₃ : 10 ml x 24 no. plastic bottle Ozone: 10 ml x 1 no. plastic bottle C ₆ H ₆ : 6 no. charcoal tubes CO: 1 no. Bladder	Date-Receipt of Sample	18/03/2021
Sampling Procedure	As per Method Reference	Date-Start of Analysis	18/03/2021
Order Reference	As per PO No. PNP/February/2019- 2020/013 Dated 26/02/2020	Date-Completion of Analysis	22/03/2021

Meteorological Data / Environmental Conditions

Average Wind Velocity 5 km/h	Wind Direction NE	Relative Humidity (Max./Min.): 60/48 %	Temperature (Max./Min.): 37/22 °C	Duration of Survey 24 h
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CHEMICAL TESTING

Parameter	Results	NAAQS # 2009	Unit	Method
Sulphur Dioxide (SO ₂)	7.9	80	µg/m ³	IS 5082 (Part 2): 2001, RA 2017
Nitrogen Dioxide (NO ₂)	31.3	80	µg/m ³	IS 5082 (Part 6): 2006, RA 2017
Particulate Matter (size less than 10 µm) or PM ₁₀	367	100	µg/m ³	IS 5082 (Part 20): 2006, RA 2017
Particulate Matter (size less than 2.5µm) or PM _{2.5}	153	60	µg/m ³	USEPA CFR 40, Part 50, Appendix I
Ozone (O ₃)	37.9	180	µg/m ³	AWMA 3rd Ed., Method 40, Page no. A02.0000
Lead (Pb)	<0.02	1	µg/m ³	EPA/625/R-96/010 a Compendium Method 0-31 6 3.2, Jan 1999
Carbon Monoxide (CO)	2.11	4	mg/m ³	CPCB Guidelines, 37/2012-03, Page no.16
Ammonia (NH ₃)	<4	400	µg/m ³	AEC/C/SAP/AA-7
Benzene (C ₆ H ₆)	1.87	5	µg/m ³	IS 5082 (Part 8): 2006, RA 2017
Benzo (a) Pyrene (BaP) - particulate phase only	<0.2	1	ng/m ³	IS 5082 (Part 02): 2004, RA 2019
Arsenic (As)	<0.3	6	ng/m ³	EPA/625/R-96/010 a Compendium Method 0-31 6 3.2, Jan 1999
Nickel (Ni)	<3	20	ng/m ³	EPA/625/R-96/010 a Compendium Method 0-31 6 3.2, Jan 1999

TWA Time Weighted Average

NAAQS (National Ambient Air Quality Standards (Industrial, Residential, Rural and other Area) specified as: 24 hours TWA in case of Sulphur Dioxide, Nitrogen Dioxide, PM₁₀, PM_{2.5}, Lead and Ammonia, 1 hour TWA in case of Carbon Monoxide and Ozone, Annual TWA in case of Benzene, Benzo (a) Pyrene, Arsenic and Nickel.

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AMBIENT AIR QUALITY MONITORING REPORT

Sample ID: AA/03/21/5724	Report No: AA/03/21/5724	Report Date	22/03/2021
Name & Address of Customer	PNP Maritime Services Private Limited 2nd Floor, Lansdowne House Building, M.B. Marg, Near Regal Cinema, Apollo Bunder, Colaba, Mumbai - 400 001		
Sample Collected by	Laboratory	Sample Description/ Type	Ambient Air (Group: Atmospheric Pollution, Sub Group: Ambient Air Quality)
Sampling Location	Near Jetty No. 3	Date-Sampling	15/03/2021 to 16/03/2021
Sample Quantity/ Packing	PM ₁₀ : BaP, Metals: Filter paper 1 x 3 no. PM _{2.5} : Filter paper 1 x 1 no. SO ₂ : 30 ml x 6 no. plastic bottle NO ₂ : 30 ml x 6 no. plastic bottle NH ₃ : 10 ml x 24 no. plastic bottle Ozone: 10 ml x 1 no. plastic bottle C ₆ H ₆ : 6 no. charcoal tubes CO: 1 no. Bladder	Date-Receipt of Sample	18/03/2021
Sampling Procedure	As per Method Reference	Date-Start of Analysis	18/03/2021
Order Reference	As per PO No. PNP/February/2019- 2020/013 Dated 26/02/2020	Date-Completion of Analysis	22/03/2021

Meteorological Data / Environmental Conditions

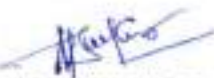
Average Wind Velocity 5 km/h	Wind Direction NE	Relative Humidity (Max./Min.): 60/48 %	Temperature (Max./Min.): 37/22 °C	Duration of Survey 24 h
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CHEMICAL TESTING

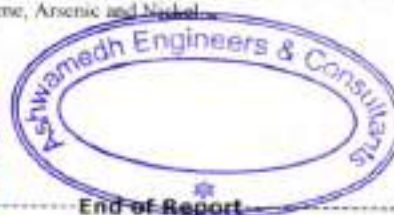
Parameter	Results	NAAQS # 2009	Unit	Method
Sulphur Dioxide (SO ₂)	8.4	80	µg/m ³	IS 5982 (Part 2): 2001, RA 2017
Nitrogen Dioxide (NO ₂)	24.7	80	µg/m ³	IS 5982 (Part 6): 2006, RA 2017
Particulate Matter (size less than 10 µm) or PM ₁₀	374	100	µg/m ³	IS 5982 (Part 20): 2006, RA 2017
Particulate Matter (size less than 2.5µm) or PM _{2.5}	162	60	µg/m ³	USEPA CFR 40, Part 50, Appendix I
Ozone (O ₃)	32.3	180	µg/m ³	AWMA 3rd Ed. Method 401 Page no. 402, 1988
Lead (Pb)	<0.02	1	µg/m ³	EPA/625/R-96/010 a Compendium Method 10-31 8 3.2, Jan 1999
Carbon Monoxide (CO)	1.88	4	mg/m ³	DPCN Guidelines: 37/2012-13, Page no.16
Ammonia (NH ₃)	<4	400	µg/m ³	AEC/C/SAP/AI-7
Benzene (C ₆ H ₆)	1.59	5	µg/m ³	IS 5982 (Part 11): 2006, RA 2017
Benzo (a) Pyrene (BaP) - particulate phase only	<0.2	1	ng/m ³	IS 5982 (Part 12): 2004, RA 2016
Arsenic (As)	<0.3	6	ng/m ³	EPA/625/R-96/010 a Compendium Method 10-31 8 3.2, Jan 1999
Nickel (Ni)	<3	20	ng/m ³	EPA/625/R-96/010 a Compendium Method 10-31 8 3.2, Jan 1999

TWA Time Weighted Average

NAAQS (National Ambient Air Quality Standards (Industrial, Residential, Rural and other Area) specified as: 24 hours TWA in case of Sulphur Dioxide, Nitrogen Dioxide, PM₁₀, PM_{2.5}, Lead and Ammonia, 1 hour TWA in case of Carbon Monoxide and Ozone, Annual TWA in case of Benzene, Benzo (a) Pyrene, Arsenic and Nickel.


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TC-5509



AMBIENT AIR QUALITY MONITORING REPORT

Sample ID: AA/03/21/5725	Report No.: AA/03/21/5725	Report Date	22/03/2021
Name & Address of Customer	PNP Maritime Services Private Limited 2nd Floor, Lansdowne House Building, M.B. Marg, Near Regal Cinema, Apollo Bunder, Colaba, Mumbai - 400 001		
Sample Collected by	Laboratory	Sample Description/ Type	Ambient Air (Group: Atmospheric Pollution, Sub Group: Ambient Air Quality)
Sampling Location	Near Jetty No.5	Date-Sampling	15/03/2021 to 16/03/2021
Sample Quantity/ Packing	PM ₁₀ , BaP, Metals: Filter paper 1 x 3 no. PM _{2.5} : Filter paper 1 x 1 no. SO ₂ : 30 ml x 6 no. plastic bottle NO ₂ : 30 ml x 6 no. plastic bottle NH ₃ : 10 ml x 24 no. plastic bottle Ozone: 10 ml x 1 no. plastic bottle C ₆ H ₆ : 6 no. charcoal tubes CO: 1 no. Bladder	Date-Receipt of Sample	18/03/2021
Sampling Procedure	As per Method Reference	Date-Start of Analysis	18/03/2021
Order Reference	As per PO No. PNP/February/2019- 2020/013 Dated 26/02/2020	Date-Completion of Analysis	22/03/2021

Meteorological Data / Environmental Conditions

Average Wind Velocity 5 km/h	Wind Direction NE	Relative Humidity (Max./Min.): 60/48 %	Temperature (Max./Min.): 37/22 °C	Duration of Survey 24 h
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CHEMICAL TESTING					
Parameter	Results	NAAQS # 2009	Unit	Method	
Sulphur Dioxide (SO ₂)	8.1	80	µg/m ³	IS 5882 (Part 2): 2008, RA 2017	
Nitrogen Dioxide (NO ₂)	30.2	80	µg/m ³	IS 5882 (Part 6): 2006, RA 2017	
Particulate Matter (size less than 10 µm) or PM ₁₀	353	100	µg/m ³	IS 5882 (Part 23): 2006, RA 2017	
Particulate Matter (size less than 2.5µm) or PM _{2.5}	142	60	µg/m ³	USEPA CFR 40, Part 50, Appendix L	
Ozone (O ₃)	35.1	180	µg/m ³	AWMA, 3rd Ed., Method 40, Page no. 403 (1999)	
Lead (Pb)	<0.02	1	µg/m ³	EPA/625/R-96/010 a Compendium Method 8-31 & 3.2, Jun 1999	
Carbon Monoxide (CO)	1.63	4	mg/m ³	CPCB Guidelines, 27/2002-13, Page no.6	
Ammonia (NH ₃)	<4	400	µg/m ³	AEC/C/SAP/AA-7	
Benzene (C ₆ H ₆)	1.86	5	µg/m ³	IS 5882 (Part 11): 2006, RA 2017	
Benzo (a) Pyrene (BaP) - particulate phase only	<0.2	1	ng/m ³	IS 5882 (Part 12): 2004, RA 2018	
Arsenic (As)	<0.3	6	ng/m ³	EPA/625/R-96/010 a Compendium Method 8-31 & 3.2, Jun 1999	
Nickel (Ni)	<3	20	ng/m ³	EPA/625/R-96/010 a Compendium Method 8-31 & 3.2, Jun 1999	

TWA Time Weighted Average
 # NAAQS (National Ambient Air Quality Standards (Industrial, Residential, Rural and other Area) specified as: 24 hours TWA in case of Sulphur Dioxide, Nitrogen Dioxide, PM₁₀, PM_{2.5}, Lead and Ammonia, 1 hour TWA in case of Carbon Monoxide and Ozone, Annual TWA in case of Benzene, Benzo (a) Pyrene, Arsenic and Nickel



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AMBIENT AIR QUALITY MONITORING REPORT

Sample ID: AA/03/21/5726	Report No: AA/03/21/5726	Report Date	22/03/2021
Name & Address of Customer	PNP Maritime Services Private Limited 2nd Floor, Lansdowne House Building, M.B. Marg, Near Regal Cinema, Apollo Bunder, Colaba, Mumbai - 400 001		
Sample Collected by	Laboratory	Sample Description/ Type	Ambient Air (Group: Atmospheric Pollution, Sub Group: Ambient Air Quality)
Sampling Location	Near Weight Bridge	Date-Sampling	15/03/2021 to 16/03/2021
Sample Quantity/ Packing	PM ₁₀ , BaP, Metals: Filter paper 1 x 3 no. PM _{2.5} : Filter paper 1 x 1 no. SO ₂ : 30 ml x 6 no. plastic bottle NO ₂ : 30 ml x 6 no. plastic bottle NH ₃ : 10 ml x 24 no. plastic bottle Ozone: 10 ml x 1 no. plastic bottle C ₆ H ₆ : 6 no. charcoal tubes CO: 1 no. Bladder	Date-Receipt of Sample	18/03/2021
Sampling Procedure	As per Method Reference	Date-Start of Analysis	18/03/2021
Order Reference	As per PO No. PNP/February/2019- 2020/013 Dated 26/02/2020	Date-Completion of Analysis	22/03/2021

Meteorological Data / Environmental Conditions

Average Wind Velocity 5 km/h	Wind Direction NE	Relative Humidity (Max./Min.): 60/48 %	Temperature (Max./Min.): 37/22 °C	Duration of Survey 24 h
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CHEMICAL TESTING

Parameter	Results	NAAQS # 2009	Unit	Method
Sulphur Dioxide (SO ₂)	7.8	80	µg/m ³	IS 5182 (Part 2): 2006, RA 2017
Nitrogen Dioxide (NO ₂)	28.5	80	µg/m ³	IS 5182 (Part 6): 2006, RA 2017
Particulate Matter (size less than 10 µm) or PM ₁₀	378	100	µg/m ³	IS 5182 (Part 20): 2006, RA 2017
Particulate Matter (size less than 2.5µm) or PM _{2.5}	152	60	µg/m ³	USEPA CFR 40, Part 50, Appendix I
Ozone (O ₃)	26.7	180	µg/m ³	AWMA 3rd Ed. Method 40 (Page no. 402, 1988)
Lead (Pb)	<0.02	1	µg/m ³	EPA/625/R-95/010 a Compendium Method 10-318 3.2, Jun 1999
Carbon Monoxide (CO)	1.58	4	mg/m ³	CPCB Guidelines, 37/2012-13, Page no.16
Ammonia (NH ₃)	<4	400	µg/m ³	AEC/C/SAP/AA-7
Benzene (C ₆ H ₆)	2.5	5	µg/m ³	IS 5182 (Part 11): 2006, RA 2017
Benzo (a) Pyrene (BaP) - particulate phase only	<0.2	1	ng/m ³	IS 5182 (Part 12): 2004, RA 2016
Arsenic (As)	<0.3	6	ng/m ³	EPA/625/R-95/010 a Compendium Method 10-31 6 2.2, Jun 1999
Nickel (Ni)	<3	20	ng/m ³	EPA/625/R-95/010 a Compendium Method 10-31 6 3.2, Jun 1999

TWA Time Weighted Average

NAAQS (National Ambient Air Quality Standards (Industrial, Residential, Rural and other Area) specified as: 24 hours TWA in case of Sulphur Dioxide, Nitrogen Dioxide, PM₁₀, PM_{2.5}, Lead and Ammonia, 1 hour TWA in case of Carbon Monoxide and Ozone, Annual TWA in case of Benzene, Benzo (a) Pyrene, Arsenic and Nickel


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AMBIENT AIR QUALITY MONITORING REPORT

Sample ID: AA/03/21/5727	Report No: AA/03/21/5727	Report Date	22/03/2021
Name & Address of Customer	PNP Maritime Services Private Limited 2nd Floor, Lansdowne House Building, M.B. Marg, Near Regal Cinema, Apollo Bunder, Colaba, Mumbai - 400 001		
Sample Collected by	Laboratory	Sample Description/ Type	Ambient Air (Group: Atmospheric Pollution, Sub Group: Ambient Air Quality)
Sampling Location	Near Custom Building	Date-Sampling	15/03/2021 to 16/03/2021
Sample Quantity/ Packing	PM ₁₀ , BaP, Metals: Filter paper 1 x 3 no. PM _{2.5} : Filter paper 1 x 1 no. SO ₂ : 30 ml x 6 no. plastic bottle NO ₂ : 30 ml x 6 no. plastic bottle NH ₃ : 10 ml x 24 no. plastic bottle Ozone: 10 ml x 1 no. plastic bottle C ₆ H ₆ : 6 no. charcoal tubes CO: 1 no. Bladder	Date-Receipt of Sample	18/03/2021
Sampling Procedure	As per Method Reference	Date-Start of Analysis	18/03/2021
Order Reference	As per PO No. PNP/February/2019- 2020/013 Dated 26/02/2020	Date-Completion of Analysis	22/03/2021

Meteorological Data / Environmental Conditions

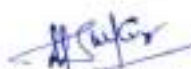
Average Wind Velocity 5 km/h	Wind Direction NE	Relative Humidity (Max./Min.): 60/48 %	Temperature (Max./Min.): 37/22 °C	Duration of Survey 24 h
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CHEMICAL TESTING

Parameter	Results	NAAQS # 2009	Unit	Method
Sulphur Dioxide (SO ₂)	8.2	80	µg/m ³	IS 5182 (Part 2): 2001, RA 2017
Nitrogen Dioxide (NO ₂)	27.7	80	µg/m ³	IS 5182 (Part 6): 2006, RA 2017
Particulate Matter (size less than 10 µm) or PM ₁₀	368	100	µg/m ³	IS 5182 (Part 23): 2006, RA 2017
Particulate Matter (size less than 2.5µm) or PM _{2.5}	152	60	µg/m ³	USEPA CFR 40, Part 50, Appendix I
Ozone (O ₃)	29.5	180	µg/m ³	AMMA 2nd Ed. Method 40 Page no. 403/1988
Lead (Pb)	<0.02	1	µg/m ³	EPA/625/R-96/010 a Compendium Method ID-316 3.2, Jun 1999
Carbon Monoxide (CO)	1.63	4	mg/m ³	CPCB Guidelines, 37/2002-03, Page no 05
Ammonia (NH ₃)	<4	400	µg/m ³	AEC/C/SAP/AA-7
Benzene (C ₆ H ₆)	1.65	5	µg/m ³	IS 5182 (Part 8): 2006, RA 2017
Benzo (a) Pyrene (BaP) - particulate phase only	<0.2	1	ng/m ³	IS 5182 (Part 12): 2004, RA 2018
Arsenic (As)	<0.3	6	ng/m ³	EPA/625/R-96/010 a Compendium Method ID-316 3.2, Jun 1999
Nickel (Ni)	<3	20	ng/m ³	EPA/625/R-96/010 a Compendium Method ID-316 3.2, Jun 1999

TWA Time Weighted Average

NAAQS (National Ambient Air Quality Standards (Industrial, Residential, Rural and other Area) specified as: 24 hours TWA in case of Sulphur Dioxide, Nitrogen Dioxide, PM₁₀, PM_{2.5}, Lead and Ammonia, 1 hour TWA in case of Carbon Monoxide and Ozone, Annual TWA in case of Benzene, Benzo (a) Pyrene, Arsenic and Nickel.


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AMBIENT AIR QUALITY MONITORING REPORT

Sample ID: AA/03/21/5728	Report No.: AA/03/21/5728	Report Date	22/03/2021
Name & Address of Customer	PNP Maritime Services Private Limited 2nd Floor, Lansdowne House Building, M.B. Marg, Near Regal Cinema, Apollo Bunder, Colaba, Mumbai - 400 001		
Sample Collected by	Laboratory	Sample Description/ Type	Ambient Air (Group: Atmospheric Pollution, Sub Group: Ambient Air Quality)
Sampling Location	Near Lal Gate	Date-Sampling	15/03/2021 to 16/03/2021
Sample Quantity/ Packing	PM ₁₀ , BaP, Metals: Filter paper 1 x 3 no. PM _{2.5} : Filter paper 1 x 1 no. SO ₂ : 30 ml x 6 no. plastic bottle NO ₂ : 30 ml x 6 no. plastic bottle NH ₃ : 10 ml x 24 no. plastic bottle Ozone: 10 ml x 1 no. plastic bottle C ₆ H ₆ : 6 no. charcoal tubes CO: 1 no. Bladder	Date-Receipt of Sample	18/03/2021
Sampling Procedure	As per Method Reference	Date-Start of Analysis	18/03/2021
Order Reference	As per PO No. PNP/February/2019- 2020/013 Dated 26/02/2020	Date-Completion of Analysis	22/03/2021

Meteorological Data / Environmental Conditions

Average Wind Velocity 5 km/h	Wind Direction NE	Relative Humidity (Max./Min.): 60/48 %	Temperature (Max./Min.): 37/22 °C	Duration of Survey 24 h
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CHEMICAL TESTING

Parameter	Results	NAAQS # 2009	Unit	Method
Sulphur Dioxide (SO ₂)	7.7	80	µg/m ³	IS 5182 (Part 2): 2001, RA 2017
Nitrogen Dioxide (NO ₂)	28.3	80	µg/m ³	IS 5182 (Part 6): 2006, RA 2017
Particulate Matter (size less than 10 µm) or PM ₁₀	354	100	µg/m ³	IS 5182 (Part 20): 2006, RA 2017
Particulate Matter (size less than 2.5µm) or PM _{2.5}	183	60	µg/m ³	USEPA CFR 40, Part 50, Appendix I
Ozone (O ₃)	33.7	180	µg/m ³	AMMA 3rd Ed. Method 40, Page no. 401/1998
Lead (Pb)	<0.02	1	µg/m ³	EPA/625/R-96/010 a Compendium Method 10-31 B 3.2, Jan 1999
Carbon Monoxide (CO)	1.83	4	mg/m ³	CPCB Guidelines, 37/2012-03, Page no 16
Ammonia (NH ₃)	<4	400	µg/m ³	AEC/C/SAP/AA-7
Benzene (C ₆ H ₆)	1.63	5	µg/m ³	IS 5182 (Part 8): 2006, RA 2017
Benzo (a) Pyrene (BaP) - particulate phase only	<0.2	1	ng/m ³	IS 5182 (Part 12): 2004, RA 2019
Arsenic (As)	<0.3	6	ng/m ³	EPA/625/R-96/010 a Compendium Method 10-31 B 3.2, Jan 1999
Nickel (Ni)	<3	20	ng/m ³	EPA/625/R-96/010 a Compendium Method 10-31 B 3.2, Jan 1999

TWA Time Weighted Average

NAAQS (National Ambient Air Quality Standards (Industrial, Residential, Rural and other Area) specified as: 24 hours TWA in case of Sulphur Dioxide, Nitrogen Dioxide, PM₁₀, PM_{2.5}, Lead and Ammonia, 1 hour TWA in case of Carbon Monoxide and Ozone, Annual TWA in case of Benzene, Benzo (a) Pyrene, Arsenic and Nickel



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4. There are no additions to, deviation or exclusions from the method.



AMBIENT AIR QUALITY MONITORING REPORT

Sample ID: AA/03/21/5729	Report No: AA/03/21/5729	Report Date	22/03/2021
Name & Address of Customer	PNP Maritime Services Private Limited 2nd Floor, Lansdowne House Building, M.B. Marg, Near Regal Cinema, Apollo Bunder, Colaba, Mumbai – 400 001		
Sample Collected by	Laboratory	Sample Description/ Type	Ambient Air (Group: Atmospheric Pollution, Sub Group: Ambient Air Quality)
Sampling Location	Near DIL Main Gate	Date-Sampling	15/03/2021 to 16/03/2021
Sample Quantity/ Packing	PM ₁₀ , BaP, Metals: Filter paper 1 x 3 no. PM _{2.5} : Filter paper 1 x 1 no. SO ₂ : 30 ml x 6 no. plastic bottle NO ₂ : 30 ml x 6 no. plastic bottle NH ₃ : 10 ml x 24 no. plastic bottle Ozone: 10 ml x 1 no. plastic bottle C ₆ H ₆ : 6 no. charcoal tubes CO: 1 no. Bladder	Date-Receipt of Sample	18/03/2021
Sampling Procedure	As per Method Reference	Date-Start of Analysis	18/03/2021
Order Reference	As per PO No. PNP/February/2019- 2020/013 Dated 26/02/2020	Date-Completion of Analysis	22/03/2021

Meteorological Data / Environmental Conditions

Average Wind Velocity 5 km/h	Wind Direction NE	Relative Humidity (Max./Min.): 60/48 %	Temperature (Max./Min.): 37/22 °C	Duration of Survey 24 h
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CHEMICAL TESTING

Parameter	Results	NAAQS # 2009	Unit	Method
Sulphur Dioxide (SO ₂)	7.5	80	µg/m ³	IS 5182 (Part 2): 2001, RA 2007
Nitrogen Dioxide (NO ₂)	33.4	80	µg/m ³	IS 5182 (Part 6): 2006, RA 2007
Particulate Matter (size less than 10 µm) or PM ₁₀	384	100	µg/m ³	IS 5182 (Part 23): 2006, RA 2007
Particulate Matter (size less than 2.5µm) or PM _{2.5}	142	60	µg/m ³	USEPA CFR 40, Part 50, Appendix I
Ozone (O ₃)	36.5	180	µg/m ³	AWMA 3rd Ed., Method 40, Page no. 403/1988
Lead (Pb)	<0.02	1	µg/m ³	EPA/625/R-96/010 a Compendium Method 10-31 B 3.2, Jan 1996
Carbon Monoxide (CO)	1.73	4	mg/m ³	CPCB Guidelines 37/2012-13, Page no 16
Ammonia (NH ₃)	<4	400	µg/m ³	AEC/C/SAP/AA-7
Benzene (C ₆ H ₆)	1.86	5	µg/m ³	IS 5182 (Part 10): 2006, RA 2007
Benzo (a) Pyrene (BaP) - particulate phase only	<0.2	1	ng/m ³	IS 5182 (Part 12): 2004, RA 2006
Arsenic (As)	<0.3	6	ng/m ³	EPA/625/R-96/010 a Compendium Method 10-31 B 3.2, Jan 1996
Nickel (Ni)	<3	20	ng/m ³	EPA/625/R-96/010 a Compendium Method 10-31 B 3.2, Jan 1996

TWA Time Weighted Average

NAAQS (National Ambient Air Quality Standards (Industrial, Residential, Rural and other Area) specified as: 24 hours TWA in case of Sulphur Dioxide, Nitrogen Dioxide, PM₁₀, PM_{2.5}, Lead and Ammonia, 1 hour TWA in case of Carbon Monoxide and Ozone, Annual TWA in case of Benzene, Benzo (a) Pyrene, Arsenic and Nickel

(Signature)

Ninad Soundankar
 Technical Manager (Chemical)
 Reviewed & Authorised by



End of Report

Note:

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TC-5509



AMBIENT AIR QUALITY MONITORING REPORT

Sample ID: AA/03/21/5730	Report No.: AA/03/21/5730	Report Date	22/03/2021
Name & Address of Customer	PNP Maritime Services Private Limited 2nd Floor, Lansdowne House Building, M.B. Marg, Near Regal Cinema, Apollo Bunder, Colaba, Mumbai - 400 001		
Sample Collected by	Laboratory	Sample Description/ Type	Ambient Air (Group: Atmospheric Pollution, Sub Group: Ambient Air Quality)
Sampling Location	DIL Godown Back Side	Date-Sampling	15/03/2021 to 16/03/2021
Sample Quantity/ Packing	PM ₁₀ , BaP, Metals: Filter paper 1 x 3 no. PM _{2.5} : Filter paper 1 x 1 no. SO ₂ : 30 ml x 6 no. plastic bottle NO ₂ : 30 ml x 6 no. plastic bottle NH ₃ : 10 ml x 24 no. plastic bottle Ozone: 10 ml x 1 no. plastic bottle C ₆ H ₆ : 6 no. charcoal tubes CO: 1 no. Bladder	Date-Receipt of Sample	18/03/2021
Sampling Procedure	As per Method Reference	Date-Start of Analysis	18/03/2021
Order Reference	As per PO No. PNP/February/2019- 2020/013 Dated 26/02/2020	Date-Completion of Analysis	22/03/2021

Meteorological Data / Environmental Conditions

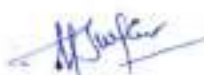
Average Wind Velocity 5 km/h	Wind Direction NE	Relative Humidity (Max./Min.): 60/48 %	Temperature (Max./Min.): 37/22 °C	Duration of Survey 24 h
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CHEMICAL TESTING

Parameter	Results	NAAQS # 2009	Unit	Method
Sulphur Dioxide (SO ₂)	7.4	80	µg/m ³	IS 5082 (Part 2): 2001, RA 2017
Nitrogen Dioxide (NO ₂)	28.1	80	µg/m ³	IS 5082 (Part 6): 2006, RA 2017
Particulate Matter (size less than 10 µm) or PM ₁₀	356	100	µg/m ³	IS 5082 (Part 23): 2006/RA 2017
Particulate Matter (size less than 2.5µm) or PM _{2.5}	143	60	µg/m ³	US EPA CFR 40, Part 50, Appendix I
Ozone (O ₃)	<19.6	180	µg/m ³	AMMA, 3rd Ed., Method 4R, Page no. 403, 1999
Lead (Pb)	<0.02	1	µg/m ³	EPA/625/R-96/010 a Compendium Method ID-31 & 3.2, Jun 1999
Carbon Monoxide (CO)	1.83	4	mg/m ³	CPCB Guidelines: 27/2002-Q3, Page no.16
Ammonia (NH ₃)	<4	400	µg/m ³	AEC/C/SAP/AA-7
Benzene (C ₆ H ₆)	1.73	5	µg/m ³	IS 5082 (Part II): 2006, RA 2017
Benzo (a) Pyrene (BaP) - particulate phase only	<0.2	1	ng/m ³	IS 5082 (Part 12): 2004, RA 2019
Arsenic (As)	<0.3	6	ng/m ³	EPA/625/R-96/010 a Compendium Method ID-31 & 3.2, Jun 1999
Nickel (Ni)	<3	20	ng/m ³	EPA/625/R-96/010 a Compendium Method ID-31 & 3.2, Jun 1999

TWA Time Weighted Average

NAAQS (National Ambient Air Quality Standards (Industrial, Residential, Rural and other Area) specified as: 24 hours TWA in case of Sulphur Dioxide, Nitrogen Dioxide, PM₁₀, PM_{2.5}, Lead and Ammonia, 1 hour TWA in case of Carbon Monoxide and Ozone, Annual TWA in case of Benzene, Benzo (a) Pyrene, Arsenic and Nickel



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TC-5509



AMBIENT AIR QUALITY MONITORING REPORT

Sample ID: AA/03/21/5897	Report No: AA/03/21/5897	Report Date	31/03/2021
Name & Address of Customer	PNP Maritime Services Private Limited 2nd Floor, Lansdowne House Building, M.B. Marg, Near Regal Cinema, Apollo Bunder, Colaba, Mumbai - 400 001		
Sample Collected by	Laboratory	Sample Description/ Type	Ambient Air (Group: Atmospheric Pollution, Sub Group: Ambient Air Quality)
Sampling Location	Near Main Gate	Date-Sampling	18/03/2021 to 19/03/2021
Sample Quantity/ Packing	PM ₁₀ , BaP, Metals: Filter paper 1 x 3 no. PM _{2.5} : Filter paper 1 x 1 no. SO ₂ : 30 ml x 6 no. plastic bottle NO ₂ : 30 ml x 6 no. plastic bottle NH ₃ : 10 ml x 24 no. plastic bottle Ozone: 10 ml x 1 no. plastic bottle C ₆ H ₆ : 6 no. charcoal tubes CO: 1 no. Bladder	Date-Receipt of Sample	22/03/2021
Sampling Procedure	As per Method Reference	Date-Start of Analysis	22/03/2021
Order Reference	As per PO No. PNP/February/2019- 2020/013 Dated 26/02/2020	Date-Completion of Analysis	31/03/2021

Meteorological Data / Environmental Conditions

Average Wind Velocity 14 km/h	Wind Direction WNW	Relative Humidity (Max./Min.): 44/32 %	Temperature (Max./Min.): 37/22 °C	Duration of Survey 24 h
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CHEMICAL TESTING					
Parameter	Results	NAAQS # 2009	Unit	Method	
Sulphur Dioxide (SO ₂)	8.1	80	µg/m ³	IS 5182 (Part 2): 2008, RA 2017	
Nitrogen Dioxide (NO ₂)	28.1	80	µg/m ³	IS 5182 (Part 5): 2006, RA 2017	
Particulate Matter (size less than 10 µm) or PM ₁₀	378	100	µg/m ³	IS 5182 (Part 23): 2006, RA 2017	
Particulate Matter (size less than 2.5µm) or PM _{2.5}	158	60	µg/m ³	ISIRI/CFR 40, Part 50, Appendix I	
Ozone (O ₃)	35.1	180	µg/m ³	AWMA 3rd Ed. Method 40 Page no. 403 (1988)	
Lead (Pb)	<0.02	1	µg/m ³	EPA/825/R-96/DIO a Compendium Method ID-31 & 32, Jan 1999	
Carbon Monoxide (CO)	1.89	4	mg/m ³	CPCB Guidelines, 37/2012-13, Page no 16	
Ammonia (NH ₃)	<4	400	µg/m ³	AEC/C/SAP/AA-7	
Benzene (C ₆ H ₆)	1.48	5	µg/m ³	IS 5182 (Part 11): 2006, RA 2017	
Benzo (a) Pyrene (BaP) - particulate phase only	<0.2	1	ng/m ³	IS 5182 (Part 17): 2004, RA 2019	
Arsenic (As)	<0.3	6	ng/m ³	EPA/825/R-96/DIO a Compendium Method ID-31 & 32, Jan 1999	
Nickel (Ni)	<3	20	ng/m ³	EPA/825/R-96/DIO a Compendium Method ID-31 & 32, Jan 1999	

TWA Time Weighted Average
 # NAAQS (National Ambient Air Quality Standards (Industrial, Residential, Rural and other Area) specified as: 24 hours TWA in case of Sulphur Dioxide, Nitrogen Dioxide, PM₁₀, PM_{2.5}, Lead and Ammonia, 1 hour TWA in case of Carbon Monoxide and Ozone, Annual TWA in case of Benzene, Benzo (a) Pyrene, Arsenic and Nickel.



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TC-5509



AMBIENT AIR QUALITY MONITORING REPORT

Sample ID: AA/03/21/5898	Report No.: AA/03/21/5898	Report Date:	31/03/2021
Name & Address of Customer:	PNP Maritime Services Private Limited 2nd Floor, Lansdowne House Building, M.B. Marg, Near Regal Cinema, Apollo Bunder, Colaba, Mumbai - 400 001		
Sample Collected by	Laboratory	Sample Description/ Type	Ambient Air (Group: Atmospheric Pollution, Sub Group: Ambient Air Quality)
Sampling Location	Near Jetty No. 1	Date-Sampling	18/03/2021 to 19/03/2021
Sample Quantity/ Packing	PM ₁₀ , BaP, Metals: Filter paper 1 x 3 no. PM _{2.5} : Filter paper 1 x 1 no. SO ₂ : 30 ml x 6 no. plastic bottle NO ₂ : 30 ml x 6 no. plastic bottle NH ₃ : 10 ml x 24 no. plastic bottle Ozone: 10 ml x 1 no. plastic bottle C ₆ H ₆ : 6 no. charcoal tubes CO: 1 no. Bladder	Date-Receipt of Sample	22/03/2021
Sampling Procedure	As per Method Reference	Date-Start of Analysis	22/03/2021
Order Reference	As per PO No. PNP/February/2019- 2020/013 Dated 26/02/2020	Date-Completion of Analysis	31/03/2021

Meteorological Data / Environmental Conditions

Average Wind Velocity 14 km/h	Wind Direction WNW	Relative Humidity (Max./Min.): 44/32 %	Temperature (Max./Min.): 37/22 °C	Duration of Survey 24 h
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CHEMICAL TESTING

Parameter	Results	NAAQS # 2009	Unit	Method
Sulphur Dioxide (SO ₂)	7.1	80	µg/m ³	IS 5882 (Part 2): 2008, RA 2017
Nitrogen Dioxide (NO ₂)	28.5	80	µg/m ³	IS 5882 (Part 6): 2006, RA 2017
Particulate Matter (size less than 10 µm) or PM ₁₀	384	100	µg/m ³	IS 5882 (Part 23): 2006, RA 2017
Particulate Matter (size less than 2.5µm) or PM _{2.5}	156	60	µg/m ³	USEPA CFR 40, Part 50, Appendix L
Ozone (O ₃)	30.9	180	µg/m ³	AWMA 3rd Ed., Method 40, Page no. 403/1988
Lead (Pb)	<0.02	1	µg/m ³	EPA/625/R-96/010 a Compendium Method ID-316 3.2, Jun 1999
Carbon Monoxide (CO)	2.11	4	mg/m ³	CPCB Guidelines, 37/2002-01, Page no.16
Ammonia (NH ₃)	<4	400	µg/m ³	AEC/C/SAP/AA-7
Benzene (C ₆ H ₆)	2.41	5	µg/m ³	IS 5882 (Part 8): 2006, RA 2017
Benzo (a) Pyrene (BaP) - particulate phase only	<0.2	1	ng/m ³	IS 5882 (Part 12): 2006, RA 2017
Arsenic (As)	<0.3	6	ng/m ³	EPA/625/R-96/010 a Compendium Method ID-316 3.2, Jun 1999
Nickel (Ni)	<3	20	ng/m ³	EPA/625/R-96/010 a Compendium Method ID-316 3.2, Jun 1999

TWA Time Weighted Average

NAAQS (National Ambient Air Quality Standards (Industrial, Residential, Rural and other Area) specified as: 24 hours TWA in case of Sulphur Dioxide, Nitrogen Dioxide, PM₁₀, PM_{2.5}, Lead and Ammonia, 1 hour TWA in case of Carbon Monoxide and Ozone, Annual TWA in case of Benzene, Benzo (a) Pyrene, Arsenic and Nickel.


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TC-5509



AMBIENT AIR QUALITY MONITORING REPORT

Sample ID: AA/03/21/5899	Report No.: AA/03/21/5899	Report Date	31/03/2021
Name & Address of Customer	PNP Maritime Services Private Limited 2nd Floor, Lansdowne House Building, M.B. Marg, Near Regal Cinema, Apollo Bunder, Colaba, Mumbai - 400 001		
Sample Collected by	Laboratory	Sample Description/ Type	Ambient Air (Group: Atmospheric Pollution, Sub Group: Ambient Air Quality)
Sampling Location	Near Jetty No. 2	Date-Sampling	18/03/2021 to 19/03/2021
Sample Quantity/ Packing	PM ₁₀ , BaP, Metals: Filter paper 1 x 3 no. PM _{2.5} : Filter paper 1 x 1 no. SO ₂ : 30 ml x 6 no. plastic bottle NO ₂ : 30 ml x 6 no. plastic bottle NH ₃ : 10 ml x 24 no. plastic bottle Ozone: 10 ml x 1 no. plastic bottle C ₆ H ₆ : 6 no. charcoal tubes CO: 1 no. Bladder	Date-Receipt of Sample	22/03/2021
Sampling Procedure	As per Method Reference	Date-Start of Analysis	22/03/2021
Order Reference	As per PO No. PNP/February/2019- 2020/013 Dated 26/02/2020	Date-Completion of Analysis	31/03/2021

Meteorological Data / Environmental Conditions

Average Wind Velocity 14 km/h	Wind Direction WNW	Relative Humidity (Max./Min.): 44/32 %	Temperature (Max./Min.): 37/22 °C	Duration of Survey 24 h
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CHEMICAL TESTING

Parameter	Results	NAAQS # 2009	Unit	Method
Sulphur Dioxide (SO ₂)	7.5	80	µg/m ³	IS 5082 (Part 2): 2006, RA 2017
Nitrogen Dioxide (NO ₂)	28.3	80	µg/m ³	IS 5082 (Part 6): 2006, RA 2017
Particulate Matter (size less than 10 µm) or PM ₁₀	367	100	µg/m ³	IS 5082 (Part 20): 2006, RA 2017
Particulate Matter (size less than 2.5µm) or PM _{2.5}	146	60	µg/m ³	USEPA CFR 40, Part 50, Appendix I
Ozone (O ₃)	29.5	180	µg/m ³	AWMA, 3rd Ed., Method 41, Page no. 403, 1988
Lead (Pb)	<0.02	1	µg/m ³	EPA/625/R-96/010 a Compendium Method 8-318 3.2, Jan 1998
Carbon Monoxide (CO)	1.69	4	mg/m ³	CPCB Guidelines: 37/2002-G, Page no. 6
Ammonia (NH ₃)	<4	400	µg/m ³	AEC/C/SAP/AA-7
Benzene (C ₆ H ₆)	1.84	5	µg/m ³	IS 5082 (Part 10): 2006, RA 2017
Benzo (a) Pyrene (BaP) - particulate phase only	<0.2	1	ng/m ³	IS 5082 (Part 12): 2006, RA 2017
Arsenic (As)	<0.3	6	ng/m ³	EPA/625/R-96/010 a Compendium Method 8-318 3.2, Jan 1998
Nickel (Ni)	<3	20	ng/m ³	EPA/625/R-96/010 a Compendium Method 8-318 3.2, Jan 1998

TWA Time Weighted Average

* NAAQS (National Ambient Air Quality Standards (Industrial, Residential, Rural and other Area) specified as: 24 hours TWA in case of Sulphur Dioxide, Nitrogen Dioxide, PM₁₀, PM_{2.5}, Lead and Ammonia, 1 hour TWA in case of Carbon Monoxide and Ozone, Annual TWA in case of Benzene, Benzo (a) Pyrene, Arsenic and Nickel



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End of Report

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TC-5509



AMBIENT AIR QUALITY MONITORING REPORT

Sample ID: AA/03/21/5900	Report No: AA/03/21/5900	Report Date	31/03/2021
Name & Address of Customer	PNP Maritime Services Private Limited 2nd Floor, Lansdowne House Building, M.B. Marg, Near Regal Cinema, Apollo Bunder, Colaba, Mumbai - 400 001		
Sample Collected by	Laboratory	Sample Description/ Type	Ambient Air (Group: Atmospheric Pollution, Sub Group: Ambient Air Quality)
Sampling Location	Near Jetty No. 3	Date-Sampling	18/03/2021 to 19/03/2021
Sample Quantity/ Packing	PM ₁₀ , BaP, Metals: Filter paper 1 x 3 no. PM _{2.5} : Filter paper 1 x 1 no. SO ₂ : 30 ml x 6 no. plastic bottle NO ₂ : 30 ml x 6 no. plastic bottle NH ₃ : 10 ml x 24 no. plastic bottle Ozone: 10 ml x 1 no. plastic bottle C ₆ H ₆ : 6 no. charcoal tubes CO: 1 no. Bladder	Date-Receipt of Sample	22/03/2021
Sampling Procedure	As per Method Reference	Date-Start of Analysis	22/03/2021
Order Reference	As per PO No. PNP/February/2019- 2020/013 Dated 26/02/2020	Date-Completion of Analysis	31/03/2021

Meteorological Data / Environmental Conditions

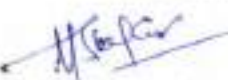
Average Wind Velocity 14 km/h	Wind Direction WNW	Relative Humidity (Max./Min.): 44/32 %	Temperature (Max./Min.): 37/22 °C	Duration of Survey 24 h
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CHEMICAL TESTING

Parameter	Results	NAAQS # 2009	Unit	Method
Sulphur Dioxide (SO ₂)	8.5	80	µg/m ³	IS 5182 (Part 2): 2001 RA 2017
Nitrogen Dioxide (NO ₂)	32.4	80	µg/m ³	IS 5182 (Part 6): 2006 RA 2017
Particulate Matter (size less than 10 µm) or PM ₁₀	368	100	µg/m ³	IS 5182 (Part 23): 2006 RA 2017
Particulate Matter (size less than 2.5µm) or PM _{2.5}	153	60	µg/m ³	USEPA CFR 40, Part 50, Appendix I
Ozone (O ₃)	37.9	180	µg/m ³	AWMA, 3rd Ed. Method 40, Page no. 403 1998
Lead (Pb)	<0.02	1	µg/m ³	EPA/625/R-96/010 a Compendium Method 10-316 3.2, Jun 1999
Carbon Monoxide (CO)	1.94	4	mg/m ³	CPCB Guidelines, 37/2002-02, Page no.11
Ammonia (NH ₃)	<4	400	µg/m ³	AEC/C/SAP/AA-7
Benzene (C ₆ H ₆)	2.17	5	µg/m ³	IS 5182 (Part 11): 2006 RA 2017
Benzo (a) Pyrene (BaP) - particulate phase only	<0.2	1	ng/m ³	IS 5182 (Part 12): 2004 RA 2019
Arsenic (As)	<0.3	6	ng/m ³	EPA/625/R-96/010 a Compendium Method 10-316 3.2, Jun 1999
Nickel (Ni)	<3	20	ng/m ³	EPA/625/R-96/010 a Compendium Method 10-316 3.2, Jun 1999

TWA Time Weighted Average

NAAQS (National Ambient Air Quality Standards (Industrial, Residential, Rural and other Area) specified as: 24 hours TWA in case of Sulphur Dioxide, Nitrogen Dioxide, PM₁₀, PM_{2.5}, Lead and Ammonia, 1-hour TWA in case of Carbon Monoxide and Ozone, Annual TWA in case of Benzene, Benzo (a) Pyrene, Arsenic and Nickel.



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End of Report

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AMBIENT AIR QUALITY MONITORING REPORT

Sample ID: AA/03/21/5901	Report No: AA/03/21/5901	Report Date	31/03/2021
Name & Address of Customer	PNP Maritime Services Private Limited 2nd Floor, Lansdowne House Building, M.B. Marg, Near Regal Cinema, Apollo Bunder, Colaba, Mumbai - 400 001		
Sample Collected by	Laboratory	Sample Description/ Type	Ambient Air (Group: Atmospheric Pollution, Sub Group: Ambient Air Quality)
Sampling Location	Near Jetty No.5	Date-Sampling	18/03/2021 to 19/03/2021
Sample Quantity/ Packing	PM ₁₀ , BaP, Metals: Filter paper 1 x 3 no. PM _{2.5} : Filter paper 1 x 1 no. SO ₂ : 30 ml x 6 no. plastic bottle NO ₂ : 30 ml x 6 no. plastic bottle NH ₃ : 10 ml x 24 no. plastic bottle Ozone: 10 ml x 1 no. plastic bottle C ₆ H ₆ : 6 no. charcoal tubes CO: 1 no. Bladder	Date-Receipt of Sample	22/03/2021
Sampling Procedure	As per Method Reference	Date-Start of Analysis	22/03/2021
Order Reference	As per PO No. PNP/February/2019- 2020/013 Dated 26/02/2020	Date-Completion of Analysis	31/03/2021

Meteorological Data / Environmental Conditions

Average Wind Velocity 14 km/h	Wind Direction WNW	Relative Humidity (Max./Min.): 44/32 %	Temperature (Max./Min.): 37/22 °C	Duration of Survey 24 h
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CHEMICAL TESTING

Parameter	Results	NAAQS # 2009	Unit	Method
Sulphur Dioxide (SO ₂)	8.4	80	µg/m ³	IS 5182 (Part 2): 2006, RA 2017
Nitrogen Dioxide (NO ₂)	27.5	80	µg/m ³	IS 5182 (Part 6): 2006, RA 2017
Particulate Matter (size less than 10 µm) or PM ₁₀	341	100	µg/m ³	IS 5182 (Part 22): 2006, RA 2017
Particulate Matter (size less than 2.5µm) or PM _{2.5}	132	60	µg/m ³	USEPA CFR 40, Part 50, Appendix I
Ozone (O ₃)	30.9	180	µg/m ³	AWMA, 3rd Ed., Method 4E, Page no. 402, 1998
Lead (Pb)	<0.02	1	µg/m ³	EPA/825/R-96/010 a Compendium Method II-318 3.2, Jun 1996
Carbon Monoxide (CO)	1.81	4	mg/m ³	CPCB Guidelines, 37/2002-CL, Page no.16
Ammonia (NH ₃)	<4	400	µg/m ³	AEC/C/SAP/AA-7
Benzene (C ₆ H ₆)	1.68	5	µg/m ³	IS 5182 (Part 8): 2006, RA 2017
Benzo (a) Pyrene (BaP) - particulate phase only	<0.2	1	ng/m ³	IS 5182 (Part 17): 2004, RA 2016
Arsenic (As)	<0.3	6	ng/m ³	EPA/825/R-96/010 a Compendium Method II-318 3.2, Jun 1996
Nickel (Ni)	<3	20	ng/m ³	EPA/825/R-96/010 a Compendium Method II-318 3.2, Jun 1996

TWA Time Weighted Average

NAAQS (National Ambient Air Quality Standards (Industrial, Residential, Rural and other Area) specified as: 24 hours TWA in case of Sulphur Dioxide, Nitrogen Dioxide, PM₁₀, PM_{2.5}, Lead and Ammonia, 1 hour TWA in case of Carbon Monoxide and Ozone, Annual TWA in case of Benzene, Benzo (a) Pyrene, Arsenic and Nickel.



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TC-5509



AMBIENT AIR QUALITY MONITORING REPORT

Sample ID: AA/03/21/5902	Report No: AA/03/21/5902	Report Date	31/03/2021
Name & Address of Customer	PNP Maritime Services Private Limited 2nd Floor, Lansdowne House Building, M.B. Marg, Near Regal Cinema, Apollo Bunder, Colaba, Mumbai - 400 001		
Sample Collected by	Laboratory	Sample Description/Type	Ambient Air (Group: Atmospheric Pollution, Sub Group: Ambient Air Quality)
Sampling Location	Near Weight Bridge	Date-Sampling	18/03/2021 to 19/03/2021
Sample Quantity/ Packing	PM ₁₀ , BaP, Metals: Filter paper 1 x 3 no. PM _{2.5} : Filter paper 1 x 1 no. SO ₂ : 30 ml x 6 no. plastic bottle NO ₂ : 30 ml x 6 no. plastic bottle NH ₃ : 10 ml x 24 no. plastic bottle Ozone: 10 ml x 1 no. plastic bottle C ₆ H ₆ : 6 no. charcoal tubes CO: 1 no. Bladder	Date-Receipt of Sample	22/03/2021
Sampling Procedure	As per Method Reference	Date-Start of Analysis	22/03/2021
Order Reference	As per PO No. PNP/February/2019- 2020/013 Dated 26/02/2020	Date-Completion of Analysis	31/03/2021

Meteorological Data / Environmental Conditions

Average Wind Velocity 14 km/h	Wind Direction WNW	Relative Humidity (Max./Min.): 44/32 %	Temperature (Max./Min.): 37/22 °C	Duration of Survey 24 h
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CHEMICAL TESTING					
Parameter	Results	NAAQS # 2009	Unit	Method	
Sulphur Dioxide (SO ₂)	7.9	80	µg/m ³	IS 5182 (Part 2): 2006, RA 2007	
Nitrogen Dioxide (NO ₂)	30.9	80	µg/m ³	IS 5182 (Part 6): 2006, RA 2007	
Particulate Matter (size less than 10 µm) or PM ₁₀	368	100	µg/m ³	IS 5182 (Part 23): 2006, RA 2007	
Particulate Matter (size less than 2.5µm) or PM _{2.5}	159	60	µg/m ³	USEPA CFR 40, Part 50, Appendix I	
Ozone (O ₃)	33.7	180	µg/m ³	AWWA 3rd Ed. Method 40, Page no. 403, 1988	
Lead (Pb)	<0.02	1	µg/m ³	EPA/825/R-96/010 a Compendium Method 0-318.3.2, Jun 1998	
Carbon Monoxide (CO)	1.54	4	mg/m ³	CPCB Guidelines: 37/2002-03, Page no.16	
Ammonia (NH ₃)	<4	400	µg/m ³	NEC/C/SAP/AA-7	
Benzene (C ₆ H ₆)	1.91	5	µg/m ³	IS 5182 (Part II): 2006, RA 2007	
Benzo (a) Pyrene (BaP) - particulate phase only	<0.2	1	ng/m ³	IS 5182 (Part 17): 2004, RA 2008	
Arsenic (As)	<0.3	6	ng/m ³	EPA/825/R-96/010 a Compendium Method 0-318.3.2, Jun 1998	
Nickel (Ni)	<3	20	ng/m ³	EPA/825/R-96/010 a Compendium Method 0-318.3.2, Jun 1998	

TWA Time Weighted Average

NAAQS (National Ambient Air Quality Standards (Industrial, Residential, Rural and other Area) specified as: 24 hours TWA in case of Sulphur Dioxide, Nitrogen Dioxide, PM₁₀, PM_{2.5}, Lead and Ammonia, 1 hour TWA in case of Carbon Monoxide and Ozone, Annual TWA in case of Benzene, Benzo (a) Pyrene, Arsenic and Nickel.



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AMBIENT AIR QUALITY MONITORING REPORT

Sample ID: AA/03/21/5903	Report No: AA/03/21/5903	Report Date	31/03/2021
Name & Address of Customer	PNP Maritime Services Private Limited 2nd Floor, Lansdowne House Building, M.B. Marg, Near Regal Cinema, Apollo Bunder, Colaba, Mumbai - 400 001		
Sample Collected by	Laboratory	Sample Description/ Type	Ambient Air (Group: Atmospheric Pollution, Sub Group: Ambient Air Quality)
Sampling Location	Near Custom Building	Date-Sampling	18/03/2021 to 19/03/2021
Sample Quantity/ Packing	PM ₁₀ , BaP, Metals: Filter paper 1 x 3 no. PM _{2.5} : Filter paper 1 x 1 no. SO ₂ : 30 ml x 6 no. plastic bottle NO ₂ : 30 ml x 6 no. plastic bottle NH ₃ : 10 ml x 24 no. plastic bottle Ozone: 10 ml x 1 no. plastic bottle C ₆ H ₆ : 6 no. charcoal tubes CO: 1 no. Bladder	Date-Receipt of Sample	22/03/2021
Sampling Procedure	As per Method Reference	Date-Start of Analysis	22/03/2021
Order Reference	As per PO No. PNP/February/2019- 2020/013 Dated 26/02/2020	Date-Completion of Analysis	31/03/2021

Meteorological Data / Environmental Conditions

Average Wind Velocity 14 km/h	Wind Direction WNW	Relative Humidity (Max./Min.): 44/32 %	Temperature (Max./Min.): 37/22 °C	Duration of Survey 24 h
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CHEMICAL TESTING					
Parameter	Results	NAAQS # 2009	Unit	Method	
Sulphur Dioxide (SO ₂)	7.5	80	µg/m ³	IS 5182 (Part 2): 2006, RA 2017	
Nitrogen Dioxide (NO ₂)	30.2	80	µg/m ³	IS 5182 (Part 6): 2006, RA 2017	
Particulate Matter (size less than 10 µm) or PM ₁₀	364	100	µg/m ³	IS 5182 (Part 20): 2006, RA 2017	
Particulate Matter (size less than 2.5µm) or PM _{2.5}	163	60	µg/m ³	USEPA CFR 40, Part 50, Appendix I	
Ozone (O ₃)	40.7	180	µg/m ³	AWWA 3rd Ed. Method 41 Page no. 403/1988	
Lead (Pb)	<0.02	1	µg/m ³	EPA/625/R-96/010 a Compendium Method ID-316 3.2, Jan 1998	
Carbon Monoxide (CO)	1.69	4	mg/m ³	CPCB Guidelines, 37/2002-03, Page no.16	
Ammonia (NH ₃)	<4	400	µg/m ³	AEC/C/SAP/AA-7	
Benzene (C ₆ H ₆)	1.83	5	µg/m ³	IS 5182 (Part 8): 2006, RA 2017	
Benzo (a) Pyrene (BaP) - particulate phase only	<0.2	1	ng/m ³	IS 5182 (Part 12): 2004, RA 2017	
Arsenic (As)	<0.3	6	ng/m ³	EPA/625/R-96/010 a Compendium Method ID-316 3.2, Jan 1998	
Nickel (Ni)	<3	20	ng/m ³	EPA/625/R-96/010 a Compendium Method ID-316 3.2, Jan 1998	

TWA Time Weighted Average
 # NAAQS (National Ambient Air Quality Standards (Industrial, Residential, Rural and other Area) specified as: 24 hours TWA in case of Sulphur Dioxide, Nitrogen Dioxide, PM₁₀, PM_{2.5}, Lead and Ammonia, 1 hour TWA in case of Carbon Monoxide and Ozone, Annual TWA in case of Benzene, Benzo (a) Pyrene, Arsenic and Nickel

H. Sufjan

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AMBIENT AIR QUALITY MONITORING REPORT

Sample ID: AA/03/21/5904	Report No: AA/03/21/5904	Report Date	31/03/2021
Name & Address of Customer	PNP Maritime Services Private Limited 2nd Floor, Lansdowne House Building, M.B. Marg, Near Regal Cinema, Apollo Bunder, Colaba, Mumbai - 400 001		
Sample Collected by	Laboratory	Sample Description/ Type	Ambient Air (Group: Atmospheric Pollution, Sub Group: Ambient Air Quality)
Sampling Location	Near Lal Gate	Date-Sampling	18/03/2021 to 19/03/2021
Sample Quantity/ Packing	PM ₁₀ : BaP, Metals: Filter paper 1 x 3 no. PM _{2.5} : Filter paper 1 x 1 no. SO ₂ : 30 ml x 6 no. plastic bottle NO ₂ : 30 ml x 6 no. plastic bottle NH ₃ : 10 ml x 24 no. plastic bottle Ozone: 10 ml x 1 no. plastic bottle C ₆ H ₆ : 6 no. charcoal tubes CO: 1 no. Bladder	Date-Receipt of Sample	22/03/2021
Sampling Procedure	As per Method Reference	Date-Start of Analysis	22/03/2021
Order Reference	As per PO No. PNP/February/2019- 2020/013 Dated 26/02/2020	Date-Completion of Analysis	31/03/2021

Meteorological Data / Environmental Conditions

Average Wind Velocity 14 km/h	Wind Direction WNW	Relative Humidity (Max./Min.): 44/32 %	Temperature (Max./Min.): 37/22 °C	Duration of Survey 24 h
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CHEMICAL TESTING

Parameter	Results	NAAQS # 2009	Unit	Method
Sulphur Dioxide (SO ₂)	7.0	80	µg/m ³	IS 5182 (Part 2): 2006, RA 2017
Nitrogen Dioxide (NO ₂)	28.5	80	µg/m ³	IS 5182 (Part 6): 2006, RA 2017
Particulate Matter (size less than 10 µm) or PM ₁₀	355	100	µg/m ³	IS 5182 (Part 23): 2006, RA 2017
Particulate Matter (size less than 2.5µm) or PM _{2.5}	162	60	µg/m ³	USEPA CFR 40, Part 50, Appendix I
Ozone (O ₃)	29.5	180	µg/m ³	AWMA 3rd Ed. Method 40, Page no. 403, 1988
Lead (Pb)	<0.02	1	µg/m ³	EPA/625/R-96/D10 a Compendium Method 10-316 2.2, Jun 1999
Carbon Monoxide (CO)	1.73	4	mg/m ³	GPCB Guidelines: 37/2002-03, Page no 15
Ammonia (NH ₃)	<4	400	µg/m ³	NEC/C/SAP/AA-7
Benzene (C ₆ H ₆)	1.87	5	µg/m ³	IS 5182 (Part 8): 2006, RA 2017
Benzo (a) Pyrene (BaP) - particulate phase only	<0.2	1	ng/m ³	IS 5182 (Part 12): 2004, RA 2018
Arsenic (As)	<0.3	6	ng/m ³	EPA/625/R-96/D10 a Compendium Method 10-316 2.2, Jun 1999
Nickel (Ni)	<3	20	ng/m ³	EPA/625/R-96/D10 a Compendium Method 10-316 2.2, Jun 1999

TWA Time Weighted Average
 # NAAQS (National Ambient Air Quality Standards (Industrial, Residential, Rural and other Area) specified as: 24 hours TWA in case of Sulphur Dioxide, Nitrogen Dioxide, PM₁₀, PM_{2.5}, Lead and Ammonia, 1 hour TWA in case of Carbon Monoxide and Ozone, Annual TWA in case of Benzene, Benzo (a) Pyrene, Arsenic and Nickel

(Signature)

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AMBIENT AIR QUALITY MONITORING REPORT

Sample ID: AA/03/21/5905	Report No.: AA/03/21/5905	Report Date	31/03/2021
Name & Address of Customer	PNP Maritime Services Private Limited 2nd Floor, Lansdowne House Building, M.B. Marg, Near Regal Cinema, Apollo Bunder, Colaba, Mumbai - 400 001		
Sample Collected by	Laboratory	Sample Description/ Type	Ambient Air (Group: Atmospheric Pollution, Sub Group: Ambient Air Quality)
Sampling Location	Near DIL Main Gate	Date-Sampling	18/03/2021 to 19/03/2021
Sample Quantity/ Packing	PM ₁₀ , BaP, Metals: Filter paper 1 x 3 no. PM _{2.5} : Filter paper 1 x 1 no. SO ₂ : 30 ml x 6 no. plastic bottle NO ₂ : 30 ml x 6 no. plastic bottle NH ₃ : 10 ml x 24 no. plastic bottle Ozone: 10 ml x 1 no. plastic bottle C ₆ H ₆ : 6 no. charcoal tubes CO: 1 no. Bladder	Date-Receipt of Sample	22/03/2021
Sampling Procedure	As per Method Reference	Date-Start of Analysis	22/03/2021
Order Reference	As per PO No. PNP/February/2019- 2020/013 Dated 26/02/2020	Date-Completion of Analysis	31/03/2021

Meteorological Data / Environmental Conditions

Average Wind Velocity 14 km/h	Wind Direction WNW	Relative Humidity (Max./Min.): 44/32 %	Temperature (Max./Min.): 37/22 °C	Duration of Survey 24 h
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CHEMICAL TESTING					
Parameter	Results	NAAQS # 2009	Unit	Method	
Sulphur Dioxide (SO ₂)	7.4	80	µg/m ³	IS 5182 (Part 2): 2006, RA 2017	
Nitrogen Dioxide (NO ₂)	26.8	80	µg/m ³	IS 5182 (Part 2): 2006, RA 2017	
Particulate Matter (size less than 10 µm) or PM ₁₀	366	100	µg/m ³	IS 5182 (Part 23): 2006, RA 2017	
Particulate Matter (size less than 2.5µm) or PM _{2.5}	157	60	µg/m ³	USEPA CFR 40, Part 50, Appendix I	
Ozone (O ₃)	36.5	180	µg/m ³	AWMA 3rd Ed. Method 41, Page no. 403/1988	
Lead (Pb)	<0.02	1	µg/m ³	EPA/625/R-96/010 a Compendium Method ID-316 3.2, Jan 1999	
Carbon Monoxide (CO)	1.78	4	mg/m ³	CPCB Guidelines, 37/2012-13, Page no. 16	
Ammonia (NH ₃)	<4	400	µg/m ³	AEC/C/SAP/AA-7	
Benzene (C ₆ H ₆)	2.18	5	µg/m ³	IS 5182 (Part 2): 2006, RA 2017	
Benzo (a) Pyrene (BaP) - particulate phase only	<0.2	1	ng/m ³	IS 5182 (Part 2): 2006, RA 2017	
Arsenic (As)	<0.3	6	ng/m ³	EPA/625/R-96/010 a Compendium Method ID-316 3.2, Jan 1999	
Nickel (Ni)	<3	20	ng/m ³	EPA/625/R-96/010 a Compendium Method ID-316 3.2, Jan 1999	

TWA Time Weighted Average
 # NAAQS (National Ambient Air Quality Standards (Industrial, Residential, Rural and other Area) specified as: 24 hours TWA in case of Sulphur Dioxide, Nitrogen Dioxide, PM₁₀, PM_{2.5}, Lead and Ammonia, 1 hour TWA in case of Carbon Monoxide and Ozone, Annual TWA in case of Benzene, Benzo (a) Pyrene, Arsenic and Nickel.


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AMBIENT AIR QUALITY MONITORING REPORT

Sample ID: AA/03/21/5906	Report No: AA/03/21/5906	Report Date	31/03/2021
Name & Address of Customer	PNP Maritime Services Private Limited 2nd Floor, Lansdowne House Building, M.B. Marg, Near Regal Cinema, Apollo Bunder, Colaba, Mumbai - 400 001		
Sample Collected by	Laboratory	Sample Description/ Type	Ambient Air (Group: Atmospheric Pollution, Sub Group: Ambient Air Quality)
Sampling Location	DIL Godown Back Side	Date-Sampling	18/03/2021 to 19/03/2021
Sample Quantity/ Packing	PM ₁₀ , BaP, Metals: Filter paper 1 x 3 no. PM _{2.5} : Filter paper 1 x 1 no. SO ₂ : 30 ml x 6 no. plastic bottle NO ₂ : 30 ml x 6 no. plastic bottle NH ₃ : 10 ml x 24 no. plastic bottle Ozone: 10 ml x 1 no. plastic bottle C ₆ H ₆ : 6 no. charcoal tubes CO: 1 no. Bladder	Date-Receipt of Sample	22/03/2021
Sampling Procedure	As per Method Reference	Date-Start of Analysis	22/03/2021
Order Reference	As per PO No. PNP/February/2019- 2020/013 Dated 26/02/2020	Date-Completion of Analysis	31/03/2021

Meteorological Data / Environmental Conditions

Average Wind Velocity 14 km/h	Wind Direction WNW	Relative Humidity (Max./Min.): 44/32 %	Temperature (Max./Min.): 37/22 °C	Duration of Survey 24 h
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CHEMICAL TESTING

Parameter	Results	NAAQS # 2009	Unit	Method
Sulphur Dioxide (SO ₂)	8.1	80	µg/m ³	IS 5182 (Part 2): 2001, RA 2017
Nitrogen Dioxide (NO ₂)	31.3	80	µg/m ³	IS 5182 (Part 6): 2006, RA 2017
Particulate Matter (size less than 10 µm) or PM ₁₀	345	100	µg/m ³	IS 5182 (Part 23): 2006, RA 2017
Particulate Matter (size less than 2.5µm) or PM _{2.5}	132	60	µg/m ³	USEPA CFR 40, Part 50, Appendix I
Ozone (O ₃)	<19.6	180	µg/m ³	AWMA 3rd Ed. Method 411 Page no. 403, 1993
Lead (Pb)	<0.02	1	µg/m ³	EPA/625/R-96/010 a Compendium Method ID-31 & 32, Jan 1995
Carbon Monoxide (CO)	1.41	4	mg/m ³	CPCB Guidelines: 27/2012-13, Page no.16
Ammonia (NH ₃)	<4	400	µg/m ³	AEC/C/SAP/NA-7
Benzene (C ₆ H ₆)	1.84	5	µg/m ³	IS 5182 (Part II) : 2006, RA 2017
Benzo (a) Pyrene (BaP) - particulate phase only	<0.2	1	ng/m ³	IS 5182 (Part 12): 2004, RA 2015
Arsenic (As)	<0.3	6	ng/m ³	EPA/625/R-96/010 a Compendium Method ID-31 & 32, Jan 1995
Nickel (Ni)	<3	20	ng/m ³	EPA/625/R-96/010 a Compendium Method ID-31 & 32, Jan 1995

TWA Time Weighted Average

NAAQS (National Ambient Air Quality Standards (Industrial, Residential, Rural and other Area) specified as: 24 hours TWA in case of Sulphur Dioxide, Nitrogen Dioxide, PM₁₀, PM_{2.5}, Lead and Ammonia, 1 hour TWA in case of Carbon Monoxide and Ozone, Annual TWA in case of Benzene, Benzo (a) Pyrene, Arsenic and Nickel.



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AMBIENT AIR QUALITY MONITORING REPORT

Sample ID: AA/03/21/5972	Report No: AA/03/21/5972	Report Date: 30/03/2021
Name & Address of Customer:	PNP Maritime Services Private Limited 2nd Floor, Lansdowne House Building, M.B. Marg, Near Regal Cinema, Apollo Bunder, Colaba, Mumbai - 400 001	
Sample Collected by:	Laboratory	Sample Description/ Type: Ambient Air (Group: Atmospheric Pollution, Sub Group: Ambient Air Quality)
Sampling Location:	Near Main Gate	Date-Sampling: 22/03/2021 to 23/03/2021
Sample Quantity/ Packing:	PM ₁₀ , BaP, Metals: Filter paper 1 x 3 no. PM _{2.5} : Filter paper 1 x 1 no. SO ₂ : 30 ml x 6 no. plastic bottle NO ₂ : 30 ml x 6 no. plastic bottle NH ₃ : 10 ml x 24 no. plastic bottle Ozone: 10 ml x 1 no. plastic bottle C ₆ H ₆ : 6 no. charcoal tubes CO: 1 no. Bladder	Date-Receipt of Sample: 25/03/2021
Sampling Procedure:	As per Method Reference	Date-Start of Analysis: 25/03/2021
Order Reference:	As per PO No. PNP/February/2019-2020/013 Dated 26/02/2020	Date-Completion of Analysis: 30/03/2021

Meteorological Data / Environmental Conditions

Average Wind Velocity 14 km/h	Wind Direction WNW	Relative Humidity (Max./Min.): 58/46 %	Temperature (Max./Min.): 37/20 °C	Duration of Survey 24 h
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CHEMICAL TESTING				
Parameter	Results	NAAQS # 2009	Unit	Method
Sulphur Dioxide (SO ₂)	7.4	80	µg/m ³	IS 5182 (Part 2): 2001, RA 2007
Nitrogen Dioxide (NO ₂)	28.9	80	µg/m ³	IS 5182 (Part 6): 2006, RA 2007
Particulate Matter (size less than 10 µm) or PM ₁₀	374	100	µg/m ³	IS 5182 (Part 23): 2006, RA 2007
Particulate Matter (size less than 2.5 µm) or PM _{2.5}	153	60	µg/m ³	USEPA CFR 40, Part 50, Appendix I
Ozone (O ₃)	37.9	180	µg/m ³	AWWA 3rd Ed. Method 401 Page no. 403 1993
Lead (Pb)	<0.02	1	µg/m ³	EPA/625/R-96/010 a Compendium Method 10-31 E 2.2, Jan 1999
Carbon Monoxide (CO)	1.53	4	mg/m ³	CPCB Guidelines, 37/2002-03, Page no.16
Ammonia (NH ₃)	<4	400	µg/m ³	AEC/C/SAP/AA-7
Benzene (C ₆ H ₆)	1.10	5	µg/m ³	IS 5182 (Part 11): 2006, RA 2007
Benzo (a) Pyrene (BaP) - particulate phase only	<0.2	1	ng/m ³	IS 5182 (Part 12): 2004, RA 2008
Arsenic (As)	<0.3	6	ng/m ³	EPA/625/R-96/010 a Compendium Method 10-31 E 2.2, Jan 1999
Nickel (Ni)	<3	20	ng/m ³	EPA/625/R-96/010 a Compendium Method 10-31 E 2.2, Jan 1999

TWA Time Weighted Average
 # NAAQS (National Ambient Air Quality Standards (Industrial, Residential, Rural and other Area) specified as: 24 hours TWA in case of Sulphur Dioxide, Nitrogen Dioxide, PM₁₀, PM_{2.5}, Lead and Ammonia, 1 hour TWA in case of Carbon Monoxide and Ozone, Annual TWA in case of Benzene, Benzo (a) Pyrene, Arsenic and Nickel


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TC-5509



AMBIENT AIR QUALITY MONITORING REPORT

Sample ID: AA/03/21/5973	Report No.: AA/03/21/5973	Report Date	30/03/2021
Name & Address of Customer	PNP Maritime Services Private Limited 2nd Floor, Lansdowne House Building, M.B. Marg, Near Regal Cinema, Apollo Bunder, Colaba, Mumbai - 400 001		
Sample Collected by	Laboratory	Sample Description/ Type	Ambient Air (Group: Atmospheric Pollution, Sub Group: Ambient Air Quality)
Sampling Location	Near Jetty No. 1	Date-Sampling	22/03/2021 to 23/03/2021
Sample Quantity/ Packing	PM ₁₀ , BaP, Metals: Filter paper 1 x 3 no. PM _{2.5} : Filter paper 1 x 1 no. SO ₂ : 30 ml x 6 no. plastic bottle NO ₂ : 30 ml x 6 no. plastic bottle NH ₃ : 10 ml x 24 no. plastic bottle Ozone: 10 ml x 1 no. plastic bottle C ₆ H ₆ : 6 no. charcoal tubes CO: 1 no. Bladder	Date-Receipt of Sample	25/03/2021
Sampling Procedure	As per Method Reference	Date-Start of Analysis	25/03/2021
Order Reference	As per PO No. PNP/February/2019- 2020/013 Dated 26/02/2020	Date-Completion of Analysis	30/03/2021

Meteorological Data / Environmental Conditions

Average Wind Velocity 14 km/h	Wind Direction WNW	Relative Humidity (Max./Min.): 58/46 %	Temperature (Max./Min.): 37/20 °C	Duration of Survey 24 h
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CHEMICAL TESTING

Parameter	Results	NAAQS # 2009	Unit	Method
Sulphur Dioxide (SO ₂)	6.5	80	µg/m ³	IS 5182 (Part 2): 2008, RA 2017
Nitrogen Dioxide (NO ₂)	28.3	80	µg/m ³	IS 5182 (Part 6): 2006, RA 2017
Particulate Matter (size less than 10 µm) or PM ₁₀	383	100	µg/m ³	IS 5182 (Part 23): 2006, RA 2017
Particulate Matter (size less than 2.5µm) or PM _{2.5}	150	60	µg/m ³	USEPA CFR 40, Part 50, Appendix I
Ozone (O ₃)	33.7	180	µg/m ³	AWMA, 3rd Ed., Method 48, Page no. 403, 1988
Lead (Pb)	<0.02	1	µg/m ³	EPA/625/R-96/010 a Compendium Method ID-316 3.2, Jan 1999
Carbon Monoxide (CO)	1.93	4	mg/m ³	CPCB Guidelines, 31/2002-01, Page no 15
Ammonia (NH ₃)	<4	400	µg/m ³	AEC/C/SAP/AA-7
Benzene (C ₆ H ₆)	2.33	5	µg/m ³	IS 5182 (Part II): 2006, RA 2017
Benzo (a) Pyrene (BaP) - particulate phase only	<0.2	1	ng/m ³	IS 5182 (Part 12): 2006, RA 2017
Arsenic (As)	<0.3	6	ng/m ³	EPA/625/R-96/010 a Compendium Method ID-316 3.2, Jan 1999
Nickel (Ni)	<3	20	ng/m ³	EPA/625/R-96/010 a Compendium Method ID-316 3.2, Jan 1999

TWA Time Weighted Average

NAAQS (National Ambient Air Quality Standards (Industrial, Residential, Rural and other Area) specified as: 24 hours TWA in case of Sulphur Dioxide, Nitrogen Dioxide, PM₁₀, PM_{2.5}, Lead and Ammonia, 1 hour TWA in case of Carbon Monoxide and Ozone, Annual TWA in case of Benzene, Benzo (a) Pyrene, Arsenic and Nickel



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TC-5509



AMBIENT AIR QUALITY MONITORING REPORT

Sample ID: AA/03/21/5974	Report No.: AA/03/21/5974	Report Date	30/03/2021
Name & Address of Customer	PNP Maritime Services Private Limited 2nd Floor, Lansdowne House Building, M.B. Marg, Near Regal Cinema, Apollo Bunder, Colaba, Mumbai - 400 001		
Sample Collected by	Laboratory	Sample Description/ Type	Ambient Air (Group: Atmospheric Pollution, Sub Group: Ambient Air Quality)
Sampling Location	Near Jetty No. 2	Date-Sampling	22/03/2021 to 23/03/2021
Sample Quantity/ Packing	PM ₁₀ , BaP, Metals: Filter paper 1 x 3 no. PM _{2.5} : Filter paper 1 x 1 no. SO ₂ : 30 ml x 6 no. plastic bottle NO ₂ : 30 ml x 6 no. plastic bottle NH ₃ : 10 ml x 24 no. plastic bottle Ozone: 10 ml x 1 no. plastic bottle C ₆ H ₆ : 6 no. charcoal tubes CO: 1 no. Bladder	Date-Receipt of Sample	25/03/2021
Sampling Procedure	As per Method Reference	Date-Start of Analysis	25/03/2021
Order Reference	As per PO No. PNP/February/2019- 2020/013 Dated 26/02/2020	Date-Completion of Analysis	30/03/2021

Meteorological Data / Environmental Conditions

Average Wind Velocity 14 km/h	Wind Direction WNW	Relative Humidity (Max./Min.): 58/46 %	Temperature (Max./Min.): 37/20 °C	Duration of Survey 24 h
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CHEMICAL TESTING

Parameter	Results	NAAQS # 2009	Unit	Method
Sulphur Dioxide (SO ₂)	7.2	80	µg/m ³	IS 582 (Part 2): 2008, RA 2007
Nitrogen Dioxide (NO ₂)	28.5	80	µg/m ³	IS 582 (Part 6): 2006, RA 2007
Particulate Matter (size less than 10 µm) or PM ₁₀	380	100	µg/m ³	IS 582 (Part 7): 2006, RA 2007
Particulate Matter (size less than 2.5µm) or PM _{2.5}	159	60	µg/m ³	USEPA CFR 40, Part 50, Appendix I
Ozone (O ₃)	28.1	180	µg/m ³	AWMA 3rd Ed., Method 48 Page no. 402, 1988
Lead (Pb)	<0.02	1	µg/m ³	EPA/625/R-96/010 a Compendium Method 10-3.1.6 3.2, Jun 1999
Carbon Monoxide (CO)	1.48	4	mg/m ³	CPCB Guidelines: 37/2002-GI, Page no.16
Ammonia (NH ₃)	<4	400	µg/m ³	AEC/C/SAP/AA-7
Benzene (C ₆ H ₆)	1.69	5	µg/m ³	IS 582 (Part 8): 2006, RA 2007
Benzo (a) Pyrene (BaP) - particulate phase only	<0.2	1	ng/m ³	IS 582 (Part 12): 2004, RA 2008
Arsenic (As)	<0.3	6	ng/m ³	EPA/625/R-96/010 a Compendium Method 10-3.1.6 3.2, Jun 1999
Nickel (Ni)	<3	20	ng/m ³	EPA/625/R-96/010 a Compendium Method 10-3.1.6 3.2, Jun 1999

TWA Time Weighted Average

NAAQS (National Ambient Air Quality Standards (Industrial, Residential, Rural and other Area) specified as: 24 hours TWA in case of Sulphur Dioxide, Nitrogen Dioxide, PM₁₀, PM_{2.5}, Lead and Ammonia, 1 hour TWA in case of Carbon Monoxide and Ozone, Annual TWA in case of Benzene, Benzo (a) Pyrene, Arsenic and Nickel.


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AMBIENT AIR QUALITY MONITORING REPORT

Sample ID	AA/03/21/5975	Report No.	AA/03/21/5975	Report Date	30/03/2021
Name & Address of Customer	PNP Maritime Services Private Limited 2nd Floor, Lansdowne House Building, M.B. Marg, Near Regal Cinema, Apollo Bunder, Colaba, Mumbai - 400 001				
Sample Collected by	Laboratory	Sample Description/ Type	Ambient Air (Group: Atmospheric Pollution, Sub Group: Ambient Air Quality)		
Sampling Location	Near Jetty No. 3	Date-Sampling	22/03/2021 to 23/03/2021		
Sample Quantity/ Packing	PM ₁₀ , BaP, Metals: Filter paper 1 x 3 no. PM _{2.5} : Filter paper 1 x 1 no. SO ₂ : 30 ml x 6 no. plastic bottle NO ₂ : 30 ml x 6 no. plastic bottle NH ₃ : 10 ml x 24 no. plastic bottle Ozone: 10 ml x 1 no. plastic bottle C ₆ H ₆ : 6 no. charcoal tubes CO: 1 no. Bladder	Date-Receipt of Sample	25/03/2021		
Sampling Procedure	As per Method Reference	Date-Start of Analysis	25/03/2021		
Order Reference	As per PO No. PNP/February/2019- 2020/013 Dated 26/02/2020	Date-Completion of Analysis	30/03/2021		

Meteorological Data / Environmental Conditions

Average Wind Velocity 14 km/h	Wind Direction WNW	Relative Humidity (Max./Min.): 58/46 %	Temperature (Max./Min.): 37/20 °C	Duration of Survey 24 h
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CHEMICAL TESTING

Parameter	Results	NAAQS # 2009	Unit	Method
Sulphur Dioxide (SO ₂)	7.7	80	µg/m ³	IS 5182 (Part 2): 2008, RA 2007
Nitrogen Dioxide (NO ₂)	29.8	80	µg/m ³	IS 5182 (Part E): 2006, RA 2007
Particulate Matter (size less than 10 µm) or PM ₁₀	364	100	µg/m ³	IS 5182 (Part 23): 2006, RA 2007
Particulate Matter (size less than 2.5µm) or PM _{2.5}	140	60	µg/m ³	USEPA CFR 40, Part 50, Appendix I
Ozone (O ₃)	35.1	180	µg/m ³	AWMA 3rd Ed. Method 40, Page no. 403, 1988
Lead (Pb)	<0.02	1	µg/m ³	EPA/625/R-96/010 a Compendium Method 10-31 B 3.2, Jan 1999
Carbon Monoxide (CO)	1.74	4	mg/m ³	CPCB Guidelines, 37/2012-G, Page no 18
Ammonia (NH ₃)	<4	400	µg/m ³	AEC/C/SAP/AA-7
Benzene (C ₆ H ₆)	1.75	5	µg/m ³	IS 5182 (Part II): 2006, RA 2007
Benzo (a) Pyrene (BaP) - particulate phase only	<0.2	1	ng/m ³	IS 5182 (Part 12): 2004, RA 2006
Arsenic (As)	<0.3	6	ng/m ³	EPA/625/R-96/010 a Compendium Method 10-31 B 3.2, Jan 1999
Nickel (Ni)	<3	20	ng/m ³	EPA/625/R-96/010 a Compendium Method 10-31 B 3.2, Jan 1999

TWA Time Weighted Average

NAAQS (National Ambient Air Quality Standards (Industrial, Residential, Rural and other Area) specified as: 24 hours TWA in case of Sulphur Dioxide, Nitrogen Dioxide, PM₁₀, PM_{2.5}, Lead and Ammonia, 1 hour TWA in case of Carbon Monoxide and Ozone, Annual TWA in case of Benzene, Benzo (a) Pyrene, Arsenic and Nickel.

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AMBIENT AIR QUALITY MONITORING REPORT

Sample ID: AA/03/21/5976	Report No.: AA/03/21/5976	Report Date	30/03/2021
Name & Address of Customer	PNP Maritime Services Private Limited 2nd Floor, Lansdowne House Building, M.B. Marg, Near Regal Cinema, Apollo Bunder, Colaba, Mumbai - 400 001		
Sample Collected by	Laboratory	Sample Description/ Type	Ambient Air (Group: Atmospheric Pollution, Sub Group: Ambient Air Quality)
Sampling Location	Near Jetty No.5	Date-Sampling	22/03/2021 to 23/03/2021
Sample Quantity/ Packing	PM ₁₀ , BaP, Metals: Filter paper 1 x 3 no. PM _{2.5} : Filter paper 1 x 1 no. SO ₂ : 30 ml x 6 no. plastic bottle NO ₂ : 30 ml x 6 no. plastic bottle NH ₃ : 10 ml x 24 no. plastic bottle Ozone: 10 ml x 1 no. plastic bottle C ₆ H ₆ : 6 no. charcoal tubes CO: 1 no. Bladder	Date-Receipt of Sample	25/03/2021
Sampling Procedure	As per Method Reference	Date-Start of Analysis	25/03/2021
Order Reference	As per PO No. PNP/February/2019- 2020/013 Dated 26/02/2020	Date-Completion of Analysis	30/03/2021

Meteorological Data / Environmental Conditions

Average Wind Velocity 14 km/h	Wind Direction WNW	Relative Humidity (Max./Min.): 58/46 %	Temperature (Max./Min.): 37/20 °C	Duration of Survey 24 h
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CHEMICAL TESTING

Parameter	Results	NAAQS # 2009	Unit	Method
Sulphur Dioxide (SO ₂)	8.4	80	µg/m ³	IS 5182 (Part 2): 2006, RA 2017
Nitrogen Dioxide (NO ₂)	25.1	80	µg/m ³	IS 5182 (Part 6): 2006, RA 2017
Particulate Matter (size less than 10 µm) or PM ₁₀	302	100	µg/m ³	IS 5182 (Part 7): 2006, RA 2017
Particulate Matter (size less than 2.5µm) or PM _{2.5}	120	60	µg/m ³	USEPA CFR 40, Part 50, Appendix I
Ozone (O ₃)	30.9	180	µg/m ³	AWMA 3rd Ed. Method 41, Page no. 403, 1998
Lead (Pb)	<0.02	1	µg/m ³	EPA/625/R-96/010 a Compendium Method 01-31 B 3.2, Jun 1999
Carbon Monoxide (CO)	1.53	4	mg/m ³	CPCB Guidelines: 37/2010-Cl, Page no.16
Ammonia (NH ₃)	<4	400	µg/m ³	AEC/C/SAP/AA-7
Benzene (C ₆ H ₆)	1.43	5	µg/m ³	IS 5182 (Part 8): 2006, RA 2017
Benzo (a) Pyrene (BaP) - particulate phase only	<0.2	1	ng/m ³	IS 5182 (Part 9): 2006, RA 2017
Arsenic (As)	<0.3	6	ng/m ³	EPA/625/R-96/010 a Compendium Method 01-31 B 3.2, Jun 1999
Nickel (Ni)	<3	20	ng/m ³	EPA/625/R-96/010 a Compendium Method 01-31 B 3.2, Jun 1999

TWA Time Weighted Average

NAAQS (National Ambient Air Quality Standards (Industrial, Residential, Rural and other Area) specified as: 24 hours TWA in case of Sulphur Dioxide, Nitrogen Dioxide, PM₁₀, PM_{2.5}, Lead and Ammonia, 1 hour TWA in case of Carbon Monoxide and Ozone, Annual TWA in case of Benzene, Benzo (a) Pyrene, Arsenic and Nickel

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AMBIENT AIR QUALITY MONITORING REPORT

Sample ID: AA/03/21/5977	Report No.: AA/03/21/5977	Report Date	30/03/2021
Name & Address of Customer	PNP Maritime Services Private Limited 2nd Floor, Lansdowne House Building, M.B. Marg, Near Regal Cinema, Apollo Bunder, Colaba, Mumbai - 400 001		
Sample Collected by	Laboratory	Sample Description/ Type	Ambient Air (Group: Atmospheric Pollution, Sub Group: Ambient Air Quality)
Sampling Location	Near Weight Bridge	Date-Sampling	22/03/2021 to 23/03/2021
Sample Quantity/ Packing	PM ₁₀ , BaP, Metals: Filter paper 1 x 3 no. PM _{2.5} : Filter paper 1 x 1 no. SO ₂ : 30 ml x 6 no. plastic bottle NO ₂ : 30 ml x 6 no. plastic bottle NH ₃ : 10 ml x 24 no. plastic bottle Ozone: 10 ml x 1 no. plastic bottle C ₆ H ₆ : 6 no. charcoal tubes CO: 1 no. Bladder	Date-Receipt of Sample	25/03/2021
Sampling Procedure	As per Method Reference	Date-Start of Analysis	25/03/2021
Order Reference	As per PO No. PNP/February/2019- 2020/013 Dated 26/02/2020	Date-Completion of Analysis	30/03/2021

Meteorological Data / Environmental Conditions

Average Wind Velocity 14 km/h	Wind Direction WNW	Relative Humidity (Max./Min.): 58/46 %	Temperature (Max./Min.): 37/20 °C	Duration of Survey 24 h
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CHEMICAL TESTING

Parameter	Results	NAAQS # 2009	Unit	Method
Sulphur Dioxide (SO ₂)	6.8	80	µg/m ³	IS 5182 (Part 2): 2008, RA 2017
Nitrogen Dioxide (NO ₂)	29.4	80	µg/m ³	IS 5182 (Part 5): 2008, RA 2017
Particulate Matter (size less than 10 µm) or PM ₁₀	366	100	µg/m ³	IS 5182 (Part 22): 2006, RA 2017
Particulate Matter (size less than 2.5µm) or PM _{2.5}	140	60	µg/m ³	USEPA CFR 40, Part 50, Appendix I
Ozone (O ₃)	30.9	180	µg/m ³	AMMA 2nd Ed., Method 48, Page no. 403/1988
Lead (Pb)	<0.02	1	µg/m ³	EPA/625/R-96/010 a Compendium Method 10-316 3.2, Jun 1999
Carbon Monoxide (CO)	1.63	4	mg/m ³	CPCB Guidelines: 37/2007-G3, Page no 16
Ammonia (NH ₃)	<4	400	µg/m ³	AEC/C/SAP/AA-7
Benzene (C ₆ H ₆)	2.12	5	µg/m ³	IS 5182 (Part 8): 2006, RA 2017
Benzo (a) Pyrene (BaP) - particulate phase only	<0.2	1	ng/m ³	IS 5182 (Part 12): 2004, RA 2018
Arsenic (As)	<0.3	6	ng/m ³	EPA/625/R-96/010 a Compendium Method 10-316 3.2, Jun 1999
Nickel (Ni)	<3	20	ng/m ³	EPA/625/R-96/010 a Compendium Method 10-316 3.2, Jun 1999

TWA Time Weighted Average
 # NAAQS (National Ambient Air Quality Standards (Industrial, Residential, Rural and other Area) specified as: 24 hours TWA in case of Sulphur Dioxide, Nitrogen Dioxide, PM₁₀, PM_{2.5}, Lead and Ammonia, 1 hour TWA in case of Carbon Monoxide and Ozone, Annual TWA in case of Benzene, Benzo (a) Pyrene, Arsenic and Nickel

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AMBIENT AIR QUALITY MONITORING REPORT

Sample ID: AA/03/21/5978	Report No: AA/03/21/5978	Report Date	30/03/2021
Name & Address of Customer	PNP Maritime Services Private Limited 2nd Floor, Lansdowne House Building, M.B. Marg, Near Regal Cinema, Apollo Bunder, Colaba, Mumbai - 400 001		
Sample Collected by	Laboratory	Sample Description/ Type	Ambient Air (Group: Atmospheric Pollution, Sub Group: Ambient Air Quality)
Sampling Location	Near Custom Building	Date-Sampling	22/03/2021 to 23/03/2021
Sample Quantity/ Packing	PM ₁₀ : BaP, Metals: Filter paper 1 x 3 no. PM _{2.5} : Filter paper 1 x 1 no. SO ₂ : 30 ml x 6 no. plastic bottle NO ₂ : 30 ml x 6 no. plastic bottle NH ₃ : 10 ml x 24 no. plastic bottle Ozone: 10 ml x 1 no. plastic bottle C ₆ H ₆ : 6 no. charcoal tubes CO: 1 no. Bladder	Date-Receipt of Sample	25/03/2021
Sampling Procedure	As per Method Reference	Date-Start of Analysis	25/03/2021
Order Reference	As per PO No. PNP/February/2019- 2020/013 Dated 26/02/2020	Date-Completion of Analysis	30/03/2021

Meteorological Data / Environmental Conditions

Average Wind Velocity 14 km/h	Wind Direction WNW	Relative Humidity (Max./Min.): 58/46 %	Temperature (Max./Min.): 37/20 °C	Duration of Survey 24 h
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CHEMICAL TESTING

Parameter	Results	NAAQS # 2009	Unit	Method
Sulphur Dioxide (SO ₂)	7.9	80	µg/m ³	IS 582 (Part 2): 2006, RA 2007
Nitrogen Dioxide (NO ₂)	25.3	80	µg/m ³	IS 582 (Part 6): 2006, RA 2007
Particulate Matter (size less than 10 µm) or PM ₁₀	358	100	µg/m ³	IS 582 (Part 23): 2006, RA 2007
Particulate Matter (size less than 2.5µm) or PM _{2.5}	137	60	µg/m ³	USEPA CFR 40, Part 50, Appendix L
Ozone (O ₃)	36.5	180	µg/m ³	NWA, 3rd Ed. Method 41, Page no. 403, 1988
Lead (Pb)	<0.02	1	µg/m ³	EPA/625/R-96/010 a Compendium Method 10-316.3.2, Jun 1993
Carbon Monoxide (CO)	1.33	4	mg/m ³	CPCB Guidelines, 37/2002-13, Page no.16
Ammonia (NH ₃)	<4	400	µg/m ³	AEC/C/SAP/AA-7
Benzene (C ₆ H ₆)	1.33	5	µg/m ³	IS 582 (Part 11): 2006, RA 2007
Benzo (a) Pyrene (BaP) - particulate phase only	<0.2	1	ng/m ³	IS 582 (Part 12): 2006, RA 2007
Arsenic (As)	<0.3	6	ng/m ³	EPA/625/R-96/010 a Compendium Method 10-316.3.2, Jun 1993
Nickel (Ni)	<3	20	ng/m ³	EPA/625/R-96/010 a Compendium Method 10-316.3.2, Jun 1993

TWA Time Weighted Average
 # NAAQS (National Ambient Air Quality Standards (Industrial, Residential, Rural and other Area) specified as: 24 hours TWA in case of Sulphur Dioxide, Nitrogen Dioxide, PM₁₀, PM_{2.5}, Lead and Ammonia, 1 hour TWA in case of Carbon Monoxide and Ozone, Annual TWA in case of Benzene, Benzo (a) Pyrene, Arsenic and Nickel.

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AMBIENT AIR QUALITY MONITORING REPORT

Sample ID: AA/03/21/5979	Report No: AA/03/21/5979	Report Date	30/03/2021
Name & Address of Customer	PNP Maritime Services Private Limited 2nd Floor, Lansdowne House Building, M.B. Marg, Near Regal Cinema, Apollo Bunder, Colaba, Mumbai - 400 001		
Sample Collected by	Laboratory	Sample Description/ Type	Ambient Air (Group: Atmospheric Pollution, Sub Group: Ambient Air Quality)
Sampling Location	Near Lal Gate	Date-Sampling	22/03/2021 to 23/03/2021
Sample Quantity/ Packing	PM ₁₀ : BaP, Metals: Filter paper 1 x 3 no. PM _{2.5} : Filter paper 1 x 1 no. SO ₂ : 30 ml x 6 no. plastic bottle NO ₂ : 30 ml x 6 no. plastic bottle NH ₃ : 10 ml x 24 no. plastic bottle Ozone: 10 ml x 1 no. plastic bottle C ₆ H ₆ : 6 no. charcoal tubes CO: 1 no. Bladder	Date-Receipt of Sample	25/03/2021
Sampling Procedure	As per Method Reference	Date-Start of Analysis	25/03/2021
Order Reference	As per PO No. PNP/February/2019- 2020/013 Dated 26/02/2020	Date-Completion of Analysis	30/03/2021

Meteorological Data / Environmental Conditions

Average Wind Velocity 14 km/h	Wind Direction WNW	Relative Humidity (Max./Min.): 58/46 %	Temperature (Max./Min.): 37/20 °C	Duration of Survey 24 h
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CHEMICAL TESTING					
Parameter	Results	NAAQS # 2009	Unit	Method	
Sulphur Dioxide (SO ₂)	7.2	80	µg/m ³	IS 5182 (Part 2): 2001, RA 2017	
Nitrogen Dioxide (NO ₂)	33.2	80	µg/m ³	IS 5182 (Part 6): 2006, RA 2017	
Particulate Matter (size less than 10 µm) or PM ₁₀	389	100	µg/m ³	IS 5182 (Part 20): 2006, RA 2017	
Particulate Matter (size less than 2.5µm) or PM _{2.5}	193	60	µg/m ³	IS EPA CFR 40, Part 50, Appendix I	
Ozone (O ₃)	29.5	180	µg/m ³	AWMA 3rd Ed. Method 40, Page no. 402, 1988	
Lead (Pb)	<0.02	1	µg/m ³	EPA/625/R-96/010 a Compendium Method 0-3.1 B 3.2, Jun 1999	
Carbon Monoxide (CO)	1.76	4	mg/m ³	CPCB Guidelines, 37/2002 (3), Page no.16	
Ammonia (NH ₃)	<4	400	µg/m ³	AEC/C/SAP/AA-7	
Benzene (C ₆ H ₆)	1.87	5	µg/m ³	IS 5182 (Part 8): 2006, RA 2017	
Benzo (a) Pyrene (BaP) - particulate phase only	<0.2	1	ng/m ³	IS 5182 (Part 7): 2004, RA 2018	
Arsenic (As)	<0.3	6	ng/m ³	EPA/625/R-96/010 a Compendium Method 0-3.1 B 3.2, Jun 1999	
Nickel (Ni)	<3	20	ng/m ³	EPA/625/R-96/010 a Compendium Method 0-3.1 B 3.2, Jun 1999	

TWA Time Weighted Average
 # NAAQS (National Ambient Air Quality Standards (Industrial, Residential, Rural and other Area) specified as: 24 hours TWA in case of Sulphur Dioxide, Nitrogen Dioxide, PM₁₀, PM_{2.5}, Lead and Ammonia, 1 hour TWA in case of Carbon Monoxide and Ozone, Annual TWA in case of Benzene, Benzo (a) Pyrene, Arsenic and Nickel

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TC-5509



AMBIENT AIR QUALITY MONITORING REPORT

Sample ID	AA/03/21/5980	Report No.	AA/03/21/5980	Report Date	30/03/2021
Name & Address of Customer	PNP Maritime Services Private Limited 2nd Floor, Lansdowne House Building, M.B. Marg, Near Regal Cinema, Apollo Bunder, Colaba, Mumbai - 400 001				
Sample Collected by	Laboratory	Sample Description/ Type	Ambient Air (Group: Atmospheric Pollution, Sub Group: Ambient Air Quality)		
Sampling Location	Near DIL Main Gate	Date-Sampling	22/03/2021 to 23/03/2021		
Sample Quantity/ Packing	PM ₁₀ : BaP, Metals: Filter paper 1 x 3 no. PM _{2.5} : Filter paper 1 x 1 no. SO ₂ : 30 ml x 6 no. plastic bottle NO ₂ : 30 ml x 6 no. plastic bottle NH ₃ : 10 ml x 24 no. plastic bottle Ozone: 10 ml x 1 no. plastic bottle C ₆ H ₆ : 6 no. charcoal tubes CO: 1 no. Bladder	Date-Receipt of Sample	25/03/2021		
Sampling Procedure	As per Method Reference	Date-Start of Analysis	25/03/2021		
Order Reference	As per PO No. PNP/February/2019- 2020/013 Dated 26/02/2020	Date-Completion of Analysis	30/03/2021		

Meteorological Data / Environmental Conditions

Average Wind Velocity 14 km/h	Wind Direction WNW	Relative Humidity (Max./Min.): 58/46 %	Temperature (Max./Min.): 37/20 °C	Duration of Survey 24 h
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CHEMICAL TESTING

Parameter	Results	NAAQS # 2009	Unit	Method
Sulphur Dioxide (SO ₂)	6.4	80	µg/m ³	IS 5182 (Part 2): 2006; RA 2017
Nitrogen Dioxide (NO ₂)	26.2	80	µg/m ³	IS 5182 (Part 6): 2006; RA 2017
Particulate Matter (size less than 10 µm) or PM ₁₀	370	100	µg/m ³	IS 5182 (Part 7): 2006; RA 2017
Particulate Matter (size less than 2.5µm) or PM _{2.5}	138	60	µg/m ³	USEPA CFR 40, Part 50, Appendix I
Ozone (O ₃)	33.7	180	µg/m ³	AWMA 3rd Ed. Method 40; Page no. 402.0388
Lead (Pb)	<0.02	1	µg/m ³	EPA/625/R-96/010 a Compendium Method ID-216 3.2, Jun 1999
Carbon Monoxide (CO)	1.73	4	mg/m ³	CPCB Guidelines, 37/2002-GI, Page no 16
Ammonia (NH ₃)	<4	400	µg/m ³	AEC/C/SAP/AA-7
Benzene (C ₆ H ₆)	2.09	5	µg/m ³	IS 5182 (Part 8): 2006; RA 2017
Benzo (a) Pyrene (BaP) - particulate phase only	<0.2	1	ng/m ³	IS 5182 (Part 12): 2004; RA 2018
Arsenic (As)	<0.3	6	ng/m ³	EPA/625/R-96/010 a Compendium Method ID-216 3.2, Jun 1999
Nickel (Ni)	<3	20	ng/m ³	EPA/625/R-96/010 a Compendium Method ID-216 3.2, Jun 1999

TWA Time Weighted Average
 # NAAQS (National Ambient Air Quality Standards (Industrial, Residential, Rural and other Area) specified as: 24 hours TWA in case of Sulphur Dioxide, Nitrogen Dioxide, PM₁₀, PM_{2.5}, Lead and Ammonia, 1 hour TWA in case of Carbon Monoxide and Ozone, Annual TWA in case of Benzene, Benzo (a) Pyrene, Arsenic and Nickel.

H. S. Soundankar

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TC-5509



AMBIENT AIR QUALITY MONITORING REPORT

Sample ID: AA/03/21/5981	Report No.: AA/03/21/5981	Report Date	30/03/2021
Name & Address of Customer	PNP Maritime Services Private Limited 2nd Floor, Lansdowne House Building, M.B. Marg, Near Regal Cinema, Apollo Bunder, Colaba, Mumbai - 400 001		
Sample Collected by	Laboratory	Sample Description/ Type	Ambient Air (Group: Atmospheric Pollution, Sub Group: Ambient Air Quality)
Sampling Location	DIL Godown Back Side	Date-Sampling	22/03/2021 to 23/03/2021
Sample Quantity/ Packing	PM ₁₀ : BaP, Metals: Filter paper 1 x 3 no. PM _{2.5} : Filter paper 1 x 1 no. SO ₂ : 30 ml x 6 no. plastic bottle NO ₂ : 30 ml x 6 no. plastic bottle NH ₃ : 10 ml x 24 no. plastic bottle Ozone: 10 ml x 1 no. plastic bottle C ₆ H ₆ : 6 no. charcoal tubes CO: 1 no. Bladder	Date-Receipt of Sample	25/03/2021
Sampling Procedure	As per Method Reference	Date-Start of Analysis	25/03/2021
Order Reference	As per PO No. PNP/February/2019- 2020/013 Dated 26/02/2020	Date-Completion of Analysis	30/03/2021

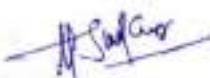
Meteorological Data / Environmental Conditions

Average Wind Velocity 14 km/h	Wind Direction WNW	Relative Humidity (Max./Min.): 58/46 %	Temperature (Max./Min.): 37/20 °C	Duration of Survey 24 h
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CHEMICAL TESTING

Parameter	Results	NAAQS # 2009	Unit	Method
Sulphur Dioxide (SO ₂)	7.2	80	µg/m ³	IS 582 (Part 2): 2001, RA 2007
Nitrogen Dioxide (NO ₂)	27.3	80	µg/m ³	IS 582 (Part 6): 2006, RA 2007
Particulate Matter (size less than 10 µm) or PM ₁₀	311	100	µg/m ³	IS 582 (Part 23): 2006, RA 2007
Particulate Matter (size less than 2.5µm) or PM _{2.5}	107	60	µg/m ³	USEPA CFR 40, Part 50, Appendix L
Ozone (O ₃)	<19.6	180	µg/m ³	NWMA 3rd Ed. Method 40, Page no. 403, 1988
Lead (Pb)	<0.02	1	µg/m ³	EPA/625/R-96/010 a Compendium Method 10-31 & 3.2, Jan 1993
Carbon Monoxide (CO)	1.14	4	mg/m ³	CPCB Guidelines, 27/2002-03, Page no.6
Ammonia (NH ₃)	<4	400	µg/m ³	AEC/C/SAP/AA-7
Benzene (C ₆ H ₆)	1.52	5	µg/m ³	IS 582 (Part II): 2006, RA 2007
Benzo (a) Pyrene (BaP) - particulate phase only	<0.2	1	ng/m ³	IS 582 (Part Q): 2004, RA 2006
Arsenic (As)	<0.3	6	ng/m ³	EPA/625/R-96/010 a Compendium Method 10-31 & 3.2, Jan 1993
Nickel (Ni)	<3	20	ng/m ³	EPA/625/R-96/010 a Compendium Method 10-31 & 3.2, Jan 1993

TWA Time Weighted Average
 * NAAQS (National Ambient Air Quality Standards (Industrial, Residential, Rural and other Area) specified as: 24 hours TWA in case of Sulphur Dioxide, Nitrogen Dioxide, PM₁₀, PM_{2.5}, Lead and Ammonia, 1 hour TWA in case of Carbon Monoxide and Ozone, Annual TWA in case of Benzene, Benzo (a) Pyrene, Arsenic and Nickel



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TC-5509



AMBIENT AIR QUALITY MONITORING REPORT

Sample ID: AA/03/21/6108	Report No: AA/03/21/6108	Report Date: 02/04/2021
Name & Address of Customer	PNP Maritime Services Private Limited 2nd Floor, Lansdowne House Building, M.B. Marg, Near Regal Cinema, Apollo Bunder, Colaba, Mumbai - 400 001	
Sample Collected by	Laboratory	Sample Description/ Type Ambient Air (Group: Atmospheric Pollution, Sub Group: Ambient Air Quality)
Sampling Location	Near Main Gate	Date-Sampling 25/03/2021 to 26/03/2021
Sample Quantity/ Packing	PM ₁₀ , BaP, Metals: Filter paper 1 x 3 no. PM _{2.5} : Filter paper 1 x 1 no. SO ₂ : 30 ml x 6 no. plastic bottle NO ₂ : 30 ml x 6 no. plastic bottle NH ₃ : 10 ml x 24 no. plastic bottle Ozone: 10 ml x 1 no. plastic bottle C ₆ H ₆ : 6 no. charcoal tubes CO: 1 no. Bladder	Date-Receipt of Sample 29/03/2021
Sampling Procedure	As per Method Reference	Date-Start of Analysis 29/03/2021
Order Reference	As per PO No. PNP/February/2019- 2020/013 Dated 26/02/2020	Date-Completion of Analysis 02/04/2021

Meteorological Data / Environmental Conditions

Average Wind Velocity 8 km/h	Wind Direction E	Relative Humidity (Max./Min.): 50/38 %	Temperature (Max./Min.): 40/23 °C	Duration of Survey 24 h
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CHEMICAL TESTING

Parameter	Results	NAAQS # 2009	Unit	Method
Sulphur Dioxide (SO ₂)	8.1	80	µg/m ³	IS 5182 (Part 2): 2008, RA 2007
Nitrogen Dioxide (NO ₂)	32.4	80	µg/m ³	IS 5182 (Part 1): 2008, RA 2007
Particulate Matter (size less than 10 µm) or PM ₁₀	394	100	µg/m ³	IS 5182 (Part 23): 2008, RA 2007
Particulate Matter (size less than 2.5µm) or PM _{2.5}	174	60	µg/m ³	USEPA CFR 40, Part 50, Appendix I
Ozone (O ₃)	39.3	180	µg/m ³	ANMA 3rd Ed. Method 48 Page no. 403/1988
Lead (Pb)	<0.02	1	µg/m ³	EPA/625/R-96/010 a Compendium Method 10-31 6 2.2, Jun 1999
Carbon Monoxide (CO)	1.83	4	mg/m ³	CPCB Guidelines, 27/2002-G, Page no.16
Ammonia (NH ₃)	<4	400	µg/m ³	AEC/C/SAP/AM-7
Benzene (C ₆ H ₆)	1.42	5	µg/m ³	IS 5182 (Part II): 2008, RA 2007
Benzo (a) Pyrene (BaP) - particulate phase only	<0.2	1	ng/m ³	IS 5182 (Part 12): 2008, RA 2007
Arsenic (As)	<0.3	6	ng/m ³	EPA/625/R-96/010 a Compendium Method 10-31 6 2.2, Jun 1999
Nickel (Ni)	<3	20	ng/m ³	EPA/625/R-96/010 a Compendium Method 10-31 6 2.2, Jun 1999

TWA Time Weighted Average

NAAQS (National Ambient Air Quality Standards (Industrial, Residential, Rural and other Area) specified as: 24 hours TWA in case of Sulphur Dioxide, Nitrogen Dioxide, PM₁₀, PM_{2.5}, Lead and Ammonia, 1 hour TWA in case of Carbon Monoxide and Ozone, Annual TWA in case of Benzene, Benzo (a) Pyrene, Arsenic and Nickel.

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AMBIENT AIR QUALITY MONITORING REPORT

Sample ID: AA/03/21/6109	Report No.: AA/03/21/6109	Report Date:	02/04/2021
Name & Address of Customer	PNP Maritime Services Private Limited 2nd Floor, Lansdowne House Building, M.B. Marg, Near Regal Cinema, Apollo Bunder, Colaba, Mumbai - 400 001		
Sample Collected by	Laboratory	Sample Description/ Type	Ambient Air (Group: Atmospheric Pollution, Sub Group: Ambient Air Quality)
Sampling Location	Near Jetty No. 1	Date-Sampling	25/03/2021 to 26/03/2021
Sample Quantity/ Packing	PM ₁₀ , BaP, Metals: Filter paper 1 x 3 no. PM _{2.5} : Filter paper 1 x 1 no. SO ₂ : 30 ml x 6 no. plastic bottle NO ₂ : 30 ml x 6 no. plastic bottle NH ₃ : 10 ml x 24 no. plastic bottle Ozone: 10 ml x 1 no. plastic bottle C ₆ H ₆ : 6 no. charcoal tubes CO: 1 no. Bladder	Date-Receipt of Sample	29/03/2021
Sampling Procedure	As per Method Reference	Date-Start of Analysis	29/03/2021
Order Reference	As per PO No. PNP/February/2019- 2020/013 Dated 26/02/2020	Date-Completion of Analysis	02/04/2021

Meteorological Data / Environmental Conditions

Average Wind Velocity 8 km/h	Wind Direction E	Relative Humidity (Max./Min.): 50/38 %	Temperature (Max./Min.): 40/23 °C	Duration of Survey 24 h
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CHEMICAL TESTING

Parameter	Results	NAAQS # 2009	Unit	Method
Sulphur Dioxide (SO ₂)	7.0	80	µg/m ³	IS 5082 (Part 2): 2008, RA 2007
Nitrogen Dioxide (NO ₂)	29.2	80	µg/m ³	IS 5082 (Part 5): 2006, RA 2007
Particulate Matter (size less than 10 µm) or PM ₁₀	387	100	µg/m ³	IS 5082 (Part 7): 2006, RA 2007
Particulate Matter (size less than 2.5µm) or PM _{2.5}	156	60	µg/m ³	USEPA CFR 40, Part 50, Appendix I
Ozone (O ₃)	33.7	180	µg/m ³	AWMA 2nd Ed. Method 40, Page no. 403, 1988
Lead (Pb)	<0.02	1	µg/m ³	EPA/825/R-96/010 a Compendium Method 10-31 § 3.2, Jun 1999
Carbon Monoxide (CO)	1.88	4	mg/m ³	CPCB Guidelines, 27/2002-03, Page no.16
Ammonia (NH ₃)	<4	400	µg/m ³	NEC/C/SAP/AA-7
Benzene (C ₆ H ₆)	2.45	5	µg/m ³	IS 5082 (Part 11): 2006, RA 2007
Benzo (a) Pyrene (BaP) - particulate phase only	<0.2	1	ng/m ³	IS 5082 (Part 12): 2004, RA 2009
Arsenic (As)	<0.3	6	ng/m ³	EPA/825/R-96/010 a Compendium Method 10-31 § 3.2, Jun 1999
Nickel (Ni)	<3	20	ng/m ³	EPA/825/R-96/010 a Compendium Method 10-31 § 3.2, Jun 1999

TWA Time Weighted Average

NAAQS (National Ambient Air Quality Standards (Industrial, Residential, Rural and other Area) specified as: 24 hours TWA in case of Sulphur Dioxide, Nitrogen Dioxide, PM₁₀, PM_{2.5}, Lead and Ammonia, 1 hour TWA in case of Carbon Monoxide and Ozone, Annual TWA in case of Benzene, Benzo (a) Pyrene, Arsenic and Nickel



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AMBIENT AIR QUALITY MONITORING REPORT

Sample ID: AA/03/21/6110	Report No.: AA/03/21/6110	Report Date	02/04/2021
Name & Address of Customer	PNP Maritime Services Private Limited 2nd Floor, Lansdowne House Building, M.B. Marg, Near Regal Cinema, Apollo Bunder, Colaba, Mumbai - 400 001		
Sample Collected by	Laboratory	Sample Description/ Type	Ambient Air (Group: Atmospheric Pollution, Sub Group: Ambient Air Quality)
Sampling Location	Near Jetty No. 2	Date-Sampling	25/03/2021 to 26/03/2021
Sample Quantity/ Packing	PM ₁₀ , BaP, Metals: Filter paper 1 x 3 no. PM _{2.5} : Filter paper 1 x 1 no. SO ₂ : 30 ml x 6 no. plastic bottle NO ₂ : 30 ml x 6 no. plastic bottle NH ₃ : 10 ml x 24 no. plastic bottle Ozone: 10 ml x 1 no. plastic bottle C ₆ H ₆ : 6 no. charcoal tubes CO: 1 no. Bladder	Date-Receipt of Sample	29/03/2021
Sampling Procedure	As per Method Reference	Date-Start of Analysis	29/03/2021
Order Reference	As per PO No. PNP/February/2019- 2020/013 Dated 26/02/2020	Date-Completion of Analysis	02/04/2021

Meteorological Data / Environmental Conditions

Average Wind Velocity 8 km/h	Wind Direction E	Relative Humidity (Max./Min.): 50/38 %	Temperature (Max./Min.): 40/23 °C	Duration of Survey 24 h
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CHEMICAL TESTING

Parameter	Results	NAAQS # 2009	Unit	Method
Sulphur Dioxide (SO ₂)	6.4	80	µg/m ³	IS 5182 (Part 2): 2006, RA 2007
Nitrogen Dioxide (NO ₂)	27.5	80	µg/m ³	IS 5182 (Part 5): 2006, RA 2007
Particulate Matter (size less than 10 µm) or PM ₁₀	364	100	µg/m ³	IS 5182 (Part 23): 2006, RA 2007
Particulate Matter (size less than 2.5µm) or PM _{2.5}	154	60	µg/m ³	OSIP4 CFR 40, Part 50, Appendix I
Ozone (O ₃)	28.1	180	µg/m ³	AWWA 2nd Ed. Method 41/ Page no. 403, 1998
Lead (Pb)	<0.02	1	µg/m ³	EPA/625/R-96/010 a Compendium Method 10-31 & 3.2, Jun 1999
Carbon Monoxide (CO)	1.43	4	mg/m ³	CPCB Guidelines: 37/2007-03, Page no.16
Ammonia (NH ₃)	<4	400	µg/m ³	AEC/C/SAP/AA-7
Benzene (C ₆ H ₆)	1.54	5	µg/m ³	IS 5182 (Part 11): 2006, RA 2007
Benzo (a) Pyrene (BaP) - particulate phase only	<0.2	1	ng/m ³	IS 5182 (Part 17): 2004, RA 2009
Arsenic (As)	<0.3	6	ng/m ³	EPA/625/R-96/010 a Compendium Method 10-31 & 3.2, Jun 1999
Nickel (Ni)	<3	20	ng/m ³	EPA/625/R-96/010 a Compendium Method 10-31 & 3.2, Jun 1999

TWA: Time Weighted Average

NAAQS (National Ambient Air Quality Standards (Industrial, Residential, Rural and other Area) specified as: 24 hours TWA in case of Sulphur Dioxide, Nitrogen Dioxide, PM₁₀, PM_{2.5}, Lead and Ammonia, 1 hour TWA in case of Carbon Monoxide and Ozone, Annual TWA in case of Benzene, Benzo (a) Pyrene, Arsenic, and Nickel



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AMBIENT AIR QUALITY MONITORING REPORT

Sample ID: AA/03/21/6111	Report No.: AA/03/21/6111	Report Date	02/04/2021
Name & Address of Customer	PNP Maritime Services Private Limited 2nd Floor, Lansdowne House Building, M.B. Marg, Near Regal Cinema, Apollo Bunder, Colaba, Mumbai - 400 001		
Sample Collected by	Laboratory	Sample Description/ Type	Ambient Air (Group: Atmospheric Pollution, Sub Group: Ambient Air Quality)
Sampling Location	Near Jetty No. 3	Date-Sampling	25/03/2021 to 26/03/2021
Sample Quantity/ Packing	PM ₁₀ , BaP, Metals: Filter paper 1 x 3 no. PM _{2.5} : Filter paper 1 x 1 no. SO ₂ : 30 ml x 6 no. plastic bottle NO ₂ : 30 ml x 6 no. plastic bottle NH ₃ : 10 ml x 24 no. plastic bottle Ozone: 10 ml x 1 no. plastic bottle C ₆ H ₆ : 6 no. charcoal tubes CO: 1 no. Bladder	Date-Receipt of Sample	29/03/2021
Sampling Procedure	As per Method Reference	Date-Start of Analysis	29/03/2021
Order Reference	As per PO No. PNP/February/2019- 2020/013 Dated 26/02/2020	Date-Completion of Analysis	02/04/2021

Meteorological Data / Environmental Conditions

Average Wind Velocity 8 km/h	Wind Direction E	Relative Humidity (Max./Min.): 50/38 %	Temperature (Max./Min.): 40/23 °C	Duration of Survey 24 h
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CHEMICAL TESTING

Parameter	Results	NAAQS # 2009	Unit	Method
Sulphur Dioxide (SO ₂)	7.2	80	µg/m ³	IS 5882 (Part 2): 2008, RA 2017
Nitrogen Dioxide (NO ₂)	33.2	80	µg/m ³	IS 5882 (Part 6): 2008, RA 2017
Particulate Matter (size less than 10 µm) or PM ₁₀	361	100	µg/m ³	IS 5882 (Part 23): 2008, RA 2017
Particulate Matter (size less than 2.5µm) or PM _{2.5}	155	60	µg/m ³	USEPA CFR 40, Part 50, Appendix I
Ozone (O ₃)	37.9	180	µg/m ³	AWMA, 3rd Ed., Method 40, Page no. 403, 1988
Lead (Pb)	<0.02	1	µg/m ³	EPA/625/R-96/010 a Compendium Method 10-31 & 3.2, Jan 1999
Carbon Monoxide (CO)	1.74	4	mg/m ³	CPCB Guidelines, 07/2017-02, Page no.16
Ammonia (NH ₃)	<4	400	µg/m ³	AEC/C/SAP/AA-7
Benzene (C ₆ H ₆)	1.90	5	µg/m ³	IS 5882 (Part 11): 2008, RA 2017
Benzo (a) Pyrene (BaP) - particulate phase only	<0.2	1	ng/m ³	IS 5882 (Part 12): 2004, RA 2019
Arsenic (As)	<0.3	6	ng/m ³	EPA/625/R-96/010 a Compendium Method 10-31 & 3.2, Jan 1999
Nickel (Ni)	<3	20	ng/m ³	EPA/625/R-96/010 a Compendium Method 10-31 & 3.2, Jan 1999

TWA Time Weighted Average
 # NAAQS (National Ambient Air Quality Standards (Industrial, Residential, Rural and other Area) specified as: 24 hours TWA in case of Sulphur Dioxide, Nitrogen Dioxide, PM₁₀, PM_{2.5}, Lead and Ammonia, 1 hour TWA in case of Carbon Monoxide and Ozone, Annual TWA in case of Benzene, Benzo (a) Pyrene, Arsenic and Nickel

(Signature)

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TC-5509



AMBIENT AIR QUALITY MONITORING REPORT

Sample ID: AA/03/21/6112	Report No.: AA/03/21/6112	Report Date:	02/04/2021
Name & Address of Customer	PNP Maritime Services Private Limited 2nd Floor, Lansdowne House Building, M.B. Marg, Near Regal Cinema, Apollo Bunder, Colaba, Mumbai - 400 001		
Sample Collected by	Laboratory	Sample Description/ Type	Ambient Air (Group: Atmospheric Pollution, Sub Group: Ambient Air Quality)
Sampling Location	Near Jetty No.5	Date-Sampling	25/03/2021 to 26/03/2021
Sample Quantity/ Packing	PM ₁₀ , BaP, Metals: Filter paper 1 x 3 no. PM _{2.5} : Filter paper 1 x 1 no. SO ₂ : 30 ml x 6 no. plastic bottle NO ₂ : 30 ml x 6 no. plastic bottle NH ₃ : 10 ml x 24 no. plastic bottle Ozone: 10 ml x 1 no. plastic bottle C ₆ H ₆ : 6 no. charcoal tubes CO: 1 no. Bladder	Date-Receipt of Sample	29/03/2021
Sampling Procedure	As per Method Reference	Date-Start of Analysis	29/03/2021
Order Reference	As per PO No. PNP/February/2019- 2020/013 Dated 26/02/2020	Date-Completion of Analysis	02/04/2021

Meteorological Data / Environmental Conditions


Average Wind Velocity 8 km/h	Wind Direction E	Relative Humidity (Max./Min.): 50/38 %	Temperature (Max./Min.): 40/23 °C	Duration of Survey 24 h
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CHEMICAL TESTING

Parameter	Results	NAAQS # 2009	Unit	Method
Sulphur Dioxide (SO ₂)	8.2	80	µg/m ³	IS 5182 (Part 2): 2001, RA 2007
Nitrogen Dioxide (NO ₂)	24.3	80	µg/m ³	IS 5182 (Part 5): 2006, RA 2007
Particulate Matter (size less than 10 µm) or PM ₁₀	324	100	µg/m ³	IS 5182 (Part 20): 2006, RA 2007
Particulate Matter (size less than 2.5µm) or PM _{2.5}	134	60	µg/m ³	USEPA CFR 40, Part 50, Appendix L
Ozone (O ₃)	33.7	180	µg/m ³	AWMA 3rd Ed. Method 40, Page no. 402/1988
Lead (Pb)	<0.02	1	µg/m ³	EPA/625/R-96/010 a Compendium Method ID-316 3.2, Jun 1999
Carbon Monoxide (CO)	1.58	4	mg/m ³	CPCB Guidelines, 37/2002-10, Page no.16
Ammonia (NH ₃)	<4	400	µg/m ³	AEC/C/SAP/M-7
Benzene (C ₆ H ₆)	1.45	5	µg/m ³	IS 5182 (Part II): 2006, RA 2007
Benzo (a) Pyrene (BaP) - particulate phase only	<0.2	1	ng/m ³	IS 5182 (Part II): 2006, RA 2007
Arsenic (As)	<0.3	6	ng/m ³	EPA/625/R-96/010 a Compendium Method ID-316 3.2, Jun 1999
Nickel (Ni)	<3	20	ng/m ³	EPA/625/R-96/010 a Compendium Method ID-316 3.2, Jun 1999

TWA Time Weighted Average

NAAQS (National Ambient Air Quality Standards (Industrial, Residential, Rural and other Area) specified as: 24 hours TWA in case of Sulphur Dioxide, Nitrogen Dioxide, PM₁₀, PM_{2.5}, Lead and Ammonia, 1 hour TWA in case of Carbon Monoxide and Ozone, Annual TWA in case of Benzene, Benzo (a) Pyrene, Arsenic and Nickel



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AMBIENT AIR QUALITY MONITORING REPORT

Sample ID: AA/03/21/6113	Report No: AA/03/21/6113	Report Date	02/04/2021
Name & Address of Customer	PNP Maritime Services Private Limited 2nd Floor, Lansdowne House Building, M.B. Marg, Near Regal Cinema, Apollo Bunder, Colaba, Mumbai - 400 001		
Sample Collected by	Laboratory	Sample Description/ Type	Ambient Air (Group: Atmospheric Pollution, Sub Group: Ambient Air Quality)
Sampling Location	Near Weight Bridge	Date-Sampling	25/03/2021 to 26/03/2021
Sample Quantity/ Packing	PM ₁₀ , BaP, Metals: Filter paper 1 x 3 no. PM _{2.5} : Filter paper 1 x 1 no. SO ₂ : 30 ml x 6 no. plastic bottle NO ₂ : 30 ml x 6 no. plastic bottle NH ₃ : 10 ml x 24 no. plastic bottle Ozone: 10 ml x 1 no. plastic bottle C ₆ H ₆ : 6 no. charcoal tubes CO: 1 no. Bladder	Date-Receipt of Sample	29/03/2021
Sampling Procedure	As per Method Reference	Date-Start of Analysis	29/03/2021
Order Reference	As per PO No. PNP/February/2019- 2020/013 Dated 26/02/2020	Date-Completion of Analysis	02/04/2021

Meteorological Data / Environmental Conditions

Average Wind Velocity 8 km/h	Wind Direction E	Relative Humidity (Max./Min.): 50/38 %	Temperature (Max./Min.): 40/23 °C	Duration of Survey 24 h
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CHEMICAL TESTING

Parameter	Results	NAAQS # 2009	Unit	Method
Sulphur Dioxide (SO ₂)	7.4	80	µg/m ³	IS 5182 (Part 2): 2001, RA 2007
Nitrogen Dioxide (NO ₂)	28.5	80	µg/m ³	IS 5182 (Part 6): 2006, RA 2007
Particulate Matter (size less than 10 µm) or PM ₁₀	364	100	µg/m ³	IS 5182 (Part 23): 2006, RA 2007
Particulate Matter (size less than 2.5µm) or PM _{2.5}	133	60	µg/m ³	USEPA CFR 40, Part 50, Appendix I
Ozone (O ₃)	29.5	180	µg/m ³	AWMA 3rd Ed, Method 40, Page no. 402, 1988
Lead (Pb)	<0.02	1	µg/m ³	EPA/625/R-96/010 a Compendium Method 8-316 3.7, Jan 1999
Carbon Monoxide (CO)	1.63	4	mg/m ³	EPCB Guidelines, 37/2002-02, Page no.16
Ammonia (NH ₃)	<4	400	µg/m ³	AEC/C/SAP/RA-7
Benzene (C ₆ H ₆)	2.20	5	µg/m ³	IS 5182 (Part II) : 2006, RA 2007
Benzo (a) Pyrene (BaP) - particulate phase only	<0.2	1	ng/m ³	IS 5182 (Part 12): 2004, RA 2009
Arsenic (As)	<0.3	6	ng/m ³	EPA/625/R-96/010 a Compendium Method 8-316 3.7, Jan 1999
Nickel (Ni)	<3	20	ng/m ³	EPA/625/R-96/010 a Compendium Method 8-316 3.7, Jan 1999

TWA Time Weighted Average

NAAQS (National Ambient Air Quality Standards (Industrial, Residential, Rural and other Area) specified as: 24 hours TWA in case of Sulphur Dioxide, Nitrogen Dioxide, PM₁₀, PM_{2.5}, Lead and Ammonia, 1 hour TWA in case of Carbon Monoxide and Ozone, Annual TWA in case of Benzene, Benzo (a) Pyrene, Arsenic and Nickel

Ninad Soundankar

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TC-5509



AMBIENT AIR QUALITY MONITORING REPORT

Sample ID: AA/03/21/6114	Report No: AA/03/21/6114	Report Date	02/04/2021
Name & Address of Customer	PNP Maritime Services Private Limited 2nd Floor, Lansdowne House Building, M.B. Marg, Near Regal Cinema, Apollo Bunder, Colaba, Mumbai - 400 001		
Sample Collected by	Laboratory	Sample Description/ Type	Ambient Air (Group: Atmospheric Pollution, Sub Group: Ambient Air Quality)
Sampling Location	Near Custom Building	Date-Sampling	25/03/2021 to 26/03/2021
Sample Quantity/ Packing	PM ₁₀ , BaP, Metals: Filter paper 1 x 3 no. PM _{2.5} : Filter paper 1 x 1 no. SO ₂ : 30 ml x 6 no. plastic bottle NO ₂ : 30 ml x 6 no. plastic bottle NH ₃ : 10 ml x 24 no. plastic bottle Ozone: 10 ml x 1 no. plastic bottle C ₆ H ₆ : 6 no. charcoal tubes CO: 1 no. Bladder	Date-Receipt of Sample	29/03/2021
Sampling Procedure	As per Method Reference	Date-Start of Analysis	29/03/2021
Order Reference	As per PO No. PNP/February/2019- 2020/013 Dated 26/02/2020	Date-Completion of Analysis	02/04/2021

Meteorological Data / Environmental Conditions

Average Wind Velocity 8 km/h	Wind Direction E	Relative Humidity (Max./Min.): 50/38 %	Temperature (Max./Min.): 40/23 °C	Duration of Survey 24 h
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CHEMICAL TESTING

Parameter	Results	NAAQS # 2009	Unit	Method
Sulphur Dioxide (SO ₂)	7.5	80	µg/m ³	IS 5082 (Part 2): 2008, RA 2007
Nitrogen Dioxide (NO ₂)	26.4	80	µg/m ³	IS 5082 (Part 6): 2006, RA 2007
Particulate Matter (size less than 10 µm) or PM ₁₀	363	100	µg/m ³	IS 5082 (Part 73): 2006 RA 2007
Particulate Matter (size less than 2.5µm) or PM _{2.5}	141	60	µg/m ³	USEPA CFR 40, Part 50, Appendix L
Ozone (O ₃)	36.5	180	µg/m ³	NWMA 3rd Ed. Method 40, Page no. 403, 1988
Lead (Pb)	<0.02	1	µg/m ³	EPA/625/R-95/010 a Compendium Method ID-318 3.2, Jun 1999
Carbon Monoxide (CO)	1.53	4	mg/m ³	DPOB Guidelines, 31/2002-03, Page no.16
Ammonia (NH ₃)	<4	400	µg/m ³	AEC/C/SAP/AA-7
Benzene (C ₆ H ₆)	1.44	5	µg/m ³	IS 5082 (Part 8): 2006, RA 2007
Benzo (a) Pyrene (BaP) - particulate phase only	<0.2	1	ng/m ³	IS 5082 (Part 12): 2004, RA 2009
Arsenic (As)	<0.3	6	ng/m ³	EPA/625/R-95/010 a Compendium Method ID-318 3.2, Jun 1999
Nickel (Ni)	<3	20	ng/m ³	EPA/625/R-95/010 a Compendium Method ID-318 3.2, Jun 1999

TWA Time Weighted Average

NAAQS (National Ambient Air Quality Standards (Industrial, Residential, Rural and other Area) specified as: 24 hours TWA in case of Sulphur Dioxide, Nitrogen Dioxide, PM₁₀, PM_{2.5}, Lead and Ammonia, 1 hour TWA in case of Carbon Monoxide and Ozone, Annual TWA in case of Benzene, Benzo (a) Pyrene, Arsenic and Nickel.


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AMBIENT AIR QUALITY MONITORING REPORT

Sample ID: AA/03/21/6115	Report No.: AA/03/21/6115	Report Date	02/04/2021
Name & Address of Customer	PNP Maritime Services Private Limited 2nd Floor, Lansdowne House Building, M.B. Marg, Near Regal Cinema, Apollo Bunder, Colaba, Mumbai - 400 001		
Sample Collected by	Laboratory	Sample Description/ Type	Ambient Air (Group: Atmospheric Pollution, Sub Group: Ambient Air Quality)
Sampling Location	Near Lal Gate	Date-Sampling	25/03/2021 to 26/03/2021
Sample Quantity/ Packing	PM ₁₀ , BaP, Metals: Filter paper 1 x 3 no. PM _{2.5} : Filter paper 1 x 1 no. SO ₂ : 30 ml x 6 no. plastic bottle NO ₂ : 30 ml x 6 no. plastic bottle NH ₃ : 10 ml x 24 no. plastic bottle Ozone: 10 ml x 1 no. plastic bottle C ₆ H ₆ : 6 no. charcoal tubes CO: 1 no. Bladder	Date-Receipt of Sample	29/03/2021
Sampling Procedure	As per Method Reference	Date-Start of Analysis	29/03/2021
Order Reference	As per PO No. PNP/February/2019- 2020/013 Dated 26/02/2020	Date-Completion of Analysis	02/04/2021

Meteorological Data / Environmental Conditions

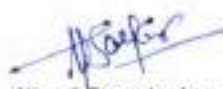
Average Wind Velocity 8 km/h	Wind Direction E	Relative Humidity (Max./Min.): 50/38 %	Temperature (Max./Min.): 40/23 °C	Duration of Survey 24 h
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CHEMICAL TESTING

Parameter	Results	NAAQS # 2009	Unit	Method
Sulphur Dioxide (SO ₂)	6.1	80	µg/m ³	IS 5182 (Part 2): 2006, RA 2017
Nitrogen Dioxide (NO ₂)	30	80	µg/m ³	IS 5182 (Part 6): 2006, RA 2017
Particulate Matter (size less than 10 µm) or PM ₁₀	365	100	µg/m ³	IS 5182 (Part 23): 2006, RA 2017
Particulate Matter (size less than 2.5µm) or PM _{2.5}	177	60	µg/m ³	USEPA CFR 40, Part 50, Appendix I
Ozone (O ₃)	25.3	180	µg/m ³	AWMA, 3rd Ed., Method 4H, Page no. 403, 1988
Lead (Pb)	<0.02	1	µg/m ³	EPA/625/R-96/010 a Compendium Method 10-31 & 3.2, Jun 1996
Carbon Monoxide (CO)	1.44	4	mg/m ³	CPCB Guidelines, 37/2002-GI, Page no.16
Ammonia (NH ₃)	<4	400	µg/m ³	AEC/C/SAP/AA-7
Benzene (C ₆ H ₆)	1.62	5	µg/m ³	IS 5182 (Part 11): 2006, RA 2017
Benzo (a) Pyrene (BaP) - particulate phase only	<0.2	1	ng/m ³	IS 5182 (Part 12): 2006, RA 2017
Arsenic (As)	<0.3	6	ng/m ³	EPA/625/R-96/010 a Compendium Method 10-31 & 3.2, Jun 1996
Nickel (Ni)	<3	20	ng/m ³	EPA/625/R-96/010 a Compendium Method 10-31 & 3.2, Jun 1996

TWA Time Weighted Average

NAAQS (National Ambient Air Quality Standards (Industrial, Residential, Rural and other Area) specified as: 24 hours TWA in case of Sulphur Dioxide, Nitrogen Dioxide, PM₁₀, PM_{2.5}, Lead and Ammonia, 1 hour TWA in case of Carbon Monoxide and Ozone, Annual TWA in case of Benzene, Benzo (a) Pyrene, Arsenic and Nickel


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AMBIENT AIR QUALITY MONITORING REPORT

Sample ID: AA/03/21/6116	Report No. AA/03/21/6116	Report Date	02/04/2021
Name & Address of Customer	PNP Maritime Services Private Limited 2nd Floor, Lansdowne House Building, M.B. Marg, Near Regal Cinema, Apollo Bunder, Colaba, Mumbai - 400 001		
Sample Collected by	Laboratory	Sample Description/ Type	Ambient Air (Group: Atmospheric Pollution, Sub Group: Ambient Air Quality)
Sampling Location	Near DIL Main Gate	Date-Sampling	25/03/2021 to 26/03/2021
Sample Quantity/ Packing	PM ₁₀ , BaP, Metals: Filter paper 1 x 3 no. PM _{2.5} : Filter paper 1 x 1 no. SO ₂ : 30 ml x 6 no. plastic bottle NO ₂ : 30 ml x 6 no. plastic bottle NH ₃ : 10 ml x 24 no. plastic bottle Ozone: 10 ml x 1 no. plastic bottle C ₆ H ₆ : 6 no. charcoal tubes CO: 1 no. Bladder	Date-Receipt of Sample	29/03/2021
Sampling Procedure	As per Method Reference	Date-Start of Analysis	29/03/2021
Order Reference	As per PO No. PNP/February/2019- 2020/013 Dated 26/02/2020	Date-Completion of Analysis	02/04/2021

Meteorological Data / Environmental Conditions

Average Wind Velocity 8 km/h	Wind Direction E	Relative Humidity (Max./Min.): 50/38 %	Temperature (Max./Min.): 40/23 °C	Duration of Survey 24 h
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CHEMICAL TESTING

Parameter	Results	NAAQS # 2009	Unit	Method
Sulphur Dioxide (SO ₂)	6.4	80	µg/m ³	IS 5082 (Part 2): 2004, RA 2007
Nitrogen Dioxide (NO ₂)	26.8	80	µg/m ³	IS 5082 (Part 6): 2006, RA 2007
Particulate Matter (size less than 10 µm) or PM ₁₀	369	100	µg/m ³	IS 5082 (Part 73): 2006, RA 2007
Particulate Matter (size less than 2.5µm) or PM _{2.5}	157	60	µg/m ³	USEPA CFR 40, Part 50, Appendix I
Ozone (O ₃)	33.7	180	µg/m ³	AWMA 3rd Ed. Method 40, Page no. 4031588
Lead (Pb)	<0.02	1	µg/m ³	EPA/625/R-96/010 a Compendium Method ID-318 3.2, Jun 1999
Carbon Monoxide (CO)	1.66	4	mg/m ³	CPCB Guidelines, 27/2002-II, Page no 16
Ammonia (NH ₃)	<4	400	µg/m ³	AEC/C/SAP/MA-7
Benzene (C ₆ H ₆)	2.72	5	µg/m ³	IS 5082 (Part 11): 2006, RA 2007
Benzo (a) Pyrene (BaP) - particulate phase only	<0.2	1	ng/m ³	IS 5082 (Part 12): 2004, RA 2007
Arsenic (As)	<0.3	6	ng/m ³	EPA/625/R-96/010 a Compendium Method ID-318 3.2, Jun 1999
Nickel (Ni)	<3	20	ng/m ³	EPA/625/R-96/010 a Compendium Method ID-318 3.2, Jun 1999

TWA Time Weighted Average

NAAQS (National Ambient Air Quality Standards (Industrial, Residential, Rural and other Area) specified as: 24 hours TWA in case of Sulphur Dioxide, Nitrogen Dioxide, PM₁₀, PM_{2.5}, Lead and Ammonia, 1 hour TWA in case of Carbon Monoxide and Ozone, Annual TWA in case of Benzene, Benzo (a) Pyrene, Arsenic and Nickel

[Signature]

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AMBIENT AIR QUALITY MONITORING REPORT

Sample ID: AA/03/21/6117	Report No.: AA/03/21/6117	Report Date	02/04/2021
Name & Address of Customer	PNP Maritime Services Private Limited 2nd Floor, Lansdowne House Building, M.B. Marg, Near Regal Cinema, Apollo Bunder, Colaba, Mumbai - 400 001		
Sample Collected by	Laboratory	Sample Description/ Type	Ambient Air (Group: Atmospheric Pollution, Sub Group: Ambient Air Quality)
Sampling Location	DIL Godown Back Side	Date-Sampling	25/03/2021 to 26/03/2021
Sample Quantity/ Packing	PM ₁₀ , BaP, Metals: Filter paper 1 x 3 no. PM _{2.5} : Filter paper 1 x 1 no. SO ₂ : 30 ml x 6 no. plastic bottle NO ₂ : 30 ml x 6 no. plastic bottle NH ₃ : 10 ml x 24 no. plastic bottle Ozone: 10 ml x 1 no. plastic bottle C ₆ H ₆ : 6 no. charcoal tubes CO: 1 no. Bladder	Date-Receipt of Sample	29/03/2021
Sampling Procedure	As per Method Reference	Date-Start of Analysis	29/03/2021
Order Reference	As per PO No. PNP/February/2019- 2020/013 Dated 26/02/2020	Date-Completion of Analysis	02/04/2021

Meteorological Data / Environmental Conditions

Average Wind Velocity 8 km/h	Wind Direction E	Relative Humidity (Max./Min.): 50/38 %	Temperature (Max./Min.): 40/23 °C	Duration of Survey 24 h
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CHEMICAL TESTING

Parameter	Results	NAAQS # 2009	Unit	Method
Sulphur Dioxide (SO ₂)	7.2	80	µg/m ³	IS 582 (Part 2) 2006, RA 2017
Nitrogen Dioxide (NO ₂)	27.5	80	µg/m ³	IS 582 (Part E) 2006, RA 2017
Particulate Matter (size less than 10 µm) or PM ₁₀	331	100	µg/m ³	IS 582 (Part 20) 2006, RA 2017
Particulate Matter (size less than 2.5µm) or PM _{2.5}	120	60	µg/m ³	USEPA CFR 40, Part 50, Appendix L
Ozone (O ₃)	<19.6	180	µg/m ³	AWMA 3rd Ed. Method 40, Page no. 403, 1999
Lead (Pb)	<0.02	1	µg/m ³	EPA/625/R-96/010 a Compendium Method 10-31 & 3.2, Jun 1999
Carbon Monoxide (CO)	1.10	4	mg/m ³	CPCB Guidelines, 27/2002-GI, Page no.16
Ammonia (NH ₃)	<4	400	µg/m ³	AEC/C/SAP/AM-7
Benzene (C ₆ H ₆)	1.71	5	µg/m ³	IS 582 (Part II) 2006, RA 2017
Benzo (a) Pyrene (BaP) - particulate phase only	<0.2	1	ng/m ³	IS 582 (Part II) 2006, RA 2017
Arsenic (As)	<0.3	6	ng/m ³	EPA/625/R-96/010 a Compendium Method 10-31 & 3.2, Jun 1999
Nickel (Ni)	<3	20	ng/m ³	EPA/625/R-96/010 a Compendium Method 10-31 & 3.2, Jun 1999

TWA Time Weighted Average

NAAQS (National Ambient Air Quality Standards (Industrial, Residential, Rural and other Area) specified as: 24 hours TWA in case of Sulphur Dioxide, Nitrogen Dioxide, PM₁₀, PM_{2.5}, Lead and Ammonia, 1 hour TWA in case of Carbon Monoxide and Ozone, Annual TWA in case of Benzene, Benzo (a) Pyrene, Arsenic and Nickel


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AMBIENT AIR QUALITY MONITORING REPORT

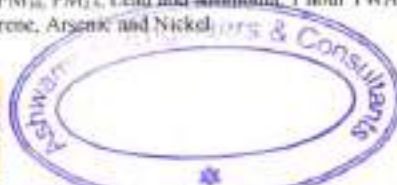
Sample ID: AA/04/21/5003	Report No: AA/04/21/5003	Report Date	06/04/2021
Name & Address of Customer	PNP Maritime Services Private Limited 2nd Floor, Lansdowne House Building, M.B. Marg, Near Regal Cinema, Apollo Bunder, Colaba, Mumbai - 400 001		
Sample Collected by	Laboratory	Sample Description/ Type	Ambient Air (Group: Atmospheric Pollution, Sub Group: Ambient Air Quality)
Sampling Location	Near Main Gate	Date-Sampling	29/03/2021 to 30/03/2021
Sample Quantity/ Packing	PM ₁₀ , BaP, Metals: Filter paper 1 x 3 no. PM _{2.5} : Filter paper 1 x 1 no. SO ₂ : 30 ml x 6 no. plastic bottle NO ₂ : 30 ml x 6 no. plastic bottle NH ₃ : 10 ml x 24 no. plastic bottle Ozone: 10 ml x 1 no. plastic bottle C ₆ H ₆ : 6 no. charcoal tubes CO: 1 no. bladder	Date-Receipt of Sample	01/04/2021
Sampling Procedure	As per Method Reference	Date-Start of Analysis	01/04/2021
Order Reference	As per PO No. PNP/February/2019- 2020/013 Dated 26/02/2020	Date-Completion of Analysis	06/04/2021

Meteorological Data / Environmental Conditions

Average Wind Velocity 10 km/h	Wind Direction SW	Relative Humidity (Max./Min.): 30/18%	Temperature (Max./Min.): 42/25 °C	Duration of Survey 24 h
Parameter	Results	NAAQS # 2009	Unit	Method
CHEMICAL TESTING				
Sulphur Dioxide (SO ₂)	6.3	80	µg/m ³	IS 582 (Part 2): 2006, RA 2007
Nitrogen Dioxide (NO ₂)	28.3	80	µg/m ³	IS 582 (Part 6): 2006, RA 2007
Particulate Matter (size less than 10 µm) or PM ₁₀	362	100	µg/m ³	IS 582 (Part 23): 2006, RA 2007
Particulate Matter (size less than 2.5µm) or PM _{2.5}	151	60	µg/m ³	IS 582 (Part 23): 2006, RA 2007
Ozone (O ₃)	36.5	180	µg/m ³	AWMA, 3rd Ed. Method 40 Page no. 403, 1988
Lead (Pb)	<0.02	1	µg/m ³	EPA/625/R-96/010 a Compendium Method ID-31632, Jun 1999
Carbon Monoxide (CO)	1.44	4	mg/m ³	CPCB Guidelines: 37/2002-03, Page no.6
Ammonia (NH ₃)	<4	400	µg/m ³	AEC/C/SAP/AA 7
Benzene (C ₆ H ₆)	1.09	5	µg/m ³	IS 582 (Part 11): 2006, RA 2007
Benzo (a) Pyrene (BaP) - particulate phase only	<0.2	1	ng/m ³	IS 582 (Part 12): 2006, RA 2007
Arsenic (As)	<0.3	6	ng/m ³	EPA/625/R-96/010 a Compendium Method ID-31632, Jun 1999
Nickel (Ni)	<3	20	ng/m ³	EPA/625/R-96/010 a Compendium Method ID-31632, Jun 1999

TWA Time Weighted Average
 # NAAQS (National Ambient Air Quality Standards (Industrial, Residential, Rural and other Area) specified as: 24 hours TWA in case of Sulphur Dioxide, Nitrogen Dioxide, PM₁₀, PM_{2.5}, Lead and Ammonia, 1 hour TWA in case of Carbon Monoxide and Ozone, Annual TWA in case of Benzene, Benzo (a) Pyrene, Arsenic and Nickel


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AMBIENT AIR QUALITY MONITORING REPORT

Sample ID: AA/04/21/5004	Report No: AA/04/21/5004	Report Date	06/04/2021
Name & Address of Customer	PNP Maritime Services Private Limited 2nd Floor, Lansdowne House Building, M.B. Marg, Near Regal Cinema, Apollo Bunder, Colaba, Mumbai - 400 001		
Sample Collected by	Laboratory	Sample Description/ Type	Ambient Air (Group: Atmospheric Pollution, Sub Group: Ambient Air Quality)
Sampling Location	Near Jetty No. 1	Date-Sampling	29/03/2021 to 30/03/2021
Sample Quantity/Packing	PM ₁₀ , BaP, Metals: Filter paper 1 x 3 no. PM _{2.5} : Filter paper 1 x 1 no. SO ₂ : 30 ml x 6 no. plastic bottle NO ₂ : 30 ml x 6 no. plastic bottle NH ₃ : 10 ml x 24 no. plastic bottle Ozone: 10 ml x 1 no. plastic bottle C ₆ H ₆ : 6 no. charcoal tubes CO: 1 no. bladder	Date-Receipt of Sample	01/04/2021
Sampling Procedure	As per Method Reference	Date-Start of Analysis	01/04/2021
Order Reference	As per PO No. PNP/February/2019- 2020/013 Dated 26/02/2020	Date-Completion of Analysis	06/04/2021

Meteorological Data / Environmental Conditions

Average Wind Velocity 10 km/h	Wind Direction SW	Relative Humidity (Max./Min.): 30/18 %	Temperature (Max./Min.): 42/25 °C	Duration of Survey 24 h
Parameter	Results	NAAQS # 2009	Unit	Method
CHEMICAL TESTING				
Sulphur Dioxide (SO ₂)	5.8	80	µg/m ³	IS 5182 (Part 2): 2006, RA 2007
Nitrogen Dioxide (NO ₂)	24.3	80	µg/m ³	IS 5182 (Part 6): 2006, RA 2007
Particulate Matter (size less than 10 µm) or PM ₁₀	376	100	µg/m ³	IS 5182 (Part 23): 2006, RA 2007
Particulate Matter (size less than 2.5µm) or PM _{2.5}	139	60	µg/m ³	USEPA CFR 40, Part 50, Appendix I
Ozone (O ₂)	30.9	180	µg/m ³	AWMA 3rd Ed. Method 48 Page no. 403, 1998
Lead (Pb)	<0.02	1	µg/m ³	EPA/625/R-96/010 a Compendium Method 10-31 & 32, Jan 1999
Carbon Monoxide (CO)	1.74	4	mg/m ³	CPCB Guidelines, 27/2002-03, Page no.6
Ammonia (NH ₃)	<4	400	µg/m ³	AEC/C/SAP/AA-7
Benzene (C ₆ H ₆)	2.11	5	µg/m ³	IS 5182 (Part 8): 2006, RA 2007
Benzo (a) Pyrene (BaP) - particulate phase only	<0.2	1	ng/m ³	IS 5182 (Part 17): 2004, RA 2006
Arsenic (As)	<0.3	6	ng/m ³	EPA/625/R-96/010 a Compendium Method 10-21 & 32, Jan 1999
Nickel (Ni)	<3	20	ng/m ³	EPA/625/R-96/010 a Compendium Method 10-31 & 32, Jan 1999

TWA Time Weighted Average
 # NAAQS (National Ambient Air Quality Standards (Industrial, Residential, Rural and other Area) specified as: 24 hours TWA in case of Sulphur Dioxide, Nitrogen Dioxide, PM₁₀, PM_{2.5}, Lead and Ammonia, 1 hour TWA in case of Carbon Monoxide and Ozone, Annual TWA in case of Benzene, Benzo (a) Pyrene, Arsenic and Nickel.

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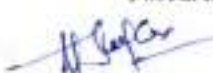
AMBIENT AIR QUALITY MONITORING REPORT

Sample ID: AA/04/21/5005	Report No: AA/04/21/5005	Report Date	06/04/2021
Name & Address of Customer	PNP Maritime Services Private Limited 2nd Floor, Lansdowne House Building, M.B. Marg, Near Regal Cinema, Apollo Bunder, Colaba, Mumbai - 400 001		
Sample Collected by	Laboratory	Sample Description/ Type	Ambient Air (Group: Atmospheric Pollution, Sub Group: Ambient Air Quality)
Sampling Location	Near Jetty No. 2	Date-Sampling	29/03/2021 to 30/03/2021
Sample Quantity/ Packing	PM ₁₀ , BaP, Metals: Filter paper 1 x 3 no. PM _{2.5} : Filter paper 1 x 1 no. SO ₂ : 30 ml x 6 no. plastic bottle NO ₂ : 30 ml x 6 no. plastic bottle NH ₃ : 10 ml x 24 no. plastic bottle Ozone: 10 ml x 1 no. plastic bottle C ₆ H ₆ : 6 no. charcoal tubes CO: 1 no. bladder	Date-Receipt of Sample	01/04/2021
Sampling Procedure	As per Method Reference	Date-Start of Analysis	01/04/2021
Order Reference	As per PO No. PNP/February/2019- 2020/013 Dated 26/02/2020	Date-Completion of Analysis	06/04/2021

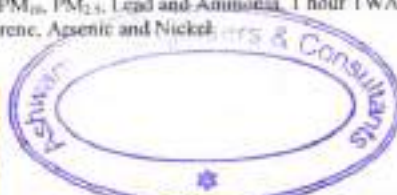
Meteorological Data / Environmental Conditions

Average Wind Velocity 10 km/h	Wind Direction SW	Relative Humidity (Max./Min.): 30/18 %	Temperature (Max./Min.): 42/25°C	Duration of Survey 24 h
Parameter	Results	NAAQS # 2009	Unit	Method
CHEMICAL TESTING				
Sulphur Dioxide (SO ₂)	6.1	80	µg/m ³	IS 5082 (Part 2): 2006, RA 2007
Nitrogen Dioxide (NO ₂)	32.4	80	µg/m ³	IS 5082 (Part 6): 2006, RA 2007
Particulate Matter (size less than 10 µm) or PM ₁₀	364	100	µg/m ³	IS 5082 (Part 23): 2006, RA 2007
Particulate Matter (size less than 2.5 µm) or PM _{2.5}	153	60	µg/m ³	US EPA CFR 40, Part 50, Appendix I
Ozone (O ₃)	30.9	180	µg/m ³	AWMA 2nd Ed. Method 40, Page no. A02.1000
Lead (Pb)	<0.02	1	µg/m ³	EPA/625/R-96/010 a Compendium Method 0-31 & 3.2, Jun 1999
Carbon Monoxide (CO)	1.69	4	mg/m ³	CPCB Guidelines, 37/2012-Q3, Page no.16
Ammonia (NH ₃)	<4	400	µg/m ³	AEC/C/SAP/AA-7
Benzene (C ₆ H ₆)	1.87	5	µg/m ³	IS 5082 (Part 11): 2006, RA 2007
Benzo (a) Pyrene (BaP) - particulate phase only	<0.2	1	ng/m ³	IS 5082 (Part 12): 2006, RA 2007
Arsenic (As)	<0.3	6	ng/m ³	EPA/625/R-96/010 a Compendium Method 0-31 & 3.2, Jun 1999
Nickel (Ni)	<3	20	ng/m ³	EPA/625/R-96/010 a Compendium Method 0-31 & 3.2, Jun 1999

TWA Time Weighted Average
 # NAAQS (National Ambient Air Quality Standards (Industrial, Residential, Rural and other Area) specified as: 24 hours TWA in case of Sulphur Dioxide, Nitrogen Dioxide, PM₁₀, PM_{2.5}, Lead and Ammonia, 1 hour TWA in case of Carbon Monoxide and Ozone, Annual TWA in case of Benzene, Benzo (a) Pyrene, Arsenic and Nickel.


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TC-5509

AMBIENT AIR QUALITY MONITORING REPORT

Sample ID: AA/04/21/5006	Report No: AA/04/21/5006	Report Date	06/04/2021
Name & Address of Customer	PNP Maritime Services Private Limited 2nd Floor, Lansdownie House Building, M.B. Marg, Near Regal Cinema, Apollo Bunder, Colaba, Mumbai - 400 001		
Sample Collected by	Laboratory	Sample Description/ Type	Ambient Air (Group: Atmospheric Pollution, Sub Group: Ambient Air Quality)
Sampling Location	Near Jetty No. 3	Date-Sampling	29/03/2021 to 30/03/2021
Sample Quantity/ Packing	PM ₁₀ , BaP, Metals: Filter paper 1 x 3 no. PM _{2.5} : Filter paper 1 x 1 no. SO ₂ : 30 ml x 6 no. plastic bottle NO ₂ : 30 ml x 6 no. plastic bottle NH ₃ : 10 ml x 24 no. plastic bottle Ozone: 10 ml x 1 no. plastic bottle C ₆ H ₆ : 6 no. charcoal tubes CO: 1 no. bladder	Date-Receipt of Sample	01/04/2021
Sampling Procedure	As per Method Reference	Date-Start of Analysis	01/04/2021
Order Reference	As per PO No. PNP/February/2019- 2020/013 Dated 26/02/2020	Date-Completion of Analysis	06/04/2021

Meteorological Data / Environmental Conditions

Average Wind Velocity 10 km/h	Wind Direction SW	Relative Humidity (Max./Min.): 30/18%	Temperature (Max./Min.): 42/25 °C	Duration of Survey 24 h
Parameter	Results	NAAQS # 2009	Unit	Method
CHEMICAL TESTING				
Sulphur Dioxide (SO ₂)	8.4	80	µg/m ³	IS 5182 (Part 2): 2001, RA 2007
Nitrogen Dioxide (NO ₂)	33	80	µg/m ³	IS 5182 (Part 5): 2006, RA 2007
Particulate Matter (size less than 10 µm) or PM ₁₀	388	100	µg/m ³	IS 5182 (Part 22): 2006, RA 2007
Particulate Matter (size less than 2.5µm) or PM _{2.5}	157	60	µg/m ³	USEPA CFR 40, Part 50, Appendix I
Ozone (O ₃)	37.9	180	µg/m ³	AWMA 3rd Ed. Method 41 Page no. 403 1999
Lead (Pb)	<0.02	1	µg/m ³	EPA/675/R-96/010 a Compendium Method ID-31 B 3.2, Jun 1999
Carbon Monoxide (CO)	2.01	4	mg/m ³	CPCB Guidelines, 31/2007-G, Page no 16
Ammonia (NH ₃)	<4	400	µg/m ³	AEC/C/SAP/AA 7
Benzene (C ₆ H ₆)	2.02	5	µg/m ³	IS 5182 (Part 11): 2006, RA 2007
Benzo (a) Pyrene (BaP) - particulate phase only	<0.2	1	ng/m ³	IS 5182 (Part 12): 2004 RA 2009
Arsenic (As)	<0.3	6	ng/m ³	EPA/675/R-96/010 a Compendium Method ID-31 B 3.2, Jun 1999
Nickel (Ni)	<3	20	ng/m ³	EPA/675/R-96/010 a Compendium Method ID-31 B 3.2, Jun 1999

TWA Time Weighted Average
 # NAAQS (National Ambient Air Quality Standards (Industrial, Residential, Rural and other Area) specified as: 24 hours TWA in case of Sulphur Dioxide, Nitrogen Dioxide, PM₁₀, PM_{2.5}, Lead and Ammonia, 1 hour TWA in case of Carbon Monoxide and Ozone, Annual TWA in case of Benzene, Benzo (a) Pyrene, Arsenic and Nickel.

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AMBIENT AIR QUALITY MONITORING REPORT

Sample ID: AA/04/21/5007	Report No: AA/04/21/5007	Report Date	06/04/2021
Name & Address of Customer	PNP Maritime Services Private Limited 2nd Floor, Lansdowne House Building, M.B. Marg, Near Regal Cinema, Apollo Bunder, Colaba, Mumbai - 400 001		
Sample Collected by	Laboratory	Sample Description/ Type	Ambient Air (Group: Atmospheric Pollution, Sub Group: Ambient Air Quality)
Sampling Location	Near Jetty No.5	Date-Sampling	29/03/2021 to 30/03/2021
Sample Quantity/ Packing	PM ₁₀ , BaP, Metals: Filter paper 1 x 3 no. PM _{2.5} : Filter paper 1 x 1 no. SO ₂ : 30 ml x 6 no. plastic bottle NO ₂ : 30 ml x 6 no. plastic bottle NH ₃ : 10 ml x 24 no. plastic bottle Ozone: 10 ml x 1 no. plastic bottle C ₆ H ₆ : 6 no. charcoal tubes CO: 1 no. bladder	Date-Receipt of Sample	01/04/2021
Sampling Procedure	As per Method Reference	Date-Start of Analysis	01/04/2021
Order Reference	As per PO No. PNP/February/2019- 2020/013 Dated 26/02/2020	Date-Completion of Analysis	06/04/2021

Meteorological Data / Environmental Conditions

Average Wind Velocity 10 km/h	Wind Direction SW	Relative Humidity (Max./Min.): 30/18 %	Temperature (Max./Min.): 42/25 °C	Duration of Survey 24 h
Parameter	Results	NAAQS # 2009	Unit	Method
CHEMICAL TESTING				
Sulphur Dioxide (SO ₂)	7.2	80	µg/m ³	IS 5982 (Part 2): 2004, RA 2007
Nitrogen Dioxide (NO ₂)	24.7	80	µg/m ³	IS 5982 (Part 6): 2006, RA 2007
Particulate Matter (size less than 10 µm) or PM ₁₀	322	100	µg/m ³	IS 5982 (Part 23): 2006, RA 2007
Ozone (O ₃)	35.1	180	µg/m ³	AWMA, 3rd Ed., Method 40, Page no. 401, 1969
Lead (Pb)	<0.02	1	µg/m ³	EPA/625/P-96/010 a Compendium Method 10-31 & 3.2, Jan 1999
Carbon Monoxide (CO)	1.79	4	mg/m ³	CPCB Guidelines, 37/2002-CI, Page no.16
Ammonia (NH ₃)	<4	400	µg/m ³	AEC/C/SAP/AA-7
Benzene (C ₆ H ₆)	1.73	5	µg/m ³	IS 5982 (Part 10): 2006, RA 2007
Benzo (a) Pyrene (BaP) - particulate phase only	<0.2	1	ng/m ³	IS 5982 (Part 17): 2004, RA 2009
Arsenic (As)	<0.3	6	ng/m ³	EPA/625/P-96/010 a Compendium Method 10-31 & 3.2, Jan 1999
Nickel (Ni)	<3	20	ng/m ³	EPA/625/P-96/010 a Compendium Method 10-31 & 3.2, Jan 1999

TWA Time Weighted Average

NAAQS (National Ambient Air Quality Standards (Industrial, Residential, Rural and other Area) specified as: 24 hours TWA in case of Sulphur Dioxide, Nitrogen Dioxide, PM₁₀, PM_{2.5}, Lead and Ammonia, 1 hour TWA in case of Carbon Monoxide and Ozone, Annual TWA in case of Benzene, Benzo (a) Pyrene, Arsenic and Nickel.

H. Soundankar

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 Technical Manager (Chemical)
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AMBIENT AIR QUALITY MONITORING REPORT

Sample ID: AA/D4/21/5008	Report No: AA/04/21/5008	Report Date: 06/04/2021
Name & Address of Customer	PNP Maritime Services Private Limited 2nd Floor, Lansdowne House Building, M.B. Marg, Near Regal Cinema, Apollo Bunder, Colaba, Mumbai - 400 001	
Sample Collected by	Laboratory	Sample Description/ Type Ambient Air (Group: Atmospheric Pollution, Sub Group: Ambient Air Quality)
Sampling Location	Near Weight Bridge	Date-Sampling 29/03/2021 to 30/03/2021
Sample Quantity/ Packing	PM ₁₀ , BaP, Metals: Filter paper 1 x 3 no. PM _{2.5} : Filter paper 1 x 1 no. SO ₂ : 30 ml x 6 no. plastic bottle NO ₂ : 30 ml x 6 no. plastic bottle NH ₃ : 10 ml x 24 no. plastic bottle Ozone: 10 ml x 1 no. plastic bottle C ₆ H ₆ : 6 no. charcoal tubes CO: 1 no. bladder	Date-Receipt of Sample 01/04/2021
Sampling Procedure	As per Method Reference	Date-Start of Analysis 01/04/2021
Order Reference	As per PO No. PNP/February/2019- 2020/013 Dated 26/02/2020	Date-Completion of Analysis 06/04/2021

Meteorological Data / Environmental Conditions

Average Wind Velocity: 10 km/h	Wind Direction SW	Relative Humidity (Max./Min.): 30/18 %	Temperature (Max./Min.): 42/25°C	Duration of Survey 24 h
Parameter	Results	NAAQS # 2009	Unit	Method
CHEMICAL TESTING				
Sulphur Dioxide (SO ₂)	6.8	80	µg/m ³	IS 5182 (Part 7): 2006, RA 2017
Nitrogen Dioxide (NO ₂)	28.7	80	µg/m ³	IS 5182 (Part 6): 2006, RA 2017
Particulate Matter (size less than 10 µm) or PM ₁₀	359	100	µg/m ³	IS 5182 (Part 23): 2006, RA 2017
Particulate Matter (size less than 2.5µm) or PM _{2.5}	153	60	µg/m ³	USEPA CFR 40, Part 50, Appendix I
Ozone (O ₃)	30.9	180	µg/m ³	AWMA 3rd Ed. Method 40, Page no. 403, 1999
Lead (Pb)	<0.02	1	µg/m ³	EPA/825/R-96/010 a Compendium Method 10-31 & 3.2, Jan 1999
Carbon Monoxide (CO)	1.59	4	mg/m ³	CPCB Guidelines: 37/2002-G, Page no.16
Ammonia (NH ₃)	<4	400	µg/m ³	AEC/C/SAP/AA-7
Benzene (C ₆ H ₆)	2.35	5	µg/m ³	IS 5182 (Part 10): 2006, RA 2017
Benzo (a) Pyrene (BaP) - particulate phase only	<0.2	1	ng/m ³	IS 5182 (Part 12): 2004, RA 2016
Arsenic (As)	<0.3	6	ng/m ³	EPA/825/R-96/010 a Compendium Method 10-31 & 3.2, Jan 1999
Nickel (Ni)	<3	20	ng/m ³	EPA/825/R-96/010 a Compendium Method 10-31 & 3.2, Jan 1999

TWA Time Weighted Average
 # NAAQS (National Ambient Air Quality Standards (Industrial, Residential, Rural and other Area) specified as: 24 hours TWA in case of Sulphur Dioxide, Nitrogen Dioxide, PM₁₀, PM_{2.5}, Lead and Ammonia, 1 hour TWA in case of Carbon Monoxide and Ozone, Annual TWA in case of Benzene, Benzo (a) Pyrene, Arsenic and Nickel.

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 Technical Manager (Chemical)
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AMBIENT AIR QUALITY MONITORING REPORT

Sample ID: AA/04/21/5009	Report No: AA/04/21/5009	Report Date	06/04/2021
Name & Address of Customer	PNP Maritime Services Private Limited 2nd Floor, Lansdowne House Building, M.B. Marg, Near Regal Cinema, Apollo Bunder, Colaba, Mumbai - 400 001		
Sample Collected by	Laboratory	Sample Description/ Type	Ambient Air (Group: Atmospheric Pollution, Sub Group: Ambient Air Quality)
Sampling Location	Near Custom Building	Date-Sampling	29/03/2021 to 30/03/2021
Sample Quantity/ Packing	PM ₁₀ , BaP, Metals: Filter paper 1 x 3 no. PM _{2.5} : Filter paper 1 x 1 no. SO ₂ : 30 ml x 6 no. plastic bottle NO ₂ : 30 ml x 6 no. plastic bottle NH ₃ : 10 ml x 24 no. plastic bottle Ozone: 10 ml x 1 no. plastic bottle C ₆ H ₆ : 6 no. charcoal tubes CO: 1 no. bladder	Date-Receipt of Sample	01/04/2021
Sampling Procedure	As per Method Reference	Date-Start of Analysis	01/04/2021
Order Reference	As per PO No. PNP/February/2019- 2020/013 Dated 26/02/2020	Date-Completion of Analysis	06/04/2021

Meteorological Data / Environmental Conditions

Average Wind Velocity 10 km/h	Wind Direction SW	Relative Humidity (Max./Min.): 30/18 %	Temperature (Max./Min.): 42/25°C	Duration of Survey 24 h
Parameter	Results	NAAQS # 2009	Unit	Method
CHEMICAL TESTING				
Sulphur Dioxide (SO ₂)	7.5	80	µg/m ³	IS 5182 (Part 2): 2008, RA 2017
Nitrogen Dioxide (NO ₂)	25.3	80	µg/m ³	IS 5182 (Part 6): 2006, RA 2017
Particulate Matter (size less than 10 µm) or PM ₁₀	264	100	µg/m ³	IS 5182 (Part 23): 2006, RA 2017
Particulate Matter (size less than 2.5µm) or PM _{2.5}	147	60	µg/m ³	USEPA CFR 40, Part 50, Appendix I
Ozone (O ₃)	36.5	180	µg/m ³	ANMA 3rd Ed., Method 4B, Page no. A02.1000
Lead (Pb)	<0.02	1	µg/m ³	EPA/625/R-96/010 a Compendium Method 8-31 & 32, Jan 1999
Carbon Monoxide (CO)	1.33	4	mg/m ³	CPCB Guidelines, 27/2012-03, Page no.16
Ammonia (NH ₃)	<4	400	µg/m ³	AEC/C/SAP/AA-7
Benzene (C ₆ H ₆)	1.50	5	µg/m ³	IS 5182 (Part 11): 2006, RA 2017
Benzo (a) Pyrene (BaP) - particulate phase only	<0.2	1	ng/m ³	IS 5182 (Part 12): 2004, RA 2018
Arsenic (As)	<0.3	6	ng/m ³	EPA/625/R-96/010 a Compendium Method 8-31 & 32, Jan 1999
Nickel (Ni)	<3	20	ng/m ³	EPA/625/R-96/010 a Compendium Method 8-31 & 32, Jan 1999

TWA Time Weighted Average
 * NAAQS (National Ambient Air Quality Standards (Industrial, Residential, Rural and other Area) specified as: 24 hours TWA in case of Sulphur Dioxide, Nitrogen Dioxide, PM₁₀, PM_{2.5}, Lead and Ammonia, 1 hour TWA in case of Carbon Monoxide and Ozone, Annual TWA in case of Benzene, Benzo (a) Pyrene, Arsenic and Nickel.


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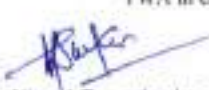
AMBIENT AIR QUALITY MONITORING REPORT

Sample ID: AA/04/21/5010	Report No.: AA/04/21/5010	Report Date	06/04/2021
Name & Address of Customer	PNP Maritime Services Private Limited 2nd Floor, Lansdowne House Building, M.B. Marg, Near Regal Cinema, Apollo Bunder, Colaba, Mumbai - 400 001		
Sample Collected by	Laboratory	Sample Description/ Type	Ambient Air (Group: Atmospheric Pollution, Sub Group: Ambient Air Quality)
Sampling Location	Near Lal Gate	Date-Sampling	29/03/2021 to 30/03/2021
Sample Quantity/ Packing	PM ₁₀ , BaP, Metals: Filter paper 1 x 3 no. PM _{2.5} : Filter paper 1 x 1 no. SO ₂ : 30 ml x 6 no. plastic bottle NO ₂ : 30 ml x 6 no. plastic bottle NH ₃ : 10 ml x 24 no. plastic bottle Ozone: 10 ml x 1 no. plastic bottle C ₆ H ₆ : 6 no. charcoal tubes CO: 1 no. bladder	Date-Receipt of Sample	01/04/2021
Sampling Procedure	As per Method Reference	Date-Start of Analysis	01/04/2021
Order Reference	As per PO No. PNP/February/2019- 2020/013 Dated 26/02/2020	Date-Completion of Analysis	06/04/2021

Meteorological Data / Environmental Conditions

Average Wind Velocity 10 km/h	Wind Direction SW	Relative Humidity (Max./Min.): 30/18 %	Temperature (Max./Min.): 42/25 °C	Duration of Survey 24 h
Parameter	Results	NAAQS # 2009	Unit	Method
CHEMICAL TESTING				
Sulphur Dioxide (SO ₂)	7.1	80	µg/m ³	IS 5182 (Part 7): 2001, RA 2007
Nitrogen Dioxide (NO ₂)	32.6	80	µg/m ³	IS 5182 (Part 8): 2006, RA 2007
Particulate Matter (size less than 10 µm) or PM ₁₀	388	100	µg/m ³	IS 5182 (Part 20): 2006, RA 2007
Particulate Matter (size less than 2.5µm) or PM _{2.5}	174	60	µg/m ³	USEPA CFR 40, Part 50, Appendix I
Ozone (O ₃)	26.7	180	µg/m ³	NWMA 2nd Ed. Method 40, Page no. 403, 1988
Lead (Pb)	<0.02	1	µg/m ³	EPA/625/R-96/010 a Compendium Method IO-3.1 & 3.2, Jun 1999
Carbon Monoxide (CO)	1.88	4	mg/m ³	CPCB Guidelines: 27/2007-03, Page no.6
Ammonia (NH ₃)	<4	400	µg/m ³	AEC/C/SAP/AA-7
Benzene (C ₆ H ₆)	1.59	5	µg/m ³	IS 5182 (Part 8): 2006, RA 2007
Benzo (a) Pyrene (BaP) - particulate phase only	<0.2	1	ng/m ³	IS 5182 (Part 7): 2004, RA 2006
Arsenic (As)	<0.3	6	ng/m ³	EPA/625/R-96/010 a Compendium Method IO-3.1 & 3.2, Jun 1999
Nickel (Ni)	<3	20	ng/m ³	EPA/625/R-96/010 a Compendium Method IO-3.1 & 3.2, Jun 1999

TWA Time Weighted Average
 # NAAQS (National Ambient Air Quality Standards (Industrial, Residential, Rural and other Area) specified as: 24 hours TWA in case of Sulphur Dioxide, Nitrogen Dioxide, PM₁₀, PM_{2.5}, Lead and Ammonia, 1 hour TWA in case of Carbon Monoxide and Ozone, Annual TWA in case of Benzene, Benzo (a) Pyrene, Arsenic and Nickel


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AMBIENT AIR QUALITY MONITORING REPORT

Sample ID: AA/04/21/5011	Report No: AA/04/21/5011	Report Date	06/04/2021
Name & Address of Customer	PNP Maritime Services Private Limited 2nd Floor, Lansdowne House Building, M.B. Marg, Near Regal Cinema, Apollo Bunder, Colaba, Mumbai - 400 001.		
Sample Collected by	Laboratory	Sample Description/ Type	Ambient Air (Group: Atmospheric Pollution, Sub Group: Ambient Air Quality)
Sampling Location	Near DIL Main Gate	Date-Sampling	29/03/2021 to 30/03/2021
Sample Quantity/ Packing	PM ₁₀ , BaP, Metals: Filter paper 1 x 3 no. PM _{2.5} : Filter paper 1 x 1 no. SO ₂ : 30 ml x 6 no. plastic bottle NO ₂ : 30 ml x 6 no. plastic bottle NH ₃ : 10 ml x 24 no. plastic bottle Ozone: 10 ml x 1 no. plastic bottle C ₆ H ₆ : 6 no. charcoal tubes CO: 1 no. bladder	Date-Receipt of Sample	01/04/2021
Sampling Procedure	As per Method Reference	Date-Start of Analysis	01/04/2021
Order Reference	As per PO No. PNP/February/2019- 2020/013 Dated 26/02/2020.	Date-Completion of Analysis	06/04/2021

Meteorological Data / Environmental Conditions

Average Wind Velocity 10 km/h	Wind Direction SW	Relative Humidity (Max./Min.): 30/18 %	Temperature (Max./Min.): 42/25 °C	Duration of Survey 24 h
Parameter	Results	NAAQS # 2009	Unit	Method
CHEMICAL TESTING				
Sulphur Dioxide (SO ₂)	7.2	80	µg/m ³	IS 5182 (Part 2): 2006, RA 2007
Nitrogen Dioxide (NO ₂)	26.4	80	µg/m ³	IS 5182 (Part 6): 2006, RA 2007
Particulate Matter (size less than 10 µm) or PM ₁₀	366	100	µg/m ³	IS 5182 (Part 23): 2006, RA 2007
Particulate Matter (size less than 2.5µm) or PM _{2.5}	132	60	µg/m ³	USEPA CFR 40, Part 50, Appendix I.
Ozone (O ₃)	36.5	180	µg/m ³	AWMA 3rd Ed. Method 40 Page no. 403.198B
Lead (Pb)	<0.02	1	µg/m ³	EPA/625/R-96/010 a Compendium Method ID-316 3.2, Jan 1999
Carbon Monoxide (CO)	1.74	4	mg/m ³	CPCB Guidelines, 31/2007-03, Page no.16
Ammonia (NH ₃)	<4	400	µg/m ³	AEC/C/SAP/AA-7
Benzene (C ₆ H ₆)	2.36	5	µg/m ³	IS 5182 (Part II): 2006, RA 2007
Benzo (a) Pyrene (BaP) - particulate phase only	<0.2	1	ng/m ³	IS 5182 (Part 12): 2004, RA 2009
Arsenic (As)	<0.3	6	ng/m ³	EPA/625/R-96/010 a Compendium Method ID-316 3.2, Jan 1999
Nickel (Ni)	<3	20	ng/m ³	EPA/625/R-96/010 a Compendium Method ID-316 3.2, Jan 1999

TWA Time Weighted Average

NAAQS (National Ambient Air Quality Standards (Industrial, Residential, Rural and other Area) specified as: 24 hours TWA in case of Sulphur Dioxide, Nitrogen Dioxide, PM₁₀, PM_{2.5}, Lead and Ammonia, 1 hour TWA in case of Carbon Monoxide and Ozone, Annual TWA in case of Benzene, Benzo (a) Pyrene, Arsenic and Nickel.

Ninad Soundankar
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TC-5509

AMBIENT AIR QUALITY MONITORING REPORT

Sample ID: AA/04/21/5012	Report No: AA/04/21/5012	Report Date	06/04/2021
Name & Address of Customer	PNP Maritime Services Private Limited 2nd Floor, Lansdowne House Building, M.B. Marg, Near Regal Cinema, Apollo Bunder, Colaba, Mumbai - 400 001		
Sample Collected by	Laboratory	Sample Description/ Type	Ambient Air (Group: Atmospheric Pollution, Sub Group: Ambient Air Quality)
Sampling Location	DIL Godown Back Side	Date-Sampling	29/03/2021 to 30/03/2021
Sample Quantity/ Packing	PM ₁₀ , BaP, Metals: Filter paper 1 x 3 no. PM _{2.5} : Filter paper 1 x 1 no. SO ₂ : 30 ml x 6 no. plastic bottle NO ₂ : 30 ml x 6 no. plastic bottle NH ₃ : 10 ml x 24 no. plastic bottle Ozone: 10 ml x 1 no. plastic bottle C ₆ H ₆ : 6 no. charcoal tubes CO: 1 no. bladder	Date-Receipt of Sample	01/04/2021
Sampling Procedure	As per Method Reference	Date-Start of Analysis	01/04/2021
Order Reference	As per PO No. PNP/February/2019- 2020/013 Dated 26/02/2020	Date-Completion of Analysis	06/04/2021

Meteorological Data / Environmental Conditions

Average Wind Velocity 10 km/h	Wind Direction SW	Relative Humidity (Max./Min.): 30/18 %	Temperature (Max./Min.): 42/25 °C	Duration of Survey 24 h
Parameter	Results	NAAQS # 2009	Unit	Method
CHEMICAL TESTING				
Sulphur Dioxide (SO ₂)	7.2	80	µg/m ³	IS 5182 (Part 2): 2008, RA 2007
Nitrogen Dioxide (NO ₂)	30.2	80	µg/m ³	IS 5182 (Part 6): 2006, RA 2007
Particulate Matter (size less than 10 µm) or PM ₁₀	361	100	µg/m ³	IS 5182 (Part 23): 2006, RA 2007
Particulate Matter (size less than 2.5µm) or PM _{2.5}	143	60	µg/m ³	USEPA CFR 40, Part 50, Appendix I
Ozone (O ₃)	<19.6	180	µg/m ³	AWMA 3rd Ed. Method 40, Page no. 402, 1988
Lead (Pb)	<0.02	1	µg/m ³	EPA/625/R-96/010 a Compendium Method 10-31 6 3.2, Jun 1999
Carbon Monoxide (CO)	2.14	4	mg/m ³	DPCB Guidelines, 27/2012-13, Page no 16
Ammonia (NH ₃)	<4	400	µg/m ³	AEC/C/SAP/M-7
Benzene (C ₆ H ₆)	2.03	5	µg/m ³	IS 5182 (Part 11): 2006, RA 2007
Benzo (a) Pyrene (BaP) - particulate phase only	<0.2	1	ng/m ³	IS 5182 (Part 12): 2004, RA 2008
Arsenic (As)	<0.3	6	ng/m ³	EPA/625/R-96/010 a Compendium Method 10-31 6 3.2, Jun 1999
Nickel (Ni)	<3	20	ng/m ³	EPA/625/R-96/010 a Compendium Method 10-31 6 3.2, Jun 1999

TWA Time Weighted Average

NAAQS (National Ambient Air Quality Standards (Industrial, Residential, Rural and other Area) specified as: 24 hours TWA in case of Sulphur Dioxide, Nitrogen Dioxide, PM₁₀, PM_{2.5}, Lead and Ammonia, 1 hour TWA in case of Carbon Monoxide and Ozone, Annual TWA in case of Benzene, Benzo (a) Pyrene, Arsenic and Nickel

(Signature)
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 Technical Manager (Chemical)
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End of Report

Note:

- The result listed refers only to the tested sample(s) and applicable parameter(s).
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- In case sampling is not done by laboratory, the results apply to the sample as received.
- There are no additions to, deviation or exclusions from the method.



TC-5509

NOISE LEVEL MEASUREMENT REPORT

Sample / Report No.	N/03/21/5129	Report Date	05/03/2021
Name and Address of Customer	PNP Maritime Services Private Ltd. 2nd, Floor, Landsdown House Building, M.B. Marg, Near Regal Cinema, Apollo Bunder, Colaba, Mumbai-400 001		
Monitoring Done By	Laboratory	Sample Description /Type	Ambient Noise (Group: Atmospheric Pollution)
Order Reference	As per PO No. PNP/February/2019- 2020/013 Dated 26/02/2020	Date-Monitoring	01/03/2021

Location	Time (h)	Results	Results	Method
		Noise Level dB (A) Fast Response	Noise Level dB (A) Slow Response	
A. Near Main Gate	0900 (Day Time)	75.5	74.8	CISQ Protocol for Ambient Level Noise Monitoring, July 2015 AEC/C/SAP/SAM/35 & 36
	2100 (Night Time)	73.8	72.5	
B. Near Jetty No. 1	0910 (Day Time)	61.3	60.7	
	2110 (Night Time)	59.2	58.1	
C. Near Jetty No. 2	0920 (Day Time)	76.2	75.6	
	2120 (Night Time)	74.3	72.9	
D. Near Jetty No. 3	0930 (Day Time)	72.7	71.1	
	2130 (Night Time)	70.6	69.4	
E. Near Jetty No. 5	0940 (Day Time)	63.8	62.2	
	2140 (Night Time)	61.1	60.3	
F. Near Weight Bridge	0950 (Day Time)	75.6	74.4	
	2150 (Night Time)	73.6	72.2	
G. Near Custom Building	1000 (Day Time)	63.9	62.9	
	2200 (Night Time)	61.4	59.7	
H. Near Lal Gate	1010 (Day Time)	64.3	63.8	
	2210 (Night Time)	62.1	60.2	
I. Near DIL Main Gate	1020 (Day Time)	62.6	61.1	
	2220 (Night Time)	61.5	59.	
J. DIL Godown Back Side	1130 (Day Time)	63.4	62.2	
	2330(Night Time)	60.9	58.4	
Limit s				
As Per the Noise Pollution (Regulation & Control) Rules, 2000 (Rules 3 (1) and 4(1))				
Area Type	Limits in dB (A) weighted scale			
	Day (6 a.m. to 10 p.m.)		Night (10 p.m. to 6 a.m.)	
Industrial	75		70	


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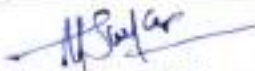
TC-5509



NOISE LEVEL MEASUREMENT REPORT

Sample / Report No.	N/03/21/5319	Report Date	09/03/2021
Name and Address of Customer	PNP Maritime Services Private Ltd. 2nd, Floor, Landsdown House Building, M.B. Marg, Near Regal Cinema, Apollo Bunder, Colaba, Mumbai-400 001		
Monitoring Done By	Laboratory	Sample Description /Type	Ambient Noise (Group: Atmospheric Pollution)
Order Reference	As per PO No. PNP/February/2019- 2020/013 Dated 26/02/2020	Date-Monitoring	04/03/2021

Location	Time (h)	Results Noise Level dB (A) Fast Response	Results Noise Level dB (A) Slow Response	Method
A. Near Main Gate	0900 (Day Time)	73.6	72.5	CPCB Protocol for Ambient Level Noise Monitoring, July 2015 AEC/C/SAP /SAM/35 E 05
	2100 (Night Time)	71.5	69.8	
B. Near Jetty No. 1	0910 (Day Time)	62.7	61.2	
	2110 (Night Time)	60.5	59.1	
C. Near Jetty No. 2	0920 (Day Time)	75.5	74.3	
	2120 (Night Time)	73.4	71.8	
D. Near Jetty No. 3	0930 (Day Time)	74.9	73.6	
	2130 (Night Time)	72.8	70.2	
E. Near Jetty No. 5	0940 (Day Time)	64.3	63.9	
	2140 (Night Time)	62.7	60.3	
F. Near Weight Bridge	0950 (Day Time)	75.4	74.8	
	2150 (Night Time)	72.5	70.1	
G. Near Custom Building	1000 (Day Time)	62.8	61.5	
	2200 (Night Time)	60.3	59.2	
H. Near Lal Gate	1010 (Day Time)	65.6	64.8	
	2210 (Night Time)	63.7	62.5	
I. Near DIL Main Gate	1020 (Day Time)	64.2	63.6	
	2220 (Night Time)	62.4	61.8	
J. DIL Godown Back Side	1130 (Day Time)	66.3	65.3	
	2330 (Night Time)	64.6	62.7	
Limit s				
As Per the Noise Pollution (Regulation & Control) Rules, 2000 (Rules 3 (1) and 4(1))				
Area Type	Limits in dB (A) weighted scale			
	Day (6 a.m. to 10 p.m.)	Night (10 p.m. to 6 a.m.)		
Industrial	75			70


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NOISE LEVEL MEASUREMENT REPORT

Sample / Report No.	N/03/21/5456	Report Date	12/03/2021
Name and Address of Customer	PNP Maritime Services Private Ltd. 2nd, Floor, Landsdown House Building, M.B. Marg, Near Regal Cinema, Apollo Bunder, Colaba, Mumbai-400 001		
Monitoring Done By	Laboratory	Sample Description /Type	Ambient Noise (Group: Atmospheric Pollution)
Order Reference	As per PO No. PNP/February/2019- 2020/013 Dated 26/02/2020	Date-Monitoring	08/03/2021

Location	Time (h)	Results	Results	Method
		Noise Level dB (A) Fast Response	Noise Level dB (A) Slow Response	
A. Near Main Gate	0900 (Day Time)	74.3	73.8	DPCB Protocol for Ambient Level Noise Monitoring, July 2015 NE/C/SAP/SAM/25 & 26
	2100 (Night Time)	72.2	70.8	
B. Near Jetty No. 1	0910 (Day Time)	63.4	62.9	
	2110 (Night Time)	61.5	59.4	
C. Near Jetty No. 2	0920 (Day Time)	76.7	75.2	
	2120 (Night Time)	74.5	73.1	
D. Near Jetty No. 3	0930 (Day Time)	73.6	72.1	
	2130 (Night Time)	71.5	69.7	
E. Near Jetty No. 5	0940 (Day Time)	65.3	64.8	
	2140 (Night Time)	63.4	61.2	
F. Near Weight Bridge	0950 (Day Time)	76.9	75.4	
	2150 (Night Time)	74.7	72.3	
G. Near Custom Building	1000 (Day Time)	63.1	62.6	
	2200 (Night Time)	61.4	60.5	
H. Near Lal Gate	1010 (Day Time)	64.2	63.7	
	2210 (Night Time)	62.1	59.8	
I. Near DIL Main Gate	1020 (Day Time)	69.4	60.9	
	2220 (Night Time)	59.2	57.5	
J. DIL Godown Back Side	1130 (Day Time)	62.3	61.8	
	2330 (Night Time)	60.4	59.2	

Limit s

As Per the Noise Pollution (Regulation & Control) Rules, 2000 (Rules 3 (1) and 4(1))

Area Type	Limits in dB (A) weighted scale	
	Day (6 a.m. to 10 p.m.)	Night (10 p.m. to 6 a.m.)
Industrial	75	70


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NOISE LEVEL MEASUREMENT REPORT

Sample / Report No.	N/03/21/5603	Report Date	15/03/2021
Name and Address of Customer	PNP Maritime Services Private Ltd. 2nd, Floor, Landsdown House Building, M.B. Marg, Near Regal Cinema, Apollo Bunder, Colaba, Mumbai-400 001		
Monitoring Done By	Laboratory	Sample Description /Type	Ambient Noise (Group: Atmospheric Pollution)
Order Reference	As per PO No. PNP/February/2019- 2020/013 Dated 26/02/2020	Date-Monitoring	11/03/2021

Location	Time (h)	Results	Results	Method
		Noise Level dB (A) Fast Response	Noise Level dB (A) Slow Response	
A. Near Main Gate	0900 (Day Time)	75.8	74.8	CPCB Protocol for Ambient Level Noise Monitoring, July 2015 AEC/C/SAP/SAM/35 & 36
	2100 (Night Time)	73.7	71.6	
B. Near Jetty No. 1	0910 (Day Time)	63.7	62.7	
	2110 (Night Time)	60.5	59.6	
C. Near Jetty No. 2	0920 (Day Time)	76.6	75.5	
	2120 (Night Time)	73.2	70.2	
D. Near Jetty No. 3	0930 (Day Time)	75.4	74.6	
	2130 (Night Time)	72.3	70.2	
E. Near Jetty No. 5	0940 (Day Time)	62.5	61.3	
	2140 (Night Time)	60.3	59.2	
F. Near Weight Bridge	0950 (Day Time)	65.4	64.2	
	2150 (Night Time)	62.2	60.3	
G. Near Custom Building	1000 (Day Time)	64.9	63.7	
	2200 (Night Time)	62.5	60.8	
H. Near Lal Gate	1010 (Day Time)	66.3	65.2	
	2210 (Night Time)	63.2	61.3	
I. Near DIL Main Gate	1020 (Day Time)	63.6	62.4	
	2220 (Night Time)	61.7	60.3	
J. DIL Godown Back Side	1130 (Day Time)	61.5	60.2	
	2330 (Night Time)	59.2	57.3	

Limits

**As Per the Noise Pollution (Regulation & Control) Rules, 2000
(Rules 3 (1) and 4(1))**

Area Type	Limits in dB (A) weighted scale	
	Day (6 a.m. to 10 p.m.)	Night (10 p.m. to 6 a.m.)
Industrial	75	70



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NOISE LEVEL MEASUREMENT REPORT

Sample / Report No.	N/03/21/5731	Report Date	19/03/2021
Name and Address of Customer	PNP Maritime Services Private Ltd. 2nd, Floor, Landsdown House Building, M.B. Marg, Near Regal Cinema, Apollo Bunder, Colaba, Mumbai-400 001		
Monitoring Done By	Laboratory	Sample Description /Type	Ambient Noise (Group: Atmospheric Pollution)
Order Reference	As per PO No. PNP/February/2019- 2020/013 Dated 26/02/2020	Date-Monitoring	15/03/2021

Location	Time (h)	Results		Method
		Noise Level dB (A) Fast Response	Noise Level dB (A) Slow Response	
A. Near Main Gate	0900 (Day Time)	74.2	73.7	DPCB Protocol for Ambient Level Noise Monitoring, July 2015 AEC/C/SAP/SAM/35 & 36
	2100 (Night Time)	72.3	70.2	
B. Near Jetty No. 1	0910 (Day Time)	65.3	64.3	
	2110 (Night Time)	62.2	60.6	
C. Near Jetty No. 2	0920 (Day Time)	75.5	74.5	
	2120 (Night Time)	73.3	71.7	
D. Near Jetty No. 3	0930 (Day Time)	76.6	75.1	
	2130 (Night Time)	74.9	72.7	
E. Near Jetty No. 5	0940 (Day Time)	63.3	62.2	
	2140 (Night Time)	61.6	60.5	
F. Near Weight Bridge	0950 (Day Time)	75.9	74.4	
	2150 (Night Time)	73.7	71.6	
G. Near Custom Building	1000 (Day Time)	66.7	65.2	
	2200 (Night Time)	64.5	62.3	
H. Near Lal Gate	1010 (Day Time)	64.3	63.8	
	2210 (Night Time)	62.4	60.2	
I. Near DIL Main Gate	1020 (Day Time)	65.4	64.9	
	2220 (Night Time)	63.2	61.5	
J. DIL Godown Back Side	1130 (Day Time)	66.7	65.2	
	2330(Night Time)	64.3	62.7	

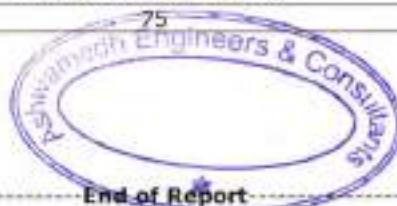
Limit s

**As Per the Noise Pollution (Regulation & Control) Rules, 2000
 (Rules 3 (1) and 4(1))**

Area Type	Limits in dB (A) weighted scale	
	Day (6 a.m. to 10 p.m.)	Night (10 p.m. to 6 a.m.)
Industrial	75	70

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NOISE LEVEL MEASUREMENT REPORT

Sample / Report No.	N/03/21/5907	Report Date	23/03/2021
Name and Address of Customer	PNP Maritime Services Private Ltd. 2nd, Floor, Landsdown House Building, M.B. Marg, Near Regal Cinema, Apollo Bunder, Colaba, Mumbai-400 001		
Monitoring Done By	Laboratory	Sample Description /Type	Ambient Noise (Group: Atmospheric Pollution)
Order Reference	As per PO No. PNP/February/2019- 2020/013 Dated 26/02/2020	Date-Monitoring	18/03/2021

Location	Time (h)	Results Noise Level dB (A) Fast Response	Results Noise Level dB (A) Slow Response	Method
A. Near Main Gate	0900 (Day Time)	76.6	75.7	CPCB Protocol for Ambient Level Noise Monitoring, July 2015 AEC/C/SAP/SAM/35 & 36
	2100 (Night Time)	74.3	72.4	
B. Near Jetty No. 1	0910 (Day Time)	64.3	63.6	
	2110 (Night Time)	62.7	60.5	
C. Near Jetty No. 2	0920 (Day Time)	78.9	77.5	
	2120(Night Time)	76.3	74.2	
D. Near Jetty No. 3	0930 (Day Time)	75.2	74.7	
	2130 (Night Time)	73.5	71.4	
E. Near Jetty No. 5	0940 (Day Time)	66.5	65.2	
	2140 (Night Time)	64.8	62.3	
F. Near Weight Bridge	0950 (Day Time)	75.3	74.5	
	2150 (Night Time)	73.2	71.8	
G. Near Custom Building	1000 (Day Time)	67.8	66.3	
	2200 (Night Time)	66.4	64.3	
H. Near Lal Gate	1010 (Day Time)	65.9	64.2	
	2210 (Night Time)	63.2	61.7	
I. Near DIL Main Gate	1020 (Day Time)	64.4	63.5	
	2220(Night Time)	62.7	60.5	
J. DIL Godown Back Side	1130 (Day Time)	65.2	64.2	
	2330(Night Time)	63.8	61.5	

Limit s

**As Per the Noise Pollution (Regulation & Control) Rules, 2000
(Rules 3 (1) and 4(1))**

Area Type	Limits in dB (A) weighted scale	
	Day (6 a.m. to 10 p.m.)	Night (10 p.m. to 6 a.m.)
Industrial	75	70


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NOISE LEVEL MEASUREMENT REPORT

Sample / Report No.	N/03/21/5982	Report Date	26/03/2021
Name and Address of Customer	PNP Maritime Services Private Ltd. 2nd, Floor, Landsdown House Building, M.B. Marg, Near Regal Cinema, Apollo Bunder, Colaba, Mumbai-400 001		
Monitoring Done By	Laboratory	Sample Description /Type	Ambient Noise (Group: Atmospheric Pollution)
Order Reference	As per PO No. PNP/February/2019- 2020/013 Dated 26/02/2020	Date-Monitoring	22/03/2021

Location	Time (h)	Results	Results	Method
		Noise Level dB (A) Fast Response	Noise Level dB (A) Slow Response	
A. Near Main Gate	0900(Day Time)	75.6	74.7	CPCB Protocol for Ambient Level Noise Monitoring, July 2015 AEC/C/SAP/SAM/35 & 36
	2100 (Night Time)	73.5	71.2	
B. Near Jetty No. 1	0910 (Day Time)	63.3	62.8	
	2110 (Night Time)	61.5	59.2	
C. Near Jetty No. 2	0920 (Day Time)	76.7	75.1	
	2120 (Night Time)	74.3	72.1	
D. Near Jetty No. 3	0930 (Day Time)	77.8	76.2	
	2130 (Night Time)	75.8	73.7	
E. Near Jetty No. 5	0940 (Day Time)	66.5	65.4	
	2140 (Night Time)	64.9	62.6	
F. Near Weight Bridge	0950 (Day Time)	78.4	77.1	
	2150 (Night Time)	76.2	74.3	
G. Near Custom Building	1000 (Day Time)	65.1	64.9	
	2200 (Night Time)	63.6	61.5	
H. Near Lal Gate	1010 (Day Time)	64.2	63.3	
	2210 (Night Time)	62.3	60.5	
I. Near DIL Main Gate	1020 (Day Time)	62.9	61.6	
	2220 (Night Time)	60.7	58.2	
J. DIL Godown Back Side	1130 (Day Time)	65.5	64.4	
	2330 (Night Time)	63.2	61.2	

Limit s

**As Per the Noise Pollution (Regulation & Control) Rules, 2000
(Rules 3 (1) and 4(1))**

Area Type	Limits in dB (A) weighted scale	
	Day (6 a.m. to 10 p.m.)	Night (10 p.m. to 6 a.m.)
Industrial	75	70

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NOISE LEVEL MEASUREMENT REPORT

Sample / Report No.	N/03/21/6118	Report Date	01/04/2021
Name and Address of Customer	PNP Maritime Services Private Ltd. 2nd, Floor, Landsdown House Building, M.B. Marg, Near Regal Cinema, Apollo Bunder, Colaba, Mumbai-400 001		
Monitoring Done By	Laboratory	Sample Description /Type	Ambient Noise (Group: Atmospheric Pollution)
Order Reference	As per PO No. PNP/February/2019- 2020/013 Dated 26/02/2020	Date-Monitoring	25/03/2021

Location	Time (h)	Results		Method
		Noise Level dB (A) Fast Response	Noise Level dB (A) Slow Response	
A. Near Main Gate	0900 (Day Time)	75.5	74.2	DPCB Protocol for Ambient Level Noise Monitoring, July 2015 NEC/CL/SAP/SAM/35 B 36
	2100 (Night Time)	73.2	71.3	
B. Near Jetty No. 1	0910 (Day Time)	66.3	65.7	
	2110 (Night Time)	64.7	62.5	
C. Near Jetty No. 2	0920 (Day Time)	75.8	74.6	
	2120 (Night Time)	73.2	71.4	
D. Near Jetty No. 3	0930 (Day Time)	76.4	75.3	
	2130 (Night Time)	74.1	72.3	
E. Near Jetty No. 5	0940 (Day Time)	65.2	64.5	
	2140 (Night Time)	63.3	61.2	
F. Near Weight Bridge	0950 (Day Time)	77.6	76.4	
	2150 (Night Time)	75.3	73.2	
G. Near Custom Building	1000 (Day Time)	64.4	63.9	
	2200 (Night Time)	62.3	61.7	
H. Near Lal Gate	1010 (Day Time)	67.3	66.3	
	2210 (Night Time)	65.7	64.8	
I. Near DIL Main Gate	1020 (Day Time)	63.7	62.8	
	2220 (Night Time)	61.4	60.3	
J. DIL Godown Back Side	1130 (Day Time)	65.9	64.5	
	2330 (Night Time)	63.3	62.3	

Limit s

**As Per the Noise Pollution (Regulation & Control) Rules, 2000
 (Rules 3 (1) and 4(1))**

Area Type	Limits in dB (A) weighted scale	
	Day (6 a.m. to 10 p.m.)	Night (10 p.m. to 6 a.m.)
Industrial	75	70


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NOISE LEVEL MEASUREMENT REPORT

Sample / Report No.	N/04/21/5013	Report Date	02/04/2021
Name and Address of Customer	PNP Maritime Services Private Ltd. 2nd, Floor, Landsdown House Building, M.B. Marg, Near Regal Cinema, Apollo Bunder, Colaba, Mumbai-400 001		
Monitoring Done By	Laboratory	Sample Description /Type	Ambient Noise (Group: Atmospheric Pollution)
Order Reference	As per PO No. PNP/February/2019- 2020/013 Dated 26/02/2020	Date-Monitoring	29/03/2021

Location	Time (h)	Results Noise Level dB (A) Fast Response	Results Noise Level dB (A) Slow Response	Method
A. Near Main Gate	0900 (Day Time)	74.7	73.4	EPCB Protocol for Ambient Level Noise Monitoring, July 2005 AEC/C/SAP/SAM/25.6.36
	2100 (Night Time)	72.3	70.8	
B. Near Jetty No. 1	0910 (Day Time)	62.3	61.2	
	2110 (Night Time)	60.5	58.7	
C. Near Jetty No. 2	0920 (Day Time)	75.1	74.6	
	2120 (Night Time)	73.4	71.2	
D. Near Jetty No. 3	0930 (Day Time)	76.5	75.8	
	2130 (Night Time)	74.7	72.9	
E. Near Jetty No. 5	0940 (Day Time)	65.8	64.9	
	2140 (Night Time)	62.7	60.3	
F. Near Weight Bridge	0950 (Day Time)	77.7	76.4	
	2150 (Night Time)	75.6	73.2	
G. Near Custom Building	1000 (Day Time)	64.2	63.5	
	2200 (Night Time)	62.8	61.5	
H. Near Lal Gate	1010 (Day Time)	63.9	62.6	
	2210 (Night Time)	61.5	58.8	
I. Near DIL Main Gate	1020 (Day Time)	61.3	60.3	
	2220 (Night Time)	59.7	57.2	
J. DIL Godown Back Side	1130 (Day Time)	64.1	63.6	
	2330 (Night Time)	62.4	60.1	
Limit s				
As Per the Noise Pollution (Regulation & Control) Rules, 2000 (Rules 3 (1) and 4(1))				
Area Type	Limits in dB (A) weighted scale			
	Day (6 a.m. to 10 p.m.)	Night (10 p.m. to 6 a.m.)		
Industrial	75	70		


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Note:

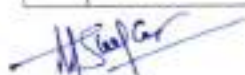
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TEST REPORT

Sample / Report No: (1) AA/04/21/3542 (2) AA/04/21/3552 (3) AA/04/21/3562 (4) AA/04/21/3572	Sample ID: (1) AA/04/21/3542N (2) AA/04/21/3552N (3) AA/04/21/3562N (4) AA/04/21/3572N	Report Date: 10/04/2021
Name and Address of Customer	PNP Maritime Services Private Limited, 2nd Floor, Lansdowne House Building, M.B. Marg, Near Regal Cinema, Apollo Bunder, Colaba, Mumbai - 400 001	Order Reference: As per PO No. PNP/February/2019- 2020/013 Dated 26/02/2020
Sample Description/Type	Ambient Air (Particle Size)	
Sampling Location	Near Main Gate	
Sampling Procedure	By Particle Counter	
Duration of Survey	24 h	

Sr. No.	Parameter	Units	Results				Method Reference
			01.03.2021	04.03.2021	08.03.2021	11.03.2021	
	Date	-	01.03.2021	04.03.2021	08.03.2021	11.03.2021	
1.	Particles	-					
a.	0.3 μ	Particle/m ³	611025	517247	511025	610247	By Particle Counter
b.	0.5 μ	Particle/m ³	199825	131257	127536	187250	By Particle Counter
c.	1.0 μ	Particle/m ³	87258	81275	78892	88257	By Particle Counter
d.	2.5 μ	Particle/m ³	41025	29127	38912	39421	By Particle Counter
e.	5.0 μ	Particle/m ³	8817	7806	8817	9127	By Particle Counter
f.	10 μ	Particle/m ³	3570	3147	3470	4417	By Particle Counter



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TEST REPORT

Sample / Report No. (1) AA/04/21/3582 (2) AA/04/21/3592 (3) AA/04/21/3602 (4) AA/04/21/3624 (5) AA/04/21/3634	Sample ID: (1) AA/04/21/3582N (2) AA/04/21/3592N (3) AA/04/21/3602N (4) AA/04/21/3624N (5) AA/04/21/3634N	Report Date: 10/04/2021
Name and Address of Customer	PNP Maritime Services Private Limited, 2nd Floor, Lansdowne House Building, M.B. Marg, Near Regal Cinema, Apollo Bunder, Colaba, Mumbai - 400 001	Order Reference: As per PO No. PNP/February/2019- 2020/013 Dated 26/02/2020
Sample Description/Type	Ambient Air (Particle Size)	
Sampling Location	Near Main Gate	
Sampling Procedure	By Particle Counter	
Duration of Survey	24 hours	

Sr. No	Parameter	Units	Results					Method Reference
			Date	15.03.2021	18.03.2021	22.03.2021	25.03.2021	
1.	Particles	-						
a.	0.3 μ	Particle/m ³	657123	612472	661247	651242	621212	By Particle Counter
b.	0.5 μ	Particle/m ³	170257	157124	172587	157211	131242	By Particle Counter
c.	1.0 μ	Particle/m ³	90217	91247	98124	95214	96124	By Particle Counter
d.	2.5 μ	Particle/m ³	40215	42157	44127	45127	42143	By Particle Counter
e.	5.0 μ	Particle/m ³	8125	8124	9124	9234	9001	By Particle Counter
f.	10 μ	Particle/m ³	3333	3212	4124	4521	4012	By Particle Counter

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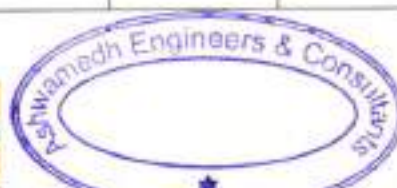
TEST REPORT

Sample / Report No. (1) AA/04/21/3543 (2) AA/04/21/3553 (3) AA/04/21/3563 (4) AA/04/21/3573	Sample ID: (1) AA/04/21/3543N (2) AA/04/21/3553N (3) AA/04/21/3563N (4) AA/04/21/3573N	Report Date: 10/04/2021
Name and Address of Customer	PNP Maritime Services Private Limited, 2nd Floor, Lansdowne House Building, M.B. Marg, Near Regal Cinema, Apollo Bunder, Colaba, Mumbai - 400 001	Order Reference: As per PO No. PNP/February/2019- 2020/013 Dated 26/02/2020
Sample Description/Type	Ambient Air (Particle Size)	
Sampling Location	Near Jetty No. 1	
Sampling Procedure	By Particle Counter	
Duration of Survey	24 hours	

Sr. No.	Parameter	Units	Results				Method Reference
			01.03.2021	04.03.2021	08.03.2021	11.03.2021	
	Date	-	01.03.2021	04.03.2021	08.03.2021	11.03.2021	
1.	Particles	-					
a.	0.3 μ	Particle/m ³	478573	527286	551257	671257	By Particle Counter
b.	0.5 μ	Particle/m ³	137582	112576	127256	182027	By Particle Counter
c.	1.0 μ	Particle/m ³	81257	85712	90275	88127	By Particle Counter
d.	2.5 μ	Particle/m ³	42817	33728	42728	34728	By Particle Counter
e.	5.0 μ	Particle/m ³	7718	8718	9125	8125	By Particle Counter
f.	10 μ	Particle/m ³	3275	400	3007	3275	By Particle Counter

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TEST REPORT

Sample/ Report No. (1) AA/04/21/3583 (2) AA/04/21/3593 (3) AA/04/21/3603 (4) AA/04/21/3625 (5) AA/04/21/3635	Sample ID: (1) AA/04/21/3583N (2) AA/04/21/3593N (3) AA/04/21/3603N (4) AA/04/21/3625N (5) AA/04/21/3635N	Report Date: 10/04/2021
Name and Address of Customer	PNP Maritime Services Private Limited, 2nd Floor, Lansdowne House Building, M.B. Marg, Near Regal Cinema, Apollo Bunder, Colaba, Mumbai - 400 001	Order Reference: As per PO No. PNP/February/2019- 2020/013 Dated 26/02/2020
Sample Description/Type	Ambient Air (Particle Size)	
Sampling Location	Near Jetty No. 1	
Sampling Procedure	By Particle Counter	
Duration of Survey	24 hours	

Sr. No	Parameter	Units	Results					Method Reference
			15.03.2021	18.03.2021	22.03.2021	25.03.2021	29.03.2021	
	Date	-	15.03.2021	18.03.2021	22.03.2021	25.03.2021	29.03.2021	
1.	Particles	-						
a.	0.3 μ	Particle/m ³	571248	561247	521347	551234	571242	By Particle Counter
b.	0.5 μ	Particle/m ³	172358	161625	141247	152372	161247	By Particle Counter
c.	1.0 μ	Particle/m ³	82347	84124	86124	88124	75124	By Particle Counter
d.	2.5 μ	Particle/m ³	31025	32142	33124	30112	31242	By Particle Counter
e.	5.0 μ	Particle/m ³	7712	7412	7512	7902	8112	By Particle Counter
f.	10 μ	Particle/m ³	3111	4124	4217	3900	4100	By Particle Counter


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TEST REPORT

Sample / Report No. (1) AA/04/21/3544 (2) AA/04/21/3554 (3) AA/04/21/3564 (4) AA/04/21/3574	Sample ID: (1) AA/04/21/3544N (2) AA/04/21/3554N (3) AA/04/21/3564N (4) AA/04/21/3574N	Report Date: 10/04/2021
Name and Address of Customer	PNP Maritime Services Private Limited, 2nd Floor, Lansdowne House Building, M.B. Marg, Near Regal Cinema, Apollo Bunder, Colaba, Mumbai - 400 001	Order Reference: As per PO No. PNP/February/2019- 2020/013 Dated 26/02/2020
Sample Description/Type	Ambient Air (Particle Size)	
Sampling Location	Near Jetty No. 2	
Sampling Procedure	By Particle Counter	
Duration of Survey	24 hours	

Sr. No.	Parameter	Units	Results				Method Reference
			01.03.2021	04.03.2021	08.03.2021	11.03.2021	
	Date	-	01.03.2021	04.03.2021	08.03.2021	11.03.2021	
1.	Particles	-					
a.	0.3 μ	Particle/m ³	567284	627128	571256	512576	By Particle Counter
b.	0.5 μ	Particle/m ³	172582	152727	142172	107258	By Particle Counter
c.	1.0 μ	Particle/m ³	52742	71282	74512	88125	By Particle Counter
d.	2.5 μ	Particle/m ³	21725	34857	38124	33257	By Particle Counter
e.	5.0 μ	Particle/m ³	8812	7125	9125	8127	By Particle Counter
f.	10 μ	Particle/m ³	2902	3140	4412	3217	By Particle Counter


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TEST REPORT

Sample / Report No. (1) AA/04/21/3584 (2) AA/04/21/3594 (3) AA/04/21/3604 (4) AA/04/21/3626 (5) AA/04/21/3636	Sample ID: (1) AA/04/21/3584N (2) AA/04/21/3594N (3) AA/04/21/3604N (4) AA/04/21/3626N (5) AA/04/21/3636N	Report Date: 10/04/2021
Name and Address of Customer	PNP Maritime Services Private Limited, 2nd Floor, Lansdowne House Building, M.B. Marg, Near Regal Cinema, Apollo Bunder, Colaba, Mumbai - 400 001	Order Reference: As per PO No. PNP/February/2019- 2020/013 Dated 26/02/2020
Sample Description/Type	Ambient Air (Particle Size)	
Sampling Location	Near Jetty No. 2	
Sampling Procedure	By Particle Counter	
Duration of Survey	24 hours	

Sr. No.	Parameter	Units	Results					Method Reference
			15.03.2021	18.03.2021	22.03.2021	25.03.2021	29.03.2021	
	Date	-	15.03.2021	18.03.2021	22.03.2021	25.03.2021	29.03.2021	
1.	Particles	-						
a.	0.3 μ	Particle/m ³	531427	546127	551247	571247	551247	By Particle Counter
b.	0.5 μ	Particle/m ³	112473	124347	112427	124312	132424	By Particle Counter
c.	1.0 μ	Particle/m ³	84257	88124	86124	84124	87142	By Particle Counter
d.	2.5 μ	Particle/m ³	27912	28127	31333	29132	33331	By Particle Counter
e.	5.0 μ	Particle/m ³	7127	8124	7012	7314	7414	By Particle Counter
f.	10 μ	Particle/m ³	2915	3001	3111	3712	3612	By Particle Counter

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TEST REPORT

Sample / Report No. (1) AA/04/21/3545 (2) AA/04/21/3555 (3) AA/04/21/3565 (4) AA/04/21/3575	Sample ID: (1) AA/04/21/3545N (2) AA/04/21/3555N (3) AA/04/21/3565N (4) AA/04/21/3575N	Report Date: 10/04/2021
Name and Address of Customer	PNP Maritime Services Private Limited, 2nd Floor, Lansdowne House Building, M.B. Marg, Near Regal Cinema, Apollo Bunder, Colaba, Mumbai - 400 001	Order Reference: As per PO No. PNP/February/2019- 2020/013 Dated 26/02/2020
Sample Description/Type	Ambient Air (Particle Size)	
Sampling Location	Near Jetty No. 3	
Sampling Procedure	By Particle Counter	
Duration of Survey	24 hours	

Sr. No.	Parameter	Units	Results				Method Reference
			01.03.2021	04.03.2021	08.03.2021	11.03.2021	
	Date	-	01.03.2021	04.03.2021	08.03.2021	11.03.2021	
1.	Particles	-					
a.	0.3 μ	Particle/m ³	572804	687025	621247	521272	By Particle Counter
b.	0.5 μ	Particle/m ³	202575	212576	189024	112572	By Particle Counter
c.	1.0 μ	Particle/m ³	84256	88125	83715	88712	By Particle Counter
d.	2.5 μ	Particle/m ³	57281	41412	39128	41272	By Particle Counter
e.	5.0 μ	Particle/m ³	7234	6125	7125	8127	By Particle Counter
f.	10 μ	Particle/m ³	3520	4125	2210	3271	By Particle Counter

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TEST REPORT

Sample / Report No. (1) AA/04/21/3585 (2) AA/04/21/3595 (3) AA/04/21/3605 (4) AA/04/21/3627 (5) AA/04/21/3637	Sample ID: (1) AA/04/21/3585N (2) AA/04/21/3595N (3) AA/04/21/3605N (4) AA/04/21/3627N (5) AA/04/21/3637N	Report Date: 10/04/2021
Name and Address of Customer:	PNP Maritime Services Private Limited, 2nd Floor, Lansdowne House Building, M.B. Marg, Near Regal Cinema, Apollo Bunder, Colaba, Mumbai - 400 001	Order Reference: As per PO No. PNP/February/2019- 2020/013 Dated 26/02/2020
Sample Description/Type	Ambient Air (Particle Size)	
Sampling Location	Near Jetty No. 3	
Sampling Procedure	By Particle Counter	
Duration of Survey	24 hours	

Sr. No	Parameter	Units	Results					Method Reference
			15.03.2021	18.03.2021	22.03.2021	25.03.2021	29.03.2021	
	Date	-	15.03.2021 1	18.03.2021	22.03.2021	25.03.2021	29.03.2021	
1.	Particles	-						
a.	0.3 µ	Particle/m ³	551247	521243	531247	581771	561112	By Particle Counter
b.	0.5 µ	Particle/m ³	124373	111234	124723	152372	141414	By Particle Counter
c.	1.0 µ	Particle/m ³	85127	86127	74127	79124	81110	By Particle Counter
d.	2.5 µ	Particle/m ³	39124	38124	34214	37124	32634	By Particle Counter
e.	5.0 µ	Particle/m ³	7912	7612	8124	8312	8412	By Particle Counter
f.	10 µ	Particle/m ³	2415	2915	3314	3412	2902	By Particle Counter

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TEST REPORT

Sample / Report No. (1) AA/04/21/3546 (2) AA/04/21/3556 (3) AA/04/21/3566 (4) AA/04/21/3576	Sample ID: (1) AA/04/21/3546N (2) AA/04/21/3556N (3) AA/04/21/3566N (4) AA/04/21/3576N	Report Date: 10/04/2021
Name and Address of Customer	PNP Maritime Services Private Limited, 2nd Floor, Lansdowne House Building, M.B. Marg, Near Regal Cinema, Apollo Bunder, Colaba, Mumbai - 400 001	Order Reference: As per PO No. PNP/February/2019- 2020/013 Dated 26/02/2020
Sample Description/Type	Ambient Air (Particle Size)	
Sampling Location	Near Jetty No. 5	
Sampling Procedure	By Particle Counter	
Duration of Survey	24 hours	

Sr. No.	Parameter	Units	Results				Method Reference
			01.03.2021	04.03.2021	08.03.2021	11.03.2021	
	Date	-	01.03.2021	04.03.2021	08.03.2021	11.03.2021	
1.	Particles	-					
a.	0.3 μ	Particle/m ³	517286	478257	412476	441275	By Particle Counter
b.	0.5 μ	Particle/m ³	200347	182046	126713	110247	By Particle Counter
c.	1.0 μ	Particle/m ³	82137	71258	82742	84272	By Particle Counter
d.	2.5 μ	Particle/m ³	40217	31258	37068	32714	By Particle Counter
e.	5.0 μ	Particle/m ³	8124	7128	8111	7712	By Particle Counter
f.	10 μ	Particle/m ³	3928	2487	3125	3217	By Particle Counter

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TEST REPORT

Sample / Report No. (1) AA/04/21/3586 (2) AA/04/21/3596 (3) AA/04/21/3606 (4) AA/04/21/3628 (5) AA/04/21/3638	Sample ID: (1) AA/04/21/3586N (2) AA/04/21/3596N (3) AA/04/21/3606N (4) AA/04/21/3628N (5) AA/04/21/3638N	Report Date: 10/04/2021
Name and Address of Customer	PNP Maritime Services Private Limited, 2nd Floor, Lansdowne House Building, M.B. Marg, Near Regal Cinema, Apollo Bunder, Colaba, Mumbai – 400 001	Order Reference: As per PO No, PNP/February/2019- 2020/013 Dated 26/02/2020
Sample Description/Type	Ambient Air (Particle Size)	
Sampling Location	Near Jetty No. 5	
Sampling Procedure	By Particle Counter	
Duration of Survey	24 hours	

Sr. No.	Parameter	Units	Results					Method Reference
			15.03.2021	18.03.2021	22.03.2021	25.03.2021	29.03.2021	
	Date	-	15.03.2021	18.03.2021	22.03.2021	25.03.2021	29.03.2021	
1.	Particles	-						
a.	0.3 μ	Particle/m ³	412573	441257	481247	491123	501242	By Particle Counter
b.	0.5 μ	Particle/m ³	102723	123124	152725	171242	155552	By Particle Counter
c.	1.0 μ	Particle/m ³	85126	71245	74125	77124	71024	By Particle Counter
d.	2.5 μ	Particle/m ³	33125	31247	35716	36124	32323	By Particle Counter
e.	5.0 μ	Particle/m ³	8125	8124	9124	8912	8221	By Particle Counter
f.	10 μ	Particle/m ³	3312	3712	4127	3777	2908	By Particle Counter

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TEST REPORT

Sample / Report No. (1) AA/04/21/3547 (2) AA/04/21/3557 (3) AA/04/21/3567 (4) AA/04/21/3577	Sample ID. (1) AA/04/21/3547N (2) AA/04/21/3557N (3) AA/04/21/3567N (4) AA/04/21/3577N	Report Date: 10/04/2020
Name and Address of Customer:	PNP Maritime Services Private Limited, 2nd Floor, Lansdowne House Building, M.B. Marg, Near Regal Cinema, Apollo Bunder, Colaba, Mumbai – 400 001	Order Reference: As per PO No. PNP/February/2019- 2020/013 Dated 26/02/2020
Sample Description/Type	Ambient Air (Particle Size)	
Sampling Location	Near Weight Bridge	
Sampling Procedure	By Particle Counter	
Duration of Survey	24 hours	

Sr. No.	Parameter	Units	Results				Method Reference
			01.03.2021	04.03.2021	08.03.2021	11.03.2021	
	Date	-	01.03.2021	04.03.2021	08.03.2021	11.03.2021	
1.	Particles	-					
a.	0.3 μ	Particle/m ³	422678	410025	370272	414720	By Particle Counter
b.	0.5 μ	Particle/m ³	142578	107258	99028	102727	By Particle Counter
c.	1.0 μ	Particle/m ³	81258	79028	67028	78250	By Particle Counter
d.	2.5 μ	Particle/m ³	34782	33028	24728	34725	By Particle Counter
e.	5.0 μ	Particle/m ³	9125	8127	5712	8812	By Particle Counter
f.	10 μ	Particle/m ³	4125	3012	1290	3302	By Particle Counter

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Note:

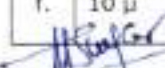
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TEST REPORT

Sample / Report No. (1) AA/04/21/3587 (2) AA/04/21/3597 (3) AA/04/21/3607 (4) AA/04/21/3629 (5) AA/04/21/3639	Sample ID: (1) AA/04/21/3587N (2) AA/04/21/3597N (3) AA/04/21/3607N (4) AA/04/21/3629N (5) AA/04/21/3639N	Report Date: 10/04/2021
Name and Address of Customer	PNP Maritime Services Private Limited, 2nd Floor, Lansdowne House Building, M.B. Marg, Near Regal Cinema, Apollo Bunder, Colaba, Mumbai - 400 001	Order Reference: As per PO No. PNP/February/2019- 2020/013 Dated 26/02/2020
Sample Description/Type	Ambient Air (Particle Size)	
Sampling Location	Near Weight Bridge	
Sampling Procedure	By Particle Counter	
Duration of Survey	24 hours	

Sr. No	Parameter	Units	Results					Method Reference
			15.03.2021	18.03.2021	22.03.2021	25.03.2021	29.03.2021	
	Date	-	15.03.2021 1	18.03.2021	22.03.2021	25.03.2021	29.03.2021	
1.	Particles	-						
a.	0.3 μ	Particle/m ³	401267	411247	412473	442241	461247	By Particle Counter
b.	0.5 μ	Particle/m ³	182354	161247	162473	152441	161124	By Particle Counter
c.	1.0 μ	Particle/m ³	82435	81247	71257	72317	77124	By Particle Counter
d.	2.5 μ	Particle/m ³	29347	30124	37912	39127	36612	By Particle Counter
e.	5.0 μ	Particle/m ³	7624	7412	8111	8231	8132	By Particle Counter
f.	10 μ	Particle/m ³	2912	2412	3312	3212	3102	By Particle Counter


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TEST REPORT

Sample / Report No. (1) AA/04/21/3548 (2) AA/04/21/3558 (3) AA/04/21/3568 (4) AA/04/21/3578	Sample ID: (1) AA/04/21/3548N (2) AA/04/21/3558N (3) AA/04/21/3568N (4) AA/04/21/3578N	Report Date: 10/04/2021
Name and Address of Customer	PNP Maritime Services Private Limited, 2nd Floor, Lansdowne House Building, M.B. Marg, Near Regal Cinema, Apollo Bunder, Colaba, Mumbai – 400 001	Order Reference: As per PO No. PNP/February/2019- 2020/013 Dated 26/02/2020
Sample Description/Type	Ambient Air (Particle Size)	
Sampling Location	Near Custom Building	
Sampling Procedure	By Particle Counter	
Duration of Survey	24 hours	

Sr. No.	Parameter	Units	Results				Method Reference
			01.03.2021	04.03.2021	08.03.2021	11.03.2021	
	Date	-	01.03.2021	04.03.2021	08.03.2021	11.03.2021	
1.	Particles	-					
a.	0.3 µ	Particle/m ³	507028	517287	421357	571252	By Particle Counter
b.	0.5 µ	Particle/m ³	142586	124767	110247	107286	By Particle Counter
c.	1.0 µ	Particle/m ³	78258	74247	67812	77128	By Particle Counter
d.	2.5 µ	Particle/m ³	34721	29347	31270	34721	By Particle Counter
e.	5.0 µ	Particle/m ³	6571	7121	6121	7712	By Particle Counter
f.	10 µ	Particle/m ³	3421	2514	2195	3175	By Particle Counter

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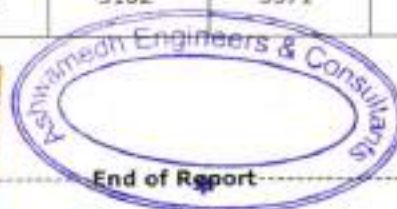


TEST REPORT

Sample / Report No. (1) AA/04/21/3588 (2) AA/04/21/3598 (3) AA/04/21/3608 (4) AA/04/21/3630 (5) AA/04/21/3640	Sample ID: (1) AA/04/21/3588N (2) AA/04/21/3598N (3) AA/04/21/3608N (4) AA/04/21/3630N (5) AA/04/21/3640N	Report Date: 10/04/2021
Name and Address of Customer	PNP Maritime Services Private Limited, 2nd Floor, Lansdowne House Building, M.B. Marg, Near Regal Cinema, Apollo Bunder, Colaba, Mumbai - 400 001	Order Reference: As per PO No. PNP/February/2019- 2020/013 Dated 26/02/2020
Sample Description/Type	Ambient Air (Particle Size)	
Sampling Location	Near Custom Building	
Sampling Procedure	By Particle Counter	
Duration of Survey	24 hours	

Sr. No	Parameter	Units	Results					Method Reference
			15.03.2021	18.03.2021	22.03.2021	25.03.2021	29.03.2021	
	Date	-	15.03.2021 1	18.03.2021	22.03.2021	25.03.2021	29.03.2021 1	
1.	Particles	-						
a.	0.3 μ	Particle/m ³	471243	491273	512472	521252	512422	By Particle Counter
b.	0.5 μ	Particle/m ³	127326	112347	141257	132542	122234	By Particle Counter
c.	1.0 μ	Particle/m ³	79125	81024	87124	88124	86114	By Particle Counter
d.	2.5 μ	Particle/m ³	33217	31247	32147	31024	30124	By Particle Counter
e.	5.0 μ	Particle/m ³	7912	8124	8812	8520	8610	By Particle Counter
f.	10 μ	Particle/m ³	2915	3102	3371	3021	3112	By Particle Counter


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TEST REPORT

Sample / Report No. (1) AA/04/21/3549 (2) AA/04/21/3559 (3) AA/04/21/3569 (4) AA/04/21/3579	Sample ID: (1) AA/04/21/3549N (2) AA/04/21/3559N (3) AA/04/21/3569N (4) AA/04/21/3579N	Report Date: 10/04/2021
Name and Address of Customer	PNP Maritime Services Private Limited, 2nd Floor, Lansdowne House Building, M.B. Marg, Near Regal Cinema, Apollo Bunder, Colaba, Mumbai - 400 001	Order Reference: As per PO No. PNP/February/2019- 2020/013 Dated 26/02/2020
Sample Description/Type	Ambient Air (Particle Size)	
Sampling Location	Near Lal Gate	
Sampling Procedure	By Particle Counter	
Duration of Survey	24 hours	

Sr. No.	Parameter	Units	Results				Method Reference
			01.03.2021	04.03.2021	08.03.2021	11.03.2021	
	Date	-	01.03.2021	04.03.2021	08.03.2021	11.03.2021	
1.	Particles	-					
a.	0.3 μ	Particle/m ³	378025	412738	517268	551273	By Particle Counter
b.	0.5 μ	Particle/m ³	112875	108728	112576	134272	By Particle Counter
c.	1.0 μ	Particle/m ³	88728	81702	80272	88127	By Particle Counter
d.	2.5 μ	Particle/m ³	34768	29870	34280	41247	By Particle Counter
e.	5.0 μ	Particle/m ³	8125	7614	8167	8027	By Particle Counter
f.	10 μ	Particle/m ³	2920	3219	2888	2125	By Particle Counter


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TEST REPORT

Sample / Report No. (1) AA/04/21/3589 (2) AA/04/21/3599 (3) AA/04/21/3609 (4) AA/04/21/3631 (5) AA/04/21/3641	Sample ID: (1) AA/04/21/3589N (2) AA/04/21/3599N (3) AA/04/21/3609N (4) AA/04/21/3631N (5) AA/04/21/3641N	Report Date: 10/04/2021
Name and Address of Customer:	PNP Maritime Services Private Limited, 2nd Floor, Lansdowne House Building, M.B. Marg, Near Regal Cinema, Apollo Bunder, Colaba, Mumbai - 400 001	Order Reference: As per PO No. PNP/February/2019- 2020/013 Dated 26/02/2020
Sample Description/Type	Ambient Air (Particle Size)	
Sampling Location	Near Lal Gate	
Sampling Procedure	By Particle Counter	
Duration of Survey	24 hours	

Sr. No	Parameter	Units	Results					Method Reference
			15.03.2021	18.03.2021	22.03.2021	25.03.2021	29.03.2021	
	Date	-	15.03.2021	18.03.2021	22.03.2021	25.03.2021	29.03.2021	
1.	Particles	-						
a.	0.3 μ	Particle/m ³	571247	551247	501247	561247	541243	By Particle Counter
b.	0.5 μ	Particle/m ³	162572	142127	130214	152473	121212	By Particle Counter
c.	1.0 μ	Particle/m ³	83125	84712	87124	88124	83412	By Particle Counter
d.	2.5 μ	Particle/m ³	33127	35127	36712	38127	35124	By Particle Counter
e.	5.0 μ	Particle/m ³	8125	8214	9102	9002	8414	By Particle Counter
f.	10 μ	Particle/m ³	3125	3312	4012	3733	3023	By Particle Counter

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TEST REPORT

Sample / Report No. (1) AA/04/21/3551 (2) AA/04/21/3561 (3) AA/04/21/3571 (4) AA/04/21/3581	Sample ID: (1) AA/04/21/3551N (2) AA/04/21/3561N (3) AA/04/21/3571N (4) AA/04/21/3581N	Report Date: 10/04/2021
Name and Address of Customer	PNP Maritime Services Private Limited, 2nd Floor, Lansdowne House Building, M.B. Marg, Near Regal Cinema, Apollo Bunder, Colaba, Mumbai - 400 001	Order Reference: As per PO No. PNP/February/2019- 2020/013 Dated 26/02/2020
Sample Description/Type	Ambient Air (Particle Size)	
Sampling Location	DIL Godown Back Side	
Sampling Procedure	By Particle Counter	
Duration of Survey	24 hours	

Sr. No.	Parameter	Units	Results				Method Reference
			01.03.2021	04.03.2021	08.03.2021	11.03.2021	
	Date	-	01.03.2021	04.03.2021	08.03.2021	11.03.2021	
1.	Particles	-					
a.	0.3 µ	Particle/m ³	421257	481257	561275	421576	By Particle Counter
b.	0.5 µ	Particle/m ³	90823	112354	127386	112476	By Particle Counter
c.	1.0 µ	Particle/m ³	71257	77125	81257	77152	By Particle Counter
d.	2.5 µ	Particle/m ³	34725	38725	41307	37172	By Particle Counter
e.	5.0 µ	Particle/m ³	6428	8125	7128	8812	By Particle Counter
f.	10 µ	Particle/m ³	3472	4120	3182	2902	By Particle Counter


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TEST REPORT

Sample / Report No. (1) AA/04/21/3591 (2) AA/04/21/3601 (3) AA/04/21/3611 (4) AA/04/21/3633 (5) AA/04/21/3643	Sample ID: (1) AA/04/21/3591N (2) AA/04/21/3601N (3) AA/04/21/3611N (4) AA/04/21/3633N (5) AA/04/21/3643N	Report Date: 10/04/2021
Name and Address of Customer	PNP Maritime Services Private Limited, 2nd Floor, Lansdowne House Building, M.B. Marg, Near Regal Cinema, Apollo Bunder, Colaba, Mumbai - 400 001	Order Reference: As per PO No. PNP/February/2019- 2020/013 Dated 26/02/2020
Sample Description/Type	Ambient Air (Particle Size)	
Sampling Location	DIL Godown Back Side	
Sampling Procedure	By Particle Counter	
Duration of Survey	24 hours	

Sr. No.	Parameter	Units	Results					Method Reference
			15.03.2021	18.03.2021	22.03.2021	25.03.2021	29.03.2021	
	Date	-	15.03.2021	18.03.2021	22.03.2021	25.03.2021	29.03.2021	
1.	Particles	-						
a.	0.3 μ	Particle/m ³	521346	541212	591247	562222	531212	By Particle Counter
b.	0.5 μ	Particle/m ³	102347	112347	122347	112342	123131	By Particle Counter
c.	1.0 μ	Particle/m ³	88124	81245	82127	80122	81212	By Particle Counter
d.	2.5 μ	Particle/m ³	27162	31247	33124	31002	32014	By Particle Counter
e.	5.0 μ	Particle/m ³	7125	8125	7712	7912	8014	By Particle Counter
f.	10 μ	Particle/m ³	3012	4021	3712	3611	3712	By Particle Counter

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TEST REPORT

Sample / Report No. (1) AA/04/21/3550 (2) AA/04/21/3560 (3) AA/04/21/3570 (4) AA/04/21/3580	Sample ID: (1) AA/04/21/3550N (2) AA/04/21/3560N (3) AA/04/21/3570N (4) AA/04/21/3580N	Report Date: 10/04/2021
Name and Address of Customer	PNP Maritime Services Private Limited, 2nd Floor, Lansdowne House Building, M.B. Marg, Near Regal Cinema, Apollo Bunder, Colaba, Mumbai - 400 001	Order Reference: As per PO No. PNP/February/2019- 2020/013 Dated 26/02/2020
Sample Description/Type	Ambient Air (Particle Size)	
Sampling Location	Near DIL Main Gate	
Sampling Procedure	By Particle Counter	
Duration of Survey	24 hours	

Sr. No.	Parameter	Units	Results				Method Reference
			01.03.2021	04.03.2021	08.03.2021	11.03.2021	
	Date	-	01.03.2021	04.03.2021	08.03.2021	11.03.2021	
1.	Particles	-					
a.	0.3 μ	Particle/m ³	554872	517247	556727	576125	By Particle Counter
b.	0.5 μ	Particle/m ³	192473	131257	172345	134752	By Particle Counter
c.	1.0 μ	Particle/m ³	80725	81275	84125	90275	By Particle Counter
d.	2.5 μ	Particle/m ³	32785	29127	42124	34725	By Particle Counter
e.	5.0 μ	Particle/m ³	8812	7806	8125	8812	By Particle Counter
f.	10 μ	Particle/m ³	4125	3147	4125	3475	By Particle Counter

(Signature)

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TEST REPORT

Sample / Report No. (1) AA/04/21/3590 (2) AA/04/21/3600 (3) AA/04/21/3610 (4) AA/04/21/3632 (5) AA/04/21/3642	Sample ID: (1) AA/04/21/3590N (2) AA/04/21/3600N (3) AA/04/21/3610N (4) AA/04/21/3632N (5) AA/04/21/3642N	Report Date: 10/04/2021
Name and Address of Customer	PNP Maritime Services Private Limited, 2nd Floor, Lansdowne House Building, M.B. Marg, Near Regal Cinema, Apollo Bunder, Colaba, Mumbai - 400 001	Order Reference: As per PO No. PNP/February/2019- 2020/013 Dated 26/02/2020
Sample Description/Type	Ambient Air (Particle Size)	
Sampling Location	Near DIL Main Gate	
Sampling Procedure	By Particle Counter	
Duration of Survey	24 hours	

Sr. No.	Parameter	Units	Results					Method Reference
			15.03.2021	18.03.2021	22.03.2021	25.03.2021	29.03.2021	
	Date	-	15.03.2021 1	18.03.2021	22.03.2021	25.03.2021	29.03.2021	
1.	Particles	-						
a.	0.3 μ	Particle/m ³	671257	621347	601271	610235	631247	By Particle Counter
b.	0.5 μ	Particle/m ³	172583	162472	142472	132472	153312	By Particle Counter
c.	1.0 μ	Particle/m ³	81257	82124	84125	85125	81242	By Particle Counter
d.	2.5 μ	Particle/m ³	33124	37124	35127	31247	32313	By Particle Counter
e.	5.0 μ	Particle/m ³	9124	8912	9012	8612	8521	By Particle Counter
f.	10 μ	Particle/m ³	4125	3999	4124	3912	4012	By Particle Counter

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TEST REPORT

Sample ID : W/03/21/0255	Report No. W/03/21/0255N	Report Date	16/03/2021	
Name and address of Customer	PNP Maritime Services Private Limited (PNP Jetty) 2nd Floor, Lansdowne House Building, M.B .Marg,Near Regal Cinema, Apollo Bunder, Colaba, Mumbai 400 001,Maharashtra			
Sampling done by	Laboratory	Sample Description / Type	Marine Life Water (Group:Water)	
Sampling Location	Near JSW Plant	Date - Sampling	14/03/2021	
Sample Quantity / Packing	2 L x 1 no. plastic can	Date - Receipt of Sample	15/03/2021	
Sampling Procedure	APHA 23rd Ed, 2017	Date - Start of Analysis	15/03/2021	
Order Reference	As per your P.O. No. PNP/February/2019-2020/013 dated 26.02.2020	Date - Completion of Analysis	15/03/2021	
Sr.No.	Parameter	Result	Unit	Method
BIOLOGICAL TESTING				
Bacteriological Parameters				
1	Aquatic Fauna and Flora composed of large number of species of bacteria	Absent	/1L	APHA 23rd Ed. 2017 (by microscopy)
2	Phytoplankton	Absent	/1L	APHA 23rd Ed. 2017, 10200 F-10-17 (by microscopy)
3	Zooplankton	Absent	/1L	APHA 23rd Ed. 2017, 10200 G-10-2 (by microscopy)

Divya Sharma

Divya Sharma
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TEST REPORT

Sample ID : W/03/21/0256	Report No. W/03/21/0256N	Report Date	16/03/2021	
Name and address of Customer	PNP Maritime Services Private Limited (PNP Jetty) 2nd Floor, Lansdowne House Building, M.B .Marg,Near Regal Cinema, Apollo Bunder, Colaba, Mumbai 400 001,Maharashtra			
Sampling done by	Laboratory	Sample Description / Type	Marine Life Water (Group:Water)	
Sampling Location	Near Railway Bridge	Date - Sampling	14/03/2021	
Sample Quantity / Packing	2 L x 1 no. plastic can	Date - Receipt of Sample	15/03/2021	
Sampling Procedure	APHA 23rd Ed, 2017	Date - Start of Analysis	15/03/2021	
Order Reference	As per your P.O. No. PNP/February/2019-2020/013 dated 26.02.2020	Date - Completion of Analysis	15/03/2021	
Sr.No.	Parameter	Result	Unit	Method
BIOLOGICAL TESTING				
Bacteriological Parameters				
1	Aquatic Fauna and Flora composed of large number of species of bacteria	Absent	/1L	APHA 23rd Ed, 2017 (by microscopy)
2	Phytoplankton	Absent	/1L	APHA 23rd Ed, 2017, 10200 F-10-17 (by microscopy)
3	Zooplankton	Absent	/1L	APHA 23rd Ed, 2017, 10200 G-10-21 (by microscopy)

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TEST REPORT

Sample ID : W/03/21/0257	Report No. W/03/21/0257N	Report Date	16/03/2021	
Name and address of Customer	PNP Maritime Services Private Limited (PNP Jetty) 2nd Floor, Lansdowne House Building, M.B .Marg,Near Regal Cinema, Apollo Bunder, Colaba, Mumbai 400 001,Maharashtra			
Sampling done by	Laboratory	Sample Description / Type	Marine Life Water (Group:Water)	
Sampling Location	Near Govt. Port (Jetty)	Date - Sampling	14/03/2021	
Sample Quantity / Packing	2 L x 1 no. plastic can	Date - Receipt of Sample	15/03/2021	
Sampling Procedure	APHA 23rd Ed, 2017	Date - Start of Analysis	15/03/2021	
Order Reference	As per your P.O. No. PNP/February/2019-2020/013 dated 26.02.2020	Date - Completion of Analysis	15/03/2021	
Sr.No.	Parameter	Result	Unit	Method
BIOLOGICAL TESTING				
Bacteriological Parameters				
1	Aquatic Fauna and Flora composed of large number of species of bacteria	Absent	/1L	APHA 23rd Ed. 2017 (by microscopy)
2	Phytoplankton	Absent	/1L	APHA 23rd Ed. 2017, ISO200 F-10-17 (by microscopy)
3	Zooplankton	Absent	/1L	APHA 23rd Ed. 2017, ISO200 G-10-21 (by microscopy)

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Note:

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TEST REPORT

Sample ID : W/03/21/0258	Report No. W/03/21/0258N	Report Date	16/03/2021
Name and address of Customer	PNP Maritime Services Private Limited (PNP Jetty) 2nd Floor, Lansdowne House Building, M.B .Marg,Near Regal Cinema, Apollo Bunder, Colaba, Mumbai 400 001,Maharashtra		
Sampling done by	Laboratory	Sample Description / Type	Marine Life Water (Group:Water)
Sampling Location	Near Jetty No.2	Date - Sampling	14/03/2021
Sample Quantity / Packing	2 L x 1 no. plastic can	Date - Receipt of Sample	15/03/2021
Sampling Procedure	APHA 23rd Ed, 2017	Date - Start of Analysis	15/03/2021
Order Reference	As per your P.O. No. PNP/February/2019-2020/013 dated 26.02.2020	Date - Completion of Analysis	15/03/2021

Sr.No.	Parameter	Result	Unit	Method
BIOLOGICAL TESTING				
Bacteriological Parameters				
1	Aquatic Fauna and Flora composed of large number of species of bacteria	Absent	/1L	APHA 23rd Ed, 2017 (by microscopy)
2	Phytoplankton	Absent	/1L	APHA 23rd Ed, 2017, 10200 F-10-17 (by microscopy)
3	Zooplankton	Absent	/1L	APHA 23rd Ed, 2017, 10200 G-10-21 (by microscopy)

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TEST REPORT

Sample ID : W/03/21/0251	Report No. W/03/21/0251N	Report Date	16/03/2021	
Name and address of Customer	PNP Maritime Services Private Limited (PNP Jetty) 2nd Floor, Lansdowne House Building, M.B .Marg,Near Regal Cinema, Apollo Bunder, Colaba, Mumbai 400 001,Maharashtra			
Sampling done by	Laboratory	Sample Description / Type	Marine Life Water (Group:Water)	
Sampling Location	Near Jetty No.3	Date - Sampling	14/03/2021	
Sample Quantity / Packing	2 L x 1 no. plastic can	Date - Receipt of Sample	15/03/2021	
Sampling Procedure	APHA 23rd Ed, 2017	Date - Start of Analysis	15/03/2021	
Order Reference	As per your P.O. No. PNP/February/2019-2020/013 dated 26.02.2020	Date - Completion of Analysis	15/03/2021	
Sr.No.	Parameter	Result	Unit	Method
BIOLOGICAL TESTING				
Bacteriological Parameters				
1	Aquatic Fauna and Flora composed of large number of species of bacteria	Absent	/1L	APHA 23rd Ed. 2017 (by microscopy)
2	Phytoplankton	Absent	/1L	APHA 23rd Ed. 2017, ID200 F-10-7 (by microscopy)
3	Zooplankton	Absent	/1L	APHA 23rd Ed. 2017, ID200 G-10-3 (by microscopy)

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TEST REPORT

Sample ID : W/03/21/0252	Report No. W/03/21/0252N	Report Date	16/03/2021
Name and address of Customer	PNP Maritime Services Private Limited (PNP Jetty) 2nd Floor, Lansdowne House Building, M.B. Marg, Near Regal Cinema, Apollo Bunder, Colaba, Mumbai 400 001, Maharashtra		
Sampling done by	Laboratory	Sample Description / Type	Marine Life Water (Group:Water)
Sampling Location	Near JSW Jetty	Date - Sampling	14/03/2021
Sample Quantity / Packing	2 L x 1 no. plastic can	Date - Receipt of Sample	15/03/2021
Sampling Procedure	APHA 23rd Ed, 2017	Date - Start of Analysis	15/03/2021
Order Reference	As per your P.O. No. PNP/February/2019-2020/013 dated 26.02.2020	Date - Completion of Analysis	15/03/2021

Sr.No.	Parameter	Result	Unit	Method
BIOLOGICAL TESTING				
Bacteriological Parameters				
1	Aquatic Fauna and Flora composed of large number of species of bacteria	Absent	/1L	APHA 23rd Ed. 2017 (by microscopy)
2	Phytoplankton	Absent	/1L	APHA 23rd Ed. 2017. 10200 F-10-7 (by microscopy)
3	Zooplankton	Absent	/1L	APHA 23rd Ed. 2017. 10200 E-10-21 (by microscopy)



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TEST REPORT

Sample ID : W/03/21/0253	Report No. W/03/21/0253N	Report Date	16/03/2021
Name and address of Customer	PNP Maritime Services Private Limited (PNP Jetty) 2nd Floor, Lansdowne House Building, M.B .Marg, Near Regal Cinema, Apollo Bunder, Colaba, Mumbai 400 001, Maharashtra		
Sampling done by	Laboratory	Sample Description / Type	Marine Life Water (Group: Water)
Sampling Location	Near JSW Jetty End	Date - Sampling	14/03/2021
Sample Quantity / Packing	2 L x 1 no. plastic can	Date - Receipt of Sample	15/03/2021
Sampling Procedure	APHA 23rd Ed, 2017	Date - Start of Analysis	15/03/2021
Order Reference	As per your P.O. No. PNP/February/2019-2020/013 dated 26.02.2020	Date - Completion of Analysis	15/03/2021

Sr.No.	Parameter	Result	Unit	Method
BIOLOGICAL TESTING				
Bacteriological Parameters				
1	Aquatic Fauna and Flora composed of large number of species of bacteria	Absent	/1L	APHA 23rd Ed. 2017 (by microscopy)
2	Phytoplankton	Absent	/1L	APHA 23rd Ed. 2017, 102100 F-10-17 (by microscopy)
3	Zooplankton	Absent	/1L	APHA 23rd Ed. 2017, 102100 G-10-21 (by microscopy)



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TEST REPORT

Sample ID : W/03/21/0254	Report No. W/03/21/0254N	Report Date	16/03/2021
Name and address of Customer	PNP Maritime Services Private Limited (PNP Jetty) 2nd Floor, Lansdowne House Building, M.B. Marg, Near Regal Cinema, Apollo Bunder, Colaba, Mumbai 400 001, Maharashtra		
Sampling done by	Laboratory	Sample Description / Type	Marine Life Water (Group:Water)
Sampling Location	Near DIL Godown Backside	Date - Sampling	14/03/2021
Sample Quantity / Packing	2 L x 1 no. plastic can	Date - Receipt of Sample	15/03/2021
Sampling Procedure	APHA 23rd Ed, 2017	Date - Start of Analysis	15/03/2021
Order Reference	As per your P.O. No. PNP/February/2019-2020/013 dated 26.02.2020	Date - Completion of Analysis	15/03/2021

Sr.No.	Parameter	Result	Unit	Method
BIOLOGICAL TESTING				
Bacteriological Parameters				
1	Aquatic Fauna and Flora composed of large number of species of bacteria	Absent	/1L	APHA 23rd Ed. 2017 (by microscopy)
2	Phytoplankton	Absent	/1L	APHA 23rd Ed. 2017. 10200 F-10-7 (by microscopy)
3	Zooplankton	Absent	/1L	APHA 23rd Ed. 2017. 10200 G-10-2 (by microscopy)

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TEST REPORT

Sample ID : W/03/21/0243	Report No. W/03/21/0243	Report Date	23/03/2021
Name and address of Customer	PNP Maritime Services Private Limited (PNP Jetty) 2nd Floor, Lansdowne House Building, M.B .Marg,Near Regal Cinema, Apollo Bunder, Colaba, Mumbai 400 001,Maharashtra		
Sampling done by	Laboratory	Sample Description / Type	Marine Water (Group:Water)
Sampling Location	Near JSW Plant	Date - Sampling	14/03/2021
Sample Quantity / Packing	5 L x 1 no. plastic can 250 ml x 1 no. sterile bottle	Date - Receipt of Sample	15/03/2021
Sampling Procedure	IS 1622:1981 & IS 3025(Part I) 1987 & APHA 23rd Ed. 2017, 1060 B,1-40, 9060 A,9-36 & 9060 B,9-39	Date - Start of Analysis	15/03/2021
Order Reference	As per your Ref. No. PNP/February/2019-2020/013 dated 26.02.2020	Date - Completion of Analysis	22/03/2021

Sr.No.	Parameter	Result	Unit	Method
CHEMICAL TESTING				
Physical & Chemical Parameters				
1	Colour	3	Hazen	IS 3025 (Part 4) 1983, RA 2017
2	Odour	Agreeable	-	IS 3025 (Part 5) 1983, RA 2016
3	pH value	8.01	-	IS 3025 (Part 8) 1983, RA 2017
4	Turbidity	28	NTU	IS 3025 (Part 10) 1984, RA 2017
5	Total Suspended Solids	34	mg/L	IS 3025 (Part 17) 1984, RA 2017, Amds.1
6	Biochemical Oxygen Demand (3 days, 27°C)	3	mg/L	IS 3025 (Part 44) 1993, RA 2014, Amds.1
7	Chemical Oxygen Demand	12	mg/L	APHA, 23rd Ed. 2017, 5220-B, 5-18
8	Oil & Grease	<1	mg/L	APHA, 23rd Ed. 2017, 5520-B, 5-42
9	Calcium (as Ca)	401	mg/L	IS 3025 (Part 40) 1991, RA 2014, Ed.1(2004-07)
10	Chloride (as Cl)	15495	mg/L	IS 3025 (Part 32) 1988, RA 2014
11	Copper (as Cu)	0.040	mg/L	IS 3025(Part 2)-2004, RA 2014/ISO 1885:1996
12	Iron (as Fe)	13.5	mg/L	IS 3025 (Part 2)- 2004, RA 2014 / ISO 1885:1996
13	Total Alkalinity (as CaCO ₃)	150	mg/L	IS 3025(Part 23)1988, RA 2014, Amds.2
14	Potassium (as K)	160	mg/L	IS 3025 (Part 45): 1993, RA 2014, Amds.1
15	Sodium (as Na)	6750	mg/L	IS 3025 (Part 45): 1993, RA 2014, Amds.1
16	Magnesium (as Mg)	899	mg/L	IS 3025 (Part 46):1994, RA 2014, Amds.2
17	Lead(as Pb)	<0.008	mg/L	IS 3025 (Part 2)- 2004, RA 2014/ISO 1885:1996
18	Cadmium (as Cd)	<0.002	mg/L	IS 3025 (Part 2)- 2004, RA 2014/ISO 1885:1996
19	Zinc (as Zn)	0.051	mg/L	IS 3025(Part 2)-2004, RA 2014/ISO 1885:1996
BIOLOGICAL TESTING				
Bacteriological Parameters				
20	<i>Escherichia coli</i>	39	MPN Index / 100 ml	APHA, 23rd Ed. 2017, 9221-G, 9-80
21	Total Coliforms	920	MPN Index / 100 ml	APHA, 23rd Ed. 2017, 9221-B, 9-80
22	Faecal Coliforms	280	MPN Index / 100 ml	APHA, 23rd Ed. 2017, 9221-E, 9-77

Note: Sample ID W/03/21/243 bears two Test Reports - W/03/21/243 and W/03/21/243N

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ULR-TC550921000004611F

Sample ID : W/03/21/0243	Report No. W/03/21/0243	Report Date	23/03/2021
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TEST REPORT

Sample ID : W/03/21/0243	Report No. W/03/21/0243N	Report Date	23/03/2021	
Name and address of Customer	PNP Maritime Services Private Limited (PNP Jetty) 2nd Floor, Lansdowne House Building, M.B .Marg ,Near Regal Cinema, Apollo Bunder, Colaba, Mumbai 400 001 ,Maharashtra			
Sampling done by	Laboratory	Sample Description / Type	Marine Water (Group:Water)	
Sampling Location	Near JSW Plant	Date - Sampling	14/03/2021	
Sample Quantity / Packing	5 L x 1 no. plastic can 250 ml x 1 no. sterile bottle	Date - Receipt of Sample	15/03/2021	
Sampling Procedure	IS 1622:1981 & IS 3025(Part 1) 1987 & APHA 23rd Ed. 2017, 1060 B,1-40, 9060 A,9-36 & 9060 B,9-39	Date - Start of Analysis	15/03/2021	
Order Reference	As per your Ref. No. PNP/February/2019-2020/013 dated 26.02.2020	Date - Completion of Analysis	22/03/2021	
Sr.No.	Parameter	Result	Unit	Method
CHEMICAL TESTING				
Physical & Chemical Parameters				
1	Total Dissolved Solids	24010	mg/L	IS 3025 (Part 1E) ISBA, RA 2006 Ed.21 (1999-12)
2	Electrical Conductivity (at 25°C)	38725	µmho/cm	IS 3025(Part 1A) ISBA, RA 2006
3	Total Solids	25810	mg/L	IS 3025 (Part 1S) ISBA, RA 2014, Amd.1
Note: Sample ID W/03/21/243 bears two Test Reports - W/03/21/243 and W/03/21/243N				


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TC-5509

ULR-TC550921000004612F

TEST REPORT

Sample ID : W/03/21/0244	Report No. W/03/21/0244	Report Date	23/03/2021
Name and address of Customer	PNP Maritime Services Private Limited (PNP Jetty) 2nd Floor, Lansdowne House Building, M.B. Marg, Near Regal Cinema, Apollo Bunder, Colaba, Mumbai 400 001, Maharashtra		
Sampling done by	Laboratory	Sample Description / Type	Marine Water (Group: Water)
Sampling Location	Near Railway Bridge	Date - Sampling	14/03/2021
Sample Quantity / Packing	5 L x 1 no. plastic can 250 ml x 1 no. sterile bottle	Date - Receipt of Sample	15/03/2021
Sampling Procedure	IS 1622:1981 & IS 3025(Part 1) 1987 & APHA 23rd Ed. 2017, 1060 B,1-40, 9060 A,9-36 & 9060 B,9-39	Date - Start of Analysis	15/03/2021
Order Reference	As per your Ref. No. PNP/February/2019-2020/013 dated 26.02.2020	Date - Completion of Analysis	22/03/2021

Sr.No.	Parameter	Result	Unit	Method
CHEMICAL TESTING				
Physical & Chemical Parameters				
1	Colour	3	Hazen	IS 3025 (Part 4):1983, RA 2017
2	Odour	Agreeable	-	IS 3025 (Part 5):1983, RA 2016
3	pH value	7.93	-	IS 3025 (Part 6):1983, RA 2017
4	Turbidity	28	NTU	IS 3025 (Part 10):1984, RA 2017
5	Total Suspended Solids	39	mg/L	IS 3025 (Part 17):1984, RA 2017, Amds.1
6	Biochemical Oxygen Demand (3 days, 27°C)	5	mg/L	IS 3025 (Part 44):1983, RA 2014, Amds.1
7	Chemical Oxygen Demand	22	mg/L	APHA, 23rd Ed., 2017, 5220-B, 5-18
8	Oil & Grease	<1	mg/L	APHA, 23rd Ed., 2017, 5520-B, 5-47
9	Calcium (as Ca)	321	mg/L	IS 3025 (Part 40):1981, RA 2014, Ed.1(2004-02)
10	Chloride (as Cl)	15495	mg/L	IS 3025 (Part 32):1988, RA 2014
11	Copper (as Cu)	0.040	mg/L	IS 3025(Part 2):2004, RA 2014/ISO 1885:1996
12	Iron (as Fe)	13.2	mg/L	IS 3025 (Part 2):2004, RA 2014 / ISO 1885:1996
13	Total Alkalinity (as CaCO ₃)	155	mg/L	IS 3025(Part 23):1986, RA 2014, Amds.2
14	Potassium (as K)	180	mg/L	IS 3025 (Part 45):1983, RA 2014, Amds.1
15	Sodium (as Na)	8040	mg/L	IS 3025 (Part 45):1983, RA 2014, Amds.1
16	Magnesium (as Mg)	996	mg/L	IS 3025 (Part 46):1984, RA 2014, Amds.2
17	Lead(as Pb)	<0.008	mg/L	IS 3025 (Part 2):2004, RA 2014/ISO 1885:1996
18	Cadmium (as Cd)	<0.002	mg/L	IS 3025 (Part 2):2004, RA 2014/ISO 1885:1996
19	Zinc (as Zn)	<0.05	mg/L	IS 3025(Part 2):2004, RA 2014/ISO 1885:1996
BIOLOGICAL TESTING				
Bacteriological Parameters				
20	<i>Escherichia coli</i>	20	MPN Index / 100 ml	APHA, 23rd Ed., 2017, 8221-G, 9-80
21	Total Coliforms	280	MPN Index / 100 ml	APHA, 23rd Ed., 2017, 8221-B, 9-69
22	Faecal Coliforms	39	MPN Index / 100 ml	APHA, 23rd Ed., 2017, 8221-E, 9-77

Note: Sample ID W/03/21/244 bears two Test Reports - W/03/21/244 and W/03/21/244N

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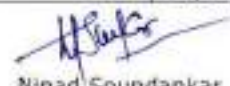
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Sample ID : W/03/21/0244	Report No. W/03/21/0244	Report Date	23/03/2021
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TC-5509



TEST REPORT

Sample ID : W/03/21/0244	Report No. W/03/21/0244N	Report Date	23/03/2021
Name and address of Customer	PNP Maritime Services Private Limited (PNP Jetty) 2nd Floor, Lansdowne House Building, M.B .Marg,Near Regal Cinema, Apollo Bunder, Colaba, Mumbai 400 001,Maharashtra		
Sampling done by	Laboratory	Sample Description / Type	Marine Water (Group: Water)
Sampling Location	Near Railway Bridge	Date - Sampling	14/03/2021
Sample Quantity / Packing	5 L x 1 no. plastic can 250 ml x 1 no. sterile bottle	Date - Receipt of Sample	15/03/2021
Sampling Procedure	IS 1622:1981 & IS 3025(Part I) 1987 & APHA 23-rd Ed. 2017, 1060 B,1-40, 9060 A,9-36 & 9060 B,9-39	Date - Start of Analysis	15/03/2021
Order Reference	As per your Ref. No. PNP/February/2019-2020/013 dated 26.02.2020	Date - Completion of Analysis	22/03/2021

Sr.No.	Parameter	Result	Unit	Method
CHEMICAL TESTING				
Physical & Chemical Parameters				
1	Total Dissolved Solids	25800	mg/L	IS 3025 (Part 16):1984, RA 2006 Ed 21 (1989-12)
2	Electrical Conductivity (at 25°C)	41613	µmho/cm	IS 3025(Part 14): 1984, RA 2006
3	Total Solids	27610	mg/L	IS 3025 (Part 15): 1984, RA 2014, Amds.1

Note: Sample ID W/03/21/244 bears two Test Reports - W/03/21/244 and W/03/21/244N


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TEST REPORT

Sample ID : W/03/21/0245	Report No. W/03/21/0245	Report Date	23/03/2021
Name and address of Customer	PNP Maritime Services Private Limited (PNP Jetty) 2nd Floor, Lansdowne House Building, M.B .Marg,Near Regal Cinema, Apollo Bunder, Colaba, Mumbai 400 001,Maharashtra		
Sampling done by	Laboratory	Sample Description / Type	Marine Water (Group:Water)
Sampling Location	Near Govt. Port (Jetty)	Date - Sampling	14/03/2021
Sample Quantity / Packing	5 L x 1 no. plastic can 250 ml x 1 no. sterile bottle	Date - Receipt of Sample	15/03/2021
Sampling Procedure	IS 1622:1981 & IS 3025(Part I) 1987 & APHA 23rd Ed. 2017, 1060 B,1-40, 9060 A,9-36 & 9060 B,9-39	Date - Start of Analysis	15/03/2021
Order Reference	As per your Ref. No. PNP/February/2019-2020/013 dated 26.02.2020	Date - Completion of Analysis	22/03/2021

Sr.No.	Parameter	Result	Unit	Method
CHEMICAL TESTING				
Physical & Chemical Parameters				
1	Colour	3	Hazen	IS 3025 (Part 4):1983. RA 2017
2	Odour	Agreeable	-	IS 3025 (Part 5): 1993. RA 2006
3	pH value	8.02	-	IS 3025 (Part 11):1983. RA 2017
4	Turbidity	25	NTU	IS 3025 (Part 10):1984. RA 2017
5	Total Suspended Solids	36	mg/L	IS 3025 (Part 17): 1984. RA 2017. Amds1
6	Biochemical Oxygen Demand (3 days, 27°C)	5	mg/L	IS 3025 (Part 44): 1993. RA 2014. Amds1
7	Chemical Oxygen Demand	23	mg/L	APHA, 23rd Ed. 2017, 5220-B, 5-1B
8	Oil & Grease	<1	mg/L	APHA, 23rd Ed. 2017, 5520-B, 5-47
9	Calcium (as Ca)	401	mg/L	IS 3025 (Part 40):1991. RA 2014. Ed II(2014-07)
10	Chloride (as Cl)	19244	mg/L	IS 3025 (Part 32):1988. RA 2014
11	Copper (as Cu)	0.027	mg/L	IS 3025(Part 2):2004. RA 2014/ISO 11885:1996
12	Iron (as Fe)	8.78	mg/L	IS 3025 (Part 2): 2004. RA 2014 / ISO 11885:1996
13	Total Alkalinity (as CaCO ₃)	158	mg/L	IS 3025(Part 23):1996. RA 2014. Amds2
14	Potassium (as K)	180	mg/L	IS 3025 (Part 45): 1993. RA 2014. Amds1
15	Sodium (as Na)	7720	mg/L	IS 3025 (Part 45): 1993. RA 2014. Amds1
16	Magnesium (as Mg)	1021	mg/L	IS 3025 (Part 46):1994. RA 2014. Amds2
17	Lead(as Pb)	<0.008	mg/L	IS 3025 (Part 2): 2004. RA 2014/ISO 11885:1996
18	Cadmium (as Cd)	0.003	mg/L	IS 3025 (Part 2): 2004. RA 2014/ISO 11885:1996
19	Zinc (as Zn)	<0.05	mg/L	IS 3025(Part 2):2004. RA 2014/ISO 11885:1996
BIOLOGICAL TESTING				
Bacteriological Parameters				
20	<i>Escherichia coli</i>	27	MPN Index / 100 ml	APHA, 23rd Ed. 2017, 9221-G, 9-80
21	Total Coliforms	240	MPN Index / 100 ml	APHA, 23rd Ed. 2017, 9221-B, 9-65
22	Faecal Coliforms	79	MPN Index / 100 ml	APHA, 23rd Ed. 2017, 9221-E, 9-77

Note: Sample ID W/03/21/245 bears two Test Reports - W/03/21/245 and W/03/21/245N

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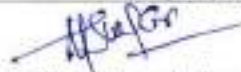
ULR-TC550921000004613F

Sample ID : W/03/21/0245	Report No. W/03/21/0245	Report Date	23/03/2021
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TC-5509

TEST REPORT

Sample ID : W/03/21/0245	Report No. W/03/21/0245N	Report Date	23/03/2021
Name and address of Customer	PNP Maritime Services Private Limited (PNP Jetty) 2nd Floor, Lansdowne House Building, M.B. Marg, Near Regal Cinema, Apollo Bunder, Colaba, Mumbai 400 001, Maharashtra		
Sampling done by	Laboratory	Sample Description / Type	Marine Water (Group:Water)
Sampling Location	Near Govt. Port (Jetty)	Date - Sampling	14/03/2021
Sample Quantity / Packing	5 L x 1 no. plastic can 250 ml x 1 no. sterile bottle	Date - Receipt of Sample	15/03/2021
Sampling Procedure	IS 1622:1981 & IS 3025(Part I) 1987 & APHA 23rd Ed. 2017, 1060 B,1-40, 9060 A,9-36 & 9060 B,9-39	Date - Start of Analysis	15/03/2021
Order Reference	As per your Ref. No. PNP/February/2019-2020/013 dated 26.02.2020	Date - Completion of Analysis	22/03/2021

Sr.No.	Parameter	Result	Unit	Method
CHEMICAL TESTING				
Physical & Chemical Parameters				
1	Total Dissolved Solids	25010	mg/L	IS 3025 (Part B):1984, RA 2006 Ed 21 (1999-12)
2	Electrical Conductivity (at 25°C)	40338	µmho/cm	IS 3025(Part A), 1984, RA 2006
3	Total Solids	26730	mg/L	IS 3025 (Part B): 1984, RA 2014, Amés.)

Note: Sample ID W/03/21/245 bears two Test Reports - W/03/21/245 and W/03/21/245N


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TC-5509

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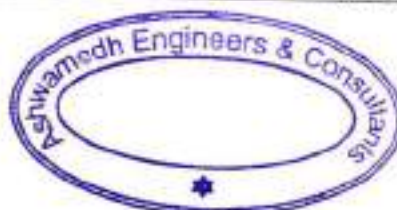
TEST REPORT

Sample ID : W/03/21/0246	Report No. W/03/21/0246	Report Date	23/03/2021
Name and address of Customer	PNP Maritime Services Private Limited (PNP Jetty) 2nd Floor, Lansdowne House Building, M.B .Marg,Near Regal Cinema, Apollo Bunder, Colaba, Mumbai 400 001,Maharashtra		
Sampling done by	Laboratory	Sample Description / Type	Marine Water (Group:Water)
Sampling Location	Near Jetty No.2	Date - Sampling	14/03/2021
Sample Quantity / Packing	5 L x 1 no. plastic can 250 ml x 1 no. sterile bottle	Date - Receipt of Sample	15/03/2021
Sampling Procedure	IS 1622:1981 & IS 3025(Part I) 1987 & APHA 23rd Ed. 2017, 1060 B,1-40, 9060 A,9-36 & 9060 B,9-39	Date - Start of Analysis	15/03/2021
Order Reference	As per your Ref. No. PNP/February/2019-2020/013 dated 26.02.2020	Date - Completion of Analysis	22/03/2021

Sr.No.	Parameter	Result	Unit	Method
CHEMICAL TESTING				
Physical & Chemical Parameters				
1	Colour	2	Hazen	IS 3025 (Part 4):1983, RA 2017
2	Odour	Agreeable	-	IS 3025 (Part 5): 1983, RA 2006
3	pH value	6.43	-	IS 3025 (Part 6):1983, RA 2017
4	Turbidity	1.1	NTU	IS 3025 (Part 10):1994, RA 2017
5	Total Suspended Solids	8	mg/L	IS 3025 (Part 17): 1984, RA 2017, Amdt.1
6	Biochemical Oxygen Demand (3 days, 27°C)	5	mg/L	IS 3025 (Part 44): 1993, RA 2014, Amdt.1
7	Chemical Oxygen Demand	20	mg/L	APHA, 23rd Ed. 2017, 5220-B, 5-18
8	Oil & Grease	<1	mg/L	APHA, 23rd Ed. 2017, 5520-B, 5-42
9	Calcium (as Ca)	561	mg/L	IS 3025 (Part 40):1991, RA 2014, Ed.1(2004-02)
10	Chloride (as Cl)	17495	mg/L	IS 3025 (Part 32):1988, RA 2014
11	Copper (as Cu)	0.027	mg/L	IS 3025(Part 2):2004, RA 2014/ISO 1885:1996
12	Iron (as Fe)	8.75	mg/L	IS 3025 (Part 2): 2004, RA 2014 / ISO 1885:1996
13	Total Alkalinity (as CaCO ₃)	108	mg/L	IS 3025(Part 23):1996, RA 2014, Amdt.2
14	Potassium (as K)	200	mg/L	IS 3025 (Part 45): 1993, RA 2014, Amdt.1
15	Sodium (as Na)	8040	mg/L	IS 3025 (Part 45): 1993, RA 2014, Amdt.1
16	Magnesium (as Mg)	1021	mg/L	IS 3025 (Part 46):1994, RA 2014, Amdt.2
17	Lead(as Pb)	<0.008	mg/L	IS 3025 (Part 2): 2004, RA 2014/ISO 1885:1996
18	Cadmium (as Cd)	<0.002	mg/L	IS 3025 (Part 2): 2004, RA 2014/ISO 1885:1996
19	Zinc (as Zn)	<0.05	mg/L	IS 3025(Part 2):2004, RA 2014/ISO 1885:1996
BIOLOGICAL TESTING				
Bacteriological Parameters				
20	<i>Escherichia coli</i>	27	MPN Index / 100 ml	APHA, 23rd Ed. 2017, 9221-G, 9-80
21	Total Coliforms	79	MPN Index / 100 ml	APHA, 23rd Ed. 2017, 9221-B, 9-69
22	Faecal Coliforms	27	MPN Index / 100 ml	APHA, 23rd Ed. 2017, 9221-E, 9-77

Note: Sample ID W/03/21/246 bears two Test Reports - W/03/21/246 and W/03/21/246N

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ULR-TC550921000004614F

Sample ID : W/03/21/0246	Report No. W/03/21/0246	Report Date	23/03/2021
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TEST REPORT

Sample ID : W/03/21/0246	Report No. W/03/21/0246N	Report Date	23/03/2021	
Name and address of Customer	PNP Maritime Services Private Limited (PNP Jetty) 2nd Floor, Lansdowne House Building, M.B .Marg, Near Regal Cinema, Apollo Bunder, Colaba, Mumbai 400 001, Maharashtra			
Sampling done by	Laboratory	Sample Description / Type	Marine Water (Group: Water)	
Sampling Location	Near Jetty No.2	Date - Sampling	14/03/2021	
Sample Quantity / Packing	5 L x 1 no. plastic can 250 ml x 1 no. sterile bottle	Date - Receipt of Sample	15/03/2021	
Sampling Procedure	IS 1622:1981 & IS 3025(Part I) 1987 & APHA 23rd Ed. 2017, 1060 B,1-40, 9060 A,9-36 & 9060 B,9-39	Date - Start of Analysis	15/03/2021	
Order Reference	As per your Ref. No. PNP/February/2019-2020/013 dated 26.02.2020	Date - Completion of Analysis	22/03/2021	
Sr.No.	Parameter	Result	Unit	Method
CHEMICAL TESTING				
Physical & Chemical Parameters				
1	Total Dissolved Solids	27600	mg/L	IS 3025 (Part 1E):1984, RA 2006 Ed.21 (1988-12)
2	Electrical Conductivity (at 25°C)	44516	µmho/cm	IS 3025(Part 14): 1984, RA 2006
3	Total Solids	29410	mg/L	IS 3025 (Part 1S): 1984, RA 2014, (Indic)
Note: Sample ID W/03/21/246 bears two Test Reports - W/03/21/246 and W/03/21/246N				


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TC-5509

ULR-TC550921000004615F

TEST REPORT

Sample ID : W/03/21/0247	Report No. W/03/21/0247	Report Date	23/03/2021
Name and address of Customer	PNP Maritime Services Private Limited (PNP Jetty) 2nd Floor, Lansdowne House Building, M.B .Marg,Near Regal Cinema, Apollo Bunder, Colaba, Mumbai 400 001,Maharashtra		
Sampling done by	Laboratory	Sample Description / Type	Marine Water (Group:Water)
Sampling Location	Near Jetty No.3	Date - Sampling	14/03/2021
Sample Quantity / Packing	5 L x 1 no. plastic can 250 ml x 1 no. sterile bottle	Date - Receipt of Sample	15/03/2021
Sampling Procedure	IS 1622:1981 & IS 3025(Part 1) 1987 & APHA 23rd Ed. 2017, 1060 B,1-40, 9060 A,9-36 & 9060 B,9-39	Date - Start of Analysis	15/03/2021
Order Reference	As per your Ref. No. PNP/February/2019-2020/013 dated 26.02.2020	Date - Completion of Analysis	22/03/2021

Sr.No.	Parameter	Result	Unit	Method
CHEMICAL TESTING				
Physical & Chemical Parameters				
1	Colour	2	Hazen	IS 3025 (Part 4):1983, RA 2017
2	Odour	Agreeable	-	IS 3025 (Part 5): 1983, RA 2006
3	pH value	6.10	-	IS 3025 (Part 6):1983, RA 2017
4	Turbidity	4.8	NTU	IS 3025 (Part 10):1984, RA 2017
5	Total Suspended Solids	32	mg/L	IS 3025 (Part 17): 1984, RA 2017, Amds.1
6	Biochemical Oxygen Demand (3 days, 27°C)	8	mg/L	IS 3025 (Part 44):1993, RA 2014, Amds.1
7	Chemical Oxygen Demand	31	mg/L	APHA, 23rd Ed. 2017, 5220-B, 5-18
8	Oil & Grease	<1	mg/L	APHA, 23rd Ed. 2017, 5520-B, 5-42
9	Calcium (as Ca)	481	mg/L	IS 3025 (Part 40):1981, RA 2014, Ed.1(2004-02)
10	Chloride (as Cl)	17994	mg/L	IS 3025 (Part 32):1988, RA 2014
11	Copper (as Cu)	0.059	mg/L	IS 3025(Part 2):2004, RA 2014/ISO 1885:1996
12	Iron (as Fe)	0.620	mg/L	IS 3025 (Part 2): 2004, RA 2014 / ISO 1885:1996
13	Total Alkalinity (as CaCO ₃)	75	mg/L	IS 3025(Part 22):1986, RA 2014, Amds.2
14	Potassium (as K)	210	mg/L	IS 3025 (Part 45): 1993, RA 2014, Amds.1
15	Sodium (as Na)	8820	mg/L	IS 3025 (Part 45): 1993, RA 2014, Amds.1
16	Magnesium (as Mg)	1239	mg/L	IS 3025 (Part 46):1984, RA 2014, Amds.2
17	Lead(as Pb)	<0.008	mg/L	IS 3025 (Part 2): 2004, RA 2014/ISO 1885:1996
18	Cadmium (as Cd)	<0.002	mg/L	IS 3025 (Part 2): 2004, RA 2014/ISO 1885:1996
19	Zinc (as Zn)	<0.05	mg/L	IS 3025(Part 2):2004, RA 2014/ISO 1885:1996
BIOLOGICAL TESTING				
Bacteriological Parameters				
20	<i>Escherichia coli</i>	27	MPN Index / 100 ml	APHA, 23rd Ed. 2017, 9221-G, 9-80
21	Total Coliforms	140	MPN Index / 100 ml	APHA, 23rd Ed. 2017, 9221-B, 9-66
22	Faecal Coliforms	79	MPN Index / 100 ml	APHA, 23rd Ed. 2017, 9221-E, 9-77

Note: Sample ID W/03/21/247 bears two Test Reports - W/03/21/247 and W/03/21/247N

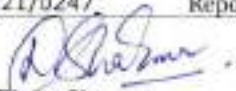
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ULR-TC550921000004615F

Sample ID : W/03/21/0247	Report No. W/03/21/0247	Report Date	23/03/2021
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TEST REPORT

Sample ID : W/03/21/0247	Report No. W/03/21/0247N	Report Date	23/03/2021
Name and address of Customer	PNP Maritime Services Private Limited (PNP Jetty) 2nd Floor, Lansdowne House Building, M.B .Marg,Near Regal Cinema, Apollo Bunder, Colaba, Mumbai 400 001,Maharashtra		
Sampling done by	Laboratory	Sample Description / Type	Marine Water (Group:Water)
Sampling Location	Near Jetty No.3	Date - Sampling	14/03/2021
Sample Quantity / Packing	5 L x 1 no. plastic can 250 ml x 1 no. sterile bottle	Date - Receipt of Sample	15/03/2021
Sampling Procedure	IS 1622:1981 & IS 3025(Part I):1987 & APHA 23rd Ed. 2017, 1060 B,1-40, 9060 A,9-36 & 9060 B,9-39	Date - Start of Analysis	15/03/2021
Order Reference	As per your Ref. No. PNP/February/2019-2020/013 dated 26.02.2020	Date - Completion of Analysis	22/03/2021

Sr.No.	Parameter	Result	Unit	Method
CHEMICAL TESTING				
Physical & Chemical Parameters				
1	Total Dissolved Solids	30000	mg/L	IS 3025 (Part 16):1984, RA 2006 Ed 21 (0939-12)
2	Electrical Conductivity (at 25°C)	48387	µmho/cm	IS 3025(Part 14):1984, RA 2006
3	Total Solids	31800	mg/L	IS 3025 (Part 15):1984, RA 2014, Amd.1

Note: Sample ID W/03/21/247 bears two Test Reports - W/03/21/247 and W/03/21/247N


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TC-5509

ULR-TC550921000004616F

TEST REPORT

Sample ID : W/03/21/0248	Report No. W/03/21/0248	Report Date	23/03/2021
Name and address of Customer	PNP Maritime Services Private Limited (PNP Jetty) 2nd Floor, Lansdowne House Building, M.B .Marg,Near Regal Cinema, Apollo Bunder, Colaba, Mumbai 400 001,Maharashtra		
Sampling done by	Laboratory	Sample Description / Type	Marine Water (Group:Water)
Sampling Location	Near JSW Jetty	Date - Sampling	14/03/2021
Sample Quantity / Packing	5 L x 1 no. plastic can 250 ml x 1 no. sterile bottle	Date - Receipt of Sample	15/03/2021
Sampling Procedure	IS 1622:1981 & IS 3025(Part I) 1987 & APHA 23rd Ed. 2017, 1060 B,1-40, 9060 A,9-36 & 9060 B,9-39	Date - Start of Analysis	15/03/2021
Order Reference	As per your Ref. No. PNP/February/2019-2020/013 dated 26.02.2020	Date - Completion of Analysis	22/03/2021

Sr.No.	Parameter	Result	Unit	Method
CHEMICAL TESTING				
Physical & Chemical Parameters				
1	Colour	2	Hazen	IS 3025 (Part 4):1983, RA 2017
2	Odour	Agreeable	-	IS 3025 (Part 5): 1983, RA 2006
3	pH value	7.18	-	IS 3025 (Part 11):1983, RA 2017
4	Turbidity	3.6	NTU	IS 3025 (Part 10):1984, RA 2017
5	Total Suspended Solids	26	mg/L	IS 3025 (Part 7): 1984, RA 2017, Amds1
6	Biochemical Oxygen Demand (3 days, 27°C)	3	mg/L	IS 3025 (Part 44): 1993, RA 2014, Amds1
7	Chemical Oxygen Demand	13	mg/L	APHA, 23rd Ed. 2017, 5220-B, 5-18
8	Oil & Grease	<1	mg/L	APHA, 23rd Ed. 2017, 5520-B, 5-42
9	Calcium (as Ca)	361	mg/L	IS 3025 (Part 40):1993, RA 2014, Ed1(2004-02)
10	Chloride (as Cl)	18494	mg/L	IS 3025 (Part 32):1988, RA 2014
11	Copper (as Cu)	<0.02	mg/L	IS 3025(Part 2):2004, RA 2014/ISO 11885:1996
12	Iron (as Fe)	1.38	mg/L	IS 3025 (Part 2): 2004, RA 2014 / ISO 11885:1996
13	Total Alkalinity (as CaCO ₃)	155	mg/L	IS 3025(Part 23):1988, RA 2014, Amds 2
14	Potassium (as K)	150	mg/L	IS 3025 (Part 45): 1993, RA 2014, Amds1
15	Sodium (as Na)	6520	mg/L	IS 3025 (Part 45): 1993, RA 2014, Amds1
16	Magnesium (as Mg)	1094	mg/L	IS 3025 (Part 46):1994, RA 2014, Amds2
17	Lead(as Pb)	<0.008	mg/L	IS 3025 (Part 2): 2004, RA 2014/ISO 11885:1996
18	Cadmium (as Cd)	0.002	mg/L	IS 3025 (Part 2): 2004, RA 2014/ISO 11885:1996
19	Zinc (as Zn)	0.054	mg/L	IS 3025(Part 2):2004, RA 2014/ISO 11885:1996
BIOLOGICAL TESTING				
Bacteriological Parameters				
20	<i>Escherichia coli</i>	14	MPN Index / 100 ml	APHA, 23rd Ed. 2017, 8221-G, 9-80
21	Total Coliforms	220	MPN Index / 100 ml	APHA, 23rd Ed. 2017, 8221-B, 9-69
22	Faecal Coliforms	27	MPN Index / 100 ml	APHA, 23rd Ed. 2017, 8221-E, 9-77

Note: Sample ID W/03/21/248 bears two Test Reports - W/03/21/248 and W/03/21/248N

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ULR-TC550921000004616F

Sample ID : W/03/21/0248	Report No. W/03/21/0248	Report Date	23/03/2021
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TEST REPORT

Sample ID : W/03/21/0248	Report No. W/03/21/0248N	Report Date	23/03/2021	
Name and address of Customer	PNP Maritime Services Private Limited (PNP Jetty) 2nd Floor, Lansdowne House Building, M.B Marg, Near Regal Cinema, Apollo Bunder, Colaba, Mumbai 400 001, Maharashtra			
Sampling done by	Laboratory	Sample Description / Type	Marine Water (Group:Water)	
Sampling Location	Near JSW Jetty	Date - Sampling	14/03/2021	
Sample Quantity / Packing	5 L x 1 no. plastic can 250 ml x 1 no. sterile bottle	Date - Receipt of Sample	15/03/2021	
Sampling Procedure	IS 1622:1981 & IS 3025(Part I) 1987 & APHA 23rd Ed. 2017, 1060 B,1-40, 9060 A,9-36 & 9060 B,9-39	Date - Start of Analysis	15/03/2021	
Order Reference	As per your Ref. No. PNP/February/2019-2020/013 dated 26.02.2020	Date - Completion of Analysis	22/03/2021	
Sr.No.	Parameter	Result	Unit	Method
CHEMICAL TESTING				
Physical & Chemical Parameters				
1	Total Dissolved Solids	27010	mg/L	IS 3025 (Part 1):1984, RA 2006 Ed.21 (999)-(2)
2	Electrical Conductivity (at 25°C)	43564	µmho/cm	IS 3025(Part 14): 1984, RA 2006
3	Total Solids	28810	mg/L	IS 3025 (Part 15): 1984, RA 2014, Amdt.1
Note: Sample ID W/03/21/248 bears two Test Reports - W/03/21/248 and W/03/21/248N				


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TC-5509



ULR-TC550921000004617F

TEST REPORT

Sample ID : W/03/21/0249	Report No. W/03/21/0249	Report Date	23/03/2021
Name and address of Customer	PNP Maritime Services Private Limited (PNP Jetty) 2nd Floor, Lansdowne House Building, M.B .Marg,Near Regal Cinema, Apollo Bunder, Colaba, Mumbai 400 001, Maharashtra		
Sampling done by	Laboratory	Sample Description / Type	Marine Water (Group:Water)
Sampling Location	Near JSW Jetty End	Date - Sampling	14/03/2021
Sample Quantity / Packing	5 L x 1 no. plastic can 250 ml x 1 no. sterile bottle	Date - Receipt of Sample	15/03/2021
Sampling Procedure	IS 1622:1981 & IS 3025(Part 1) 1987 & APHA 23rd Ed. 2017, 1060 B,1-40, 9060 A,9-36 & 9060 B,9-39	Date - Start of Analysis	15/03/2021
Order Reference	As per your Ref. No. PNP/February/2019-2020/013 dated 26.02.2020	Date - Completion of Analysis	22/03/2021

Sr.No.	Parameter	Result	Unit	Method
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CHEMICAL TESTING

Physical & Chemical Parameters

1	Colour	3	Hazen	IS 3025 (Part 4):1983, RA 2017
2	Odour	Agreeable	-	IS 3025 (Part 5):1983, RA 2016
3	pH value	7.85	-	IS 3025 (Part 10):1983, RA 2017
4	Turbidity	25	NTU	IS 3025 (Part 10):1984, RA 2017
5	Total Suspended Solids	38	mg/L	IS 3025 (Part 17):1984, RA 2017, Amds.1
6	Biochemical Oxygen Demand (3 days, 27°C)	5	mg/L	IS 3025 (Part 4A):1993, RA 2014, Amds.1
7	Chemical Oxygen Demand	21	mg/L	APHA, 23rd Ed. 2017, 5220-B, 5-18
8	Oil & Grease	<1	mg/L	APHA, 23rd Ed. 2017, 5520-B, 5-42
9	Calcium (as Ca)	401	mg/L	IS 3025 (Part 40):1993, RA 2014, Ed.1(2004-02)
10	Chloride (as Cl)	14995	mg/L	IS 3025 (Part 32):1988, RA 2014
11	Copper (as Cu)	0.049	mg/L	IS 3025(Part 2):2004, RA 2014/ISO 11885:1996
12	Iron (as Fe)	11.8	mg/L	IS 3025 (Part 2): 2004, RA 2014 / ISO 11885:1996
13	Total Alkalinity (as CaCO ₃)	170	mg/L	IS 3025(Part 73):1986, RA 2014, Amds.2
14	Potassium (as K)	170	mg/L	IS 3025 (Part 45):1993, RA 2014, Amds.1
15	Sodium (as Na)	6770	mg/L	IS 3025 (Part 45):1993, RA 2014, Amds.1
16	Magnesium (as Mg)	1142	mg/L	IS 3025 (Part 46):1994, RA 2014, Amds.2
17	Lead(as Pb)	<0.008	mg/L	IS 3025 (Part 2): 2004, RA 2014/ISO 11885:1996
18	Cadmium (as Cd)	<0.002	mg/L	IS 3025 (Part 7): 2004, RA 2014/ISO 11885:1996
19	Zinc (as Zn)	<0.05	mg/L	IS 3025(Part 2):2004, RA 2014/ISO 11885:1996

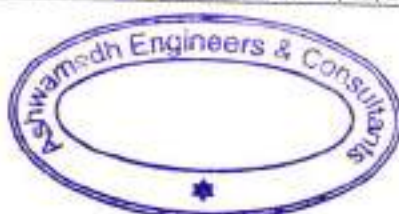
BIOLOGICAL TESTING

Bacteriological Parameters

20	Escherichia coli	24	MPN Index / 100 ml	APHA, 23rd Ed. 2017, 9221-G, 9-81
21	Total Coliforms	920	MPN Index / 100 ml	APHA, 23rd Ed. 2017, 9221-B, 9-63
22	Faecal Coliforms	39	MPN Index / 100 ml	APHA, 23rd Ed. 2017, 9221-E, 9-77

Note: Sample ID W/03/21/249 bears two Test Reports - W/03/21/249 and W/03/21/249N


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ULR-TC550921000004617F

Sample ID : W/03/21/0249	Report No. W/03/21/0249	Report Date	23/03/2021
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TC-5509

TEST REPORT

Sample ID : W/03/21/0249	Report No. W/03/21/0249N	Report Date	23/03/2021	
Name and address of Customer	PNP Maritime Services Private Limited (PNP Jetty) 2nd Floor, Lansdowne House Building, M.B. Marg, Near Regal Cinema, Apollo Bunder, Colaba, Mumbai 400 001, Maharashtra			
Sampling done by	Laboratory	Sample Description / Type	Marine Water (Group:Water)	
Sampling Location	Near JSW Jetty End	Date - Sampling	14/03/2021	
Sample Quantity / Packing	5 L x 1 no. plastic can 250 ml x 1 no. sterile bottle	Date - Receipt of Sample	15/03/2021	
Sampling Procedure	IS 1622:1981 & IS 3025(Part 1) 1987 & APHA 23rd Ed. 2017, 1060 B,1-40, 9060 A,9-36 & 9060 B,9-39	Date - Start of Analysis	15/03/2021	
Order Reference	As per your Ref. No. PNP/February/2019-2020/013 dated 26.02.2020	Date - Completion of Analysis	22/03/2021	
Sr.No.	Parameter	Result	Unit	Method
CHEMICAL TESTING				
Physical & Chemical Parameters				
1	Total Dissolved Solids	23800	mg/L	IS 3025 (Part 16) 1984, RA 2005 Ed 2.1 (0999-12)
2	Electrical Conductivity (at 25°C)	38387	µmho/cm	IS 3025(Part 14) 1984, RA 2008
3	Total Solids	25680	mg/L	IS 3025 (Part 15) 1984, RA 2014, Annex 1
Note: Sample ID W/03/21/249 bears two Test Reports - W/03/21/249 and W/03/21/249N				


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TC-5509



ULR-TC550921000004618F

TEST REPORT

Sample ID : W/03/21/0250	Report No. W/03/21/0250	Report Date	23/03/2021
Name and address of Customer	PNP Maritime Services Private Limited (PNP Jetty) 2nd Floor, Lansdowne House Building, M.B. Marg, Near Regal Cinema, Apollo Bunder, Colaba, Mumbai 400 001, Maharashtra		
Sampling done by	Laboratory	Sample Description / Type	Marine Water (Group:Water)
Sampling Location	Near DIL Godown Backside	Date - Sampling	14/03/2021
Sample Quantity / Packing	5 L x 1 no. plastic can 250 ml x 1 no. sterile bottle	Date - Receipt of Sample	15/03/2021
Sampling Procedure	IS 1622:1981 & IS 3025(Part I) 1987 & APHA 23rd Ed. 2017, 1060 B,1-40, 9060 A,9-36 & 9060 B,9-39	Date - Start of Analysis	15/03/2021
Order Reference	As per your Ref. No. PNP/February/2019-2020/013 dated 26.02.2020	Date - Completion of Analysis	22/03/2021

Sr.No.	Parameter	Result	Unit	Method
CHEMICAL TESTING				
Physical & Chemical Parameters				
1	Colour	3	Hazen	IS 3025 (Part 4):1983, RA 2017
2	Odour	Agreeable	-	IS 3025 (Part 5): 1983, RA 2016
3	pH value	7.81	-	IS 3025 (Part 10):1983, RA 2017
4	Turbidity	10	NTU	IS 3025 (Part 11):1984, RA 2017
5	Total Suspended Solids	22	mg/L	IS 3025 (Part 17): 1984, RA 2017, Amds.1
6	Biochemical Oxygen Demand (3 days, 27°C)	2	mg/L	IS 3025 (Part 44): 1993, RA 2014, Amds.1
7	Chemical Oxygen Demand	10	mg/L	APHA, 23rd Ed. 2017, 5220-B, 5-18
8	Oil & Grease	<1	mg/L	APHA, 23rd Ed. 2017, 5520-B, 5-47
9	Calcium (as Ca)	401	mg/L	IS 3025 (Part 40):1981, RA 2014, Ed.1(2004-02)
10	Chloride (as Cl)	16995	mg/L	IS 3025 (Part 37):1988, RA 2014
11	Copper (as Cu)	<0.02	mg/L	IS 3025(Part 2):2004, RA 2014/ISO 1885:1996
12	Iron (as Fe)	1.22	mg/L	IS 3025 (Part 2): 2004, RA 2014 / ISO 1885:1996
13	Total Alkalinity (as CaCO ₃)	143	mg/L	IS 3025(Part 23):1986, RA 2014, Amds.2
14	Potassium (as K)	150	mg/L	IS 3025 (Part 45): 1993, RA 2014, Amds.1
15	Sodium (as Na)	6460	mg/L	IS 3025 (Part 45): 1993, RA 2014, Amds.1
16	Magnesium (as Mg)	1166	mg/L	IS 3025 (Part 46):1994, RA 2014, Amds.2
17	Lead(as Pb)	<0.008	mg/L	IS 3025 (Part 2): 2004, RA 2014/ISO 1885:1996
18	Cadmium (as Cd)	<0.002	mg/L	IS 3025 (Part 2): 2004, RA 2014/ISO 1885:1996
19	Zinc (as Zn)	<0.05	mg/L	IS 3025(Part 2):2004, RA 2014/ISO 1885:1996
BIOLOGICAL TESTING				
Bacteriological Parameters				
20	<i>Escherichia coli</i>	22	MPN Index / 100 ml	APHA, 23rd Ed. 2017, 9221-C, 9-80
21	Total Coliforms	79	MPN Index / 100 ml	APHA, 23rd Ed. 2017, 9221-B, 9-69
22	Faecal Coliforms	49	MPN Index / 100 ml	APHA, 23rd Ed. 2017, 9221-E, 9-77

Note: Sample ID W/03/21/250 bears two Test Reports - W/03/21/250 and W/03/21/250N


D Sharma



H Safer

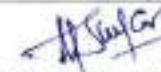
ULR-TC550921000004618F

Sample ID : W/03/21/0250	Report No. W/03/21/0250	Report Date	23/03/2021
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Divya Sharma

Section In-charge (Biological)
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TC-5509



TEST REPORT

Sample ID: W/03/21/0250	Report No. W/03/21/0250N	Report Date	23/03/2021
Name and address of Customer	PNP Maritime Services Private Limited (PNP Jetty) 2nd Floor, Lansdowne House Building, M.B .Marg,Near Regal Cinema, Apollo Bunder, Colaba, Mumbai 400 001,Maharashtra		
Sampling done by	Laboratory	Sample Description / Type	Marine Water (Group:Water)
Sampling Location	Near DIL Godown Backside	Date - Sampling	14/03/2021
Sample Quantity / Packing	5 L x 1 no. plastic can 250 ml x 1 no. sterile bottle	Date - Receipt of Sample	15/03/2021
Sampling Procedure	IS 1622:1981 & IS 3025(Part 1) 1987 & APHA 23rd Ed. 2017, 1060 B,1-40, 9060 A,9-36 & 9060 B,9-39	Date - Start of Analysis	15/03/2021
Order Reference	As per your Ref. No. PNP/February/2019-2020/013 dated 26.02.2020	Date - Completion of Analysis	22/03/2021

Sr.No.	Parameter	Result	Unit	Method
CHEMICAL TESTING				
Physical & Chemical Parameters				
1	Total Dissolved Solids	24080	mg/L	IS 3025 (Part 15):1984, RA 2006 (d 2) (0899-12)
2	Electrical Conductivity (at 25°C)	38838	µmho/cm	IS 3025 (Part 15): 1984, RA 2006
3	Total Solids	25880	mg/L	IS 3025 (Part 15): 1984, RA 2006, Amés.]

Note: Sample ID W/03/21/250 bears two Test Reports - W/03/21/250 and W/03/21/250N


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TC-5509



ULR-TC550921000004680F

TEST REPORT

Sample ID: W/03/21/0231	Report No. W/03/21/0231	Report Date	23/03/2021
Name and address of Customer	PNP Maritime Services Private Limited (PNP Jetty) 2nd Floor, Lansdowne House Building, M.B. Marg, Near Regal Cinema, Apollo Bunder, Colaba, Mumbai 400 001, Maharashtra		
Sampling done by	Laboratory	Sample Description / Type	Sea Water (Group:Water)
Sampling Location	Near Jetty No.1	Date - Sampling	14/03/2021
Sample Quantity / Packing	2 L x 1 no. plastic can 300 ml x 1 BDO bottle	Date - Receipt of Sample	15/03/2021
Sampling Procedure	IS 3025 (Part 1):1987, Amds.1 & APHA, 23rd Ed., 2017, 1060 B,1-40	Date - Start of Analysis	15/03/2021
Order Reference	As per your Ref. No. PNP/February/2019-2020/013 dated 26.02.2020	Date - Completion of Analysis	22/03/2021

Sr.No.	Parameter	Result	Unit	Method
CHEMICAL TESTING				
Physical & Chemical Parameters				
1	Temperature	25.9	°C	IS 3025 (Part 5):1984 RA 2009
2	pH value	7.75	-	IS 3025 (Part 10):1983, RA 2007
3	Dissolved Oxygen	5.5	mg/L	IS 3025 (Part 38):1989, RA 2014
4	Biochemical Oxygen Demand (3 days, 27°C)	8	mg/L	IS 3025 (Part 44): 1993, RA 2014, Amds.1
5	Oil & Grease	<1	mg/L	APHA, 23rd Ed., 2017, 5520-B, 5-47
6	Nitrate (as NO ₃)	18.2	mg/L	IS 3025 (Part 3A):1988, RA 2014
7	Ammonical Nitrogen (as NH ₃ -N)	<0.1	mg/L	APHA, 23rd Ed., 2017, 4500 NH ₃ , F, 4-16
8	Total Phosphate (as P)	<0.1	mg/L	APHA, 23rd Ed., 2017, 4500 P, E, 4-164
9	Lead (as Pb)	<0.008	mg/L	IS 3025 (Part 2): 2004, RA 2014 / ISO 11885:1996
10	Cadmium (as Cd)	<0.002	mg/L	IS 3025 (Part 2): 2004, RA 2014 / ISO 11885:1996
11	Mercury (as Hg)	<0.0008	mg/L	IS 3025 (Part 2): 2004, RA 2014 / ISO 11885:1996
12	Zinc (as Zn)	<0.05	mg/L	IS 3025 (Part 2): 2004

Note: Sample ID W/03/21/231 bears two Test Reports - W/03/21/231 and W/03/21/231N


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TEST REPORT

Sample ID : W/03/21/0231	Report No. W/03/21/0231N	Report Date	23/03/2021	
Name and address of Customer	PNP Maritime Services Private Limited (PNP Jetty) 2nd Floor, Lansdowne House Building, M.B .Marg,Near Regal Cinema, Apollo Bunder, Colaba, Mumbai 400 001,Maharashtra			
Sampling done by	Laboratory	Sample Description / Type	Sea Water (Group:Water)	
Sampling Location	Near Jetty No.1	Date - Sampling	14/03/2021	
Sample Quantity / Packing	2 L x 1 no. plastic can 300 ml x 1 BDO bottle	Date - Receipt of Sample	15/03/2021	
Sampling Procedure	IS 3025 (Part 1):1987, Ards.1 & APHA, 23rd Ed.,2017,1060 B,1-40	Date - Start of Analysis	15/03/2021	
Order Reference	As per your Ref. No. PNP/February/2019-2020/013 dated 26.02.2020	Date - Completion of Analysis	22/03/2021	
Sr.No.	Parameter	Result	Unit	Method
CHEMICAL TESTING				
Physical & Chemical Parameters				
1	Total Nitrogen (as N)	4.64	mg/L	APHA, 23rd Ed. 2017, 4500 NH ₂ , F. 4 -19.
2	Salinity	28	‰	CPCB DOSORBS /8/1983-84
Note: Sample ID W/03/21/231 bears two Test Reports - W/03/21/231 and W/03/21/231N				


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TC-5509


ULR-TC55092100004681F

TEST REPORT

Sample ID : W/03/21/0232	Report No. W/03/21/0232	Report Date	23/03/2021
Name and address of Customer	PNP Maritime Services Private Limited (PNP Jetty) 2nd Floor, Lansdowne House Building, M.B. Marg, Near Regal Cinema, Apollo Bunder, Colaba, Mumbai 400 001, Maharashtra		
Sampling done by	Laboratory	Sample Description / Type	Sea Water (Group:Water)
Sampling Location	Near Jetty No.2	Date - Sampling	14/03/2021
Sample Quantity / Packing	2 L x 1 no. plastic can 300 ml x 1 BDO bottle	Date - Receipt of Sample	15/03/2021
Sampling Procedure	IS 3025 (Part 1):1987, Amds.1 & APHA, 23rd Ed., 2017, 1060 B, 1-40	Date - Start of Analysis	15/03/2021
Order Reference	As per your Ref. No. PNP/February/2019-2020/013 dated 26.02.2020	Date - Completion of Analysis	22/03/2021

Sr.No.	Parameter	Result	Unit	Method
CHEMICAL TESTING				
Physical & Chemical Parameters				
1	Temperature	26.4	°C	IS 3025 (Part 9):1984, RA 2009.
2	pH value	7.79	-	IS 3025 (Part 11):1983, RA 2017
3	Dissolved Oxygen	5.6	mg/L	IS 3025 (Part 33):1983, RA 2014
4	Biochemical Oxygen Demand (3 days, 27°C)	6	mg/L	IS 3025 (Part 44):1983, RA 2014, Amds.1
5	Oil & Grease	<1	mg/L	APHA, 23rd Ed., 2017, 5520-B, 5-42
6	Nitrate (as NO ₃)	18.1	mg/L	IS 3025 (Part 34):1988, RA 2014
7	Ammonical Nitrogen (as NH ₃ -N)	<0.1	mg/L	APHA, 23rd Ed., 2017, 4500 NH ₃ , F, 4-119.
8	Total Phosphate (as P)	<0.1	mg/L	APHA, 23rd Ed., 2017, 4500 P, E, 4-154
9	Lead(as Pb)	<0.008	mg/L	IS 3025 (Part 2):2004, RA 2014 / ISO 11885:1996
10	Cadmium (as Cd)	<0.002	mg/L	IS 3025 (Part 2):2004, RA 2014 / ISO 11885:1996
11	Mercury (as Hg)	<0.0008	mg/L	IS 3025 (Part 2):2004, RA 2014 / ISO 11885:1996
12	Zinc (as Zn)	<0.05	mg/L	IS 3025 (Part 2):2004

Note: Sample ID W/03/21/232 bears two Test Reports - W/03/21/232 and W/03/21/232N


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4. There are no additions to, deviations or exclusions from the method.

TEST REPORT

Sample ID : W/03/21/0232	Report No. W/03/21/0232N	Report Date	23/03/2021	
Name and address of Customer	PNP Maritime Services Private Limited (PNP Jetty) 2nd Floor, Lansdowne House Building, M.B. Marg, Near Regal Cinema, Apollo Bunder, Colaba, Mumbai 400 001, Maharashtra			
Sampling done by	Laboratory	Sample Description / Type	Sea Water (Group:Water)	
Sampling Location	Near Jetty No.2	Date - Sampling	14/03/2021	
Sample Quantity / Packing	2 L x 1 no. plastic can 300 ml x 1 BDO bottle	Date - Receipt of Sample	15/03/2021	
Sampling Procedure	IS 3025 (Part 1):1987, Amds.1 & APHA, 23rd Ed.,2017,1060 B,1-40	Date - Start of Analysis	15/03/2021	
Order Reference	As per your Ref. No. PNP/February/2019-2020/013 dated 26.02.2020	Date - Completion of Analysis	22/03/2021	
Sr.No.	Parameter	Result	Unit	Method
CHEMICAL TESTING				
Physical & Chemical Parameters				
1	Total Nitrogen (as N)	4.40	mg/L	APHA, 23rd Ed. 2017, 4500 NH3.F.4 -199.
2	Salinity	28	‰	CPCB ADSORBS /B/1983 84
Note: Sample ID W/03/21/232 bears two Test Reports - W/03/21/232 and W/03/21/232N				


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TC-5509

ULR-TC550921000004682F

TEST REPORT

Sample ID : W/03/21/0233	Report No. W/03/21/0233	Report Date	23/03/2021
Name and address of Customer	PNP Maritime Services Private Limited (PNP Jetty) 2nd Floor, Lansdowne House Building, M.B. Marg, Near Regal Cinema, Apollo Bunder, Colaba, Mumbai 400 001, Maharashtra		
Sampling done by	Laboratory	Sample Description / Type	Sea Water (Group: Water)
Sampling Location	Near Jetty No.3	Date - Sampling	14/03/2021
Sample Quantity / Packing	2 L x 1 no. plastic can 300 ml x 1 BDO bottle	Date - Receipt of Sample	15/03/2021
Sampling Procedure	IS 3025 (Part 1):1987, Amds.1 & APHA, 23rd Ed.,2017,1060 B,1-40	Date - Start of Analysis	15/03/2021
Order Reference	As per your Ref. No. PNP/February/2019-2020/013 dated 26.02.2020	Date - Completion of Analysis	22/03/2021

Sr.No.	Parameter	Result	Unit	Method
CHEMICAL TESTING				
Physical & Chemical Parameters				
1	Temperature	27.2	°C	IS 3025 (Part 9):1984 RA 2009.
2	pH value	7.97	-	IS 3025 (Part 10):1983. RA 2017
3	Dissolved Oxygen	6.1	mg/L	IS 3025 (Part 38):1989. RA 2014
4	Biochemical Oxygen Demand (3 days, 27°C)	7	mg/L	IS 3025 (Part 44): 1993. RA 2014. Amé.1
5	Oil & Grease	<1	mg/L	APHA, 23rd Ed., 2017, 5520-B, 5-42
6	Nitrate (as NO ₃)	8.66	mg/L	IS 3025 (Part 34):1988. RA 2014
7	Ammonical Nitrogen (as NH ₃ -N)	<0.1	mg/L	APHA, 23rd Ed., 2017, 4500 NH ₂ F, 4 -10.
8	Total Phosphate (as P)	<0.1	mg/L	APHA, 23rd Ed., 2017, 4500 P, E, 4-10A
9	Lead(as Pb)	<0.008	mg/L	IS 3025 (Part 2):2004. RA 2014 / ISO 1885:1996
10	Cadmium (as Cd)	<0.002	mg/L	IS 3025 (Part 2):2004. RA 2014 / ISO 1885:1996
11	Mercury (as Hg)	<0.0008	mg/L	IS 3025 (Part 2):2004. RA 2014/ISO 1885:1996
12	Zinc (as Zn)	<0.05	mg/L	IS 3025 (Part 2):2004

Note: Sample ID W/03/21/233 bears two Test Reports - W/03/21/233 and W/03/21/233N


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Note:

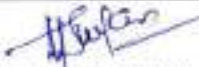
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TEST REPORT

Sample ID : W/03/21/0233	Report No. W/03/21/0233N	Report Date	23/03/2021
Name and address of Customer	PNP Maritime Services Private Limited (PNP Jetty) 2nd Floor, Lansdowne House Building, M.B .Marg, Near Regal Cinema, Apollo Bunder, Colaba, Mumbai 400 001, Maharashtra		
Sampling done by	Laboratory	Sample Description / Type	Sea Water (Group:Water)
Sampling Location	Near Jetty No.3	Date - Sampling	14/03/2021
Sample Quantity / Packing	2 L x 1 no. plastic can 300 ml x 1 BDO bottle	Date - Receipt of Sample	15/03/2021
Sampling Procedure	IS 3025 (Part 1):1987, Amds.1 & APHA, 23rd Ed.,2017,1060 B,1-40	Date - Start of Analysis	15/03/2021
Order Reference	As per your Ref. No. PNP/February/2019-2020/013 dated 26.02.2020	Date - Completion of Analysis	22/03/2021

Sr.No.	Parameter	Result	Unit	Method
CHEMICAL TESTING				
Physical & Chemical Parameters				
1	Total Nitrogen (as N)	2.43	mg/L	APHA, 23rd Ed., 2017, 4500 NH ₃ . F. 4 -09.
2	Salinity	28	‰	CPCB 4050SRBS /8/1983-84

Note: Sample ID W/03/21/233 bears two Test Reports - W/03/21/233 and W/03/21/233N


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TC-5509



ULR-TC55092100004683F

TEST REPORT

Sample ID : W/03/21/0234	Report No. W/03/21/0234	Report Date	23/03/2021
Name and address of Customer	PNP Maritime Services Private Limited (PNP Jetty) 2nd Floor, Lansdowne House Building, M.B .Marg,Near Regal Cinema, Apollo Bunder, Colaba, Mumbai 400 001,Maharashtra		
Sampling done by	Laboratory	Sample Description / Type	Sea Water (Group:Water)
Sampling Location	Near Jetty No.4	Date - Sampling	14/03/2021
Sample Quantity / Packing	2 L x 1 no. plastic can 300 ml x 1 BDO bottle	Date - Receipt of Sample	15/03/2021
Sampling Procedure	IS 3025 (Part 1):1987, Amds.1 & APHA, 23rd Ed.,2017,1060 B,1-40	Date - Start of Analysis	15/03/2021
Order Reference	As per your Ref. No. PNP/February/2019-2020/013 dated 26.02.2020	Date - Completion of Analysis	22/03/2021

Sr.No.	Parameter	Result	Unit	Method
CHEMICAL TESTING				
Physical & Chemical Parameters				
1	Temperature	28.6	°C	IS 3025 (Part 0)1984 RA 2009.
2	pH value	7.81	-	IS 3025 (Part 1):1983, RA 2017
3	Dissolved Oxygen	5.3	mg/L	IS 3025 (Part 3B)1989, RA 2014
4	Biochemical Oxygen Demand (3 days, 27°C)	7	mg/L	IS 3025 (Part 4A): 1993, RA 2014 Amds I
5	Oil & Grease	<1	mg/L	APHA, 23rd Ed., 2017, 5510-B, 5-42
6	Nitrate (as NO ₃)	14.8	mg/L	IS 3025 (Part 3A)1988, RA 2014
7	Ammonical Nitrogen (as NH ₃ -N)	<0.1	mg/L	APHA, 23rd Ed., 2017, 4500 NH ₃ , F, 4-19.
8	Total Phosphate (as P)	<0.1	mg/L	APHA, 23rd Ed., 2017, 4500 P, E, 4-164
9	Lead(as Pb)	<0.008	mg/L	IS 3025 (Part 2): 2004, RA 2014 / ISO 11885:1996
10	Cadmium (as Cd)	<0.002	mg/L	IS 3025 (Part 2): 2004, RA 2014 / ISO 11885:1996
11	Mercury (as Hg)	<0.0008	mg/L	IS 3025 (Part 2): 2004, RA 2014 / ISO 11885:1996
12	Zinc (as Zn)	<0.05	mg/L	IS 3025 (Part 2) 2004

Note: Sample ID W/03/21/234 bears two Test Reports - W/03/21/234 and W/03/21/234N


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4. There are no additions to, deviations or exclusions from the method.

TEST REPORT

Sample ID : W/03/21/0234	Report No. W/03/21/0234N	Report Date	23/03/2021	
Name and address of Customer	PNP Maritime Services Private Limited (PNP Jetty) 2nd Floor, Lansdowne House Building, M.B. Marg, Near Regal Cinema, Apollo Bunder, Colaba, Mumbai 400 001, Maharashtra			
Sampling done by	Laboratory	Sample Description / Type	Sea Water (Group:Water)	
Sampling Location	Near Jetty No.4	Date - Sampling	14/03/2021	
Sample Quantity / Packing	2 L x 1 no. plastic can 300 ml x 1 BDO bottle	Date - Receipt of Sample	15/03/2021	
Sampling Procedure	IS 3025 (Part 1):1987, Amds.1 & APHA, 23rd Ed.,2017,1060 B,1-40	Date - Start of Analysis	15/03/2021	
Order Reference	As per your Ref. No. PNP/February/2019-2020/013 dated 26.02.2020	Date - Completion of Analysis	22/03/2021	
Sr.No.	Parameter	Result	Unit	Method
CHEMICAL TESTING				
Physical & Chemical Parameters				
1	Total Nitrogen (as N)	3.90	mg/L	APHA, 23rd Ed. 2017. 4500 NH3. F. 4 -103.
2	Salinity	28	‰	CPCB AOSDRBS /S/1983-84
Note: Sample ID W/03/21/234 bears two Test Reports - W/03/21/234 and W/03/21/234N				



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TC-5509



ULR-TC55092100004684F

TEST REPORT

Sample ID : W/03/21/0235	Report No. W/03/21/0235	Report Date	23/03/2021
Name and address of Customer	PNP Maritime Services Private Limited (PNP Jetty) 2nd Floor, Lansdowne House Building, M.B. Marg, Near Regal Cinema, Apollo Bunder, Colaba, Mumbai 400 001, Maharashtra		
Sampling done by	Laboratory	Sample Description / Type	Sea Water (Group: Water)
Sampling Location	Near JSW Plant	Date - Sampling	14/03/2021
Sample Quantity / Packing	2 L x 1 no. plastic can 300 ml x 1 BDO bottle	Date - Receipt of Sample	15/03/2021
Sampling Procedure	IS 3025 (Part 1):1987, Amds.1 & APHA, 23rd Ed., 2017, 1060 B, 1-40	Date - Start of Analysis	15/03/2021
Order Reference	As per your Ref. No. PNP/February/2019-2020/013 dated 26.02.2020	Date - Completion of Analysis	22/03/2021

Sr.No.	Parameter	Result	Unit	Method
CHEMICAL TESTING				
Physical & Chemical Parameters				
1	Temperature	26.5	°C	IS 3025 (Part 5):1984 RA 2009
2	pH value	7.95	-	IS 3025 (Part 1):1983 RA 2017
3	Dissolved Oxygen	5.0	mg/L	IS 3025 (Part 3B):1989 RA 2014
4	Biochemical Oxygen Demand (3 days, 27°C)	6	mg/L	IS 3025 (Part 4A):1993 RA 2014 Amd.1
5	Oil & Grease	<1	mg/L	APHA, 23rd Ed., 2017, 5520-B, 5-42
6	Nitrate (as NO ₃)	14.1	mg/L	IS 3025 (Part 3A):1988 RA 2014
7	Ammonical Nitrogen (as NH ₃ -N)	<0.1	mg/L	APHA, 23rd Ed., 2017, 4500 NH ₃ , F. 4-115
8	Total Phosphate (as P)	<0.1	mg/L	APHA, 23rd Ed., 2017, 4500 P, I, 4-164
9	Lead (as Pb)	<0.008	mg/L	IS 3025 (Part 2):2004 RA 2014 / ISO 11885:1996
10	Cadmium (as Cd)	<0.002	mg/L	IS 3025 (Part 2):2004 RA 2014 / ISO 11885:1996
11	Mercury (as Hg)	<0.0008	mg/L	IS 3025 (Part 2):2004 RA 2014 / ISO 11885:1996
12	Zinc (as Zn)	<0.05	mg/L	IS 3025 (Part 2):2004

Note: Sample ID W/03/21/235 bears two Test Reports - W/03/21/235 and W/03/21/235N


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4. There are no additions to, deviations or exclusions from the method.

TEST REPORT

Sample ID : W/03/21/0235	Report No. W/03/21/0235N	Report Date	23/03/2021	
Name and address of Customer	PNP Maritime Services Private Limited (PNP Jetty) 2nd Floor, Lansdowne House Building, M.B .Marg,Near Regal Cinema, Apollo Bunder, Colaba, Mumbai 400 001,Maharashtra			
Sampling done by	Laboratory	Sample Description / Type	Sea Water (Group:Water)	
Sampling Location	Near JSW Plant	Date - Sampling	14/03/2021	
Sample Quantity / Packing	2 L x 1 no. plastic can 300 ml x 1 BDO bottle	Date - Receipt of Sample	15/03/2021	
Sampling Procedure	IS 3025 (Part 1):1987, Amds.1 & APHA, 23rd Ed.,2017,1060 B,1-40	Date - Start of Analysis	15/03/2021	
Order Reference	As per your Ref. No. PNP/February/2019-2020/013 dated 26.02.2020	Date - Completion of Analysis	22/03/2021	
Sr.No.	Parameter	Result	Unit	Method
CHEMICAL TESTING				
Physical & Chemical Parameters				
1	Total Nitrogen (as N)	3.55	mg/L	APHA, 23rd Ed., 2017, 4508 NH3, F.4 -08.
2	Salinity	27	‰	CPCB ADSORBS /8/1983-84
Note: Sample ID W/03/21/235 bears two Test Reports - W/03/21/235 and W/03/21/235N				


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TC-5509

ULR-TC550921000004685F

TEST REPORT

Sample ID : W/03/21/0236	Report No. W/03/21/0236	Report Date	23/03/2021
Name and address of Customer	PNP Maritime Services Private Limited (PNP Jetty) 2nd Floor, Lansdowne House Building, M.B Marg, Near Regal Cinema, Apollo Bunder, Colaba, Mumbai 400 001, Maharashtra		
Sampling done by	Laboratory	Sample Description / Type	Sea Water (Group: Water)
Sampling Location	Near Railway Bridge	Date - Sampling	14/03/2021
Sample Quantity / Packing	2 L x 1 no. plastic can 300 ml x 1 BDO bottle	Date - Receipt of Sample	15/03/2021
Sampling Procedure	IS 3025 (Part 1):1987, Amds.1 & APHA, 23rd Ed., 2017, 1060 B, 1-40	Date - Start of Analysis	15/03/2021
Order Reference	As per your Ref. No. PNP/February/2019-2020/013 dated 26.02.2020	Date - Completion of Analysis	22/03/2021

Sr.No.	Parameter	Result	Unit	Method
CHEMICAL TESTING				
Physical & Chemical Parameters				
1	Temperature	27.6	°C	IS 3025 (Part 3):1984 RA 2009
2	pH value	7.60	-	IS 3025 (Part 1):1983 RA 2017
3	Dissolved Oxygen	5.8	mg/L	IS 3025 (Part 3B):1983 RA 2014
4	Biochemical Oxygen Demand (3 days, 27°C)	6	mg/L	IS 3025 (Part 4A):1983 RA 2014, Amds I
5	Oil & Grease	<1	mg/L	APHA, 23rd Ed., 2017, 5520-B, 5-42
6	Nitrate (as NO ₃)	8.22	mg/L	IS 3025 (Part 3A):1983 RA 2014
7	Ammonical Nitrogen (as NH ₃ -N)	<0.1	mg/L	APHA, 23rd Ed., 2017, 4500 NHO, F, 4-16E
8	Total Phosphate (as P)	<0.1	mg/L	APHA, 23rd Ed., 2017, 4500 P, E, 4-16A
9	Lead (as Pb)	<0.008	mg/L	IS 3025 (Part 2):2004 RA 2014 / ISO 11885:1996
10	Cadmium (as Cd)	<0.002	mg/L	IS 3025 (Part 2):2004 RA 2014 / ISO 11885:1996
11	Mercury (as Hg)	<0.0008	mg/L	IS 3025 (Part 2):2004 RA 2014 / ISO 11885:1996
12	Zinc (as Zn)	<0.05	mg/L	IS 3025 (Part 2):2004

Note: Sample ID W/03/21/236 bears two Test Reports - W/03/21/236 and W/03/21/236N


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TEST REPORT

Sample ID : W/03/21/0236	Report No. W/03/21/0236N	Report Date	23/03/2021	
Name and address of Customer	PNP Maritime Services Private Limited (PNP Jetty) 2nd Floor, Lansdowne House Building, M.B .Marg,Near Regal Cinema, Apollo Bunder, Colaba, Mumbai 400 001,Maharashtra			
Sampling done by	Laboratory	Sample Description / Type	Sea Water (Group:Water)	
Sampling Location	Near Railway Bridge	Date - Sampling	14/03/2021	
Sample Quantity / Packing	2 L x 1 no. plastic can 300 ml x 1 BDO bottle	Date - Receipt of Sample	15/03/2021	
Sampling Procedure	IS 3025 (Part 1):1987, Amds.1 & APHA, 23rd Ed.,2017,1060 B,1-40	Date - Start of Analysis	15/03/2021	
Order Reference	As per your Ref. No. PNP/February/2019-2020/013 dated 26.02.2020	Date - Completion of Analysis	22/03/2021	
Sr.No.	Parameter	Result	Unit	Method
CHEMICAL TESTING				
Physical & Chemical Parameters				
1	Total Nitrogen (as N)	0.24	mg/L	APHA, 23rd Ed., 2017, 4500 NH3, F. 4-10.
2	Salinity	27	‰	CPCB AOSORBS /8/1983-84
Note: Sample ID W/03/21/236 bears two Test Reports - W/03/21/236 and W/03/21/236N				


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TC-5509



ULR-TC550921000004686F

TEST REPORT

Sample ID : W/03/21/0237	Report No. W/03/21/0237	Report Date	23/03/2021
Name and address of Customer	PNP Maritime Services Private Limited (PNP Jetty) 2nd Floor, Lansdowne House Building, M.B. Marg, Near Regal Cinema, Apollo Bunder, Colaba, Mumbai 400 001, Maharashtra		
Sampling done by	Laboratory	Sample Description / Type	Sea Water (Group:Water)
Sampling Location	Near PNP Office Backside	Date - Sampling	14/03/2021
Sample Quantity / Packing	2 L x 1 no. plastic can 300 ml x 1 BDO bottle	Date - Receipt of Sample	15/03/2021
Sampling Procedure	IS 3025 (Part 1):1987, Amds.1 & APHA, 23rd Ed., 2017, 1060 B,1-40	Date - Start of Analysis	15/03/2021
Order Reference	As per your Ref. No. PNP/February/2019-2020/013 dated 26.02.2020	Date - Completion of Analysis	22/03/2021

Sl.No.	Parameter	Result	Unit	Method
CHEMICAL TESTING				
Physical & Chemical Parameters				
1	Temperature	28.2	°C	IS 3025 (Part 5):1984 RA 2009
2	pH value	7.80	-	IS 3025 (Part 8):1983. RA 2017
3	Dissolved Oxygen	5.7	mg/L	IS 3025 (Part 38):1989. RA 2014
4	Biochemical Oxygen Demand (3 days, 27°C)	8	mg/L	IS 3025 (Part 44):1993. RA 2014. Amds.1
5	Oil & Grease	<1	mg/L	APHA, 23rd Ed., 2017, 5520-B, 5-47
6	Nitrate (as NO ₃)	30.7	mg/L	IS 3025 (Part 34):1988. RA 2014
7	Ammonical Nitrogen (as NH ₃ -N)	<0.1	mg/L	APHA, 23rd Ed., 2017, 4500 NH ₃ . F. 4 -16.
8	Total Phosphate (as P)	<0.1	mg/L	APHA, 23rd Ed., 2017, 4500 P. E. 4-64
9	Lead (as Pb)	<0.008	mg/L	IS 3025 (Part 2): 2004. RA 2014 / ISO 1885:1996
10	Cadmium (as Cd)	<0.002	mg/L	IS 3025 (Part 2): 2004. RA 2014 / ISO 1885:1996
11	Mercury (as Hg)	<0.0008	mg/L	IS 3025 (Part 2): 2004. RA 2014 / ISO 1885:1996
12	Zinc (as Zn)	<0.05	mg/L	IS 3025 (Part 2): 2004

Note: Sample ID W/03/21/237 bears two Test Reports - W/03/21/237 and W/03/21/237N


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TEST REPORT

Sample ID : W/03/21/0237	Report No. W/03/21/0237N	Report Date	23/03/2021	
Name and address of Customer	PNP Maritime Services Private Limited (PNP Jetty) 2nd Floor, Lansdowne House Building, M.B. Marg, Near Regal Cinema, Apollo Bunder, Colaba, Mumbai 400 001, Maharashtra			
Sampling done by	Laboratory	Sample Description / Type	Sea Water (Group:Water)	
Sampling Location	Near PNP Office Backside	Date - Sampling	14/03/2021	
Sample Quantity / Packing	2 L x 1 no. plastic can 300 ml x 1 BDO bottle	Date - Receipt of Sample	15/03/2021	
Sampling Procedure	IS 3025 (Part 1):1987, Ards.1 & APHA, 23rd Ed., 2017, 1060 B, 1-40	Date - Start of Analysis	15/03/2021	
Order Reference	As per your Ref. No. PNP/February/2019-2020/013 dated 26.02.2020	Date - Completion of Analysis	22/03/2021	
Sr.No.	Parameter	Result	Unit	Method
CHEMICAL TESTING				
Physical & Chemical Parameters				
1	Total Nitrogen (as N)	7.51	mg/L	APHA, 23rd Ed., 2017, 4500 NH ₃ , F, 4 -105.
2	Salinity	28	‰	CPCB AOSORBS /8/1983-84
Note: Sample ID W/03/21/237 bears two Test Reports - W/03/21/237 and W/03/21/237N				


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TC-5509

ULR-TC550921000004687F

TEST REPORT

Sample ID : W/03/21/0238	Report No. W/03/21/0238	Report Date	23/03/2021
Name and address of Customer	PNP Maritime Services Private Limited (PNP Jetty) 2nd Floor, Lansdowne House Building, M.B .Marg,Near Regal Cinema, Apollo Bunder, Colaba, Mumbai 400 001,Maharashtra		
Sampling done by	Laboratory	Sample Description / Type	Sea Water (Group:Water)
Sampling Location	Near Govt. Port (Jetty)	Date - Sampling	14/03/2021
Sample Quantity / Packing	2 L x 1 no. plastic can 300 ml x 1 BDO bottle	Date - Receipt of Sample	15/03/2021
Sampling Procedure	IS 3025 (Part 1):1987, Amds.1 & APHA, 23rd Ed.,2017,1060 B,1-40	Date - Start of Analysis	15/03/2021
Order Reference	As per your Ref. No. PNP/February/2019-2020/013 dated 26.02.2020	Date - Completion of Analysis	22/03/2021

Sr.No.	Parameter	Result	Unit	Method
CHEMICAL TESTING				
Physical & Chemical Parameters				
1	Temperature	25.9	°C	IS 3025 (Part 9):1984 RA 2019.
2	pH value	7.96	-	IS 3025 (Part 10):1983. RA 2017
3	Dissolved Oxygen	4.7	mg/L	IS 3025 (Part 38):1989. RA 2014
4	Biochemical Oxygen Demand (3 days, 27°C)	7	mg/L	IS 3025 (Part 44):1983. RA 2014. Amds.1
5	Oil & Grease	<1	mg/L	APHA, 23rd Ed., 2017, 5520-B, 5-42
6	Nitrate (as NO ₃)	9.04	mg/L	IS 3025 (Part 34):1988. RA 2014
7	Ammonical Nitrogen (as NH ₃ -N)	<0.1	mg/L	APHA, 23rd Ed., 2017, 4500 NH ₃ , F, 4-16.
8	Total Phosphate (as P)	<0.1	mg/L	APHA, 23rd Ed., 2017, 4500 P, E, 4-16A
9	Lead(as Pb)	<0.008	mg/L	IS 3025 (Part 2): 2004. RA 2014 / ISO 11885:1996
10	Cadmium (as Cd)	<0.002	mg/L	IS 3025 (Part 2): 2004. RA 2014 / ISO 11885:1996
11	Mercury (as Hg)	<0.0008	mg/L	IS 3025 (Part 2):2004. RA 2014/ISO 11885:1996
12	Zinc (as Zn)	<0.05	mg/L	IS 3025 (Part 2):2004

Note: Sample ID W/03/21/238 bears two Test Reports - W/03/21/238 and W/03/21/238N


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TEST REPORT

Sample ID : W/03/21/0238	Report No. W/03/21/0238N	Report Date	23/03/2021	
Name and address of Customer	PNP Maritime Services Private Limited (PNP Jetty) 2nd Floor, Lansdowne House Building, M.B .Marg,Near Regal Cinema, Apollo Bunder, Colaba, Mumbai 400 001,Maharashtra			
Sampling done by	Laboratory	Sample Description / Type	Sea Water (Group:Water)	
Sampling Location	Near Govt. Port (Jetty)	Date - Sampling	14/03/2021	
Sample Quantity / Packing	2 L x 1 no. plastic can 300 ml x 1 BDO bottle	Date - Receipt of Sample	15/03/2021	
Sampling Procedure	IS 3025 (Part 1):1987, Amds.1 & APHA, 23rd Ed.,2017,1060 B,1-40	Date - Start of Analysis	15/03/2021	
Order Reference	As per your Ref. No. PNP/February/2019-2020/013 dated 26.02.2020	Date - Completion of Analysis	22/03/2021	
Sr.No.	Parameter	Result	Unit	Method
CHEMICAL TESTING				
Physical & Chemical Parameters				
1	Total Nitrogen (as N)	2.63	mg/L	APHA, 23rd Ed., 2017, 4500 NH ₃ , F. 4 -IBL
2	Salinity	28	‰	DPFB ADSORBS /B/1983-84
Note: Sample ID W/03/21/238 bears two Test Reports - W/03/21/238 and W/03/21/238N				


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TC-5509

ULR-TC550921000004688F

TEST REPORT

Sample ID : W/03/21/0239	Report No. W/03/21/0239	Report Date	23/03/2021
Name and address of Customer	PNP Maritime Services Private Limited (PNP Jetty) 2nd Floor, Lansdowne House Building, M.B. Marg, Near Regal Cinema, Apollo Bunder, Colaba, Mumbai 400 001, Maharashtra		
Sampling done by	Laboratory	Sample Description / Type	Sea Water (Group: Water)
Sampling Location	Near Jetty No.5	Date - Sampling	14/03/2021
Sample Quantity / Packing	2 L x 1 no. plastic can 300 ml x 1 BDO bottle	Date - Receipt of Sample	15/03/2021
Sampling Procedure	IS 3025 (Part 1):1987, Amds.1 & APHA, 23rd Ed., 2017, 1060 B,1-40	Date - Start of Analysis	15/03/2021
Order Reference	As per your Ref. No. PNP/February/2019-2020/013 dated 26.02.2020	Date - Completion of Analysis	22/03/2021

Sr.No.	Parameter	Result	Unit	Method
CHEMICAL TESTING				
Physical & Chemical Parameters				
1	Temperature	27.9	°C	IS 3025 (Part 1):1984 RA 2009.
2	pH value	7.85	-	IS 3025 (Part 1):1983. RA 2007
3	Dissolved Oxygen	5.1	mg/L	IS 3025 (Part 3):1989. RA 2014
4	Biochemical Oxygen Demand (3 days, 27°C)	8	mg/L	IS 3025 (Part 4):1993. RA 2014. Amds 1
5	Oil & Grease	<1	mg/L	APHA, 23rd Ed. 2017. 5520-B. 5-42
6	Nitrate (as NO ₃)	8.22	mg/L	IS 3025 (Part 34):1988. RA 2014
7	Ammonical Nitrogen (as NH ₃ -N)	<0.1	mg/L	APHA, 23rd Ed. 2017. 4500 NH ₃ . F. 4-105.
8	Total Phosphate (as P)	<0.1	mg/L	APHA, 23rd Ed. 2017. 4500 P. E. 4-104
9	Lead(as Pb)	<0.008	mg/L	IS 3025 (Part 2):2004. RA 2014 / ISO 1885:1996
10	Cadmium (as Cd)	<0.002	mg/L	IS 3025 (Part 2):2004. RA 2014 / ISO 1885:1996
11	Mercury (as Hg)	<0.0008	mg/L	IS 3025 (Part 2):2004. RA 2014 / ISO 1885:1996
12	Zinc (as Zn)	<0.05	mg/L	IS 3025 (Part 2):2004

Note: Sample ID W/03/21/239 bears two Test Reports - W/03/21/239 and W/03/21/239N


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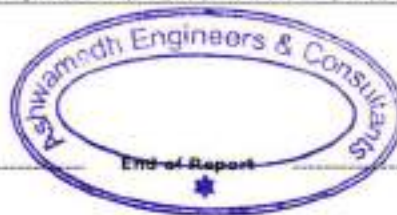


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TEST REPORT

Sample ID : W/03/21/0239	Report No. W/03/21/0239N	Report Date	23/03/2021	
Name and address of Customer	PNP Maritime Services Private Limited (PNP Jetty) 2nd Floor, Lansdowne House Building, M.B .Marg,Near Regal Cinema, Apollo Bunder, Colaba, Mumbai 400 001,Maharashtra			
Sampling done by	Laboratory	Sample Description / Type	Sea Water (Group:Water)	
Sampling Location	Near Jetty No.5	Date - Sampling	14/03/2021	
Sample Quantity / Packing	2 L x 1 no. plastic can 300 ml x 1 BDO bottle	Date - Receipt of Sample	15/03/2021	
Sampling Procedure	IS 3025 (Part 1):1987, Amds.1 & APHA, 23rd Ed.,2017,1060 B,1-40	Date - Start of Analysis	15/03/2021	
Order Reference	As per your Ref. No. PNP/February/2019-2020/013 dated 26.02.2020	Date - Completion of Analysis	22/03/2021	
Sr.No.	Parameter	Result	Unit	Method
CHEMICAL TESTING				
Physical & Chemical Parameters				
1	Total Nitrogen (as N)	2.30	mg/L	APHA, 23rd Ed. 2017, 4500 NH3, F. 4 -11B.
2	Salinity	27	‰	CPCB AQSDRDS /B/1983-B4
Note: Sample ID W/03/21/239 bears two Test Reports - W/03/21/239 and W/03/21/239N				


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TC-5509

ULR-TC550921000004689F

TEST REPORT

Sample ID : W/03/21/0240	Report No. W/03/21/0240	Report Date	23/03/2021
Name and address of Customer	PNP Maritime Services Private Limited (PNP Jetty) 2nd Floor, Lansdowne House Building, M.B .Marg, Near Regal Cinema, Apollo Bunder, Colaba, Mumbai 400 001, Maharashtra		
Sampling done by	Laboratory	Sample Description / Type	Sea Water (Group: Water)
Sampling Location	Near JSW Jetty	Date - Sampling	14/03/2021
Sample Quantity / Packing	2 L x 1 no. plastic can 300 ml x 1 BDO bottle	Date - Receipt of Sample	15/03/2021
Sampling Procedure	IS 3025 (Part 1):1987, Arnds.1 & APHA, 23rd Ed.,2017,1060 B,1-40	Date - Start of Analysis	15/03/2021
Order Reference	As per your Ref. No. PNP/February/2019-2020/013 dated 26.02.2020	Date - Completion of Analysis	22/03/2021

Sr.No.	Parameter	Result	Unit	Method
CHEMICAL TESTING				
Physical & Chemical Parameters				
1	Temperature	28.4	°C	IS 3025 (Part 5):1984 RA 2009
2	pH value	7.76	-	IS 3025 (Part 11):1983, RA 2007
3	Dissolved Oxygen	4.8	mg/L	IS 3025 (Part 3B):1989, RA 2014
4	Biochemical Oxygen Demand (3 days, 27°C)	6	mg/L	IS 3025 (Part 4A):1991, RA 2014, Arnds.1
5	Oil & Grease	<1	mg/L	APHA, 23rd Ed., 2017, 5520-B, 5-42
6	Nitrate (as NO ₃)	8.15	mg/L	IS 3025 (Part 3A):1988, RA 2014
7	Ammonical Nitrogen (as NH ₃ -N)	<0.1	mg/L	APHA, 23rd Ed., 2017, 4500 NH ₃ F, 4-105
8	Total Phosphate (as P)	<0.1	mg/L	APHA, 23rd Ed., 2017, 4500 P, E, 4-104
9	Lead(as Pb)	<0.008	mg/L	IS 3025 (Part 7):2004, RA 2014 / ISO 11885:1996
10	Cadmium (as Cd)	<0.002	mg/L	IS 3025 (Part 7):2004, RA 2014 / ISO 11885:1996
11	Mercury (as Hg)	<0.0008	mg/L	IS 3025 (Part 7):2004, RA 2014 / ISO 11885:1996
12	Zinc (as Zn)	<0.05	mg/L	IS 3025 (Part 7):2004

Note: Sample ID W/03/21/240 bears two Test Reports - W/03/21/240 and W/03/21/240N


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 4. There are no additions to, deviations or exclusions from the method.

TEST REPORT

Sample ID : W/03/21/0240	Report No. W/03/21/0240N	Report Date	23/03/2021	
Name and address of Customer	PNP Maritime Services Private Limited (PNP Jetty) 2nd Floor, Lansdowne House Building, M.B .Marg,Near Regal Cinema, Apollo Bunder, Colaba, Mumbai 400 001,Maharashtra			
Sampling done by	Laboratory	Sample Description / Type	Sea Water (Group:Water)	
Sampling Location	Near JSW Jetty	Date - Sampling	14/03/2021	
Sample Quantity / Packing	2 L x 1 no. plastic can 300 ml x 1 BDO bottle	Date - Receipt of Sample	15/03/2021	
Sampling Procedure	IS 3025 (Part 1):1987, Amds.1 & APHA, 23rd Ed.,2017,1060 B,1-40	Date - Start of Analysis	15/03/2021	
Order Reference	As per your Ref. No. PNP/February/2019-2020/013 dated 26.02.2020	Date - Completion of Analysis	22/03/2021	
Sr.No.	Parameter	Result	Unit	Method
CHEMICAL TESTING				
Physical & Chemical Parameters				
1	Total Nitrogen (as N)	2.41	mg/L	APHA, 23rd Ed. 2017, 4500 NH3, F.4-103.
2	Salinity	30	‰	CPCB AASORBS /B/1993-84
Note: Sample ID W/03/21/240 bears two Test Reports - W/03/21/240 and W/03/21/240N				


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TC-5509



ULR-TC550921000004690F

TEST REPORT

Sample ID : W/03/21/0241	Report No. W/03/21/0241	Report Date	23/03/2021
Name and address of Customer	PNP Maritime Services Private Limited (PNP Jetty) 2nd Floor, Lansdowne House Building, M.B. Marg, Near Regal Cinema, Apollo Bunder, Colaba, Mumbai 400 001, Maharashtra		
Sampling done by	Laboratory	Sample Description / Type	Sea Water (Group: Water)
Sampling Location	Near JSW Jetty End	Date - Sampling	14/03/2021
Sample Quantity / Packing	2 L x 1 no. plastic can 300 ml x 1 BDO bottle	Date - Receipt of Sample	15/03/2021
Sampling Procedure	IS 3025 (Part 1):1987, Amds.1 & APHA, 23rd Ed., 2017, 1060 B, 1-40	Date - Start of Analysis	15/03/2021
Order Reference	As per your Ref. No. PNP/February/2019-2020/013 dated 26.02.2020	Date - Completion of Analysis	22/03/2021

Sr.No.	Parameter	Result	Unit	Method
CHEMICAL TESTING				
Physical & Chemical Parameters				
1	Temperature	26.4	°C	IS 3025 (Part 9):1984 RA 2009.
2	pH value	7.70	-	IS 3025 (Part 11):1983, RA 2017
3	Dissolved Oxygen	5.2	mg/L	IS 3025 (Part 38):1989, RA 2014
4	Biochemical Oxygen Demand (3 days, 27°C)	7	mg/L	IS 3025 (Part 44):1993, RA 2014, Amds.1
5	Oil & Grease	<1	mg/L	APHA, 23rd Ed., 2017, 5520-B, 5-42
6	Nitrate (as NO ₃)	8.59	mg/L	IS 3025 (Part 34):1988, RA 2014
7	Ammonical Nitrogen (as NH ₃ -N)	<0.1	mg/L	APHA, 23rd Ed., 2017, 4500 NH ₃ , F, 4-189.
8	Total Phosphate (as P)	<0.1	mg/L	APHA, 23rd Ed., 2017, 4500 P, E, 4-164
9	Lead (as Pb)	<0.008	mg/L	IS 3025 (Part 2):2004, RA 2014 / ISO 11885:1996
10	Cadmium (as Cd)	<0.002	mg/L	IS 3025 (Part 7):2004, RA 2014 / ISO 11885:1996
11	Mercury (as Hg)	<0.0008	mg/L	IS 3025 (Part 2):2004, RA 2014 / ISO 11885:1996
12	Zinc (as Zn)	<0.05	mg/L	IS 3025 (Part 2):2004

Note: Sample ID W/03/21/241 bears two Test Reports - W/03/21/241 and W/03/21/241N


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4. There are no additions to, deviations or exclusions from the method.

TEST REPORT

Sample ID : W/03/21/0241	Report No. W/03/21/0241N	Report Date	23/03/2021	
Name and address of Customer	PNP Maritime Services Private Limited (PNP Jetty) 2nd Floor, Lansdowne House Building, M.B. Marg, Near Regal Cinema, Apollo Bunder, Colaba, Mumbai 400 001, Maharashtra			
Sampling done by	Laboratory	Sample Description / Type	Sea Water (Group:Water)	
Sampling Location	Near JSW Jetty End	Date - Sampling	14/03/2021	
Sample Quantity / Packing	2 L x 1 no. plastic can 300 ml x 1 BDO bottle	Date - Receipt of Sample	15/03/2021	
Sampling Procedure	IS 3025 (Part 1):1987, Amds.1 & APHA, 23rd Ed., 2017, 1060 B, 1-40	Date - Start of Analysis	15/03/2021	
Order Reference	As per your Ref. No. PNP/February/2019-2020/013 dated 26.02.2020	Date - Completion of Analysis	22/03/2021	
Sr.No.	Parameter	Result	Unit	Method
CHEMICAL TESTING				
Physical & Chemical Parameters				
1	Total Nitrogen (as N)	2.61	mg/L	APHA, 23rd Ed., 2017, 4500 NH3, F. 4-119.
2	Salinity	27	‰	CPCB ADSORBS /B/1983-84
Note: Sample ID W/03/21/241 bears two Test Reports - W/03/21/241 and W/03/21/241N				


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TC-5509



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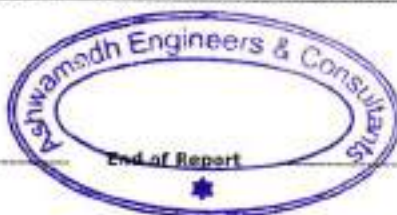
TEST REPORT

Sample ID : W/03/21/0242	Report No. W/03/21/0242	Report Date	23/03/2021
Name and address of Customer	PNP Maritime Services Private Limited (PNP Jetty) 2nd Floor, Lansdowne House Building, M.B. Marg, Near Regal Cinema, Apollo Bunder, Colaba, Mumbai 400 001, Maharashtra		
Sampling done by	Laboratory	Sample Description / Type	Sea Water (Group: Water)
Sampling Location	Near DIL Godown Backside	Date - Sampling	14/03/2021
Sample Quantity / Packing	2 L x 1 no. plastic can 300 ml x 1 BDO bottle	Date - Receipt of Sample	15/03/2021
Sampling Procedure	IS 3025 (Part 1):1987, Amds.1 & APHA, 23rd Ed., 2017, 1060 B, 1-40	Date - Start of Analysis	15/03/2021
Order Reference	As per your Ref. No. PNP/February/2019-2020/013 dated 26.02.2020	Date - Completion of Analysis	22/03/2021

Sr.No.	Parameter	Result	Unit	Method
CHEMICAL TESTING				
Physical & Chemical Parameters				
1	Temperature	29.2	°C	IS 3025 (Part 9):1984 RA 2008
2	pH value	7.73	-	IS 3025 (Part 10):1983, RA 2007
3	Dissolved Oxygen	5.4	mg/L	IS 3025 (Part 30):1989, RA 2014
4	Biochemical Oxygen Demand (3 days, 27°C)	7	mg/L	IS 3025 (Part 44):1983, RA 2014, Incls.1
5	Oil & Grease	<1	mg/L	APHA, 23rd Ed., 2017, 5520-B, 5-42
6	Nitrate (as NO ₃)	8.32	mg/L	IS 3025 (Part 34):1988, RA 2014
7	Ammonical Nitrogen (as NH ₃ -N)	<0.1	mg/L	APHA, 23rd Ed., 2017, 4500 NH ₃ , F, 4-101
8	Total Phosphate (as P)	<0.1	mg/L	APHA, 23rd Ed., 2017, 4500 P, E, 4-164
9	Lead(as Pb)	<0.008	mg/L	IS 3025 (Part 2):2004, RA 2014 / ISO 18885:1996
10	Cadmium (as Cd)	<0.002	mg/L	IS 3025 (Part 2):2004, RA 2014 / ISO 18885:1996
11	Mercury (as Hg)	<0.0008	mg/L	IS 3025 (Part 2):2004, RA 2014 / ISO 18885:1996
12	Zinc (as Zn)	<0.05	mg/L	IS 3025 (Part 2):2004

Note: Sample ID W/03/21/242 bears two Test Reports - W/03/21/242 and W/03/21/242N


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4. There are no additions to, deviations or exclusions from the method.

TEST REPORT

Sample ID : W/03/21/0242	Report No. W/03/21/0242N	Report Date	23/03/2021	
Name and address of Customer	PNP Maritime Services Private Limited (PNP Jetty) 2nd Floor, Lansdowne House Building, M.B. Marg, Near Regal Cinema, Apollo Bunder, Colaba, Mumbai 400 001, Maharashtra			
Sampling done by	Laboratory	Sample Description / Type	Sea Water (Group:Water)	
Sampling Location	Near DIL Godown Backside	Date - Sampling	14/03/2021	
Sample Quantity / Packing	2 L x 1 no. plastic can 300 ml x 1 BDO bottle	Date - Receipt of Sample	15/03/2021	
Sampling Procedure	IS 3025 (Part 1):1987, Amds.1 & APHA, 23rd Ed., 2017, 1060 B, 1-40	Date - Start of Analysis	15/03/2021	
Order Reference	As per your Ref. No. PNP/February/2019-2020/013 dated 26.02.2020	Date - Completion of Analysis	22/03/2021	
Sr.No.	Parameter	Result	Unit	Method
CHEMICAL TESTING				
Physical & Chemical Parameters				
1	Total Nitrogen (as N)	2.35	mg/L	APHA, 23rd Ed. 2007, 4500 NH3, f, 4 -05.
2	Salinity	30	‰	CPCB AOSDRBS /8/1983-84
Note: Sample ID W/03/21/242 bears two Test Reports - W/03/21/242 and W/03/21/242N				


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TEST REPORT

Sample ID : W/03/21/0481	Report No. W/03/21/0481	Report Date	02/04/2021
Name and address of Customer	PNP Maritime Services Private Limited (PNP Jetty) 2nd Floor, Lansdowne House Building, M.B. Marg, Near Regal Cinema, Apollo Bunder, Colaba, Mumbai 400 001, Maharashtra		
Sampling done by	Laboratory	Sample Description / Type	Marine Water (Group:Water)
Sampling Location	Near JSW Plant	Date - Sampling	24/03/2021
Sample Quantity / Packing	5 L x 1 no. plastic can 250 ml x 1 no. sterile bottle.	Date - Receipt of Sample	27/03/2021
Sampling Procedure	IS 1622:1981 & IS 3025(Part 1) 1987 & APHA 23rd Ed. 2017, 1060 B,1-40, 9060 A,9-36 & 9060 B,9-39	Date - Start of Analysis	27/03/2021
Order Reference	As per your Ref. No. PNP/February/2019-2020/013 dated 26.02.2020	Date - Completion of Analysis	01/04/2021

Sr.No.	Parameter	Result	Unit	Method
CHEMICAL TESTING				
Physical & Chemical Parameters				
1	Colour	1	Hazen	IS 3025 (Part 4):1983, RA 2017
2	Odour	Agreeable	-	IS 3025 (Part 5): 1983, RA 2006
3	pH value	7.70	-	IS 3025 (Part 8):1983, RA 2017
4	Turbidity	3	NTU	IS 3025 (Part 10):1984, RA 2017
5	Total Suspended Solids	28	mg/L	IS 3025 (Part 17): 1984, RA 2017, Amds.1
6	Biochemical Oxygen Demand (3 days, 27°C)	9	mg/L	IS 3025 (Part 44): 1983, RA 2014, Amds.1
7	Chemical Oxygen Demand	32	mg/L	APHA, 23rd Ed., 2017, 5220-B, 5-18
8	Oil & Grease	<1	mg/L	APHA, 23rd Ed., 2017, 5520-B, 5-42
9	Calcium (as Ca)	601	mg/L	IS 3025 (Part 40):1981, RA 2014, Edn(2004-02)
10	Copper (as Cu)	<0.02	mg/L	IS 3025(Part 2):2004, RA 2014/ISO 1885:1996
11	Iron (as Fe)	0.547	mg/L	IS 3025 (Part 2): 2004, RA 2014/ ISO 1885:1996
12	Total Alkalinity (as CaCO ₃)	143	mg/L	IS 3025(Part 23):1986, RA 2014, Amds 2
13	Potassium (as K)	9280	mg/L	IS 3025 (Part 45): 1983, RA 2014, Amds.1
14	Sodium (as Na)	290	mg/L	IS 3025 (Part 45): 1983, RA 2014, Amds.1
15	Magnesium (as Mg)	996	mg/L	IS 3025 (Part 46):1984, RA 2014, Amds.2
16	Lead(as Pb)	<0.008	mg/L	IS 3025 (Part 2): 2004, RA 2014/ISO 1885:1996
17	Cadmium (as Cd)	<0.002	mg/L	IS 3025 (Part 2): 2004, RA 2014/ISO 1885:1996
18	Zinc (as Zn)	0.087	mg/L	IS 3025(Part 2):2004, RA 2014/ISO 1885:1996
BIOLOGICAL TESTING				
Bacteriological Parameters				
19	<i>Escherichia coli</i>	<1.8	MPN Index / 100 ml	APHA, 23rd Ed., 2017, 9221-G, 9-80
20	Total Coliforms	<1.8	MPN Index / 100 ml	APHA, 23rd Ed., 2017, 9221-B, 9-68
21	Faecal Coliforms	<1.8	MPN Index / 100 ml	APHA, 23rd Ed., 2017, 9221-E, 9-77

Note: Sample ID W/03/21/481 bears two Test Reports - W/03/21/481 and W/03/21/481N

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ULR-TC550921000005540F

Sample ID : W/03/21/0481	Report No. W/03/21/0481	Report Date	02/04/2021
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D. Sharma



A. S. S. S.

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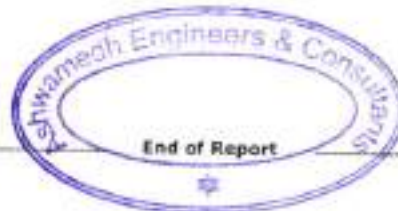
TEST REPORT

Sample ID: W/03/21/0481	Report No. W/03/21/0481N	Report Date	02/04/2021
Name and address of Customer	PNP Maritime Services Private Limited (PNP Jetty) 2nd Floor, Lansdowne House Building, M.B. Marg, Near Regal Cinema, Apollo Bunder, Colaba, Mumbai 400 001, Maharashtra		
Sampling done by	Laboratory	Sample Description / Type	Marine Water (Group: Water)
Sampling Location	Near JSW Plant	Date - Sampling	24/03/2021
Sample Quantity / Packing	5 L x 1 no. plastic can 250 ml x 1 no. sterile bottle	Date - Receipt of Sample	27/03/2021
Sampling Procedure	IS 1622:1981 & IS 3025(Part I) 1987 & APHA 23rd Ed. 2017, 1060 B,1-40, 9060 A,9-36 & 9060 B,9-39	Date - Start of Analysis	27/03/2021
Order Reference	As per your Ref. No. PNP/February/2019-2020/013 dated 26.02.2020	Date - Completion of Analysis	01/04/2021

Sr.No.	Parameter	Result	Unit	Method
CHEMICAL TESTING				
Physical & Chemical Parameters				
1	Total Dissolved Solids	33010	mg/L	IS 3025 (Part 16):1984, RA 2008 Ed.2.1 (1999-02)
2	Electrical Conductivity (at 25°C)	48544	µmho/cm	IS 3025(Part 14):1984, RA 2006
3	Chloride (as Cl)	20993	mg/L	IS 3025 (Part 32):1988, RA 2014
4	Total Solids	34512	mg/L	IS 3025 (Part 15): 1984, RA 2014, And:1

Note: Sample ID W/03/21/481 bears two Test Reports - W/03/21/481 and W/03/21/481N


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TC-5509

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TEST REPORT

Sample ID : W/03/21/0482	Report No. W/03/21/0482	Report Date	02/04/2021
Name and address of Customer	PNP Maritime Services Private Limited (PNP Jetty) 2nd Floor, Lansdowne House Building, M.B. Marg, Near Regal Cinema, Apollo Bunder, Colaba, Mumbai 400 001, Maharashtra		
Sampling done by	Laboratory	Sample Description / Type	Marine Water (Group:Water)
Sampling Location	Near Railway Bridge	Date - Sampling	24/03/2021
Sample Quantity / Packing	5 L x 1 no. plastic can 250 ml x 1 no. sterile bottle	Date - Receipt of Sample	27/03/2021
Sampling Procedure	IS 1622:1981 & IS 3025(Part 1) 1987 & APHA 23rd Ed. 2017, 1060 B,1-40, 9060 A,9-36 & 9060 B,9-39	Date - Start of Analysis	27/03/2021
Order Reference	As per your Ref. No. PNP/February/2019-2020/013 dated 26.02.2020	Date - Completion of Analysis	01/04/2021

Sr.No.	Parameter	Result	Unit	Method
CHEMICAL TESTING				
Physical & Chemical Parameters				
1	Colour	1	Hazen	IS 3025 (Part 4):1983, RA 2007
2	Odour	Agreeable	-	IS 3025 (Part 5): 1983, RA 2006
3	pH value	7.62	-	IS 3025 (Part 11):1983, RA 2017
4	Turbidity	30	NTU	IS 3025 (Part 10):1984, RA 2017
5	Total Suspended Solids	36	mg/L	IS 3025 (Part 17): 1984, RA 2017, Amds.1
6	Biochemical Oxygen Demand (3 days, 27°C)	8	mg/L	IS 3025 (Part 44):1993, RA 2014, Amds.1
7	Chemical Oxygen Demand	31	mg/L	APHA, 23rd Ed. 2017, 5220-B, 5-18
8	Oil & Grease	<1	mg/L	APHA, 23rd Ed. 2017, 5520-B, 5-42
9	Calcium (as Ca)	601	mg/L	IS 3025 (Part 40):1991, RA 2014, Ed.1(2004-02)
10	Copper (as Cu)	<0.02	mg/L	IS 3025(Part 2):2004, RA 2014/ISO 1885:1996
11	Iron (as Fe)	2.31	mg/L	IS 3025 (Part 2): 2004, RA 2014/ ISO 1885:1996
12	Total Alkalinity (as CaCO ₃)	155	mg/L	IS 3025(Part 23):1986, RA 2014, Amds.2
13	Potassium (as K)	260	mg/L	IS 3025 (Part 45): 1993, RA 2014, Amds.1
14	Sodium (as Na)	8400	mg/L	IS 3025 (Part 45): 1993, RA 2014, Amds.1
15	Magnesium (as Mg)	753	mg/L	IS 3025 (Part 46):1994, RA 2014, Amds.2
16	Lead(as Pb)	<0.008	mg/L	IS 3025 (Part 2): 2004, RA 2014/ISO 1885:1996
17	Cadmium (as Cd)	<0.002	mg/L	IS 3025 (Part 2): 2004, RA 2014/ISO 1885:1996
18	Zinc (as Zn)	<0.05	mg/L	IS 3025(Part 2):2004, RA 2014/ISO 1885:1996
BIOLOGICAL TESTING				
Bacteriological Parameters				
19	<i>Escherichia coli</i>	<1.8	MPN Index / 100 ml	APHA, 23rd Ed. 2017, 9229-G, 9-60
20	Total Coliforms	<1.8	MPN Index / 100 ml	APHA, 23rd Ed. 2017, 9229-B, 9-69
21	Faecal Coliforms	<1.8	MPN Index / 100 ml	APHA, 23rd Ed. 2017, 9229-E, 9-77

Note: Sample ID W/03/21/482 bears two Test Reports - W/03/21/482 and W/03/21/482N

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Sample ID : W/03/21/0482	Report No. W/03/21/0482	Report Date	02/04/2021
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TEST REPORT

Sample ID : W/03/21/0482	Report No. W/03/21/0482N	Report Date	02/04/2021
Name and address of Customer	PNP Maritime Services Private Limited (PNP Jetty) 2nd Floor, Lansdowne House Building, M.B. Marg, Near Regal Cinema, Apollo Bunder, Colaba, Mumbai 400 001, Maharashtra		
Sampling done by	Laboratory	Sample Description / Type	Marine Water (Group: Water)
Sampling Location	Near Railway Bridge	Date - Sampling	24/03/2021
Sample Quantity / Packing	5 L x 1 no. plastic can 250 ml x 1 no. sterile bottle	Date - Receipt of Sample	27/03/2021
Sampling Procedure	IS 1622:1981 & IS 3025(Part I) 1987 & APHA 23rd Ed. 2017, 1060 B,1-40, 9060 A,9-36 & 9060 B,9-39	Date - Start of Analysis	27/03/2021
Order Reference	As per your Ref. No. PNP/February/2019-2020/013 dated 26.02.2020	Date - Completion of Analysis	01/04/2021

Sr.No.	Parameter	Result	Unit	Method
CHEMICAL TESTING				
Physical & Chemical Parameters				
1	Total Dissolved Solids	30100	mg/L	IS 3025 (Part 15):1984, RA 2006 Ed.21 (1999-12)
2	Electrical Conductivity (at 25°C)	44264	µmho/cm	IS 3025 (Part 14): 1984, RA 2006
3	Chloride (as Cl)	19994	mg/L	IS 3025 (Part 32):1988, RA 2014
4	Total Solids	31950	mg/L	IS 3025 (Part 15): 1984, RA 2014, Amcsl

Note: Sample ID W/03/21/482 bears two Test Reports - W/03/21/482 and W/03/21/482N


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TC-5509

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TEST REPORT

Sample ID: W/03/21/0483	Report No. W/03/21/0483	Report Date	02/04/2021
Name and address of Customer	PNP Maritime Services Private Limited (PNP Jetty) 2nd Floor, Lansdowne House Building, M.B. Marg, Near Regal Cinema, Apollo Bunder, Colaba, Mumbai 400 001, Maharashtra		
Sampling done by	Laboratory	Sample Description / Type	Marine Water (Group: Water)
Sampling Location	Near Govt. Port (Jetty)	Date - Sampling	24/03/2021
Sample Quantity / Packing	5 L x 1 no. plastic can 250 ml x 1 no. sterile bottle	Date - Receipt of Sample	27/03/2021
Sampling Procedure	IS 1622:1981 & IS 3025(Part I) 1987 & APHA 23rd Ed. 2017, 1060 B,1-40, 9060 A,9-36 & 9060 B,9-39	Date - Start of Analysis	27/03/2021
Order Reference	As per your Ref. No. PNP/February/2019-2020/013 dated 26.02.2020	Date - Completion of Analysis	01/04/2021

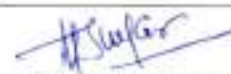
Sr.No.	Parameter	Result	Unit	Method
CHEMICAL TESTING				
Physical & Chemical Parameters				
1	Colour	3	Hazen	IS 3025 (Part 4):1983, RA 2017
2	Odour	Agreeable	-	IS 3025 (Part 5):1983, RA 2006
3	pH value	7.80	-	IS 3025 (Part II):1983, RA 2017
4	Turbidity	42.1	NTU	IS 3025 (Part III):1984, RA 2017
5	Total Suspended Solids	38	mg/L	IS 3025 (Part 17):1984, RA 2017, Amdt.1
6	Biochemical Oxygen Demand (3 days, 27°C)	7	mg/L	IS 3025 (Part 44):1993, RA 2014, Amdt.1
7	Chemical Oxygen Demand	27	mg/L	APHA, 23rd Ed., 2017, 5220-B, 5-18
8	Oil & Grease	<1	mg/L	APHA, 23rd Ed., 2017, 5520-B, 5-42
9	Calcium (as Ca)	601	mg/L	IS 3025 (Part 40):1991, RA 2014, Ed.1/2004-07
10	Copper (as Cu)	<0.02	mg/L	IS 3025(Part 2):2004, RA 2014/ISO 11885:1996
11	Iron (as Fe)	2.20	mg/L	IS 3025 (Part 2): 2004, RA 2014/ ISO 11885:1996
12	Total Alkalinity (as CaCO ₃)	155	mg/L	IS 3025(Part 23):1986, RA 2014, Amdt.2
13	Potassium (as K)	270	mg/L	IS 3025 (Part 45):1993, RA 2014, Amdt.1
14	Sodium (as Na)	8740	mg/L	IS 3025 (Part 45):1993, RA 2014, Amdt.1
15	Magnesium (as Mg)	996	mg/L	IS 3025 (Part 46):1994, RA 2014, Amdt.7
16	Lead(as Pb)	<0.008	mg/L	IS 3025 (Part 2): 2004, RA 2014/ISO 11885:1996
17	Cadmium (as Cd)	<0.002	mg/L	IS 3025 (Part 2): 2004, RA 2014/ISO 11885:1996
18	Zinc (as Zn)	<0.05	mg/L	IS 3025(Part 2):2004, RA 2014/ISO 11885:1996
BIOLOGICAL TESTING				
Bacteriological Parameters				
19	<i>Escherichia coli</i>	6.8	MPN Index / 100 ml	APHA, 23rd Ed., 2017, 9221-G, 9-80
20	Total Coliforms	17	MPN Index / 100 ml	APHA, 23rd Ed., 2017, 9221-B, 9-60
21	Faecal Coliforms	14	MPN Index / 100 ml	APHA, 23rd Ed., 2017, 9221-E, 9-77

Note: Sample ID W/03/21/483 bears two Test Reports - W/03/21/483 and W/03/21/483N


 Divya Sharma

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ULR-TC550921000005542F

Sample ID : W/03/21/0483	Report No. W/03/21/0483	Report Date	02/04/2021
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R. Sharma



H. Patil

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4. There are no additions to, deviations or exclusions from the method.

TEST REPORT

Sample ID : W/03/21/0483	Report No. W/03/21/0483N	Report Date	02/04/2021
Name and address of Customer	PNP Maritime Services Private Limited (PNP Jetty) 2nd Floor, Lansdowne House Building, M.B .Marg,Near Regal Cinema, Apollo Bunder, Colaba, Mumbai 400 001,Maharashtra		
Sampling done by	Laboratory	Sample Description / Type	Marine Water (Group:Water)
Sampling Location	Near Govt. Port (Jetty)	Date - Sampling	24/03/2021
Sample Quantity / Packing	5 L x 1 no. plastic can 250 ml x 1 no. sterile bottle	Date - Receipt of Sample	27/03/2021
Sampling Procedure	IS 1622:1981 & IS 3025(Part I) 1987 & APHA 23rd Ed. 2017, 1060 B,1-40, 9060 A,9-36 & 9060 B,9-39	Date - Start of Analysis	27/03/2021
Order Reference	As per your Ref. No. PNP/February/2019-2020/013 dated 26.02.2020	Date - Completion of Analysis	01/04/2021

Sr.No.	Parameter	Result	Unit	Method
CHEMICAL TESTING				
Physical & Chemical Parameters				
1	Total Dissolved Solids	33450	mg/L	IS 3025 (Part 16):1984, RA 2006 Ed.2.1 (1993-12)
2	Electrical Conductivity (at 25°C)	49191	µmho/cm	IS 3025(Part 14): 1984, RA 2006
3	Chloride (as Cl)	22000	mg/L	IS 3025 (Part 32):1988, RA 2004
4	Total Solids	35320	mg/L	IS 3025 (Part 15): 1984, RA 2004, Amend

Note: Sample ID W/03/21/483 bears two Test Reports - W/03/21/483 and W/03/21/483N


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4. There are no additions to, deviations or exclusions from the method.



TC-5509

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TEST REPORT

Sample ID : W/03/21/0484	Report No. W/03/21/0484	Report Date	02/04/2021
Name and address of Customer	PNP Maritime Services Private Limited (PNP Jetty) 2nd Floor, Lansdowne House Building, M.B. Marg, Near Regal Cinema, Apollo Bunder, Colaba, Mumbai 400 001, Maharashtra		
Sampling done by	Laboratory	Sample Description / Type	Marine Water (Group:Water)
Sampling Location	Near Jetty No.2	Date - Sampling	24/03/2021
Sample Quantity / Packing	5 L x 1 no. plastic can 250 ml x 1 no. sterile bottle	Date - Receipt of Sample	27/03/2021
Sampling Procedure	IS 1622:1981 & IS 3025(Part 1) 1987 & APHA 23rd Ed. 2017, 1060 B,1-40, 9060 A,9-36 & 9060 B,9-39	Date - Start of Analysis	27/03/2021
Order Reference	As per your Ref. No. PNP/February/2019-2020/013 dated 26.02.2020	Date - Completion of Analysis	01/04/2021

Se.No.	Parameter	Result	Unit	Method
CHEMICAL TESTING				
Physical & Chemical Parameters				
1	Colour	2	Hazen	IS 3025 (Part 4):1983, RA 2017
2	Odour	Agreeable	-	IS 3025 (Part 5): 1983, RA 2016
3	pH value	7.66	-	IS 3025 (Part 8):1983, RA 2017
4	Turbidity	49	NTU	IS 3025 (Part 10):1994, RA 2017
5	Total Suspended Solids	34	mg/L	IS 3025 (Part 17): 1984, RA 2017, Amds1
6	Biochemical Oxygen Demand (3 days, 27°C)	8	mg/L	IS 3025 (Part 44): 1993, RA 2014, Amds1
7	Chemical Oxygen Demand	32	mg/L	APHA, 23rd Ed. 2017, 5220-B, 5-18
8	Oil & Grease	<1	mg/L	APHA, 23rd Ed. 2017, 5520-B, 5-42
9	Calcium (as Ca)	441	mg/L	IS 3025 (Part 40):1991, RA 2014, Ed1(2004-02)
10	Copper (as Cu)	<0.02	mg/L	IS 3025(Part 2):2004, RA 2014/ISO 11885:1996
11	Iron (as Fe)	5.86	mg/L	IS 3025 (Part 2): 2004, RA 2014/ ISO 11885:1996
12	Total Alkalinity (as CaCO ₃)	150	mg/L	IS 3025(Part 25):1986, RA 2014, Amds 2
13	Potassium (as K)	260	mg/L	IS 3025 (Part 45): 1993, RA 2014, Amds1
14	Sodium (as Na)	7990	mg/L	IS 3025 (Part 45): 1993, RA 2014, Amds1
15	Magnesium (as Mg)	1069	mg/L	IS 3025 (Part 46):1994, RA 2014, Amds 2
16	Lead(as Pb)	<0.008	mg/L	IS 3025 (Part 2): 2004, RA 2014/ISO 11885:1996
17	Cadmium (as Cd)	<0.002	mg/L	IS 3025 (Part 2): 2004, RA 2014/ISO 11885:1996
18	Zinc (as Zn)	<0.05	mg/L	IS 3025(Part 2):2004, RA 2014/ISO 11885:1996
BIOLOGICAL TESTING				
Bacteriological Parameters				
19	<i>Escherichia coli</i>	4.5	MPN Index / 100 ml	APHA, 23rd Ed. 2017, 9221-G, 9-60
20	Total Coliforms	13	MPN Index / 100 ml	APHA, 23rd Ed. 2017, 9221-B, 9-60
21	Faecal Coliforms	7.8	MPN Index / 100 ml	APHA, 23rd Ed. 2017, 9221-E, 9-77

Note: Sample ID W/03/21/484 bears two Test Reports - W/03/21/484 and W/03/21/484N

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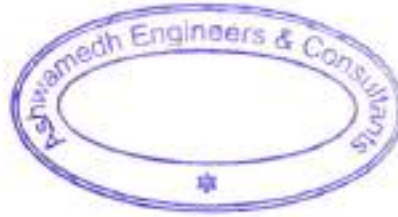
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Sample ID : W/03/21/0484	Report No. W/03/21/0484	Report Date	02/04/2021
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4. There are no additions to, deviations or exclusions from the method.

TEST REPORT

Sample ID : W/03/21/0484	Report No. W/03/21/0484N	Report Date	02/04/2021
Name and address of Customer	PNP Maritime Services Private Limited (PNP Jetty) 2nd Floor, Lansdowne House Building, M.B .Marg,Near Regal Cinema, Apollo Bunder, Colaba, Mumbai 400 001,Maharashtra		
Sampling done by	Laboratory	Sample Description / Type	Marine Water (Group:Water)
Sampling Location	Near Jetty No.2	Date - Sampling	24/03/2021
Sample Quantity / Packing	5 L x 1 no. plastic can 250 ml x 1 no. sterile bottle	Date - Receipt of Sample	27/03/2021
Sampling Procedure	IS 1622:1981 & IS 3025(Part 1) 1987 & APHA 23rd Ed. 2017, 1060 B,1-40, 9060 A,9-36 & 9060 B,9-39	Date - Start of Analysis	27/03/2021
Order Reference	As per your Ref. No. PNP/February/2019-2020/013 dated 26.02.2020	Date - Completion of Analysis	01/04/2021

Sr.No.	Parameter	Result	Unit	Method
CHEMICAL TESTING				
Physical & Chemical Parameters				
1	Total Dissolved Solids	33590	mg/L	IS 3025 (Part 16):1984, RA 2006 Ed 21 (999-12)
2	Electrical Conductivity (at 25°C)	49397	µmho/cm	IS 3025 (Part 14): 1984, RA 2006
3	Chloride (as Cl)	23743	mg/L	IS 3025 (Part 22):1988, RA 2014
4	Total Solids	35460	mg/L	IS 3025 (Part 15): 1984, RA 2014, Amd.1

Note: Sample ID W/03/21/484 bears two Test Reports - W/03/21/484 and W/03/21/484N


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TEST REPORT

Sample ID : W/03/21/0485	Report No. W/03/21/0485	Report Date	02/04/2021
Name and address of Customer	PNP Maritime Services Private Limited (PNP Jetty) 2nd Floor, Lansdowne House Building, M.B. Marg, Near Regal Cinema, Apollo Bunder, Colaba, Mumbai 400 001, Maharashtra		
Sampling done by	Laboratory	Sample Description / Type	Marine Water (Group: Water)
Sampling Location	Near Jetty No.3	Date - Sampling	24/03/2021
Sample Quantity / Packing	5 L x 1 no. plastic can 250 ml x 1 no. sterile bottle	Date - Receipt of Sample	27/03/2021
Sampling Procedure	IS 1622:1981 & IS 3025(Part 1) 1987 & APHA 23rd Ed. 2017, 1060 B,1-40, 9060 A,9-36 & 9060 B,9-39	Date - Start of Analysis	27/03/2021
Order Reference	As per your Ref. No. PNP/February/2019-2020/013 dated 26.02.2020	Date - Completion of Analysis	01/04/2021

Sr.No.	Parameter	Result	Unit	Method
CHEMICAL TESTING				
Physical & Chemical Parameters				
1	Colour	1	Hazen	IS 3025 (Part 4):1983, RA 2017
2	Odour	Agreeable	-	IS 3025 (Part 5): 1993, RA 2006
3	pH value	7.71	-	IS 3025 (Part 1):1983, RA 2017
4	Turbidity	4.2	NTU	IS 3025 (Part 10):1984, RA 2017
5	Total Suspended Solids	16	mg/L	IS 3025 (Part 7): 1984, RA 2017, Amds.1
6	Biochemical Oxygen Demand (3 days, 27°C)	6	mg/L	IS 3025 (Part 44): 1993, RA 2014, Amds.1
7	Chemical Oxygen Demand	24	mg/L	APHA, 23rd Ed. 2017, 5220-B, 5-18
8	Oil & Grease	<1	mg/L	APHA, 23rd Ed. 2017, 5520-B, 5-42
9	Calcium (as Ca)	441	mg/L	IS 3025 (Part 40):1998, RA 2014, Ed.1(2004-02)
10	Copper (as Cu)	<0.02	mg/L	IS 3025(Part 2):2004, RA 2014/ISO 11885:1996
11	Iron (as Fe)	2.12	mg/L	IS 3025 (Part 2): 2004, RA 2014/ ISO 11885:1996
12	Total Alkalinity (as CaCO ₃)	150	mg/L	IS 3025(Part 23):1986, RA 2014, Amds.2
13	Potassium (as K)	280	mg/L	IS 3025 (Part 45): 1993, RA 2014, Amds.1
14	Sodium (as Na)	8220	mg/L	IS 3025 (Part 45): 1993, RA 2014, Amds.1
15	Magnesium (as Mg)	1069	mg/L	IS 3025 (Part 45):1994, RA 2014, Amds.2
16	Lead(as Pb)	<0.008	mg/L	IS 3025 (Part 2): 2004, RA 2014/ISO 11885:1996
17	Cadmium (as Cd)	<0.002	mg/L	IS 3025 (Part 2): 2004, RA 2014/ISO 11885:1996
18	Zinc (as Zn)	<0.05	mg/L	IS 3025(Part 2):2004, RA 2014/ISO 11885:1996
BIOLOGICAL TESTING				
Bacteriological Parameters				
19	<i>Escherichia coli</i>	<1.8	MPN Index / 100 ml	APHA, 23rd Ed. 2017, 9221-G, 9-80
20	Total Coliforms	23	MPN Index / 100 ml	APHA, 23rd Ed. 2017, 9221-B, 9-60
21	Faecal Coliforms	<1.8	MPN Index / 100 ml	APHA, 23rd Ed. 2017, 9221-E, 9-77

Note: Sample ID W/03/21/485 bears two Test Reports - W/03/21/485 and W/03/21/485N


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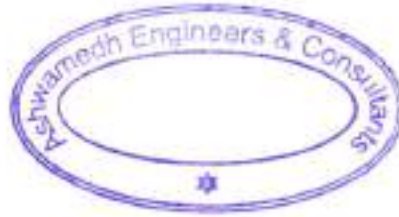

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Sample ID : W/03/21/0485	Report No. W/03/21/0485	Report Date	02/04/2021
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TEST REPORT

Sample ID: W/03/21/0485	Report No. W/03/21/0485N	Report Date	02/04/2021
Name and address of Customer	PNP Maritime Services Private Limited (PNP Jetty) 2nd Floor, Lansdowne House Building, M.B. Marg, Near Regal Cinema, Apollo Bunder, Colaba, Mumbai 400 001, Maharashtra		
Sampling done by	Laboratory	Sample Description / Type	Marine Water (Group: Water)
Sampling Location	Near Jetty No.3	Date - Sampling	24/03/2021
Sample Quantity / Packing	5 L x 1 no. plastic can 250 ml x 1 no. sterile bottle	Date - Receipt of Sample	27/03/2021
Sampling Procedure	IS 1622:1981 & IS 3025(Part I) 1987 & APHA 23rd Ed. 2017, 1060 B,1-40, 9060 A,9-36 & 9060 B,9-39	Date - Start of Analysis	27/03/2021
Order Reference	As per your Ref. No. PNP/February/2019-2020/013 dated 26.02.2020	Date - Completion of Analysis	01/04/2021

Sr.No.	Parameter	Result	Unit	Method
CHEMICAL TESTING				
Physical & Chemical Parameters				
1	Total Dissolved Solids	31090	mg/L	IS 3025 (Part 16): IS 884, RA 2006 (Ed. 2) (ISS-12)
2	Electrical Conductivity (at 25°C)	45720	µmho/cm	IS 3025(Part 14): IS 884, RA 2006
3	Chloride (as Cl)	20993	mg/L	IS 3025 (Part 32): IS 884, RA 2014
4	Total Solids	32490	mg/L	IS 3025 (Part 15): IS 884, RA 2014, Amd.1

Note: Sample ID W/03/21/485 bears two Test Reports - W/03/21/485 and W/03/21/485N


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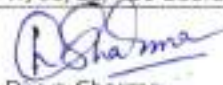
ULR-TC550921000005545F

TEST REPORT

Sample ID : W/03/21/0486	Report No. W/03/21/0486	Report Date	02/04/2021
Name and address of Customer	PNP Maritime Services Private Limited (PNP Jetty) 2nd Floor, Lansdowne House Building, M.B .Marg,Near Regal Cinema, Apollo Bunder, Colaba, Mumbai 400 001,Maharashtra		
Sampling done by	Laboratory	Sample Description / Type	Marine Water (Group:Water)
Sampling Location	Near JSW Jetty	Date - Sampling	24/03/2021
Sample Quantity / Packing	5 L x 1 no. plastic can 250 ml x 1 no. sterile bottle	Date - Receipt of Sample	27/03/2021
Sampling Procedure	IS 1622:1981 & IS 3025(Part 1) 1987 & APHA 23rd Ed. 2017, 1060 B,1-40, 9060 A,9-36 & 9060 B,9-39	Date - Start of Analysis	27/03/2021
Order Reference	As per your Ref. No. PNP/February/2019-2020/013 dated 26.02.2020	Date - Completion of Analysis	01/04/2021

Sr.No.	Parameter	Result	Unit	Method
CHEMICAL TESTING				
Physical & Chemical Parameters				
1	Colour	1	Hazen	IS 3025 (Part 4):1983. RA 2017
2	Odour	Agreeable	-	IS 3025 (Part 5): 1983. RA 2016
3	pH value	7.75	-	IS 3025 (Part 10):1983. RA 2017
4	Turbidity	12.1	NTU	IS 3025 (Part 10):1984. RA 2017
5	Total Suspended Solids	14	mg/L	IS 3025 (Part 7): 1984. RA 2017. Amds.1
6	Biochemical Oxygen Demand (3 days, 27°C)	7	mg/L	IS 3025 (Part 44): 1993. RA 2014. Amds.1
7	Chemical Oxygen Demand	19	mg/L	APHA. 23rd Ed. 2017. 5220-B. 5-18
8	Oil & Grease	<1	mg/L	APHA. 23rd Ed. 2017. 5520-B. 5-42
9	Calcium (as Ca)	401	mg/L	IS 3025 (Part 40):1991. RA 2014. Edn:2004-02)
10	Copper (as Cu)	<0.02	mg/L	IS 3025(Part 2):2004. RA 2014/ISO 1885:1996
11	Iron (as Fe)	1.36	mg/L	IS 3025 (Part 2): 2004. RA 2014/ ISO 1885:1996
12	Total Alkalinity (as CaCO ₃)	148	mg/L	IS 3025(Part 23):1986. RA 2014. Amds.2
13	Potassium (as K)	250	mg/L	IS 3025 (Part 45): 1993. RA 2014. Amds.1
14	Sodium (as Na)	7760	mg/L	IS 3025 (Part 45): 1993. RA 2014. Amds.1
15	Magnesium (as Mg)	1045	mg/L	IS 3025 (Part 46):1994. RA 2014. Amds.2
16	Lead(as Pb)	<0.008	mg/L	IS 3025 (Part 2): 2004. RA 2014/ISO 1885:1996
17	Cadmium (as Cd)	<0.002	mg/L	IS 3025 (Part 2): 2004. RA 2014/ISO 1885:1996
18	Zinc (as Zn)	<0.05	mg/L	IS 3025(Part 2):2004. RA 2014/ISO 1885:1996
BIOLOGICAL TESTING				
Bacteriological Parameters				
19	<i>Escherichia coli</i>	4.5	MPN Index / 100 ml	APHA. 23rd Ed. 2017. 9221-G. 9-80
20	Total Coliforms	7.8	MPN Index / 100 ml	APHA. 23rd Ed. 2017. 9221-B. 9-66
21	Faecal Coliforms	7.8	MPN Index / 100 ml	APHA. 23rd Ed. 2017. 9221-E. 9-77

Note: Sample ID W/03/21/486 bears two Test Reports - W/03/21/486 and W/03/21/486N


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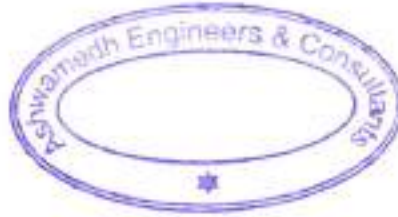

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Sample ID : W/03/21/0486	Report No. W/03/21/0486	Report Date	02/04/2021
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Note:

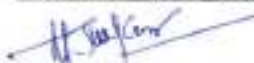
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4. There are no additions to, deviations or exclusions from the method.

TEST REPORT

Sample ID : W/03/21/0486	Report No. W/03/21/0486N	Report Date	02/04/2021
Name and address of Customer	PNP Maritime Services Private Limited (PNP Jetty) 2nd Floor, Lansdowne House Building, M.B .Marg, Near Regal Cinema, Apollo Bunder, Colaba, Mumbai 400 001, Maharashtra		
Sampling done by	Laboratory	Sample Description / Type	Marine Water (Group:Water)
Sampling Location	Near JSW Jetty	Date - Sampling	24/03/2021
Sample Quantity / Packing	5 L x 1 no. plastic can 250 ml x 1 no. sterile bottle	Date - Receipt of Sample	27/03/2021
Sampling Procedure	IS 1622:1981 & IS 3025(Part I) 1987 & APHA 23rd Ed. 2017, 1060 B,1-40, 9060 A,9-36 & 9060 B,9-39	Date - Start of Analysis	27/03/2021
Order Reference	As per your Ref. No. PNP/February/2019-2020/013 dated 26.02.2020	Date - Completion of Analysis	01/04/2021

Sr.No.	Parameter	Result	Unit	Method
CHEMICAL TESTING				
Physical & Chemical Parameters				
1	Total Dissolved Solids	31750	mg/L	IS 3025 (Part 15):1984, RA 2006 Ed.21 (1999-12)
2	Electrical Conductivity (at 25°C)	46691	µmho/cm	IS 3025 (Part 14):1984, RA 2006
3	Chloride (as Cl)	21493	mg/L	IS 3025 (Part 12):1988, RA 2014
4	Total Solids	33530	mg/L	IS 3025 (Part 15):1984, RA 2014, Amdt.1

Note: Sample ID W/03/21/486 bears two Test Reports - W/03/21/486 and W/03/21/486N


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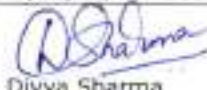
ULR-TC550921000005546F

TEST REPORT

Sample ID : W/03/21/0487	Report No. W/03/21/0487	Report Date	02/04/2021
Name and address of Customer	PNP Maritime Services Private Limited (PNP Jetty) 2nd Floor, Lansdowne House Building, M.B .Marg,Near Regal Cinema, Apollo Bunder, Colaba, Mumbai 400 001,Maharashtra		
Sampling done by	Laboratory	Sample Description / Type	Marine Water (Group: Water)
Sampling Location	Near JSW Jetty End	Date - Sampling	24/03/2021
Sample Quantity / Packing	5 L x 1 no. plastic can 250 ml x 1 no. sterile bottle	Date - Receipt of Sample	27/03/2021
Sampling Procedure	IS 1622:1981 & IS 3025(Part I) 1987 & APHA 23rd Ed. 2017, 1060 B,1-40, 9060 A,9-36 & 9060 B,9-39	Date - Start of Analysis	27/03/2021
Order Reference	As per your Ref. No. PNP/February/2019-2020/013 dated 26.02.2020	Date - Completion of Analysis	01/04/2021

Sr.No.	Parameter	Result	Unit	Method
CHEMICAL TESTING				
Physical & Chemical Parameters				
1	Colour	1	Hazen	IS 3025 (Part 4):1983. RA 2007
2	Odour	Agreeable	-	IS 3025 (Part 5): 1983. RA 2006
3	pH value	7.74	-	IS 3025 (Part 10):1983. RA 2007
4	Turbidity	32	NTU	IS 3025 (Part 10):1984. RA 2007
5	Total Suspended Solids	38	mg/L	IS 3025 (Part 17): 1984. RA 2007, Amds I
6	Biochemical Oxygen Demand (3 days, 27°C)	4	mg/L	IS 3025 (Part 44): 1993. RA 2014. Amds I
7	Chemical Oxygen Demand	18	mg/L	APHA, 23rd Ed. 2007, 5220-B, 5-18
8	Oil & Grease	<1	mg/L	APHA, 23rd Ed. 2007, 5520-B, 5-42
9	Calcium (as Ca)	401	mg/L	IS 3025 (Part 40):1991. RA 2014. Ed I(2004-02)
10	Copper (as Cu)	<0.02	mg/L	IS 3025(Part 7):2004. RA 2014/ISO 1885:1996
11	Iron (as Fe)	6.15	mg/L	IS 3025 (Part 2): 2004. RA 2014/ ISO 1885:1996
12	Total Alkalinity (as CaCO ₃)	147	mg/L	IS 3025(Part 23):1986. RA 2014. Amds.2
13	Potassium (as K)	7620	mg/L	IS 3025 (Part 45): 1993. RA 2014. Amds I
14	Sodium (as Na)	260	mg/L	IS 3025 (Part 45): 1993. RA 2014. Amds I
15	Magnesium (as Mg)	1045	mg/L	IS 3025 (Part 46):1994. RA 2014. Amds 2
16	Lead(as Pb)	<0.008	mg/L	IS 3025 (Part 2): 2004. RA 2014/ISO 1885:1996
17	Cadmium (as Cd)	<0.002	mg/L	IS 3025 (Part 2): 2004. RA 2014/ISO 1885:1996
18	Zinc (as Zn)	<0.05	mg/L	IS 3025(Part 7):2004. RA 2014/ISO 1885:1996
BIOLOGICAL TESTING				
Bacteriological Parameters				
19	<i>Escherichia coli</i>	<1.8	MPN Index / 100 ml	APHA, 23rd Ed. 2007, 9221-G, 9-80
20	Total Coliforms	<1.8	MPN Index / 100 ml	APHA, 23rd Ed. 2007, 9221-H, 9-83
21	Faecal Coliforms	<1.8	MPN Index / 100 ml	APHA, 23rd Ed. 2007, 9221-F, 9-77

Note: Sample ID W/03/21/487 bears two Test Reports - W/03/21/487 and W/03/21/487N


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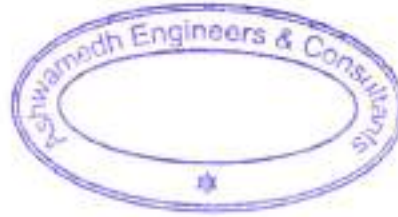



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Sample ID : W/03/21/0487	Report No. W/03/21/0487	Report Date	02/04/2021
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TEST REPORT

Sample ID : W/03/21/0487	Report No. W/03/21/0487N	Report Date	02/04/2021
Name and address of Customer	PNP Maritime Services Private Limited (PNP Jetty) 2nd Floor, Lansdowne House Building, M.B .Marg,Near Regal Cinema, Apollo Bunder, Colaba, Mumbai 400 001,Maharashtra		
Sampling done by	Laboratory	Sample Description / Type	Marine Water (Group: Water)
Sampling Location	Near JSW Jetty End	Date - Sampling	24/03/2021
Sample Quantity / Packing	5 L x 1 no. plastic can 250 ml x 1 no. sterile bottle	Date - Receipt of Sample	27/03/2021
Sampling Procedure	IS 1622:1981 & IS 3025(Part I) 1987 & APHA 23rd Ed. 2017, 1060 B,1-40, 9060 A,9-36 & 9060 B,9-39	Date - Start of Analysis	27/03/2021
Order Reference	As per your Ref. No. PNP/February/2019-2020/013 dated 26.02.2020	Date - Completion of Analysis	01/04/2021

Sr.No.	Parameter	Result	Unit	Method
CHEMICAL TESTING				
Physical & Chemical Parameters				
1	Total Dissolved Solids	32150	mg/L	IS 3025 (Part 16) 1984, RA 2006 Ed 21 (1989-12)
2	Electrical Conductivity (at 25°C)	47279	µmho/cm	IS 3025(Part 14) 1984, RA 2006
3	Chloride (as Cl)	22743	mg/L	IS 3025 (Part 37):1988, RA 2004
4	Total Solids	33950	mg/L	IS 3025 (Part 15) 1984, RA 2004, Amend.1

Note: Sample ID W/03/21/487 bears two Test Reports - W/03/21/487 and W/03/21/487N


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TC-5509



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TEST REPORT

Sample ID : W/03/21/0488	Report No. W/03/21/0488	Report Date	02/04/2021
Name and address of Customer	PNP Maritime Services Private Limited (PNP Jetty) 2nd Floor, Lansdowne House Building, M.B .Marg, Near Regal Cinema, Apollo Bunder, Colaba, Mumbai 400 001, Maharashtra		
Sampling done by	Laboratory	Sample Description / Type	Marine Water (Group:Water)
Sampling Location	Near DIL Godown Backside	Date - Sampling	24/03/2021
Sample Quantity / Packing	5 L x 1 no. plastic can 250 ml x 1 no. sterile bottle	Date - Receipt of Sample	27/03/2021
Sampling Procedure	IS 1622:1981 & IS 3025(Part 1) 1987 & APHA 23rd Ed. 2017, 1060 B,1-40, 9060 A,9-36 & 9060 B,9-39	Date - Start of Analysis	27/03/2021
Order Reference	As per your Ref. No. PNP/February/2019-2020/013 dated 26.02.2020	Date - Completion of Analysis	01/04/2021

Sr.No.	Parameter	Result	Unit	Method
CHEMICAL TESTING				
Physical & Chemical Parameters				
1	Colour	1	Hazen	IS 3025 (Part 4):1983, RA 2007
2	Odour	Agreeable	-	IS 3025 (Part 5):1983, RA 2006
3	pH value	7.69	-	IS 3025 (Part 6):1983, RA 2007
4	Turbidity	14	NTU	IS 3025 (Part 6):1984, RA 2007
5	Total Suspended Solids	12	mg/L	IS 3025 (Part 7):1984, RA 2007, Amds.1
6	Biochemical Oxygen Demand (3 days, 27°C)	8	mg/L	IS 3025 (Part 44):1993, RA 2014, Amds.1
7	Chemical Oxygen Demand	31	mg/L	APHA, 23rd Ed. 2017, 5220-B, 5-18
8	Oil & Grease	<1	mg/L	APHA, 23rd Ed. 2017, 5520-B, 5-42
9	Calcium (as Ca)	440	mg/L	IS 3025 (Part 40):1991, RA 2014, Ed.(2004-02)
10	Copper (as Cu)	<0.02	mg/L	IS 3025(Part 2):2004, RA 2014/ISO 11885:1996
11	Iron (as Fe)	2.17	mg/L	IS 3025 (Part 2): 2004, RA 2014/ ISO 11885:1996
12	Total Alkalinity (as CaCO ₃)	150	mg/L	IS 3025(Part 73):1986, RA 2014, Amds.2
13	Potassium (as K)	240	mg/L	IS 3025 (Part 45):1993, RA 2014, Amds.1
14	Sodium (as Na)	7250	mg/L	IS 3025 (Part 45):1993, RA 2014, Amds.1
15	Magnesium (as Mg)	1069	mg/L	IS 3025 (Part 45):1994, RA 2014, Amds.2
16	Lead(as Pb)	<0.008	mg/L	IS 3025 (Part 2): 2004, RA 2014/ISO 11885:1996
17	Cadmium (as Cd)	<0.002	mg/L	IS 3025 (Part 2): 2004, RA 2014/ISO 11885:1996
18	Zinc (as Zn)	<0.05	mg/L	IS 3025(Part 2):2004, RA 2014/ISO 11885:1996
BIOLOGICAL TESTING				
Bacteriological Parameters				
19	<i>Escherichia coli</i>	<1.8	MPN Index / 100 ml	APHA, 23rd Ed. 2017, 9221-G, 9-80
20	Total Coliforms	4.5	MPN Index / 100 ml	APHA, 23rd Ed. 2017, 9221-G, 9-69
21	Faecal Coliforms	<1.8	MPN Index / 100 ml	APHA, 23rd Ed. 2017, 9221-E, 9-77

Note: Sample ID W/03/21/488 bears two Test Reports - W/03/21/488 and W/03/21/488N


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Sample ID : W/03/21/0488	Report No. W/03/21/0488	Report Date	02/04/2021
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4. There are no additions to, deviations or exclusions from the method.

TEST REPORT

Sample ID : W/03/21/0488	Report No. W/03/21/0488N	Report Date	02/04/2021
Name and address of Customer	PNP Maritime Services Private Limited (PNP Jetty) 2nd Floor, Lansdowne House Building, M.B. Marg, Near Regal Cinema, Apollo Bunder, Colaba, Mumbai 400 001, Maharashtra		
Sampling done by	Laboratory	Sample Description / Type	Marine Water (Group:Water)
Sampling Location	Near DIL Godown Backside	Date - Sampling	24/03/2021
Sample Quantity / Packing	5 L x 1 no. plastic can 250 ml x 1 no. sterile bottle	Date - Receipt of Sample	27/03/2021
Sampling Procedure	IS 1622:1981 & IS 3025(Part I) 1987 & APHA 23rd Ed. 2017, 1060 B,1-40, 9060 A,9-36 & 9060 B,9-39	Date - Start of Analysis	27/03/2021
Order Reference	As per your Ref. No, PNP/February/2019-2020/013 dated 26.02.2020	Date - Completion of Analysis	01/04/2021

Sr.No.	Parameter	Result	Unit	Method
CHEMICAL TESTING				
Physical & Chemical Parameters				
1	Total Dissolved Solids	30220	mg/L	IS 3025 (Part 15) 1984, RA 2006 (Ed 2) 0989-02
2	Electrical Conductivity (at 25°C)	44441	µmho/cm	IS 3025 (Part 14) 1984, RA 2006
3	Chloride (as Cl)	21493	mg/L	IS 3025 (Part 32) 1988, RA 2014
4	Total Solids	32040	mg/L	IS 3025 (Part 15) 1984, RA 2014, Amds.

Note: Sample ID W/03/21/488 bears two Test Reports - W/03/21/488 and W/03/21/488N


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TEST REPORT

Sample ID : W/03/21/0489	Report No. W/03/21/0489N	Report Date	29/03/2021
Name and address of Customer	PNP Maritime Services Private Limited (PNP Jetty) 2nd Floor, Lansdowne House Building, M.B .Marg, Near Regal Cinema, Apollo Bunder, Colaba, Mumbai 400 001, Maharashtra		
Sampling done by	Laboratory	Sample Description / Type	Marine Life Water (Group:Water)
Sampling Location	Near Jetty No.3	Date - Sampling	24/03/2021
Sample Quantity / Packing	2 L x 1 no. plastic can	Date - Receipt of Sample	27/03/2021
Sampling Procedure	APHA 23rd Ed. 2017	Date - Start of Analysis	27/03/2021
Order Reference	As per your Ref. No. PNP/February/2019-2020/013 dated 26.02.2020	Date - Completion of Analysis	27/03/2021

Sr.No.	Parameter	Result	Unit	Method
BIOLOGICAL TESTING				
1	Aquatic Fauna and Flora composed of large number of species of bacteria	Absent	/1L	APHA 23rd Ed. 2007 (by microscopy)
2	Phytoplankton	Absent	/1L	APHA 23rd Ed. 2007, 102100 F-10-17 (by microscopy)
3	Zooplankton	Absent	/1L	APHA 23rd Ed. 2007, 102100 G-10-21 (by microscopy)



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TEST REPORT

Sample ID : W/03/21/0490	Report No. W/03/21/0490N	Report Date	29/03/2021
Name and address of Customer	PNP Maritime Services Private Limited (PNP Jetty) 2nd Floor, Lansdowne House Building, M.B .Marg,Near Regal Cinema, Apollo Bunder, Colaba, Mumbai 400 001,Maharashtra		
Sampling done by	Laboratory	Sample Description / Type	Marine Life Water (Group:Water)
Sampling Location	Near JSW Jetty	Date - Sampling	24/03/2021
Sample Quantity / Packing	2 L x 1 no. plastic can	Date - Receipt of Sample	27/03/2021
Sampling Procedure	APHA 23rd Ed. 2017	Date - Start of Analysis	27/03/2021
Order Reference	As per your Ref. No. PNP/February/2019-2020/013 dated 26.02.2020	Date - Completion of Analysis	27/03/2021

Sr.No.	Parameter	Result	Unit	Method
BIOLOGICAL TESTING				
1	Aquatic Fauna and Flora composed of large number of species of bacteria	Absent	/1L	APHA 23rd Ed. 2017 (by microscopy)
2	Phytoplankton	Absent	/1L	APHA 23rd Ed. 2017, 10200 F-10-17 (by microscopy)
3	Zooplankton	Absent	/1L	APHA 23rd Ed. 2017, 10200 G-10-21 (by microscopy)

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TEST REPORT

Sample ID : W/03/21/0491		Report No. W/03/21/0491N		Report Date		29/03/2021	
Name and address of Customer		PNP Maritime Services Private Limited (PNP Jetty) 2nd Floor, Lansdowne House Building, M.B. Marg, Near Regal Cinema, Apollo Bunder, Colaba, Mumbai 400 001, Maharashtra					
Sampling done by		Laboratory		Sample Description / Type		Marine Life Water (Group:Water)	
Sampling Location		Near JSW Jetty End		Date - Sampling		24/03/2021	
Sample Quantity / Packing		2 L x 1 no. plastic can		Date - Receipt of Sample		27/03/2021	
Sampling Procedure		APHA 23rd Ed. 2017		Date - Start of Analysis		27/03/2021	
Order Reference		As per your Ref. No. PNP/February/2019-2020/013 dated 26.02.2020		Date - Completion of Analysis		27/03/2021	
Sr.No.	Parameter	Result	Unit	Method			
BIOLOGICAL TESTING							
1	Aquatic Fauna and Flora composed of large number of species of bacteria	Absent	/1L	APHA 23rd Ed. 2017 (by microscopy)			
2	Phytoplankton	Absent	/1L	APHA 23rd Ed. 2017. H200 F-10-17 (by microscopy)			
3	Zooplankton	Absent	/1L	APHA 23rd Ed. 2017. H200 G-10-21 (by microscopy)			


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TEST REPORT

Sample ID : W/03/21/0492	Report No. W/03/21/0492N	Report Date	29/03/2021
Name and address of Customer	PNP Maritime Services Private Limited (PNP Jetty) 2nd Floor, Lansdowne House Building, M.B. Marg, Near Regal Cinema, Apollo Bunder, Colaba, Mumbai 400 001, Maharashtra		
Sampling done by	Laboratory	Sample Description / Type	Marine Life Water (Group:Water)
Sampling Location	Near DIL Godown Backside	Date - Sampling	24/03/2021
Sample Quantity / Packing	2 L x 1 no. plastic can	Date - Receipt of Sample	27/03/2021
Sampling Procedure	APHA 23rd Ed. 2017	Date - Start of Analysis	27/03/2021
Order Reference	As per your Ref. No. PNP/February/2019-2020/013 dated 26.02.2020	Date - Completion of Analysis	27/03/2021

Sr.No.	Parameter	Result	Unit	Method
BIOLOGICAL TESTING				
1	Aquatic Fauna and Flora composed of large number of species of bacteria	Absent	/1L	APHA 23rd Ed. 2017 (by microscopy)
2	Phytoplankton	Absent	/1L	APHA 23rd Ed. 2017, H200 F-10-17 (by microscopy)
3	Zooplankton	Absent	/1L	APHA 23rd Ed. 2017, H200 G-10-21 (by microscopy)


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TEST REPORT

Sample ID : W/03/21/0493	Report No. W/03/21/0493N	Report Date	29/03/2021
Name and address of Customer	PNP Maritime Services Private Limited (PNP Jetty) 2nd Floor, Lansdowne House Building, M.B .Marg, Near Regal Cinema, Apollo Bunder, Colaba, Mumbai 400 001, Maharashtra		
Sampling done by	Laboratory	Sample Description / Type	Marine Life Water (Group: Water)
Sampling Location	Near JSW Plant	Date - Sampling	24/03/2021
Sample Quantity / Packing	2 L x 1 no. plastic can	Date - Receipt of Sample	27/03/2021
Sampling Procedure	APHA 23rd Ed. 2017	Date - Start of Analysis	27/03/2021
Order Reference	As per your Ref. No. PNP/February/2019-2020/013 dated 26.02.2020	Date - Completion of Analysis	27/03/2021

Sr.No.	Parameter	Result	Unit	Method
BIOLOGICAL TESTING				
1	Aquatic Fauna and Flora composed of large number of species of bacteria	Absent	/1L	APHA 23rd Ed. 2017 (by microscopy)
2	Phytoplankton	Absent	/1L	APHA 23rd Ed. 2017. H2000 F-10-17 (by microscopy)
3	Zooplankton	Absent	/1L	APHA 23rd Ed. 2017. H2000 G-10-21 (by microscopy)



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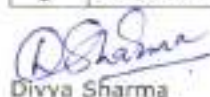


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TEST REPORT

Sample ID : W/03/21/0494	Report No. W/03/21/0494N	Report Date	29/03/2021	
Name and address of Customer	PNP Maritime Services Private Limited (PNP Jetty) 2nd Floor, Lansdowne House Building, M.B .Marg,Near Regal Cinema, Apollo Bunder, Colaba, Mumbai 400 001,Maharashtra			
Sampling done by	Laboratory	Sample Description / Type	Marine Life Water (Group:Water)	
Sampling Location	Near Railway Bridge	Date - Sampling	24/03/2021	
Sample Quantity / Packing	2 L x 1 no. plastic can	Date - Receipt of Sample	27/03/2021	
Sampling Procedure	APHA 23rd Ed. 2017	Date - Start of Analysis	27/03/2021	
Order Reference	As per your Ref. No. PNP/February/2019-2020/013 dated 26.02.2020	Date - Completion of Analysis	27/03/2021	
Sr.No.	Parameter	Result	Unit	Method
BIOLOGICAL TESTING				
1	Aquatic Fauna and Flora composed of large number of species of bacteria	Absent	/1L	APHA 23rd Ed. 2017 (by microscopy)
2	Phytoplankton	Absent	/1L	APHA 23rd Ed. 2017, 102100 F-10-17 (by microscopy)
3	Zooplankton	Absent	/1L	APHA 23rd Ed. 2017, 102100 G-10-21 (by microscopy)



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TEST REPORT

Sample ID : W/03/21/0495	Report No. W/03/21/0495N	Report Date	29/03/2021
Name and address of Customer	PNP Maritime Services Private Limited (PNP Jetty) 2nd Floor, Lansdowne House Building, M.B .Marg,Near Regal Cinema, Apollo Bunder, Colaba, Mumbai 400 001,Maharashtra		
Sampling done by	Laboratory	Sample Description / Type	Marine Life Water (Group:Water)
Sampling Location	Near Govt. Port (Jetty)	Date - Sampling	24/03/2021
Sample Quantity / Packing	2 L x 1 no. plastic can	Date - Receipt of Sample	27/03/2021
Sampling Procedure	APHA 23rd Ed. 2017	Date - Start of Analysis	27/03/2021
Order Reference	As per your Ref. No. PNP/February/2019-2020/013 dated 26.02.2020	Date - Completion of Analysis	27/03/2021

Sr.No.	Parameter	Result	Unit	Method
BIOLOGICAL TESTING				
1	Aquatic Fauna and Flora composed of large number of species of bacteria	Absent	/1L	APHA 23rd Ed. 2017 (by microscopy)
2	Phytoplankton	Absent	/1L	APHA 23rd Ed. 2017. 10200 F-10-17 (by microscopy)
3	Zooplankton	Absent	/1L	APHA 23rd Ed. 2017. 10200 G-10-21 (by microscopy)

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TEST REPORT

Sample ID : W/03/21/0496	Report No. W/03/21/0496N	Report Date	29/03/2021	
Name and address of Customer	PNP Maritime Services Private Limited (PNP Jetty) 2nd Floor, Lansdowne House Building, M.B .Marg,Near Regal Cinema, Apollo Bunder, Colaba, Mumbai 400 001,Maharashtra			
Sampling done by	Laboratory	Sample Description / Type	Marine Life Water (Group: Water)	
Sampling Location	Near Jetty No.2	Date - Sampling	24/03/2021	
Sample Quantity / Packing	2 L x 1 no. plastic can	Date - Receipt of Sample	27/03/2021	
Sampling Procedure	APHA 23rd Ed. 2017	Date - Start of Analysis	27/03/2021	
Order Reference	As per your Ref. No. PNP/February/2019-2020/013 dated 26.02.2020	Date - Completion of Analysis	27/03/2021	
Sr.No.	Parameter	Result	Unit	Method
BIOLOGICAL TESTING				
1	Aquatic Fauna and Flora composed of large number of species of bacteria	Absent	/1L	APHA 23rd Ed. 2017 (by microscopy)
2	Phytoplankton	Absent	/1L	APHA 23rd Ed. 2017, 10200 F-10-17 (by microscopy)
3	Zooplankton	Absent	/1L	APHA 23rd Ed. 2017, 10200 G-10-21 (by microscopy)

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TC-5509

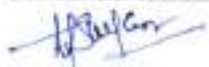
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TEST REPORT

Sample ID : W/03/21/0469	Report No. W/03/21/0469	Report Date	02/04/2021
Name and address of Customer	PNP Maritime Services Private Limited (PNP Jetty) 2nd Floor, Lansdowne House Building, M.B. Marg, Near Regal Cinema, Apollo Bunder, Colaba, Mumbai 400 001, Maharashtra		
Sampling done by	Laboratory	Sample Description / Type	Sea Water (Group: Water)
Sampling Location	Near Jetty No.1	Date - Sampling	24/03/2021
Sample Quantity / Packing	2 L x 1 no. plastic can 300 ml x 1 DO bottle	Date - Receipt of Sample	27/03/2021
Sampling Procedure	IS 3025 (Part 1):1987, Amds.1 & APHA, 23rd Ed., 2017, 1060 B, 1-40	Date - Start of Analysis	27/03/2021
Order Reference	As per your Ref. No. PNP/February/2019-2020/013 dated 26.02.2020	Date - Completion of Analysis	01/04/2021

Sr.No.	Parameter	Result	Unit	Method
CHEMICAL TESTING				
Physical & Chemical Parameters				
1	Temperature	26.2	°C	IS 3025 (Part 3):1984 RA 2009.
2	pH value	7.09	-	IS 3025 (Part 11):1983, RA 2017
3	Dissolved Oxygen	8.8	mg/L	IS 3025 (Part 38):1989, RA 2014
4	Biochemical Oxygen Demand (3 days, 27°C)	8	mg/L	IS 3025 (Part 44):1993, RA 2014 Amds.1
5	Oil & Grease	<1	mg/L	APHA, 23rd Ed., 2017, 5520-B, 5-42
6	Nitrate (as NO ₃)	16	mg/L	IS 3025 (Part 34):1988, RA 2014
7	Ammonical Nitrogen (as NH ₃ -N)	<0.1	mg/L	APHA, 23rd Ed., 2017, 4500 NH ₃ , F, 4-11E.
8	Total Phosphate (as P)	<0.1	mg/L	APHA, 23rd Ed., 2017, 4500 P, E, 4-16A
9	Lead (as Pb)	<0.008	mg/L	IS 3025 (Part 7): 2004, RA 2014 / ISO 11885:1996
10	Cadmium (as Cd)	<0.002	mg/L	IS 3025 (Part 7): 2004, RA 2014 / ISO 11885:1996
11	Mercury (as Hg)	<0.0008	mg/L	IS 3025 (Part 7): 2004, RA 2014 / ISO 11885:1996
12	Zinc (as Zn)	<0.05	mg/L	IS 3025 (Part 7): 2004

Note: Sample ID W/03/21/0469 bears two Test Reports - W/03/21/0469 and W/03/21/0469N



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TEST REPORT

Sample ID : W/03/21/0469	Report No. W/03/21/0469N	Report Date	02/04/2021	
Name and address of Customer	PNP Maritime Services Private Limited (PNP Jetty) 2nd Floor, Lansdowne House Building, M.B .Marg,Near Regal Cinema, Apollo Bunder, Colaba, Mumbai 400 001,Maharashtra			
Sampling done by	Laboratory	Sample Description / Type	Sea Water (Group:Water)	
Sampling Location	Near Jetty No.1	Date - Sampling	24/03/2021	
Sample Quantity / Packing	2 L x 1 no. plastic can 300 ml x 1 DO bottle	Date - Receipt of Sample	27/03/2021	
Sampling Procedure	IS 3025 (Part 1):1987, Arnds.1 & APHA, 23rd Ed.,2017,1060 B,1-40	Date - Start of Analysis	27/03/2021	
Order Reference	As per your Ref. No, PNP/February/2019-2020/013 dated 26.02.2020	Date - Completion of Analysis	01/04/2021	
Sr.No.	Parameter	Result	Unit	Method
CHEMICAL TESTING				
Physical & Chemical Parameters				
1	Total Nitrogen (as N)	4.15	mg/L	APHA, 23rd Ed. 2017, 4500 NH3, F. 4-105
2	Salinity	28	‰	CPCB AOSDRHS /8/1983-84
Note: Sample ID W/03/21/0469 bears two Test Reports - W/03/21/0469 and W/03/21/0469N				


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TC-5569

ULR-TC550921000005507F

TEST REPORT

Sample ID : W/03/21/0470	Report No. W/03/21/0470	Report Date	02/04/2021
Name and address of Customer	PNP Maritime Services Private Limited (PNP Jetty) 2nd Floor, Lansdowne House Building, M.B .Marg,Near Regal Cinema, Apollo Bunder, Colaba, Mumbai 400 001,Maharashtra		
Sampling done by	Laboratory	Sample Description / Type	Sea Water (Group:Water)
Sampling Location	Near Jetty No.2	Date - Sampling	24/03/2021
Sample Quantity / Packing	2 L x 1 no. plastic can 300 ml x 1 DO bottle	Date - Receipt of Sample	27/03/2021
Sampling Procedure	IS 3025 (Part 1):-1987, Ards.1 & APHA, 23rd Ed., 2017,1060 B,1-40	Date - Start of Analysis	27/03/2021
Order Reference	As per your Ref. No. PNP/February/2019-2020/013 dated 26.02.2020	Date - Completion of Analysis	01/04/2021

Sr.No.	Parameter	Result	Unit	Method
CHEMICAL TESTING				
Physical & Chemical Parameters				
1	Temperature	25.8	°C	IS 3025 (Part 3):1984 RA 2008
2	pH value	7.20	-	IS 3025 (Part 1):1983. RA 2017
3	Dissolved Oxygen	4.5	mg/L	IS 3025 (Part 3B):1989. RA 2014
4	Biochemical Oxygen Demand (3 days, 27°C)	10	mg/L	IS 3025 (Part 4):1993. RA 2014. Ards.1
5	Oil & Grease	<1	mg/L	APHA, 23rd Ed., 2017. 5520-8. 5-42
6	Nitrate (as NO ₃)	12.7	mg/L	IS 3025 (Part 3A):1988. RA 2014
7	Ammonical Nitrogen (as NH ₃ -N)	<0.1	mg/L	APHA, 23rd Ed., 2017. 4500 NH ₃ . F. 4-105
8	Total Phosphate (as P)	<0.1	mg/L	APHA, 23rd Ed., 2017. 4500 P. F. 4-164
9	Lead(as Pb)	<0.008	mg/L	IS 3025 (Part 2):2004. RA 2014 / ISO 18885:1996
10	Cadmium (as Cd)	<0.002	mg/L	IS 3025 (Part 2):2004. RA 2014 / ISO 18885:1996
11	Mercury (as Hg)	<0.0008	mg/L	IS 3025 (Part 2):2004. RA 2014/ISO 18885:1996
12	Zinc (as Zn)	<0.05	mg/L	IS 3025 (Part 2):2004

Note: Sample ID W/03/21/0470 bears two Test Reports - W/03/21/0470 and W/03/21/0470N.


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4. There are no additions to, deviations or exclusions from the method.

TEST REPORT

Sample ID : W/03/21/0470	Report No. W/03/21/0470N	Report Date	02/04/2021	
Name and address of Customer	PNP Maritime Services Private Limited (PNP Jetty) 2nd Floor, Lansdowne House Building, M.B. Marg, Near Regal Cinema, Apollo Bunder, Colaba, Mumbai 400 001, Maharashtra			
Sampling done by	Laboratory	Sample Description / Type	Sea Water (Group:Water)	
Sampling Location	Near Jetty No.2	Date - Sampling	24/03/2021	
Sample Quantity / Packing	2 L x 1 no. plastic can 300 ml x 1 DO bottle	Date - Receipt of Sample	27/03/2021	
Sampling Procedure	IS 3025 (Part 1):1987, Amds.1 & APHA, 23rd Ed.,2017,1060 B,1-40	Date - Start of Analysis	27/03/2021	
Order Reference	As per your Ref. No. PNP/February/2019-2020/013 dated 26.02.2020	Date - Completion of Analysis	01/04/2021	
Sr.No.	Parameter	Result	Unit	Method
CHEMICAL TESTING				
Physical & Chemical Parameters				
1	Total Nitrogen (as N)	3.64	mg/L	APHA, 23rd Ed., 2017, 4500 NH3.F. 4-18.
2	Salinity	30	‰	CPCB ADSORB /8/1993-84
Note: Sample ID W/03/21/0470 bears two Test Reports - W/03/21/0470 and W/03/21/0470N				

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TC-5509



ULR-TC550921000005508F

TEST REPORT

Sample ID : W/03/21/0471	Report No. W/03/21/0471	Report Date	02/04/2021
Name and address of Customer	PNP Maritime Services Private Limited (PNP Jetty) 2nd Floor, Lansdowne House Building, M.B .Marg, Near Regal Cinema, Apollo Bunder, Colaba, Mumbai 400 001, Maharashtra		
Sampling done by	Laboratory	Sample Description / Type	Sea Water (Group:Water)
Sampling Location	Near Jetty No.3	Date - Sampling	24/03/2021
Sample Quantity / Packing	2 L x 1 no. plastic can 300 ml x 1 DO bottle	Date - Receipt of Sample	27/03/2021
Sampling Procedure	IS 3025 (Part 1):1987, Ards.1 & APHA, 23rd Ed., 2017, 1060 B, 1-40	Date - Start of Analysis	27/03/2021
Order Reference	As per your Ref. No. PNP/February/2019-2020/013 dated 26.02.2020	Date - Completion of Analysis	01/04/2021

Sr.No.	Parameter	Result	Unit	Method
CHEMICAL TESTING				
Physical & Chemical Parameters				
1	Temperature	25.8	°C	IS 3025 (Part 9)1984 RA 2009.
2	pH value	7.52	-	IS 3025 (Part 10)1983. RA 2017
3	Dissolved Oxygen	6.9	mg/L	IS 3025 (Part 38)1989. RA 2014
4	Biochemical Oxygen Demand (3 days, 27°C)	7	mg/L	IS 3025 (Part 44) 1993. RA 2014. Ards.1
5	Oil & Grease	<1	mg/L	APHA, 23rd Ed. 2017. 5520-B. 5-47
6	Nitrate (as NO ₃)	8.50	mg/L	IS 3025 (Part 34)1988. RA 2014
7	Ammonical Nitrogen (as NH ₃ -N)	<0.1	mg/L	APHA, 23rd Ed. 2017. 4500 NH ₃ . F. 4-119.
8	Total Phosphate (as P)	<0.1	mg/L	APHA, 23rd Ed. 2017. 4500 P. E. 4-164
9	Lead(as Pb)	<0.008	mg/L	IS 3025 (Part 2): 2004. RA 2014 / ISO 11885:1996
10	Cadmium (as Cd)	<0.002	mg/L	IS 3025 (Part 2): 2004. RA 2014 / ISO 11885:1996
11	Mercury (as Hg)	<0.0008	mg/L	IS 3025(Part 2):2004. RA 2014/ISO 11885:1996
12	Zinc (as Zn)	<0.05	mg/L	IS 3025(Part 2):2004

Note: Sample ID W/03/21/0471 bears two Test Reports - W/03/21/0471 and W/03/21/0471N

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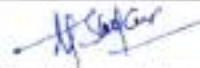


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4. There are no additions to, deviations or exclusions from the method.

TEST REPORT

Sample ID : W/03/21/0471	Report No. W/03/21/0471N	Report Date	02/04/2021	
Name and address of Customer	PNP Maritime Services Private Limited (PNP Jetty) 2nd Floor, Lansdowne House Building, M.B .Marg,Near Regal Cinema, Apollo Bunder, Colaba, Mumbai 400 001,Maharashtra			
Sampling done by	Laboratory	Sample Description / Type	Sea Water (Group:Water)	
Sampling Location	Near Jetty No.3	Date - Sampling	24/03/2021	
Sample Quantity / Packing	2 L x 1 no. plastic can 300 ml x 1 DO bottle	Date - Receipt of Sample	27/03/2021	
Sampling Procedure	IS 3025 (Part 1):1987, Amds.1 & APHA, 23rd Ed.,2017,1060 B,1-40	Date - Start of Analysis	27/03/2021	
Order Reference	As per your Ref. No. PNP/February/2019-2020/013 dated 26.02.2020	Date - Completion of Analysis	01/04/2021	
Sr.No.	Parameter	Result	Unit	Method
CHEMICAL TESTING				
Physical & Chemical Parameters				
1	Total Nitrogen (as N)	2.71	mg/L	APHA, 23rd Ed., 2017, 4500 NH ₃ , F. 4-105.
2	Salinity	27	‰	CPCB AOSD/MS /8/1983-BA
Note: Sample ID W/03/21/0471 bears two Test Reports - W/03/21/0471 and W/03/21/0471N				


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TC-5509



ULR-TC550921000005509F

TEST REPORT

Sample ID : W/03/21/0472	Report No. W/03/21/0472	Report Date	02/04/2021
Name and address of Customer	PNP Maritime Services Private Limited (PNP Jetty) 2nd Floor, Lansdowne House Building, M.B. Marg, Near Regal Cinema, Apollo Bunder, Colaba, Mumbai 400 001, Maharashtra		
Sampling done by	Laboratory	Sample Description / Type	Sea Water (Group:Water)
Sampling Location	Near Jetty No.4	Date - Sampling	24/03/2021
Sample Quantity / Packing	2 L x 1 no. plastic can 300 ml x 1 DO bottle	Date - Receipt of Sample	27/03/2021
Sampling Procedure	IS 3025 (Part 1):1987, Amds.1 & APHA, 23rd Ed.,2017,1060 B,1-40	Date - Start of Analysis	27/03/2021
Order Reference	As per your Ref. No. PNP/February/2019-2020/013 dated 26.02.2020	Date - Completion of Analysis	01/04/2021

Sl.No.	Parameter	Result	Unit	Method
CHEMICAL TESTING				
Physical & Chemical Parameters				
1	Temperature	27.5	°C	IS 3025 (Part 5):1984 RA 2009
2	pH value	7.67	-	IS 3025 (Part 8):1983, RA 2017
3	Dissolved Oxygen	6.3	mg/L	IS 3025 (Part 3B):1989, RA 2014
4	Biochemical Oxygen Demand (3 days, 27°C)	5	mg/L	IS 3025 (Part 4A):1993, RA 2014, Amds.1
5	Oil & Grease	<1	mg/L	APHA, 23rd Ed., 2017, 5520-B, 5-42
6	Nitrate (as NO ₃)	7.68	mg/L	IS 3025 (Part 3A):1988, RA 2014
7	Ammonical Nitrogen (as NH ₃ -N)	<0.1	mg/L	APHA, 23rd Ed., 2017, 4500 NH ₃ , F, 4-115
8	Total Phosphate (as P)	<0.1	mg/L	APHA, 23rd Ed., 2017, 4500 P, I, 4-16A
9	Lead(as Pb)	<0.008	mg/L	IS 3025 (Part 2):2004, RA 2014 / ISD 1885:1996
10	Cadmium (as Cd)	<0.002	mg/L	IS 3025 (Part 2):2004, RA 2014 / ISD 1885:1996
11	Mercury (as Hg)	<0.0008	mg/L	IS 3025 (Part 2):2004, RA 2014 / ISD 1885:1996
12	Zinc (as Zn)	<0.05	mg/L	IS 3025 (Part 2):2004

Note: Sample ID W/03/21/0472 bears two Test Reports - W/03/21/0472 and W/03/21/0472N

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4. There are no additions to, deviations or exclusions from the method.

TEST REPORT

Sample ID : W/03/21/0472	Report No. W/03/21/0472N	Report Date	02/04/2021	
Name and address of Customer	PNP Maritime Services Private Limited (PNP Jetty) 2nd Floor, Lansdowne House Building, M.B .Marg, Near Regal Cinema, Apollo Bunder, Colaba, Mumbai 400 001, Maharashtra			
Sampling done by	Laboratory	Sample Description / Type	Sea Water (Group: Water)	
Sampling Location	Near Jetty No.4	Date - Sampling	24/03/2021	
Sample Quantity / Packing	2 L x 1 no. plastic can 300 ml x 1 DO bottle	Date - Receipt of Sample	27/03/2021	
Sampling Procedure	IS 3025 (Part 1):1987, Amds.1 & APHA, 23rd Ed.,2017,1060 B,1-40	Date - Start of Analysis	27/03/2021	
Order Reference	As per your Ref. No. PNP/February/2019-2020/013 dated 26.02.2020	Date - Completion of Analysis	01/04/2021	
Sr.No.	Parameter	Result	Unit	Method
CHEMICAL TESTING				
Physical & Chemical Parameters				
1	Total Nitrogen (as N)	2.73	mg/L	APHA, 23rd Ed. 2017, 4500 NH ₃ , F, 4 -10.
2	Salinity	27	‰	CPCB ADSORBS /B/1983-84
Note: Sample ID W/03/21/0472 bears two Test Reports - W/03/21/0472 and W/03/21/0472N				


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TC-5509

ULR-TC550921000005514F

TEST REPORT

Sample ID : W/03/21/0477	Report No. W/03/21/0477	Report Date	02/04/2021
Name and address of Customer	PNP Maritime Services Private Limited (PNP Jetty) 2nd Floor, Lansdowne House Building, M.B. Marg, Near Regal Cinema, Apollo Bunder, Colaba, Mumbai 400 001, Maharashtra		
Sampling done by:	Laboratory	Sample Description / Type	Sea Water (Group: Water)
Sampling Location	Near Jetty No.5	Date - Sampling	24/03/2021
Sample Quantity / Packing	2 L x 1 no. plastic can 300 ml x 1 DO bottle	Date - Receipt of Sample	27/03/2021
Sampling Procedure	IS 3025 (Part 1):1987, Amds.1 & APHA, 23rd Ed., 2017, 1060 B, 1-40	Date - Start of Analysis	27/03/2021
Order Reference	As per your Ref. No. PNP/February/2019-2020/013 dated 26.02.2020	Date - Completion of Analysis	01/04/2021

Sr.No.	Parameter	Result	Unit	Method
CHEMICAL TESTING				
Physical & Chemical Parameters				
1	Temperature	28.8	°C	IS 3025 (Part 9):1984 RA 2009
2	pH value	7.70	-	IS 3025 (Part 11):1983 RA 2017
3	Dissolved Oxygen	6.3	mg/L	IS 3025 (Part 38):1989 RA 2014
4	Biochemical Oxygen Demand (3 days, 27°C)	12	mg/L	IS 3025 (Part 44):1983 RA 2014 Amds I
5	Oil & Grease	<1	mg/L	APHA, 23rd Ed. 2017, 5520-B, 5-42
6	Nitrate (as NO ₃)	21.2	mg/L	IS 3025 (Part 34):1988 RA 2014
7	Ammonical Nitrogen (as NH ₃ -N)	<0.1	mg/L	APHA, 23rd Ed. 2017, 4500 NH ₃ , F. 4-119
8	Total Phosphate (as P)	<0.1	mg/L	APHA, 23rd Ed. 2017, 4500 P, E. 4-164
9	Lead (as Pb)	<0.008	mg/L	IS 3025 (Part 2):2004 RA 2014 / ISO 11885:1996
10	Cadmium (as Cd)	<0.002	mg/L	IS 3025 (Part 2):2004 RA 2014 / ISO 11885:1996
11	Mercury (as Hg)	<0.0008	mg/L	IS 3025 (Part 2):2004 RA 2014 / ISO 11885:1996
12	Zinc (as Zn)	<0.05	mg/L	IS 3025 (Part 2):2004

Note: Sample ID W/03/21/0477 bears two Test Reports - W/03/21/0477 and W/03/21/0477N

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4. There are no additions to, deviations or exclusions from the method.

TEST REPORT

Sample ID : W/03/21/0477	Report No. W/03/21/0477N	Report Date	02/04/2021	
Name and address of Customer	PNP Maritime Services Private Limited (PNP Jetty) 2nd Floor, Lansdowne House Building, M.B. Marg, Near Regal Cinema, Apollo Bunder, Colaba, Mumbai 400 001, Maharashtra			
Sampling done by	Laboratory	Sample Description / Type	Sea Water (Group: Water)	
Sampling Location	Near Jetty No.5	Date - Sampling	24/03/2021	
Sample Quantity / Packing	2 L x 1 no. plastic can 300 ml x 1 DO bottle	Date - Receipt of Sample	27/03/2021	
Sampling Procedure	IS 3025 (Part 1):1987, Ards.1 & APHA, 23rd Ed., 2017, 1060 B, 1-40	Date - Start of Analysis	27/03/2021	
Order Reference	As per your Ref. No. PNP/February/2019-2020/013 dated 26.02.2020	Date - Completion of Analysis	01/04/2021	
Sr.No.	Parameter	Result	Unit	Method
CHEMICAL TESTING				
Physical & Chemical Parameters				
1	Total Nitrogen (as N)	7.37	mg/L	APHA, 23rd Ed. 2017, 4500 NH ₃ , F. 4 -18.
2	Salinity	30	‰	CPCB ADOHBS /B/1983-84
Note: Sample ID W/03/21/0477 bears two Test Reports - W/03/21/0477 and W/03/21/0477N				


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TC-5509

ULR-TC550921000005510F

TEST REPORT

Sample ID : W/03/21/0473	Report No. W/03/21/0473	Report Date	02/04/2021
Name and address of Customer	PNP Maritime Services Private Limited (PNP Jetty) 2nd Floor, Lansdowne House Building, M.B .Marg, Near Regal Cinema, Apollo Bunder, Colaba, Mumbai 400 001, Maharashtra		
Sampling done by	Laboratory	Sample Description / Type	Sea Water (Group: Water)
Sampling Location	Near JSW Plant	Date - Sampling	24/03/2021
Sample Quantity / Packing	2 L x 1 no. plastic can 300 ml x 1 DO bottle	Date - Receipt of Sample	27/03/2021
Sampling Procedure	IS 3025 (Part 1):1987, Amds.1 & APHA, 23rd Ed., 2017, 1060 B, 1-40	Date - Start of Analysis	27/03/2021
Order Reference	As per your Ref. No. PNP/February/2019-2020/013 dated 26.02.2020	Date - Completion of Analysis	01/04/2021

Sr.No.	Parameter	Result	Unit	Method
CHEMICAL TESTING				
Physical & Chemical Parameters				
1	Temperature	26.3	°C	IS 3025 (Part 5):1984 RA 2009.
2	pH value	7.70	-	IS 3025 (Part 11):1983. RA 2007
3	Dissolved Oxygen	4.8	mg/L	IS 3025 (Part 38):1989. RA 2014
4	Biochemical Oxygen Demand (3 days, 27°C)	9	mg/L	IS 3025 (Part 44):1993. RA 2014. (Amended)
5	Oil & Grease	<1	mg/L	APHA, 23rd Ed. 2017, 5520-B, 5-42
6	Nitrate (as NO ₃)	7.41	mg/L	IS 3025 (Part 34):1988. RA 2004
7	Ammonical Nitrogen (as NH ₃ -N)	<0.1	mg/L	APHA, 23rd Ed. 2017, 4500 NH ₃ , 1-4-16.
8	Total Phosphate (as P)	<0.1	mg/L	APHA, 23rd Ed. 2017, 4500 P, E, 4-16A
9	Lead(as Pb)	<0.008	mg/L	IS 3025 (Part 2): 2004. RA 2014 / ISD 1885:1996
10	Cadmium (as Cd)	<0.002	mg/L	IS 3025 (Part 2): 2004. RA 2014 / ISD 1885:1996
11	Mercury (as Hg)	<0.0008	mg/L	IS 3025 (Part 2): 2004. RA 2014 / ISD 1885:1996
12	Zinc (as Zn)	<0.05	mg/L	IS 3025 (Part 2): 2004

Note: Sample ID W/03/21/0473 bears two Test Reports - W/03/21/0473 and W/03/21/0473N

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Note:

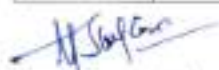
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4. There are no additions to, deviations or exclusions from the method.

TEST REPORT

Sample ID : W/03/21/0473	Report No. W/03/21/0473N	Report Date	02/04/2021
Name and address of Customer	PNP Maritime Services Private Limited (PNP Jetty) 2nd Floor, Lansdowne House Building, M.B. Marg, Near Regal Cinema, Apollo Bunder, Colaba, Mumbai 400 001, Maharashtra		
Sampling done by	Laboratory	Sample Description / Type	Sea Water (Group:Water)
Sampling Location	Near JSW Plant	Date - Sampling	24/03/2021
Sample Quantity / Packing	2 L x 1 no. plastic can 300 ml x 1 DO bottle	Date - Receipt of Sample	27/03/2021
Sampling Procedure	IS 3025 (Part 1):1987, Amds.1 & APHA, 23rd Ed., 2017, 1060 B, 1-40	Date - Start of Analysis	27/03/2021
Order Reference	As per your Ref. No. PNP/February/2019-2020/013 dated 26.02.2020	Date - Completion of Analysis	01/04/2021

Sr.No.	Parameter	Result	Unit	Method
CHEMICAL TESTING				
Physical & Chemical Parameters				
1	Total Nitrogen (as N)	2.65	mg/L	APHA, 23rd Ed., 2017, 4500 NH ₃ F. 4 -16.
2	Salinity	28	‰	DPCB AD508BS /8/1983-84

Note: Sample ID W/03/21/0473 bears two Test Reports - W/03/21/0473 and W/03/21/0473N



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4. There are no additions to, deviations or exclusions from the method.



TC-5509



ULR-TC550921000005511F

TEST REPORT

Sample ID : W/03/21/0474	Report No. W/03/21/0474	Report Date	02/04/2021
Name and address of Customer	PNP Maritime Services Private Limited (PNP Jetty) 2nd Floor, Lansdowne House Building, M.B. Marg, Near Regal Cinema, Apollo Bunder, Colaba, Mumbai 400 001, Maharashtra		
Sampling done by	Laboratory	Sample Description / Type	Sea Water (Group:Water)
Sampling Location	Near Railway Bridge	Date - Sampling	24/03/2021
Sample Quantity / Packing	2 L x 1 no. plastic can 300 ml x 1 DO bottle	Date - Receipt of Sample	27/03/2021
Sampling Procedure	IS 3025 (Part 1):1987, Amds.1 & APHA, 23rd Ed., 2017, 1060 B, 1-40	Date - Start of Analysis	27/03/2021
Order Reference	As per your Ref. No. PNP/February/2019-2020/013 dated 26.02.2020	Date - Completion of Analysis	01/04/2021

Sr.No.	Parameter	Result	Unit	Method
CHEMICAL TESTING				
Physical & Chemical Parameters				
1	Temperature	27.4	°C	IS 3025 (Part 9) 1984 RA 2009.
2	pH value	7.78	-	IS 3025 (Part 10) 1983. RA 2017
3	Dissolved Oxygen	6.5	mg/L	IS 3025 (Part 38) 1989. RA 2014
4	Biochemical Oxygen Demand (3 days, 27°C)	6	mg/L	IS 3025 (Part 44) 1993. RA 2014. Amd.1
5	Oil & Grease	<1	mg/L	APHA, 23rd Ed. 2017, 5520-B, 5-42
6	Nitrate (as NO ₃)	7.56	mg/L	IS 3025 (Part 24) 1988. RA 2014
7	Ammonical Nitrogen (as NH ₃ -N)	<0.1	mg/L	APHA, 23rd Ed. 2017, 4500 NH ₃ , F, 4-119.
8	Total Phosphate (as P)	<0.1	mg/L	APHA, 23rd Ed. 2017, 4500 P, E, 4-164
9	Lead(as Pb)	<0.008	mg/L	IS 3025 (Part 2) 2004. RA 2014 / ISO 11885:1996
10	Cadmium (as Cd)	<0.002	mg/L	IS 3025 (Part 2) 2004. RA 2014 / ISO 11885:1996
11	Mercury (as Hg)	<0.0008	mg/L	IS 3025 (Part 2) 2004. RA 2014 / ISO 11885:1996
12	Zinc (as Zn)	<0.05	mg/L	IS 3025 (Part 2) 2004

Note: Sample ID W/03/21/0474 bears two Test Reports - W/03/21/0474 and W/03/21/0474N



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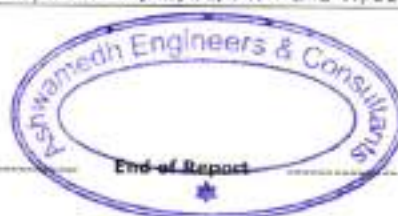
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4. There are no additions to, deviations or exclusions from the method.

TEST REPORT

Sample ID : W/03/21/0474	Report No. W/03/21/0474N	Report Date	02/04/2021	
Name and address of Customer	PNP Maritime Services Private Limited (PNP Jetty) 2nd Floor, Lansdowne House Building, M.B .Marg,Near Regal Cinema, Apollo Bunder, Colaba, Mumbai 400 001,Maharashtra			
Sampling done by	Laboratory	Sample Description / Type	Sea Water (Group:Water)	
Sampling Location	Near Railway Bridge	Date - Sampling	24/03/2021	
Sample Quantity / Packing	2 L x 1 no. plastic can 300 ml x 1 DO bottle	Date - Receipt of Sample	27/03/2021	
Sampling Procedure	IS 3025 (Part 1):1987, Amds.1 & APHA, 23rd Ed.,2017,1060 B,1-40	Date - Start of Analysis	27/03/2021	
Order Reference	As per your Ref. No. PNP/February/2019-2020/013 dated 26.02.2020	Date - Completion of Analysis	01/04/2021	
Sr.No.	Parameter	Result	Unit	Method
CHEMICAL TESTING				
Physical & Chemical Parameters				
1	Total Nitrogen (as N)	2.52	mg/L	APHA, 23rd Ed., 2017, 4500 NH3 F, 4-08.
2	Salinity	27	‰	DPCB AOSORBS /8/1983-84
Note: Sample ID W/03/21/0474 bears two Test Reports - W/03/21/0474 and W/03/21/0474N				


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4. There are no additions to, deviations or exclusions from the method.



TC-5509



ULR-TC550921000005512F

TEST REPORT

Sample ID : W/03/21/0475	Report No. W/03/21/0475	Report Date	02/04/2021
Name and address of Customer	PNP Maritime Services Private Limited (PNP Jetty) 2nd Floor, Lansdowne House Building, M.B. Marg, Near Regal Cinema, Apollo Bunder, Colaba, Mumbai 400 001, Maharashtra		
Sampling done by	Laboratory	Sample Description / Type	Sea Water (Group:Water)
Sampling Location	Near PNP Office Backside	Date - Sampling	24/03/2021
Sample Quantity / Packing	2 L x 1 no. plastic can 300 ml x 1 DO bottle	Date - Receipt of Sample	27/03/2021
Sampling Procedure	IS 3025 (Part 1):1987, Amds.1 & APHA, 23rd Ed., 2017, 1060 B, 1-40	Date - Start of Analysis	27/03/2021
Order Reference	As per your Ref. No. PNP/February/2019-2020/013 dated 26.02.2020	Date - Completion of Analysis	01/04/2021

Sr.No.	Parameter	Result	Unit	Method
CHEMICAL TESTING				
Physical & Chemical Parameters				
1	Temperature	27.9	°C	IS 3025 (Part 5):1984 RA 2009.
2	pH value	7.74	-	IS 3025 (Part 8):1983. RA 2007
3	Dissolved Oxygen	4.2	mg/L	IS 3025 (Part 38):1989. RA 2004
4	Biochemical Oxygen Demand (3 days, 27°C)	9	mg/L	IS 3025 (Part 44): 1993. RA 2004. Amds.1
5	Oil & Grease	<1	mg/L	APHA, 23rd Ed., 2007, 5520-B, 5-42
6	Nitrate (as NO ₃)	16.4	mg/L	IS 3025 (Part 34):1989. RA 2004
7	Ammonical Nitrogen (as NH ₃ -N)	<0.1	mg/L	APHA, 23rd Ed., 2007, 4500 NH3 F, 4-109
8	Total Phosphate (as P)	<0.1	mg/L	APHA, 23rd Ed., 2007, 4500 P, I, 4-164
9	Lead(as Pb)	<0.008	mg/L	IS 3025 (Part 7): 2004. RA 2004 / ISO 1885:1996
10	Cadmium (as Cd)	<0.002	mg/L	IS 3025 (Part 2): 2004. RA 2004 / ISO 1885:1996
11	Mercury (as Hg)	<0.0008	mg/L	IS 3025 (Part 7): 2004. RA 2004 / ISO 1885:1996
12	Zinc (as Zn)	<0.05	mg/L	IS 3025 (Part 7): 2004

Note: Sample ID W/03/21/0475 bears two Test Reports - W/03/21/0475 and W/03/21/0475N


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4. There are no additions to, deviations or exclusions from the method.

TEST REPORT

Sample ID : W/03/21/0475	Report No. W/03/21/0475N	Report Date	02/04/2021	
Name and address of Customer	PNP Maritime Services Private Limited (PNP Jetty) 2nd Floor, Lansdowne House Building, M.B .Marg,Near Regal Cinema, Apollo Bunder, Colaba, Mumbai 400 001,Maharashtra			
Sampling done by	Laboratory	Sample Description / Type	Sea Water (Group:Water)	
Sampling Location	Near PNP Office Backside	Date - Sampling	24/03/2021	
Sample Quantity / Packing	2 L x 1 no. plastic can 300 ml x 1 DO bottle	Date - Receipt of Sample	27/03/2021	
Sampling Procedure	IS 3025 (Part 1):1987, Amds.1 & APHA, 23rd Ed.,2017,1060 B,1-40	Date - Start of Analysis	27/03/2021	
Order Reference	As per your Ref. No. PNP/February/2019-2020/013 dated 26.02.2020	Date - Completion of Analysis	01/04/2021	
Sr.No.	Parameter	Result	Unit	Method
CHEMICAL TESTING				
Physical & Chemical Parameters				
1	Total Nitrogen (as N)	4.50	mg/L	APHA, 23rd Ed., 2017, 4500 NH3, F, 4-45.
2	Salinity	28	‰	EPCB ADSORBS /B/1983-84
Note: Sample ID W/03/21/0475 bears two Test Reports - W/03/21/0475 and W/03/21/0475N				


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TC-5509



ULR-TC550921000005513F

TEST REPORT

Sample ID : W/03/21/0476	Report No. W/03/21/0476	Report Date	02/04/2021
Name and address of Customer	PNP Maritime Services Private Limited (PNP Jetty) 2nd Floor, Lansdowne House Building, M.B. Marg, Near Regal Cinema, Apollo Bunder, Colaba, Mumbai 400 001, Maharashtra		
Sampling done by	Laboratory	Sample Description / Type	Sea Water (Group:Water)
Sampling Location	Near Govt. Port (Jetty)	Date - Sampling	24/03/2021
Sample Quantity / Packing	2 L x 1 no. plastic can 300 ml x 1 DO bottle	Date - Receipt of Sample	27/03/2021
Sampling Procedure	IS 3025 (Part 1):1987, Amds.1 & APHA, 23rd Ed.,2017,1060 B,1-40	Date - Start of Analysis	27/03/2021
Order Reference	As per your Ref. No. PNP/February/2019-2020/013 dated 26.02.2020	Date - Completion of Analysis	01/04/2021

Sr.No.	Parameter	Result	Unit	Method
CHEMICAL TESTING				
Physical & Chemical Parameters				
1	Temperature	26.8	°C	IS 3025 (Part 9):1984 RA 2009
2	pH value	7.76	-	IS 3025 (Part 10):1983, RA 2017
3	Dissolved Oxygen	7	mg/L	IS 3025 (Part 38):1985, RA 2014
4	Biochemical Oxygen Demand (3 days, 27°C)	7	mg/L	IS 3025 (Part 44):1993, RA 2014, Amds 1
5	Oil & Grease	<1	mg/L	APHA, 23rd Ed. 2017, 5520-B, 5-42
6	Nitrate (as NO ₃)	8.56	mg/L	IS 3025 (Part 34):1988, RA 2014
7	Ammonical Nitrogen (as NH ₃ -N)	<0.1	mg/L	APHA, 23rd Ed. 2017, 4500 NH ₃ , F. 4-119
8	Total Phosphate (as P)	<0.1	mg/L	APHA, 23rd Ed. 2017, 4500 P, E. 4-154
9	Lead(as Pb)	<0.008	mg/L	IS 3025 (Part 2):2004, RA 2014 / ISO 11885:1996
10	Cadmium (as Cd)	<0.002	mg/L	IS 3025 (Part 2):2004, RA 2014 / ISO 11885:1996
11	Mercury (as Hg)	<0.0008	mg/L	IS 3025 (Part 2):2004, RA 2014 / ISO 11885:1996
12	Zinc (as Zn)	<0.05	mg/L	IS 3025 (Part 2):2004

Note: Sample ID W/03/21/0476 bears two Test Reports - W/03/21/0476 and W/03/21/0476N

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4. There are no additions to, deviations or exclusions from the method.

TEST REPORT

Sample ID : W/03/21/0476	Report No. W/03/21/0476N	Report Date	02/04/2021	
Name and address of Customer	PNP Maritime Services Private Limited (PNP Jetty) 2nd Floor, Lansdowne House Building, M.B. Marg, Near Regal Cinema, Apollo Bunder, Colaba, Mumbai 400 001, Maharashtra			
Sampling done by	Laboratory	Sample Description / Type	Sea Water (Group: Water)	
Sampling Location	Near Govt. Port (Jetty)	Date - Sampling	24/03/2021	
Sample Quantity / Packing	2 L x 1 no. plastic can 300 ml x 1 DO bottle	Date - Receipt of Sample	27/03/2021	
Sampling Procedure	IS 3025 (Part 1):1987, Amds.1 & APHA, 23rd Ed., 2017, 1060 B, 1-40	Date - Start of Analysis	27/03/2021	
Order Reference	As per your Ref. No. PNP/February/2019-2020/013 dated 26.02.2020	Date - Completion of Analysis	01/04/2021	
Sr.No.	Parameter	Result	Unit	Method
CHEMICAL TESTING				
Physical & Chemical Parameters				
1	Total Nitrogen (as N)	2.64	mg/L	APHA, 23rd Ed., 2017, 4500 NH ₃ F. 4 - 1B.
2	Salinity	27	‰	CPCB ADSS/RS/B/1983-84
Note: Sample ID W/03/21/0476 bears two Test Reports – W/03/21/0476 and W/03/21/0476N				


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TC-5509



ULR-TC550921000005515F

TEST REPORT

Sample ID : W/03/21/0478	Report No. W/03/21/0478	Report Date	01/04/2021
Name and address of Customer	PNP Maritime Services Private Limited (PNP Jetty) 2nd Floor, Lansdowne House Building, M.B. Marg, Near Regal Cinema, Apollo Bunder, Colaba, Mumbai 400 001, Maharashtra		
Sampling done by	Laboratory	Sample Description / Type	Sea Water (Group: Water)
Sampling Location	Near JSW Jetty	Date - Sampling	24/03/2021
Sample Quantity / Packing	2 L x 1 no. plastic can 300 ml x 1 DO bottle	Date - Receipt of Sample	27/03/2021
Sampling Procedure	IS 3025 (Part 1):1987, Amds.1 & APHA, 23rd Ed., 2017, 1060 B, 1-40	Date - Start of Analysis	27/03/2021
Order Reference	As per your Ref. No. PNP/February/2019-2020/013 dated 26.02.2020	Date - Completion of Analysis	31/03/2021

Sr.No.	Parameter	Result	Unit	Method
CHEMICAL TESTING				
Physical & Chemical Parameters				
1	Temperature	27.7	°C	IS 3025 (Part 3):1984 RA 2005
2	pH value	7.60	-	IS 3025 (Part 8):1983, RA 2017
3	Dissolved Oxygen	4.6	mg/L	IS 3025 (Part 38):1989, RA 2014
4	Biochemical Oxygen Demand (3 days, 27°C)	7	mg/L	IS 3025 (Part 46):1993, RA 2014, Amds.1
5	Oil & Grease	<1	mg/L	APHA, 23rd Ed., 2017, 5520-B, 5-42
6	Nitrate (as NO ₃)	15.6	mg/L	IS 3025 (Part 34):1988, RA 2014
7	Ammonical Nitrogen (as NH ₃ -N)	<0.1	mg/L	APHA, 23rd Ed., 2017, 4500 NH ₃ -N, 4-185
8	Total Phosphate (as P)	<0.1	mg/L	APHA, 23rd Ed., 2017, 4500 P, E, 4-164
9	Lead(as Pb)	<0.008	mg/L	IS 3025 (Part 2): 2004, RA 2014 / ISO 11885:1996
10	Cadmium (as Cd)	<0.002	mg/L	IS 3025 (Part 2): 2004, RA 2014 / ISO 11885:1996
11	Mercury (as Hg)	<0.0008	mg/L	IS 3025 (Part 2): 2004, RA 2014 / ISO 11885:1996
12	Zinc (as Zn)	<0.05	mg/L	IS 3025 (Part 2): 2004

Note: Sample ID W/03/21/0478 bears two Test Reports - W/03/21/0478 and W/03/21/0478N


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4. There are no additions to, deviations or exclusions from the method.

TEST REPORT

Sample ID - W/03/21/0478	Report No. W/03/21/0478N	Report Date	01/04/2021	
Name and address of Customer	PNP Maritime Services Private Limited (PNP Jetty) 2nd Floor, Lansdowne House Building, M.B .Marg, Near Regal Cinema, Apollo Bunder, Colaba, Mumbai 400 001, Maharashtra			
Sampling done by	Laboratory	Sample Description / Type	Sea Water (Group:Water)	
Sampling Location	Near JSW Jetty	Date - Sampling	24/03/2021	
Sample Quantity / Packing	2 L x 1 no. plastic can 300 ml x 1 DO bottle	Date - Receipt of Sample	27/03/2021	
Sampling Procedure	IS 3025 (Part 1):1987, Amds.1 & APHA, 23rd Ed.,2017,1060 B,1-40	Date - Start of Analysis	27/03/2021	
Order Reference	As per your Ref. No. PNP/February/2019-2020/013 dated 26.02.2020	Date - Completion of Analysis	31/03/2021	
Sr.No.	Parameter	Result	Unit	Method
CHEMICAL TESTING				
Physical & Chemical Parameters				
1	Total Nitrogen (as N)	4.13	mg/L	APHA, 23rd Ed., 2017, 4500 NH3. F. 4 -165.
2	Salinity	27	‰	CPCB ADSORBS /8/1983-84
Note: Sample ID W/03/21/0478 bears two Test Reports – W/03/21/0478 and W/03/21/0478N				


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TC-5509



ULR-TC55092100005516F

TEST REPORT

Sample ID : W/03/21/0479	Report No. W/03/21/0479	Report Date	02/04/2021
Name and address of Customer	PNP Maritime Services Private Limited (PNP Jetty) 2nd Floor, Lansdowne House Building, M.B. Marg, Near Regal Cinema, Apollo Bunder, Colaba, Mumbai 400 001, Maharashtra		
Sampling done by	Laboratory	Sample Description / Type	Sea Water (Group:Water)
Sampling Location	Near ISW Jetty End	Date - Sampling	24/03/2021
Sample Quantity / Packing	2 L x 1 no. plastic can 300 ml x 1 DO bottle	Date - Receipt of Sample	27/03/2021
Sampling Procedure	IS 3025 (Part 1):1987, Amds.1 & APHA, 23rd Ed., 2017, 1060 B,1-40	Date - Start of Analysis	27/03/2021
Order Reference	As per your Ref. No. PNP/February/2019-2020/013 dated 26.02.2020	Date - Completion of Analysis	01/04/2021

Sr.No.	Parameter	Result	Unit	Method
CHEMICAL TESTING				
Physical & Chemical Parameters				
1	Temperature	28.5	°C	IS 3025 (Part 9)1984 RA 2009
2	pH value	7.60	-	IS 3025 (Part 10)1983, RA 2017
3	Dissolved Oxygen	5.8	mg/L	IS 3025 (Part 38)1993, RA 2014
4	Biochemical Oxygen Demand (3 days, 27°C)	8	mg/L	IS 3025 (Part 44)1993, RA 2014, Amds.1
5	Oil & Grease	<1	mg/L	APHA, 23rd Ed., 2017, 5520-B, 5-42
6	Nitrate (as NO ₃)	8.39	mg/L	IS 3025 (Part 34)1988, RA 2014
7	Ammonical Nitrogen (as NH ₃ -N)	<0.1	mg/L	APHA, 23rd Ed., 2017, 4500 NH ₃ , F, 4-102
8	Total Phosphate (as P)	<0.1	mg/L	APHA, 23rd Ed., 2017, 4500 P, E, 4-16A
9	Lead(as Pb)	<0.008	mg/L	IS 3025 (Part 2) 2004, RA 2014 / ISO 18885:1996
10	Cadmium (as Cd)	<0.002	mg/L	IS 3025 (Part 2) 2004, RA 2014 / ISO 18885:1996
11	Mercury (as Hg)	<0.0008	mg/L	IS 3025(Part 2)2004, RA 2014/ISO 18885:1996
12	Zinc (as Zn)	<0.05	mg/L	IS 3025(Part 2)2004

Note: Sample ID W/03/21/0479 bears two Test Reports - W/03/21/0479 and W/03/21/0479N


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4. There are no additions to, deviations or exclusions from the method.

TEST REPORT

Sample ID : W/03/21/0479	Report No. W/03/21/0479N	Report Date	02/04/2021	
Name and address of Customer	PNP Maritime Services Private Limited (PNP Jetty) 2nd Floor, Lansdowne House Building, M.B. Marg, Near Regal Cinema, Apollo Bunder, Colaba, Mumbai 400 001, Maharashtra			
Sampling done by	Laboratory	Sample Description / Type	Sea Water (Group: Water)	
Sampling Location	Near JSW Jetty End	Date - Sampling	24/03/2021	
Sample Quantity / Packing	2 L x 1 no. plastic can 300 ml x 1 DO bottle	Date - Receipt of Sample	27/03/2021	
Sampling Procedure	IS 3025 (Part 1):1987, Amds.1 & APHA, 23rd Ed., 2017, 1060 B, 1-40	Date - Start of Analysis	27/03/2021	
Order Reference	As per your Ref. No. PNP/February/2019-2020/013 dated 26.02.2020	Date - Completion of Analysis	01/04/2021	
Sr.No.	Parameter	Result	Unit	Method
CHEMICAL TESTING				
Physical & Chemical Parameters				
1	Total Nitrogen (as N)	2.99	mg/L	APHA, 23rd Ed. 2017, 4500 NH3.F. 4-105
2	Salinity	27	‰	CPCB AOSORBS /8/1983-84
Note: Sample ID W/03/21/0479 bears two Test Reports - W/03/21/0479 and W/03/21/0479N				



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TC-5509



ULR-TC550921000005517F

TEST REPORT

Sample ID : W/03/21/0480	Report No. W/03/21/0480	Report Date	02/04/2021
Name and address of Customer	PNP Maritime Services Private Limited (PNP Jetty) 2nd Floor, Lansdowne House Building, M.B. Marg, Near Regal Cinema, Apollo Bunder, Colaba, Mumbai 400 001, Maharashtra		
Sampling done by	Laboratory	Sample Description / Type	Sea Water (Group:Water)
Sampling Location	Near DIL Godown Backside	Date - Sampling	24/03/2021
Sample Quantity / Packing	2 L x 1 no. plastic can 300 ml x 1 DO bottle	Date - Receipt of Sample	27/03/2021
Sampling Procedure	IS 3025 (Part 1):1987, Amds.1 & APHA, 23rd Ed., 2017, 1060 B, 1-40	Date - Start of Analysis	27/03/2021
Order Reference	As per your Ref. No. PNP/February/2019-2020/013 dated 26.02.2020	Date - Completion of Analysis	01/04/2021

Sr.No.	Parameter	Result	Unit	Method
CHEMICAL TESTING				
Physical & Chemical Parameters				
1	Temperature	29.7	°C	IS 3025 (Part 9) 1984 RA 2009.
2	pH value	7.57	-	IS 3025 (Part 1) 1983. RA 2017
3	Dissolved Oxygen	6.5	mg/L	IS 3025 (Part 38) 1988. RA 2014
4	Biochemical Oxygen Demand (3 days, 27°C)	8	mg/L	IS 3025 (Part 44) 1993. RA 2014. Amds.1
5	Oil & Grease	<1	mg/L	APHA, 23rd Ed. 2017, 5520-B, 5-47
6	Nitrate (as NO ₃)	12.5	mg/L	IS 3025 (Part 34) 1988. RA 2014
7	Ammonical Nitrogen (as NH ₃ -N)	<0.1	mg/L	APHA, 23rd Ed. 2017, 4500 NH ₃ , F, 4-118.
8	Total Phosphate (as P)	<0.1	mg/L	APHA, 23rd Ed. 2017, 4500 P, E, 4-164
9	Lead(as Pb)	<0.008	mg/L	IS 3025 (Part 2): 2004. RA 2014 / ISO 1885:1996
10	Cadmium (as Cd)	<0.002	mg/L	IS 3025 (Part 2): 2004. RA 2014 / ISO 1885:1996
11	Mercury (as Hg)	<0.0008	mg/L	IS 3025(Part 2):2004. RA 2014/ISO 1885:1996
12	Zinc (as Zn)	<0.05	mg/L	IS 3025(Part 2) 2004

Note: Sample ID W/03/21/0480 bears two Test Reports – W/03/21/0480 and W/03/21/0480N

(Signature)

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4. There are no additions to, deviations or exclusions from the method.

TEST REPORT

Sample ID : W/03/21/0480	Report No. W/03/21/0480N	Report Date	02/04/2021	
Name and address of Customer	PNP Maritime Services Private Limited (PNP Jetty) 2nd Floor, Lansdowne House Building, M.B .Marg,Near Regal Cinema, Apollo Bunder, Colaba, Mumbai 400 001, Maharashtra			
Sampling done by	Laboratory	Sample Description / Type	Sea Water (Group:Water)	
Sampling Location	Near DIL Godown Backside	Date - Sampling	24/03/2021	
Sample Quantity / Packing	2 L x 1 no. plastic can 300 ml x 1 DO bottle	Date - Receipt of Sample	27/03/2021	
Sampling Procedure	IS 3025 (Part 1):1987, Amds.1 & APHA, 23rd Ed.,2017,1060 B,1-40	Date - Start of Analysis	27/03/2021	
Order Reference	As per your Ref. No. PNP/February/2019-2020/013 dated 26.02.2020	Date - Completion of Analysis	01/04/2021	
Sr.No.	Parameter	Result	Unit	Method
CHEMICAL TESTING				
Physical & Chemical Parameters				
1	Total Nitrogen (as N)	3.53	mg/L	APHA 23rd Ed. 2017, 4500 NH3 F, 4 -15.
2	Salinity	27	‰	EPCB AOSORBS /E/1983-84
Note: Sample ID W/03/21/0480 bears two Test Reports - W/03/21/0480 and W/03/21/0480N				


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ANNEXURE IV

ENVIRONMENT CLEARANCE LETTER

(As per EC construction phase Condition: xxxv)

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.

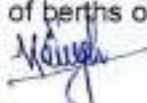
Sir,
This has reference to your online Proposal No. IA/MH/MIS/59562/2016 dated 12 September, 2019, submitted to this Ministry for grant of Environmental and CRZ Clearance in terms of the provisions of the Environment Impact Assessment (EIA) Notification, 2006 and Coastal Regulation Zone (CRZ) Notification,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

- (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:-

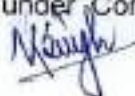
A. Specific Conditions:

- (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/reowned 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



(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.

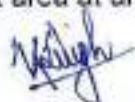
B. Standard Conditions:

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:

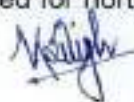
- i. The project proponent shall install system to carryout Ambient Air Quality monitoring for common/criterion parameters relevant to the main pollutants released (e.g. PM₁₀ and PM_{2.5} in reference to PM emission, and SO₂ and NO_x in reference to SO₂ and NO_x emissions) within and outside the project 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:

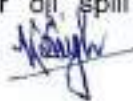
- i. Noise level survey shall be carried as per the prescribed guidelines and report in this regard shall be submitted to Regional Officer of the Ministry as a part of six-monthly compliance report.
- ii. Noise from vehicles, power machinery and equipment on-site should not exceed the prescribed limit. 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

ANNEXURE V

CONSENT TO OPERATE

(As per CTE Condition: 10)

MAHARASHTRA POLLUTION CONTROL BOARD

Tel: 24010706/24010437
Fax:
24044532/4024068/4023516
Website: <http://mpcb.gov.in>
Email: jdwater@mpcb.gov.in



Kalpataru Point, 2nd and
4th floor, Opp. Cine Planet
Cinema, Near Sion Circle,
Sion (E), Mumbai-400022

RED/S.S.I (R46)

No:- Format1.0/CC/UAN No.0000103714/CR 2104001333

Date: 27/04/2021

To,
M/s. PNP Maritime Services Pvt. Ltd.
Old Survey 247 / New Gut No. 346, PNP Port,
Dharmatar Creek
Tal: Alibag, Dist: Raigad.



Your Service is Our Duty

Sub: Renewal of Consent to Operate for Cargo terminal jetty project, in Red Category.

- Ref:**
1. Previous Consent to Operate for granted vide No. Bo/MPCB/RO(HQ)/RD-3231-16/CR/B-3912 dt. 19/03/2016 valid up to: 31/12/2020
 2. Minutes of Consent Committee Meeting held on 01.02.2021, 12.02.2021 & 25.02.2021.

Your application No.MPCB-CONSENT-0000103714 Dated 07.12.2020

For: grant of Consent to Operate under Section 26 of the Water (Prevention & Control of Pollution) Act, 1974 & under Section 21 of the Air (Prevention & Control of Pollution) Act, 1981 and Authorization under Rule 6 of the Hazardous & Other Wastes (Management & Transboundary Movement) Rules 2016 is considered and the consent is hereby granted subject to the following terms and conditions and as detailed in the schedule I, II, III & IV annexed to this order:

1. **The consent to renewal is granted for a period up to 31/12/2025**
2. **The capital investment of the project is Rs.73.66 Crs. (As per C.A Certificate submitted by industry Existing CI is-Rs. 3.21 Crs + Expansion/Increase in C.I. - Rs. 70.45 Crs)**
3. **Consent is valid for handling of:**

Sr No	Product	Maximum Quantity	UOM
Products			
1	Jetty: For Cargo handling, Handling of coal, sulphur, Rock Phosphate, Iron Ore, Bauxite and Edible Oil Cargo	5	MT/A

The Consent is Valid for the operation of Jetty (100 Mtrs, North Side of the Nallah (North of Khochi) Dharamtar Creek

4. **Conditions under Water (P&CP), 1974 Act for discharge of effluent:**

Sr No	Description	Permitted (in CMD)	Standards to	Disposal Path
1.	Trade effluent	0	As per Schedule-I	Not Applicable
2.	Domestic effluent	7.5	As per Schedule-I	On land for gardening

5. Conditions under Air (P& CP) Act, 1981 for air emissions:

Sr No.	Stack No.	Description of stack / source	Number of Stack	Standards to be achieved
1	Not Applicable	Not Applicable	0	As per Schedule -II

6. Non-Hazardous Wastes:

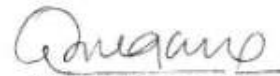
Sr No	Type of Waste	Quantity	UoM	Treatment	Disposal
1	Not Applicable	0	--NA--	Not Applicable	Not Applicable

7. Conditions under Hazardous & Other Wastes (M & T M) Rules 2016 for treatment and disposal of hazardous waste:

Sr No	Category No./ Type	Quantity	UoM	Treatment	Disposal
1	5.2 Wastes or residues containing oil	500	MT/A	Sale to authorized preprocessor/CHWTSDF	Sale to authorized preprocessor/CHWTSD

- 8 The Board reserves the right to review, amend, suspend, revoke this consent and the same shall be binding on the industry.
- 9 This consent should not be construed as exemption from obtaining necessary NOC/ permission from any other Government authorities.
- 10 The applicant shall make an application for renewal of consent 60 days prior to date of expiry of the consent. (Operate/Renewal)
- 11 The applicant shall comply with the conditions of the CRZ Clearance granted vide letter No.J-16011/38/2001-A-III dt: 06/10/2003
- 12 The applicant shall comply with the conditions of the Environmental Clearance & CRZ Clearance granted vide letter No. F.No. 10-70/2016-1A-III dt: 20/08/2020
- 13 Industry shall submit Bank Guarantee of Rs. 5 lakhs towards compliance of consent conditions & Conditions stipulated in Environmental clearance & CRZ clearance.

For and on behalf of the
Maharashtra Pollution Control Board.



(Ashok Shingare IAS),
Member Secretary

Received Consent fee of -

Sr.No	Amount(Rs.)	Transaction/DR.No.	Date	Transaction Type
1	500000.00	TXN2012000884	09/12/2020	Online Payment
2	100000.00	TXN2103001403	12/03/2021	Online Payment

Copy to:

1. Regional Officer, MPCB, Raigad and Sub-Regional Officer, MPCB, Raigad II
- They are directed to ensure the compliance of the consent conditions.
2. Chief Accounts Officer, MPCB, Sion, Mumbai



SCHEDULE-I

Terms & conditions for compliance of Water Pollution Control:

1. A) Generation - As per your application the treated effluent generation is Nil.
B) Treatment - NA
C) Disposal - NA
2. A) As per your application, you have provided Sewage Treatment Plant of designed capacity 10 CMD for the treatment of 7.5 CMD of sewage.
B) The Applicant shall operate the sewage treatment system to treat the sewage so as to achieve the following standards.

Sr.No	Parameters	Standards
1	pH	Not to exceed 5.5-9.0
2	BOD	Not to exceed 10
3	COD	Not to exceed 50
4	TSS	Not to exceed 20
5	NH4 N	Not to exceed 5
6	N-total	Not to exceed 10
7	Fecal Coliform	Not to exceed Less than 100

- C) The treated sewage shall be recycled for secondary purposes to the maximum extent and remaining shall be discharged on land for gardening within premise after confirming above standards. In no case, sewage shall find its way for gardening / outside factory premises.
3. The Board reserves its rights to review plans, specifications or other data relating to plant setup for the treatment of waterworks for the purification there of & the system for the disposal of sewage or trade effluent or in connection with the grant of any consent conditions. The Applicant shall obtain prior consent of the Board to take steps to establish the unit or establish any treatment and disposal system or an extension or addition thereto.
 4. The industry shall ensure replacement of pollution control system or its parts after expiry of its expected life as defined by manufacturer so as to ensure the compliance of standards and safety of the operation thereof.
 5. The Applicant shall comply with the provisions of the Water (Prevention & Control of Pollution) Act, 1974 and as amended, by installing water meters and other provisions as contained in the said act:

Sr. No.	Purpose for water consumed	Water consumption quantity (CMD)
1.	Industrial Cooling, spraying in mine pits or boiler feed	10.00
2.	Domestic purpose	10.00
3.	Processing whereby water gets polluted & pollutants are easily biodegradable	0.00

Sr. No.	Purpose for water consumed	Water consumption quantity (CMD)
4.	Processing whereby water gets polluted & pollutants are not easily biodegradable and are toxic	0.00
5.	Gardening	10

6. The Applicant shall provide Specific Water Pollution control system as per the conditions of EP Act, 1986 and rule made there under from time to time/ Environmental Clearance/ CREP guidelines.

SCHEDULE-II

Terms & conditions for compliance of Air Pollution Control:

1. As per your application, you have provided the Air pollution control (APC) system and erected following stack (s) to observe the following fuel pattern:

Stack No.	Stack Attached To	APC System	Height in Mtrs.	Type of Fuel	Quantity & UoM	S%	SO ₂ (kg/day)
Not Applicable	Not Applicable	Not Applicable	-	Not Applicable	--	--	--

2. The Applicant shall provide Specific Air Pollution control equipments as per the conditions of EP Act, 1986 and rule made there under from time to time/ Environmental Clearance / CREP guidelines.
3. The applicant shall operate and maintain above mentioned air pollution control system, so as to achieve the level of pollutants to the following standards:

Parameters	Standards
Total Particulate Matter	Not to exceed 150 mg/ Nm3

4. The Applicant shall obtain necessary prior permission for providing additional control equipment with necessary specifications and operation thereof or alteration or replacement/alteration well before its life come to an end or erection of new pollution control equipment.
5. The Board reserves its rights to vary all or any of the condition in the consent, if due to any technological improvement or otherwise such variation (including the change of any control equipment, other in whole or in part is necessary).

SCHEDULE-III

Details of Bank Guarantees:

Sr. No.	Consent (C2E/ C2O /C2R)	Amt of BG Imposed	Submission Period	Purpose of BG	Compliance Period	Validity Date
1	Consent to Operate	Rs. 5 lakh	15 Days	Towards O and M of pollution control system Compliance consent conditions.	31/12/2025	30/04/2026



BG Forfeiture History

Srno.	Consent (C2E/C2O/C2R)	Amount of BG imposed	Submission Period	Purpose of BG	Amount of BG Forfeiture	Reason of BG Forfeiture
NA						

BG Return details

Srno.	Consent (C2E/C2O/C2R)	BG Imposed	Purpose of BG	Amount of BG Returned
NA				

SCHEDULE-IV

General Conditions:

1. The Energy source for lighting purpose shall preferably be LED based
2. The PP shall harvest rainwater from roof tops of the buildings and storm water drains to recharge the ground water and utilize the same for different industrial applications within the plant
3. Conditions for D.G. Set
 - a) Noise from the D.G. Set should be controlled by providing an acoustic enclosure or by treating the room acoustically.
 - b) Industry should provide acoustic enclosure for control of noise. The acoustic enclosure/ acoustic treatment of the room should be designed for minimum 25 dB (A) insertion loss or for meeting the ambient noise standards, whichever is on higher side. A suitable exhaust muffler with insertion loss of 25 dB (A) shall also be provided. The measurement of insertion loss will be done at different points at 0.5 meters from acoustic enclosure/room and then average.
 - c) Industry should make efforts to bring down noise level due to DG set, outside industrial premises, within ambient noise requirements by proper siting and control measures.
 - d) Installation of DG Set must be strictly in compliance with recommendations of DG Set manufacturer.
 - e) A proper routine and preventive maintenance procedure for DG set should be set and followed in consultation with the DG manufacturer which would help to prevent noise levels of DG set from deteriorating with use.
 - f) D.G. Set shall be operated only in case of power failure.
 - g) The applicant should not cause any nuisance in the surrounding area due to operation of D.G. Set.
 - h) The applicant shall comply with the notification of MoEFCC, India on Environment (Protection) second Amendment Rules vide GSR 371(E) dated 17.05.2002 and its amendments regarding noise limit for generator sets run with diesel.
4. The applicant shall maintain good housekeeping.
5. The non-hazardous solid waste arising in the factory premises, sweepings, etc. be disposed of scientifically so as not to cause any nuisance / pollution. The applicant shall take necessary permissions from civic authorities for disposal of solid waste.
6. The applicant shall not change or alter the quantity, quality, the rate of discharge, temperature or the mode of the effluent/emissions or hazardous wastes or control equipments provided for without previous written permission of the Board. The industry will not carry out any activity, for which this consent has not been granted/without prior consent of the Board.
7. The industry shall ensure that fugitive emissions from the activity are controlled so as to maintain clean and safe environment in and around the factory premises.



8. The industry shall submit quarterly statement in respect of industries obligation towards consent and pollution control compliance's duly supported with documentary evidences (format can downloaded from MPCB official site).
9. The industry shall submit official e-mail address and any change will be duly informed to the MPCB.
10. The industry shall achieve the National Ambient Air Quality standards prescribed vide Government of India, Notification No. B-29016/20/90/PCI-L dated. 18.11.2009 as amended.
11. The Board reserves its rights to review plans, specifications or other data relating to plant setup for the treatment of waterworks for the purification thereof & the system for the disposal of sewage or trade effluent or in connection with the grant of any consent conditions. The Applicant shall obtain prior consent of the Board to take steps to establish the unit or establish any treatment and disposal system or an extension or addition thereto.
12. The industry shall ensure replacement of pollution control system or its parts after expiry of its expected life as defined by manufacturer so as to ensure the compliance of standards and safety of the operation thereof.
13. The PP shall provide personal protection equipment as per norms of Factory Act
14. Industry should monitor effluent quality, stack emissions and ambient air quality monthly/quarterly.
15. Whenever due to any accident or other unforeseen act or even, such emissions occur or is apprehended to occur in excess of standards laid down, such information shall be forthwith Reported to Board, concerned Police Station, office of Directorate of Health Services, Department of Explosives, Inspectorate of Factories and Local Body. In case of failure of pollution control equipments, the production process connected to it shall be stopped.
16. The applicant shall provide an alternate electric power source sufficient to operate all pollution control facilities installed to maintain compliance with the terms and conditions of the consent. In the absence, the applicant shall stop, reduce or otherwise, control production to abide by terms and conditions of this consent.
17. The industry shall recycle/reprocess/reuse/recover Hazardous Waste as per the provision contain in the Hazardous and Other Wastes (M & TM) Rules 2016, which can be recycled /processed /reused /recovered and only waste which has to be incinerated shall go to incineration and waste which can be used for land filling and cannot be recycled/reprocessed etc. should go for that purpose, in order to reduce load on incineration and landfill site/environment.
18. An inspection book shall be opened and made available to the Board's officers during their visit to the applicant.
19. Industry shall strictly comply with the Water (P&CP) Act, 1974, Air (P&CP) Act, 1981 and Environmental Protection Act, 1986 and industry specific standard under EP Rules 1986 which are available on MPCB website (www.mpcb.gov.in).
20. Separate drainage system shall be provided for collection of trade and sewage effluents. Terminal manholes shall be provided at the end of the collection system with arrangement for measuring the flow. No effluent shall be admitted in the pipes/sewers downstream of the terminal manholes. No effluent shall find its way other than in designed and provided collection system.
21. Neither storm water nor discharge from other premises shall be allowed to mix with the effluents from the factory.
22. The industry should not cause any nuisance in surrounding area.

23. The industry shall take adequate measures for control of noise levels from its own sources within the premises so as to maintain ambient air quality standard in respect of noise to less than 75 dB (A) during day time and 70 dB (A) during night time. Day time is reckoned in between 6 a.m. and 10 p.m. and night time is reckoned between 10 p.m. and 6 a.m.
24. The industry shall create the Environmental Cell by appointing an Environmental Engineer, Chemist and Agriculture expert for looking after day to day activities related to Environment and irrigation field where treated effluent is used for irrigation.
25. The applicant shall provide ports in the chimney/(s) and facilities such as ladder, platform etc. for monitoring the air emissions and the same shall be open for inspection to/and for use of the Board's Staff. The chimney(s) vents attached to various sources of emission shall be designated by numbers such as S-1, S-2, etc. and these shall be painted/ displayed to facilitate identification.
26. The industry should comply with the Hazardous and Other Wastes (M & TM) Rules, 2016 and submit the Annual Returns as per Rule 6(5) & 20(2) of Hazardous and Other Wastes (M & TM) Rules, 2016 for the preceding year April to March in Form-IV by 30th June of every year.
27. The applicant shall install a separate meter showing the consumption of energy for operation of domestic and industrial effluent treatment plants and air pollution control system. A register showing consumption of chemicals used for treatment shall be maintained.
28. The applicant shall bring minimum 33% of the available open land under green coverage/ plantation. The applicant shall submit a yearly statement by 30th September every year on available open plot area, number of trees surviving as on 31st March of the year and number of trees planted by September end.
29. The Board reserves its rights to review plans, specifications or other data relating to plant setup for the treatment of waterworks for the purification thereof & the system for the disposal of sewage or trade effluent or in connection with the grant of any consent conditions.
30. The firm shall submit to this office, the 30th day of September every year, the Environment Statement Report for the financial year ending 31st March in the prescribed FORM-V as per the provisions of Rule 14 of the Environment (Protection) (second Amendment) Rules, 1992.
31. The Applicant shall obtain necessary prior permission for providing additional control equipment with necessary specifications and operation thereof or alteration or replacement/alteration well before its life come to an end or erection of new pollution control equipment.
32. The Board reserves its rights to vary all or any of the condition in the consent, if due to any technological improvement or otherwise such variation (including the change of any control equipment, other in whole or in part is necessary).
33. The applicant shall provide facility for collection of environmental samples and samples of trade and sewage effluents, air emissions and hazardous waste to the Board staff at the terminal or designated points and shall pay to the Board for the services rendered in this behalf.

For and on behalf of the
Maharashtra Pollution Control Board.


(Ashok Shingare IAS),
Member Secretary



Maharashtra Pollution Control Board
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ANNEXURE VI
CONSENT TO ESTABLISH (MOM)

MAHARASHTRA POLLUTION CONTROL BOARD



Minutes of 23rd Consent Appraisal Committee Meeting of 2020-2021 held on 17.03.2021 at 03:00 p.m. conducted through Video Conferencing (Microsoft Teams).

.....

Following members of the Consent Appraisal Committee were present:

- | | |
|---|-----------------|
| 1. Shri Sudhir Shrivastava,
Chairman, M.P.C. Board, Mumbai. | Chairman |
| 2. Shri Ashok Shingare,
Member Secretary, M.P.C. Board. | Member |
| 3. Shri P.P. Nandusekar,
Technical Advisor, MIDC. | Member |
| 4. Shri Tuhin Banerjee,
Sr. Scientist, NEERI. | Member |
| 5. Shri P.K. Mirashe,
Assistant Secretary (Technical), M.P.C. Board, Mumbai. | Member Convener |

Additional Chief Secretary, Home (Transport) Dept., Mumbai on leave of absence was granted to them.

Following Officer of MPCB were present for the meeting:

- | | |
|---|----------------|
| 1. Shri V.M. Motghare
Joint Director (APC), M.P.C. Board, Mumbai. | Invitee Member |
| 2. Shri Y.B. Sontakke,
Joint Director (WPC), M.P.C. Board, Mumbai. | Invitee Member |
| 3. Dr. A.S. Supate,
Principal Scientific Office, M.P.C. Board, Mumbai. | Invitee Member |
| 4. Shri N.N. Gurav,
Regional Officer (HQ), M.P.C. Board, Mumbai. | Invitee Member |

Chairman of the committee welcomed the members of the committee and allowed proceeding of the meeting to start.

		Gat No.29 Ganganagar Hatkanangle			<p>process will be Nil after expansion. Out of Five JVS results of ETP outlet, two JVS results are exceeding the consented limit. Whereas the JVS results of source emission are within limit.</p> <p>Committee further noted that, Court case was pending for violation of the environmental laws. Industry takes immediate steps for procurement of EC and submitted Form-1 to MoEFCC on 02.03.2017. Similarly, as per MoEFCC protocol & procedures, industry have stopped excess crushing since 2017 till date as well as legal action is also initiated by MPCB vide Application No.132/2016; pending at the court. Industry has submitted Board Resolution to MPCB for not repeating the violation.</p> <p>Committee further noted that, the Ministry has issued Standard ToR under violation vide letter F. No. IAJ-11011/116/2017/-IA II (I) dated 12.02.2020. The EAC has recommended for an amount of Rs 232.57 Lakh to be spent towards Remediation plan and Natural and Community Resource Augmentation plan within a span of three years. Also noted the submission of BG of Rs. 232.57 Lakh on 11.01.2021 to Regional office Kolhapur.</p> <p>In view of above, as unit has applied for first operate without obtaining Environmental clearance, it was decided to issue SCN for refusal by giving 15 days' time to reply with EC copy and if reply not received in stipulated time period then final refusal.</p>
56	MPCB- CONSENT- 0000105351	PNP Maritime Services Pvt Ltd, (PNP Port Dharamtar at Shahabaj, old Survey 247 / New Gut No. 346 PNP Port, Dharmatar Creek, District Raigad.	APPROVED Consent to Establish for expansion i.e., handling of additional cargos capacity from 5 MTPA capacity to 19 MTPA	Up to commissionin g of the port or 5 years period whichever is earlier	<p>Committee noted that, PP has applied for consent to establish for expansion and modernization of existing port to handle additional cargo up to 14 MTPA (Existing 5 MTPA capacity).</p> <p>Committee also noted that, proposed development comprises eight (8) bulk berths, two (2) Iron & steel product berths, four (4) berths for handling liquid cargo and 200 Mtrs berth for container cargo. The proposed development will be over an area of 195 ha (Including existing 60 ha area). PP has obtained consent for existing jetty for 5</p>

					<p>MTPA. Also obtained Environmental Clearance and CRZ Clearance for expansion and modernization of existing PNP port.</p> <p>Committee further noted that, PP has proposed to upgrade existing STP the for treatment of additional sewage and treated sewage will be recycle and used for dust suppression and green belt development within the premises.</p> <p>In view of above, it was decided to grant consent to Establish for expansion by imposing conditions of Environment Management Plan (EMP) and BG of Rs.25 Lakh towards compliances of consent condition.</p> <p>Consent will be issued after full details, of loading, unloading, stacking, Fugitive mission control system, traffic management plan, is submitted.</p>
57	MPCB- CONSENT- 0000104843	Mondelez India Foods Private Limited (Gat No. 532 & 533, Induri, Tal: Maval, Dist: Pune	APPROVED 1 st consent to operate for expansion i.e., modernization of existing crumb manufacturing process	31.03.2026	<p>Committee noted that, PP has applied for grant of 1st consent to establish for expansion i.e., modernization of existing crumb manufacturing process.</p> <p>Committee also noted that, PP has obtained consent to establish for modernization of plant and having valid consent for the existing manufacturing activity. There is no additional effluent due to this additional activity. PP has provided combined ETP for treatment of trade effluent and sewage. Treated effluent is recycled and used on land for gardening. JVS results are within the limits. Also provided dust collector and Bag filter to Briquette/Bagasse fired boiler.</p> <p>In view of above, it was decided to grant 1st consent to operate for expansion i.e., modernization of existing crumb manufacturing process by imposing following conditions.</p>

ANNEXURE VII

ENVIRONMENTAL STATUS REPORT & FORM V

(As per EC construction phase Condition:10)

PNP Maritime Services Private Limited

Environmental Status Report (ESR)

As per EC condition (v)

October 2020 to March 2021

“PNP Maritime Services Private Limited”

Dharamtar Creek, Village Shahabaj, District Raigad



Mahabal Enviro Engineers Pvt. Ltd.
Plot F-7, Road 21, MIDC Wagle Estate, Thane-400604
Phone: +91-22-25823139/1663/0658 thane@mahabal.com

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Environmental Status Report

Introduction

PNP Maritime Services Private Limited is developing construction of 100 mts jetty to the north side of the nallah (north of Khochi) at Dharamtar Creek, District Raigarh. The project also involves construction of a berthing platform with a length of 100 mts to handle cargo Prior Environmental Clearance and CRZ Clearance for the Expansion and Modernisation of Existing PNP port was obtained vide EC file no. 10-70/2016-IA-III dated 20th August, 2020

Name	PNP Maritime Services Private Limited Ms. Sidharth Ghosh
Address	18,2 nd Floor, Lansdowe House, Mahakavi Bhushan Road, Colaba, Mumbai.400001
Telephone	022 22884536
Fax	022 22884535
Email ID	-

Plot area

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)

Present status

Table 1: Environmental Services progress status

Sr.	Details	Status
1.	DG set	DG set will be provided onsite for construction phase
2.	Tree plantation	Will be Provided for proposed expansion
3.	Parking	Will be Provided for proposed expansion
4.	Labour camp	Will be Provided for proposed expansion
5.	Debris details and its management	This material will be used for back filling and leveling of the plot and remaining will be disposed to authorized sites.
6.	Contact person on site	Mrs. Sidharth Ghosh

Construction facility on site

PP will provide following facilities at site:

- Material storage area
- Personal Protective equipment's for workers
- Safety Nets for buildings
- RMC procured from outside
- Steel yard
- Waste material storage area

Facility provided on site for Labour

Labour camp will provide for the labours with the all basic necessities like sanitary facilities, drinking water facility.

Land: Excavation details

To minimize disruption of soil and for conservation of topsoil, the contractor will take out the topsoil separately and stockpile it. After the construction activity is over, topsoil will be utilized for land levelling activity.

Water Supply

Construction phase:

Total water requirement will be met by tanker water. Soak pits and septic tanks will be provided for disposal of waste water. Temporary sanitary toilets will be provided during peak labor force.

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. Reports submitted along with Compliance Report.

Sewage Collection and Disposal System

Construction phase

The PP will provide labour camp with toilets and septic tanks.

Operational phase

PP will provide STP for proposed expansion project for treatment of wastewater generated during operation phase. 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.

Solid waste & Waste Disposal

Construction phase

Waste generated from labour camps mainly comprise of household domestic waste, which will be collected and composted on site. The non-compostable and non-recyclable portion of the waste will be collect & segregated.

Operational phase

The quantity of municipal solid waste generated from canteen and administrative areas will be 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

Power Supply and consumption

Total power requirement during operation phase will be 6.7 MW and will be met from MSEDCL & DG set for emergency backup.

Roads, Traffic and Transport.

Construction phase

The site is abutting DP road.

All incoming and outgoing vehicles during construction phase will be having direct access from the main road to project site, so there will not be any disturbance to existing traffic movement.

Operational phase

PP has proposed internal road and its having proper connectivity to main road.

To mitigate the impact of pollutants from vehicular traffic during the operational phase of the site, the following measures are recommended for implementation.

Vehicle emission controls

Adequate informatory signage's/Speed control devices will be put up within premises near entry/exit gates to regulate and control the speed of outgoing/incoming traffic. Regular maintenance of the vehicles will be mandatory. PUC will be compulsory for all the vehicles being parked in the building premises. Security persons at entry and exit point to insure the smooth traffic movement.

Ambient air quality monitoring Unit

PP has provided Ambient air quality monitoring Unit.

Housing and Slums

Slums issue is not applicable for this project.

Air

PP monitor the Air pollution every month and 6th monthly report is sent to MoEF&CC, Nagpur and RO & HQ of MPCB offices with the EC compliance condition.

Dust

PP will use of water sprinkles during construction phase. Proposed road side plantation along the boundary of the proposed construction site and also within the project site
Periodic maintenance of construction equipment. And use the good quality of fuels and use of personal protective equipments.

Noise levels

PP monitor the Noise Level every month and 6th monthly report is sent to MoEF&CC, Nagpur and RO & HQ of MPCB offices with the EC compliance condition.

No construction work will be done during night time

Construction equipment will be well maintained to reduce the noise pollution as per the standard limits.

We will provided the earplugs, muffs to the construction staff.

Tree plantation along the periphery of road will act as noise barrier. Noise attenuating species will be used in a landscape especially surrounding noise generating sources.

Acoustic enclosures will be provided on DG sets which will reduce the noise during operation phase.

Health

PP will provide the regular facility of the Health Check-up to the labour.

Biological Environment

Plantation & Landscaping

Selection of the plant species will be done based on their adaptability to the existing geographical conditions and the vegetation composition of the region. During the development of the green belt within the project area, emphasis has been given to selection of plant species like nitrogen fixing species, species of ornamental values, species of very fast growth with good canopy cover etc.

Landscape development plan

In the proposed project, the area allotted for landscaping is along the periphery of the area. Various types of trees are proposed for plantation. Total 2,000 no. of trees will be planted in the proposed project. The trees will be planted along the compound wall and along the road with adequate space between them so that their growth is not hampered. Plantation will be taken up randomly and landscaping aspects could be taken into consideration.

Environment Monitoring Cell

Environmental management cell will be formed headed by an Environment Manager supported by adequate number of personnel having sufficient educational and professional qualification and experience to discharge number of personnel having sufficient educational and professional qualification and experience to discharge responsibilities related to environmental management including statutory compliance, pollution prevention, environmental monitoring, preventive maintenance of pollution control equipment and green belt development & maintenance of pollution control equipment and green belt development & maintenance. The head of the cell will directly report to the top management. This cell will be the nodal agency to co-ordinate and provide necessary services on environmental issues during construction and operation of the project. This department will interact with MPCB, MoEF&CC, CPCB and Other environment regulatory agencies. The cell will be effective till handing over of the project to society.

Environmental Management Audits:

The management audits will determine whether the activities are conforming to the environmental management systems and effective in implanting the environmental policy. They may be internal or external, but carried out impartially and effectively by a person properly trained for it. Broad knowledge of the environmental process and expertise in relevant disciplines is also required. Appropriate audit programs and protocols will be established.

Table 2: Organization & Environment Management Cell

Sr.	Level	Designation	Purpose
1	Honorary	Director / Managing Committee	Policy
2	Manager	Environmental Scientist /Chemist	Job (*)
3	Executive	Supervisor, contractor, Engineers	Implement
4	Third Party	Environmental sampling, analysis will be done through external agency approved by MoEFCC / MPCB	monitoring, testing,

Budgetary provisions for Environmental Management Plan

Adequate budgetary provisions will be made for construction & operational phase. For the initial five years, the management shall

keep regular budget provision for in-plant measures to reduce pollution and construction of additional treatment units to facilitate wastewater recycling/reuse and reduction in air pollution. A budgetary provision will be made for up gradation of air pollution control equipments to control the gaseous pollutants and dust emission.



Maharashtra Pollution Control Board

महाराष्ट्र प्रदूषण नियंत्रण मंडळ

FORM V

(See Rule 14)

Environmental Audit Report for the financial Year ending the 31st March 2020

Unique Application Number

MPCB-ENVIRONMENT_STATEMENT-0000024292

Submitted Date

13-07-2020

PART A

Company Information

Company Name

PNP Maritime Services Pvt. Ltd.

Application UAN number

NA

Address

PNP Port, Dharmatar Creek

Plot no

Old Survey 247 / New Gut No. 346

Taluka

Alibag

Village

Shahabaj

Capital Investment (In lakhs)

3.21 Cr.

Scale

SSI(Small scale industry)

City

Alibag

Pincode

410216

Person Name

Mr. Siddharth Ghosh

Designation

DGM - Commercial & Operations

Telephone Number

9819771210

Fax Number

2143-320766

Email

siddharth@pnpport.com

Region

SRO-Raigad II

Industry Category

Industry Type

other

Last Environmental statement submitted online

yes

Consent Number

BO/MPCB/RO(HQ)/RD-3231-16/CR/B-3912

Consent Issue Date

19/3/2016

Consent Valid Upto

31/12/2020

Establishment Year

Date of last environment statement submitted

Industry Category Primary (STC Code) & Secondary (STC Code)

Product Information

Product Name

Jetty: For Cargo handling, Handling of coal, sulphur, Rock Phosphate, Iron Ore, Bauxite and Edible Oil Cargo

Consent Quantity

5

Actual Quantity

4.42

UOM

MT/A

By-product Information

By Product Name

NA

Consent Quantity

NA

Actual Quantity

NA

UOM

Part-B (Water & Raw Material Consumption)

1) Water Consumption in m3/day

Water Consumption for Process	Consent Quantity in m3/day	Actual Quantity in m3/day
Cooling	10	0
Domestic	5	4.5
All others	0	0
Total	15	4.5

2) Effluent Generation in CMD / MLD

Particulars	Consent Quantity	Actual Quantity	UOM
Daily quantity of sewage effluent from the factory	2.50	2.50	CMD

2) Product Wise Process Water Consumption (cubic meter of process water per unit of product)

Name of Products (Production)	During the Previous financial Year	During the current Financial year	UOM
NA	NA	NA	

3) Raw Material Consumption (Consumption of raw material per unit of product)

Name of Raw Materials	During the Previous financial Year	During the current Financial year	UOM
NA	NA	NA	

4) Fuel Consumption

Fuel Name	Consent quantity	Actual Quantity	UOM
NA	NA	NA	

Part-C

Pollution discharged to environment/unit of output (Parameter as specified in the consent issued)

[A] Water

Pollutants Detail	Quantity of Pollutants discharged (kL/day) Quantity	Concentration of Pollutants discharged(Mg/Lit) Except PH,Temp,Colour Concentration	Percentage of variation from prescribed standards with reasons %variation	Standard	Reason
NA	NA	NA	NA	NA	NA

[B] Air (Stack)

Pollutants Detail	Quantity of Pollutants discharged (kL/day) Quantity	Concentration of Pollutants discharged(Mg/NM3) Concentration	Percentage of variation from prescribed standards with reasons %variation	Standard	Reason
NA	NA	NA	NA	NA	NA

Part-D

HAZARDOUS WASTES

1) From Process

Hazardous Waste Type	Total During Previous Financial year	Total During Current Financial year	UOM
5.2 Wastes or residues containing oil	0.76	1.88	MT/A

2) From Pollution Control Facilities

Hazardous Waste Type	Total During Previous Financial year	Total During Current Financial year	UOM
			300

Part-E

SOLID WASTES

1) From Process

Non Hazardous Waste Type	Total During Previous Financial year	Total During Current Financial year	UOM
NA	NA	NA	KI

2) From Pollution Control Facilities

Non Hazardous Waste Type	Total During Previous Financial year	Total During Current Financial year	UOM
NA	NA	NA	KI

3) Quantity Recycled or Re-utilized within the unit

Waste Type	Total During Previous Financial year	Total During Current Financial year	UOM
0	NA	NA	KI

Part-F

Please specify the characteristics(in terms of concentration and quantum) of hazardous as well as solid wastes and indicate disposal practice adopted for both these categories of wastes.

1) Hazardous Waste

Type of Hazardous Waste Generated	Qty of Hazardous Waste	UOM	Concentration of Hazardous Waste
5.2 Wastes or residues containing oil	1.88	MT/A	NA

2) Solid Waste

Type of Solid Waste Generated	Qty of Solid Waste	UOM	Concentration of Solid Waste
NA	NA	KI	NA

Part-G

Impact of the pollution Control measures taken on conservation of natural resources and consequently on the cost of production.

Description	Reduction in Water Consumption (M3/day)	Reduction in Fuel & Solvent Consumption (KL/day)	Reduction in Raw Material (Kg)	Reduction in Power Consumption (KWH)	Capital Investment(in Lacs)	Reduction in Maintenance(in Lacs)
NA	NA	NA	NA	NA	NA	NA

Part-H

Additional measures/investment proposal for environmental protection abatement of pollution, prevention of pollution.

[A] Investment made during the period of Environmental Statement

Detail of measures for Environmental Protection	Environmental Protection Measures	Capital Investment (Lacks)
NA	NA	NA

[B] Investment Proposed for next Year

Detail of measures for Environmental Protection	Environmental Protection Measures	Capital Investment (Lacks)
Tree Plantation	500 Nos	0.30
		301

Part-I

Any other particulars for improving the quality of the environment.**Particulars**

Periodical trainings to all the employees regarding Environmental issues and keep them update with various methods to protect Environment. Display of informative posters at prominent locations

Name & Designation

Mr. Siddharth Ghosh.,DGM - Commercial & Operation

UAN No:

MPCB-ENVIRONMENT_STATEMENT-0000024292

Submitted On:

13-07-2020

ANNEXURE VII
ADVERTISEMENT IN NEWSPAPER

Newspaper advertisement page for PNP Maritime Services Pvt. Ltd. featuring various news articles such as 'Pak ex-embassy to Indonesia sold illegally', 'US brocas for storms Marco, Laura', 'Finland PM to head her party too', and 'Before The Recovery Office in the precincts of THE CITY COOPERATIVE BANK LTD. (MUMBAI)'. It also includes a public notice regarding environmental clearance for a project in Maharashtra.

Advertisement for Mahindra Finance featuring the headline 'मुंबईत रुग्ण बरे होण्याचे प्रमाण ८१ टक्क्यांवर' and 'रुग्ण दुपटीचा कालावधी ८५ दिवसांवर'. The ad includes a table of interest rates for various deposit schemes and a list of branches.