



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



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

PNP MARITIME SERVICES PVT. LTD.

Regd. Office: A-5, Ionic, 18, Arthur Bunder Road, Colaba, Mumbai 400 005, India.
Admin. Office: 2nd Floor, Lansdowne House, Mahakavi Bhushan Road, Colaba, Mumbai 400 001.
Tel.: 2288 4536/37/38/39/40 Fax: 2288 4535
Port Office: PNP Port Dharmatar at Shahabaj, Dist. Raigad. Tel.: +91-2143-320766.
Website: www.pnpport.com CIN: U63090MH1999PTC121461

PNP Maritime Services Pvt. Ltd.

Environmental Clearance Compliance Report

April 2020 to September 2020

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 conditions		
(v)	The project proponent shall comply with the air pollution mitigation measures as submitted.	Regular monitoring is being 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	√	

No.	Condition	Compliance	☑	P
		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 will be carried out during the fish breeding season. All measures will be taken to reduce the impacts on marine environment Regular monitoring is being carried out by a MoEF&CC recognized laboratory. The monitoring reports are 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 to prevent the 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 is being carried out by a MoEF recognized laboratory. The six-monthly monitoring report is attached.	√	
(xi)	Marine ecological studies and its mitigation measures for protection of phytoplankton, zooplanktons, macrobenthos, estuaries,	PP will comply with the condition		

No.	Condition	Compliance	☑	P
	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	PP agrees with the condition Marine ecology will be monitored regularly 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 is being carried out by a MoEF&CC recognized laboratory.	√	

No.	Condition	Compliance	☑	P
		The monitoring reports are 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 providing surface drainage systems including storm water network.	The material will be stored and used for back filling and landscaping.		
(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 will regularly submit half yearly compliance report RO, MoEF&CC.		
(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		

No.	Condition	Compliance	☑	P
	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)/RD3 231- 16/CR/B-3912 dated: 19.03.2016 has been obtained from MPCB and application for consent to Establish (expansion) will be done.		
(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	Noted		

No.	Condition	Compliance	☑	P
	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	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, Coast Guard, Civil Aviation Department shall be obtained, as applicable by project proponents from the respective competent authorities.	Noted		
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 is being carried out by a MoEF&CC recognized laboratory. The monitoring reports are 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		

No.	Condition	Compliance	☐	P
(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 used will be of 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 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.	Noted		
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.	Noted		
(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	PP will comply with the condition		

No.	Condition	Compliance	☑	P
	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.	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 horticulture, flushing, backwash, HVAC purposes and dust suppression.	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.		
(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 is being carried out by a MoEF&CC recognized laboratory. The monitoring report is 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 are regularly monitored. Construction activities will not be carried out during night time. Efforts		

No.	Condition	Compliance	☐	P
		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.	D.G sets with acoustic enclosures will be provided. PPE will be provided to the operating personnel wherever necessary.		
(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 agrees 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.	Dredged material will be disposed safely to a designated space.		
(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.	The solid wastes will be handled as per the norms of the Solid Waste Management Rules, 2016.		

No.	Condition	Compliance	☑	P
(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.	No dredging will be carried out during fish breeding and spawning seasons.		
(ii)	Dredging, etc. shall be carried out in the confined manner to reduce the impacts on marine environment.	Dredging will be carried out in a confined manner and by considering all the measures to reduce the impact 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.	Noted		

No.	Condition	Compliance	☑	P
(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.	Noted		
(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.	Personal Protective Equipment's will be provided to the personnel whenever and wherever required.		
(iii)	In case of repair of any old vessels, excessive care shall be taken while handling Asbestos & Freon gas. Besides, fully	PP will comply with the condition		

No.	Condition	Compliance	☑	P
	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.	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 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.	Noted		
(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.		

No.	Condition	Compliance	☑	P
(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 April 2020 to September 2020 is currently being submitted. The half yearly compliance report is 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	Noted		

No.	Condition	Compliance	☑	P
	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} , 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 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.	Noted.		
(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 will cooperate with the officials and will provide 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	Noted. The provisions of the approved Coastal Zone Management Plan of Maharashtra and the Supreme Court's order have been complied with.		

No.	Condition	Compliance	☑	P
	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.	Noted		
8	This issues with the approval of the Competent Authority.	Noted		

ANNEXURE I
SITE PHOTOGRAPHS

Construction Site



PPE provided to the Workers



Site Office



Water Tank



ANNEXURE II
ENVIRONMENT MONITORING REPORT



TC-5509

AMBIENT AIR QUALITY MONITORING REPORT

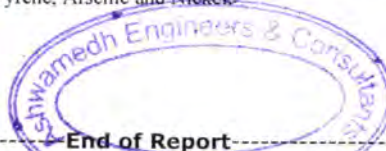
Sample / Report No.	AA/08/20/0195	Report Date	24/08/2020
Name & Address of Customer	PNP Maritime Services Private Limited 2nd Floor, Lansdowne House Building, M.B. Marg, Near Regal Cinema, Apollo Bunder, Colaba, Mumbai - 400 001		
Sample Collected by	Laboratory	Sample Description/ Type	Ambient Air (Group: Atmospheric Pollution Sub Group: Ambient Air Quality)
Sampling Location	Near Main Gate	Date-Sampling	03/08/2020 to 04/08/2020
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. plastic bladder	Date-Receipt of Sample	06/08/2020
Sampling Procedure	As per Method Reference	Date-Start of Analysis	06/08/2020
Order Reference	As per PO No. PNP/February/2019- 2020/013 Dated 26/02/2020	Date-Completion of Analysis	24/08/2020

Meteorological Data / Environmental Conditions

Average Wind Velocity 18 km/h	Wind Direction SE	Relative Humidity (Max./Min.): 87/65 %	Temperature (Max./Min.): 29/25 °C	Duration of Survey 24 h
Parameter	Results	NAAQS # 2009	Unit	Method
CHEMICAL TESTING				
Sulphur Dioxide (SO ₂)	7.3	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	336	100	µg/m ³	IS 5182 (Part 23): 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)	33.7	180	µg/m ³	AWMA, 3rd Ed., Method 411, Page no. 403, 1988
Lead (Pb)	<0.02	1	µg/m ³	EPA/625/R-96/D10 a Compendium Method 10-3.1 & 3.2, Jun 1999
Carbon Monoxide (CO)	1.51	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)	1.08	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 I2): 2004, RA 2019
Arsenic (As)	<0.3	6	ng/m ³	EPA/625/R-96/D10 a Compendium Method 10-3.1 & 3.2, Jun 1999
Nickel (Ni)	<3	20	ng/m ³	EPA/625/R-96/D10 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.

Ninad Soundankar
 Ninad Soundankar
 Technical Manager (Chemical)
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Note:

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AMBIENT AIR QUALITY MONITORING REPORT

Sample / Report No.	AA/08/20/0196	Report Date	24/08/2020
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	03/08/2020 to 04/08/2020
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. plastic bladder	Date-Receipt of Sample	06/08/2020
Sampling Procedure	As per Method Reference	Date-Start of Analysis	06/08/2020
Order Reference	As per PO No. PNP/February/2019- 2020/013 Dated 26/02/2020	Date-Completion of Analysis	24/08/2020

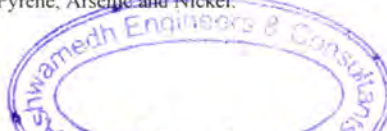
Meteorological Data / Environmental Conditions

Average Wind Velocity 18 km/h	Wind Direction SE	Relative Humidity (Max./Min.): 87/65 %	Temperature (Max./Min.): 29/25 °C	Duration of Survey 24 h
Parameter	Results	NAAQS # 2009	Unit	Method
CHEMICAL TESTING				
Sulphur Dioxide (SO ₂)	7.9	80	µg/m ³	IS 5182 (Part 2): 2001, RA 2017
Nitrogen Dioxide (NO ₂)	23.6	80	µg/m ³	IS 5182 (Part 6): 2006, RA 2017
Particulate Matter (size less than 10 µm) or PM ₁₀	315	100	µg/m ³	IS 5182 (Part 23): 2006, RA 2017
Particulate Matter (size less than 2.5µm) or PM _{2.5}	118	60	µg/m ³	USEPA CFR 40, Part 50, Appendix L
Ozone (O ₃)	33.7	180	µg/m ³	AWMA, 3rd Ed., Method 411, Page no. 403, 1988
Lead (Pb)	<0.02	1	µg/m ³	EPA/625/R-96/D10 a Compendium Method 10-3.1 & 3.2, Jun 1999
Carbon Monoxide (CO)	1.3	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)	1.27	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 2019
Arsenic (As)	<0.3	6	ng/m ³	EPA/625/R-96/D10 a Compendium Method 10-3.1 & 3.2, Jun 1999
Nickel (Ni)	<3	20	ng/m ³	EPA/625/R-96/D10 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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 Technical Manager (Chemical)
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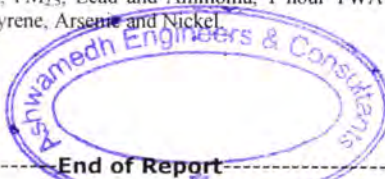
Sample / Report No.	AA/08/20/0197	Report Date	24/08/2020
Name & Address of Customer	PNP Maritime Services Private Limited 2nd Floor, Lansdowne House Building, M.B. Marg, Near Regal Cinema, Apollo Bunder, Colaba, Mumbai – 400 001		
Sample Collected by	Laboratory	Sample Description/ Type	Ambient Air (Group: Atmospheric Pollution Sub Group: Ambient Air Quality)
Sampling Location	Near Jetty No. 2	Date-Sampling	03/08/2020 to 04/08/2020
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. plastic bladder	Date-Receipt of Sample	06/08/2020
Sampling Procedure	As per Method Reference	Date-Start of Analysis	06/08/2020
Order Reference	As per PO No. PNP/February/2019- 2020/013 Dated 26/02/2020	Date-Completion of Analysis	24/08/2020

Meteorological Data / Environmental Conditions

Average Wind Velocity 18 km/h	Wind Direction SE	Relative Humidity (Max./Min.): 87/65 %	Temperature (Max./Min.): 29/25 °C	Duration of Survey 24 h
Parameter	Results	NAAQS # 2009	Unit	Method
CHEMICAL TESTING				
Sulphur Dioxide (SO ₂)	7.8	80	µg/m ³	IS 5182 (Part 2): 2001, RA 2017
Nitrogen Dioxide (NO ₂)	24.1	80	µg/m ³	IS 5182 (Part 6): 2006, RA 2017
Particulate Matter (size less than 10 µm) or PM ₁₀	250	100	µg/m ³	IS 5182 (Part 23): 2006, RA 2017
Particulate Matter (size less than 2.5µm) or PM _{2.5}	100	60	µg/m ³	USEPA CFR 40, Part 50, Appendix L
Ozone (O ₃)	33.7	180	µg/m ³	AWMA, 3rd Ed., Method 411, Page no. 403, 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)	1.20	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)	1.45	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 I2): 2004, RA 2019
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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AMBIENT AIR QUALITY MONITORING REPORT

Sample / Report No.	AA/08/20/0198	Report Date	24/08/2020
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	03/08/2020 to 04/08/2020
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. plastic bladder	Date-Receipt of Sample	06/08/2020
Sampling Procedure	As per Method Reference	Date-Start of Analysis	06/08/2020
Order Reference	As per PO No. PNP/February/2019- 2020/013 Dated 26/02/2020	Date-Completion of Analysis	24/08/2020

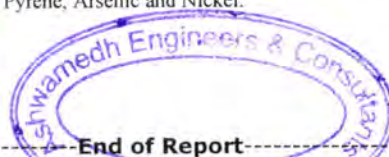
Meteorological Data / Environmental Conditions

Average Wind Velocity 18 km/h	Wind Direction SE	Relative Humidity (Max./Min.): 87/65 %	Temperature (Max./Min.): 29/25 °C	Duration of Survey 24 h
Parameter	Results	NAAQS # 2009	Unit	Method
CHEMICAL TESTING				
Sulphur Dioxide (SO ₂)	7.4	80	µg/m ³	IS 5182 (Part 2): 2001, RA 2017
Nitrogen Dioxide (NO ₂)	25.7	80	µg/m ³	IS 5182 (Part 6): 2006, RA 2017
Particulate Matter (size less than 10 µm) or PM ₁₀	260	100	µg/m ³	IS 5182 (Part 23): 2006, RA 2017
Particulate Matter (size less than 2.5µm) or PM _{2.5}	105	60	µg/m ³	USEPA CFR 40, Part 50, Appendix L
Ozone (O ₃)	28.1	180	µg/m ³	AWMA, 3rd Ed., Method 411, Page no. 403, 1988
Lead (Pb)	<0.02	1	µg/m ³	EPA/625/R-96/D10 a Compendium Method 10-3.1 & 3.2, Jun 1999
Carbon Monoxide (CO)	1.4	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)	1.26	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 2019
Arsenic (As)	<0.3	6	ng/m ³	EPA/625/R-96/D10 a Compendium Method 10-3.1 & 3.2, Jun 1999
Nickel (Ni)	<3	20	ng/m ³	EPA/625/R-96/D10 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.

(Signature)
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 Technical Manager (Chemical)
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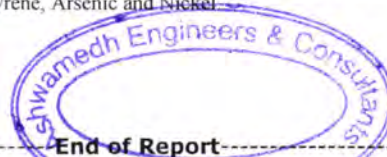
Sample / Report No.	AA/08/20/0199	Report Date	24/08/2020
Name & Address of Customer	PNP Maritime Services Private Limited 2nd Floor, Lansdowne House Building, M.B. Marg, Near Regal Cinema, Apollo Bunder, Colaba, Mumbai - 400 001		
Sample Collected by	Laboratory	Sample Description/ Type	Ambient Air (Group: Atmospheric Pollution Sub Group: Ambient Air Quality)
Sampling Location	Near Jetty No. 5	Date-Sampling	03/08/2020 to 04/08/2020
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. plastic bladder	Date-Receipt of Sample	06/08/2020
Sampling Procedure	As per Method Reference	Date-Start of Analysis	06/08/2020
Order Reference	As per PO No. PNP/February/2019- 2020/013 Dated 26/02/2020	Date-Completion of Analysis	24/08/2020

Meteorological Data / Environmental Conditions

Average Wind Velocity 18 km/h	Wind Direction SE	Relative Humidity (Max./Min.): 87/65 %	Temperature (Max./Min.): 29/25 °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 2): 2001, RA 2017
Nitrogen Dioxide (NO ₂)	27.6	80	µg/m ³	IS 5182 (Part 6): 2006, RA 2017
Particulate Matter (size less than 10 µm) or PM ₁₀	257	100	µg/m ³	IS 5182 (Part 23): 2006, RA 2017
Particulate Matter (size less than 2.5µm) or PM _{2.5}	98	60	µg/m ³	USEPA CFR 40, Part 50, Appendix I
Ozone (O ₃)	21.0	180	µg/m ³	AWMA, 3rd Ed., Method 411, Page no. 403, 1988
Lead (Pb)	<0.02	1	µg/m ³	EPA/625/R-96/D10 a Compendium Method 10-3.1 & 3.2, Jun 1999
Carbon Monoxide (CO)	1.13	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)	1.03	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 I2): 2004, RA 2019
Arsenic (As)	<0.3	6	ng/m ³	EPA/625/R-96/D10 a Compendium Method 10-3.1 & 3.2, Jun 1999
Nickel (Ni)	<3	20	ng/m ³	EPA/625/R-96/D10 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

Ninad Soundankar
 Ninad Soundankar
 Technical Manager (Chemical)
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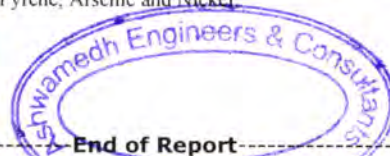
Sample / Report No.	AA/08/20/0200	Report Date	24/08/2020
Name & Address of Customer	PNP Maritime Services Private Limited 2nd Floor, Lansdowne House Building, M.B. Marg, Near Regal Cinema, Apollo Bunder, Colaba, Mumbai - 400 001		
Sample Collected by	Laboratory	Sample Description/ Type	Ambient Air (Group: Atmospheric Pollution Sub Group: Ambient Air Quality)
Sampling Location	Near Weight Bridge	Date-Sampling	03/08/2020 to 04/08/2020
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. plastic bladder	Date-Receipt of Sample	06/08/2020
Sampling Procedure	As per Method Reference	Date-Start of Analysis	06/08/2020
Order Reference	As per PO No. PNP/February/2019- 2020/013 Dated 26/02/2020	Date-Completion of Analysis	24/08/2020

Meteorological Data / Environmental Conditions

Average Wind Velocity 18 km/h	Wind Direction SE	Relative Humidity (Max./Min.): 87/65 %	Temperature (Max./Min.): 29/25 °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 2): 2001, RA 2017
Nitrogen Dioxide (NO ₂)	22.4	80	µg/m ³	IS 5182 (Part 6): 2006, RA 2017
Particulate Matter (size less than 10 µm) or PM ₁₀	300	100	µg/m ³	IS 5182 (Part 23): 2006, RA 2017
Particulate Matter (size less than 2.5µm) or PM _{2.5}	101	60	µg/m ³	USEPA CFR 40, Part 50, Appendix L
Ozone (O ₃)	22.5	180	µg/m ³	AWMA 3rd Ed., Method 4II, Page no. 403, 1988
Lead (Pb)	<0.02	1	µg/m ³	EPA/625/R-96/D10 a Compendium Method IO-3.1 & 3.2, Jun 1999
Carbon Monoxide (CO)	1.20	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 II): 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 IO-3.1 & 3.2, Jun 1999
Nickel (Ni)	<3	20	ng/m ³	EPA/625/R-96/D10 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

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

Sample / Report No.	AA/08/20/0201	Report Date	24/08/2020
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	03/08/2020 to 04/08/2020
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. plastic bladder	Date-Receipt of Sample	06/08/2020
Sampling Procedure	As per Method Reference	Date-Start of Analysis	06/08/2020
Order Reference	As per PO No. PNP/February/2019- 2020/013 Dated 26/02/2020	Date-Completion of Analysis	24/08/2020

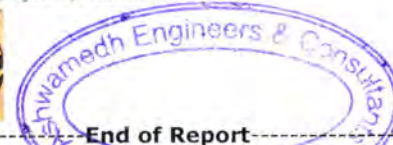
Meteorological Data / Environmental Conditions

Average Wind Velocity 18 km/h	Wind Direction SE	Relative Humidity (Max./Min.): 87/65 %	Temperature (Max./Min.): 29/25 °C	Duration of Survey 24 h
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Parameter	Results	NAAQS # 2009	Unit	Method
CHEMICAL TESTING				
Sulphur Dioxide (SO ₂)	7.9	80	µg/m ³	IS 5182 (Part 2): 2001, 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	255	100	µg/m ³	IS 5182 (Part 23): 2006, RA 2017
Particulate Matter (size less than 2.5µm) or PM _{2.5}	100	60	µg/m ³	USEPA CFR 40, Part 50, Appendix L
Ozone (O ₃)	25.2	180	µg/m ³	AWMA, 3rd Ed., Method 411, Page no. 403, 1988
Lead (Pb)	<0.02	1	µg/m ³	EPA/625/R-96/D10 a Compendium Method IO-3.1 & 3.2, Jun 1999
Carbon Monoxide (CO)	1.6	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)	1.29	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 IO-3.1 & 3.2, Jun 1999
Nickel (Ni)	<3	20	ng/m ³	EPA/625/R-96/D10 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.

(Signature)
 Niraj Soundankar
 Technical Manager (Chemical)
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Note:

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TC-5509

AMBIENT AIR QUALITY MONITORING REPORT

Sample / Report No.	AA/08/20/0202	Report Date	24/08/2020
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	03/08/2020 to 04/08/2020
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. plastic bladder	Date-Receipt of Sample	06/08/2020
Sampling Procedure	As per Method Reference	Date-Start of Analysis	06/08/2020
Order Reference	As per PO No. PNP/February/2019- 2020/013 Dated 26/02/2020	Date-Completion of Analysis	24/08/2020

Meteorological Data / Environmental Conditions

Average Wind Velocity 18 km/h	Wind Direction SE	Relative Humidity (Max./Min.): 87/65 %	Temperature (Max./Min.): 29/25 °C	Duration of Survey 24 h
Parameter	Results	NAAQS # 2009	Unit	Method
CHEMICAL TESTING				
Sulphur Dioxide (SO ₂)	6.2	80	µg/m ³	IS 5182 (Part 2): 2001, 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	261	100	µg/m ³	IS 5182 (Part 23): 2006, RA 2017
Particulate Matter (size less than 2.5µm) or PM _{2.5}	103	60	µg/m ³	USEPA CFR 40, Part 50, Appendix L
Ozone (O ₃)	28.1	180	µg/m ³	AWMA, 3rd Ed., Method 411, 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)	1.23	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)	1.28	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 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.

(Signature)
 Nirad Soundankar
 Technical Manager (Chemical)
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End of Report

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AMBIENT AIR QUALITY MONITORING REPORT

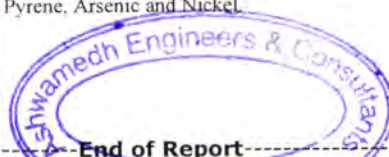
Sample / Report No.	AA/08/20/0203	Report Date	24/08/2020
Name & Address of Customer	PNP Maritime Services Private Limited 2nd Floor, Lansdowne House Building, M.B. Marg, Near Regal Cinema, Apollo Bunder, Colaba, Mumbai - 400 001		
Sample Collected by	Laboratory	Sample Description/ Type	Ambient Air (Group: Atmospheric Pollution Sub Group: Ambient Air Quality)
Sampling Location	Near DIL Main Gate	Date-Sampling	03/08/2020 to 04/08/2020
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. plastic bladder	Date-Receipt of Sample	06/08/2020
Sampling Procedure	As per Method Reference	Date-Start of Analysis	06/08/2020
Order Reference	As per PO No. PNP/February/2019- 2020/013 Dated 26/02/2020	Date-Completion of Analysis	24/08/2020

Meteorological Data / Environmental Conditions

Average Wind Velocity 18 km/h	Wind Direction SE	Relative Humidity (Max./Min.): 87/65 %	Temperature (Max./Min.): 29/25 °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): 2001, RA 2017
Nitrogen Dioxide (NO ₂)	28.1	80	µg/m ³	IS 5182 (Part 6): 2006, RA 2017
Particulate Matter (size less than 10 µm) or PM ₁₀	253	100	µg/m ³	IS 5182 (Part 23): 2006, RA 2017
Particulate Matter (size less than 2.5µm) or PM _{2.5}	100	60	µg/m ³	USEPA CFR 40, Part 50, Appendix L
Ozone (O ₃)	22.4	180	µg/m ³	AWMA, 3rd Ed., Method 411, Page no. 403, 1988
Lead (Pb)	<0.02	1	µg/m ³	EPA/625/R-96/D10 a Compendium Method 10-3.1 & 3.2, Jun 1999
Carbon Monoxide (CO)	1.3	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)	1.2	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 2019
Arsenic (As)	<0.3	6	ng/m ³	EPA/625/R-96/D10 a Compendium Method 10-3.1 & 3.2, Jun 1999
Nickel (Ni)	<3	20	ng/m ³	EPA/625/R-96/D10 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.

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

Sample / Report No.	AA/08/20/0204	Report Date	24/08/2020
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	03/08/2020 to 04/08/2020
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. plastic bladder	Date-Receipt of Sample	06/08/2020
Sampling Procedure	As per Method Reference	Date-Start of Analysis	06/08/2020
Order Reference	As per PO No. PNP/February/2019- 2020/013 Dated 26/02/2020	Date-Completion of Analysis	24/08/2020

Meteorological Data / Environmental Conditions

Average Wind Velocity 18 km/h	Wind Direction SE	Relative Humidity (Max./Min.): 87/65 %	Temperature (Max./Min.): 29/25 °C	Duration of Survey 24 h
Parameter	Results	NAAQS # 2009	Unit	Method
CHEMICAL TESTING				
Sulphur Dioxide (SO ₂)	6.4	80	µg/m ³	IS 5182 (Part 2): 2001, RA 2017
Nitrogen Dioxide (NO ₂)	24.8	80	µg/m ³	IS 5182 (Part 6): 2006, RA 2017
Particulate Matter (size less than 10 µm) or PM ₁₀	201	100	µg/m ³	IS 5182 (Part 23): 2006, RA 2017
Particulate Matter (size less than 2.5µm) or PM _{2.5}	93	60	µg/m ³	USEPA CFR 40, Part 50, Appendix L
Ozone (O ₃)	<19.6	180	µg/m ³	AWMA 3rd Ed., Method 411, Page no. 403, 1988
Lead (Pb)	<0.02	1	µg/m ³	EPA/625/R-96/D10 a Compendium Method IO-3.1 & 3.2, Jun 1999
Carbon Monoxide (CO)	1.13	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	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 IO-3.1 & 3.2, Jun 1999
Nickel (Ni)	<3	20	ng/m ³	EPA/625/R-96/D10 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.

Ninad Soundankar
 Ninad Soundankar
 Technical Manager (Chemical)
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NOISE LEVEL MEASUREMENT REPORT

Sample / Report No.	N/08/20/0205	Report Date	07/08/2020
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	03/08/2020

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)	71.4	70.2	CPCB Protocol for Ambient Level Noise Monitoring, July 2015 AEC/C/SAP/SAM/35 & 36
	2100 (Night Time)	69.5	68.3	
B. Near Jetty No. 1	0910 (Day Time)	68.9	67.4	
	2110 (Night Time)	66.5	65.3	
C. Near Jetty No. 2	0920 (Day Time)	72.1	71.3	
	2120 (Night Time)	70.3	69.4	
D. Near Jetty No. 3	0930 (Day Time)	74.8	73.7	
	2130 (Night Time)	73.6	72.5	
E. Near Jetty No. 5	0940 (Day Time)	60.4	60.1	
	2140 (Night Time)	59.6	58.3	
F. Near Weight Bridge	0950 (Day Time)	70.2	69.8	
	2150 (Night Time)	68.7	67.6	
G. Near Custom Building	1000 (Day Time)	65.4	64.3	
	2200 (Night Time)	63.2	61.8	
H. Near Lal Gate	1010 (Day Time)	69.6	68.5	
	2210 (Night Time)	67.6	66.3	
I. Near DIL Main Gate	1020 (Day Time)	70.7	69.6	
	2220 (Night Time)	68.5	67.3	
J. DIL Godown Back Side	1130 (Day Time)	62.4	61.2	
	2330 (Night Time)	59.8	58.3	

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

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

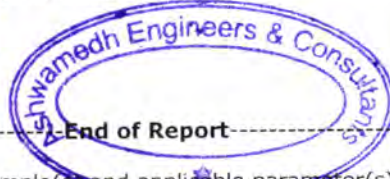
Sample / Report No.	AA/08/20/0320	Report Date	24/08/2020
Name & Address of Customer	PNP Maritime Services Private Limited 2nd Floor, Lansdowne House Building, M.B. Marg, Near Regal Cinema, Apollo Bunder, Colaba, Mumbai - 400 001		
Sample Collected by	Laboratory	Sample Description/ Type	Ambient Air (Group: Atmospheric Pollution Sub Group: Ambient Air Quality Monitoring)
Sampling Location	Near Main Gate	Date-Sampling	06/08/2020 to 07/08/2020
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. plastic bladder	Date-Receipt of Sample	08/08/2020
Sampling Procedure	As per Method Reference	Date-Start of Analysis	08/08/2020
Order Reference	As per PO No. PNP/February/2019- 2020/013 Dated 26/02/2020	Date-Completion of Analysis	24/08/2020

Meteorological Data / Environmental Conditions

Average Wind Velocity 23km/h	Wind Direction SW	Relative Humidity (Max./Min.): 85/62 %	Temperature (Max./Min.): 29/25 °C	Duration of Survey 24 h
Parameter	Results	NAAQS # 2009	Unit	Method
CHEMICAL TESTING				
Sulphur Dioxide (SO ₂)	8.1	80	µg/m ³	IS 5182 (Part 2): 2001, 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	323	100	µg/m ³	IS 5182 (Part 23): 2006, RA 2017
Particulate Matter (size less than 2.5µm) or PM _{2.5}	106	60	µg/m ³	USEPA CFR 40, Part 50, Appendix L
Ozone (O ₃)	37.9	180	µg/m ³	AWMA 3rd Ed., Method 411, Page no. 403, 1988
Lead (Pb)	<0.02	1	µg/m ³	EPA/625/R-96/D10 a Compendium Method 10-3.1 & 3.2, Jun 1999
Carbon Monoxide (CO)	1.34	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)	2.4	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 10-3.1 & 3.2, Jun 1999
Nickel (Ni)	<3	20	ng/m ³	EPA/625/R-96/D10 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.

H. S. Soundankar
 Nihad Soundankar
 Technical Manager (Chemical)
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AMBIENT AIR QUALITY MONITORING REPORT

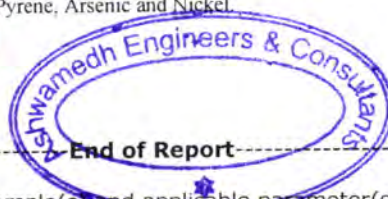
Sample / Report No.	AA/08/20/0321	Report Date	24/08/2020
Name & Address of Customer	PNP Maritime Services Private Limited 2nd Floor, Lansdowne House Building, M.B. Marg, Near Regal Cinema, Apollo Bunder, Colaba, Mumbai – 400 001		
Sample Collected by	Laboratory	Sample Description/ Type	Ambient Air (Group: Atmospheric Pollution Sub Group: Ambient Air Quality)
Sampling Location	Near Jetty No. 1	Date-Sampling	06/08/2020 to 07/08/2020
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. plastic bladder	Date-Receipt of Sample	08/08/2020
Sampling Procedure	As per Method Reference	Date-Start of Analysis	08/08/2020
Order Reference	As per PO No. PNP/February/2019- 2020/013 Dated 26/02/2020	Date-Completion of Analysis	24/08/2020

Meteorological Data / Environmental Conditions

Average Wind Velocity 23km/h	Wind Direction SW	Relative Humidity (Max./Min.): 85/62 %	Temperature (Max./Min.): 29/25 °C	Duration of Survey 24 h
Parameter	Results	NAAQS # 2009	Unit	Method
CHEMICAL TESTING				
Sulphur Dioxide (SO ₂)	7.6	80	µg/m ³	IS 5182 (Part 2): 2001, 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	338	100	µg/m ³	IS 5182 (Part 23): 2006, RA 2017
Particulate Matter (size less than 2.5µm) or PM _{2.5}	126	60	µg/m ³	USEPA CFR 40, Part 50, Appendix L
Ozone (O ₃)	36.5	180	µg/m ³	AWMA, 3rd Ed., Method 411, Page no. 403, 1988
Lead (Pb)	<0.02	1	µg/m ³	EPA/625/R-96/D10 a Compendium Method 10-3.1 & 3.2, Jun 1999
Carbon Monoxide (CO)	1.60	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)	1.28	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 I2): 2004, RA 2019
Arsenic (As)	<0.3	6	ng/m ³	EPA/625/R-96/D10 a Compendium Method 10-3.1 & 3.2, Jun 1999
Nickel (Ni)	<3	20	ng/m ³	EPA/625/R-96/D10 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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AMBIENT AIR QUALITY MONITORING REPORT

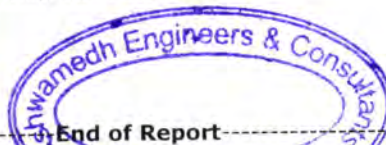
Sample / Report No.	AA/08/20/0322	Report Date	24/08/2020
Name & Address of Customer	PNP Maritime Services Private Limited 2nd Floor, Lansdowne House Building, M.B. Marg, Near Regal Cinema, Apollo Bunder, Colaba, Mumbai – 400 001		
Sample Collected by	Laboratory	Sample Description/ Type	Ambient Air (Group: Atmospheric Pollution Sub Group: Ambient Air Quality)
Sampling Location	Near Jetty No. 2	Date-Sampling	06/08/2020 to 07/08/2020
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. plastic bladder	Date-Receipt of Sample	08/08/2020
Sampling Procedure	As per Method Reference	Date-Start of Analysis	08/08/2020
Order Reference	As per PO No. PNP/February/2019- 2020/013 Dated 26/02/2020	Date-Completion of Analysis	24/08/2020

Meteorological Data / Environmental Conditions

Average Wind Velocity 23km/h	Wind Direction SW	Relative Humidity (Max./Min.): 85/62 %	Temperature (Max./Min.): 29/25 °C	Duration of Survey 24 h
Parameter	Results	NAAQS # 2009	Unit	Method
CHEMICAL TESTING				
Sulphur Dioxide (SO ₂)	7.3	80	µg/m ³	IS 5182 (Part 2): 2001, RA 2017
Nitrogen Dioxide (NO ₂)	27.1	80	µg/m ³	IS 5182 (Part 6): 2006, RA 2017
Particulate Matter (size less than 10 µm) or PM ₁₀	263	100	µg/m ³	IS 5182 (Part 23): 2006, RA 2017
Particulate Matter (size less than 2.5µm) or PM _{2.5}	118	60	µg/m ³	USEPA CFR 40, Part 50, Appendix L
Ozone (O ₃)	32.3	180	µg/m ³	AWMA 3rd Ed., Method 411, Page no. 403, 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)	1.33	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)	1.34	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 2019
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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AMBIENT AIR QUALITY MONITORING REPORT

Sample / Report No.	AA/08/20/0323	Report Date	24/08/2020
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	06/08/2020 to 07/08/2020
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. plastic bladder	Date-Receipt of Sample	08/08/2020
Sampling Procedure	As per Method Reference	Date-Start of Analysis	08/08/2020
Order Reference	As per PO No. PNP/February/2019- 2020/013 Dated 26/02/2020	Date-Completion of Analysis	24/08/2020

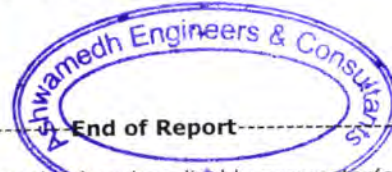
Meteorological Data / Environmental Conditions

Average Wind Velocity 18 km/h	Wind Direction SE	Relative Humidity (Max./Min.): 87/65 %	Temperature (Max./Min.): 29/25 °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): 2001, RA 2017
Nitrogen Dioxide (NO ₂)	23.3	80	µg/m ³	IS 5182 (Part 6): 2006, RA 2017
Particulate Matter (size less than 10 µm) or PM ₁₀	275	100	µg/m ³	IS 5182 (Part 23): 2006, RA 2017
Particulate Matter (size less than 2.5µm) or PM _{2.5}	113	60	µg/m ³	USEPA CFR 40, Part 50, Appendix L
Ozone (O ₃)	22.5	180	µg/m ³	AWMA, 3rd Ed., Method 411, Page no. 403, 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)	1.69	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)	1.53	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 10-3.1 & 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.

H. S. Jankar
 Ninad Soundankar
 Technical Manager (Chemical)
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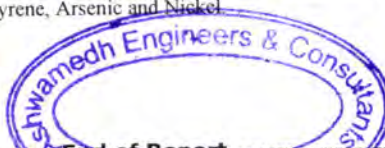
Sample / Report No.	AA/08/20/0324	Report Date	24/08/2020
Name & Address of Customer	PNP Maritime Services Private Limited 2nd Floor, Lansdowne House Building, M.B. Marg, Near Regal Cinema, Apollo Bunder, Colaba, Mumbai - 400 001		
Sample Collected by	Laboratory	Sample Description/ Type	Ambient Air (Group: Atmospheric Pollution Sub Group: Ambient Air Quality Monitoring)
Sampling Location	Near Jetty No. 5	Date-Sampling	06/08/2020 to 07/08/2020
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. plastic bladder	Date-Receipt of Sample	08/08/2020
Sampling Procedure	As per Method Reference	Date-Start of Analysis	08/08/2020
Order Reference	As per PO No. PNP/February/2019- 2020/013 Dated 26/02/2020	Date-Completion of Analysis	24/08/2020

Meteorological Data / Environmental Conditions

Average Wind Velocity 23km/h	Wind Direction SW	Relative Humidity (Max./Min.): 85/62 %	Temperature (Max./Min.): 29/25 °C	Duration of Survey 24 h
Parameter	Results	NAAQS # 2009	Unit	Method
CHEMICAL TESTING				
Sulphur Dioxide (SO ₂)	7.4	80	µg/m ³	IS 5182 (Part 2): 2001, RA 2017
Nitrogen Dioxide (NO ₂)	29.0	80	µg/m ³	IS 5182 (Part 6): 2006, RA 2017
Particulate Matter (size less than 10 µm) or PM ₁₀	268	100	µg/m ³	IS 5182 (Part 23): 2006, RA 2017
Particulate Matter (size less than 2.5µm) or PM _{2.5}	106	60	µg/m ³	USEPA CFR 40, Part 50, Appendix L
Ozone (O ₃)	25.3	180	µg/m ³	AWMA 3rd Ed., Method 411, Page no. 403, 1988
Lead (Pb)	<0.02	1	µg/m ³	EPA/625/R-96/D10 a Compendium Method 10-3.1 & 3.2, Jun 1999
Carbon Monoxide (CO)	1.10	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)	1.33	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): 2004, RA 2019
Arsenic (As)	<0.3	6	ng/m ³	EPA/625/R-96/D10 a Compendium Method 10-3.1 & 3.2, Jun 1999
Nickel (Ni)	<3	20	ng/m ³	EPA/625/R-96/D10 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

Ninad Soundankar
 Technical Manager (Chemical)
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Sample / Report No.	AA/08/20/0325	Report Date	24/08/2020
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	06/08/2020 to 07/08/2020
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. plastic bladder	Date-Receipt of Sample	08/08/2020
Sampling Procedure	As per Method Reference	Date-Start of Analysis	08/08/2020
Order Reference	As per PO No. PNP/February/2019- 2020/013 Dated 26/02/2020	Date-Completion of Analysis	24/08/2020

Meteorological Data / Environmental Conditions

Average Wind Velocity 23km/h	Wind Direction SW	Relative Humidity (Max./Min.): 85/62 %	Temperature (Max./Min.): 29/25 °C	Duration of Survey 24 h
Parameter	Results	NAAQS # 2009	Unit	Method
CHEMICAL TESTING				
Sulphur Dioxide (SO ₂)	7.3	80	µg/m ³	IS 5182 (Part 2): 2001, RA 2017
Nitrogen Dioxide (NO ₂)	25.2	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}	117	60	µg/m ³	USEPA CFR 40, Part 50, Appendix L
Ozone (O ₃)	22.5	180	µg/m ³	AWMA 3rd Ed., Method 411, Page no. 403, 1988
Lead (Pb)	<0.02	1	µg/m ³	EPA/625/R-96/D10 a Compendium Method 10-3.1 & 3.2, Jun 1999
Carbon Monoxide (CO)	1.36	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)	1.78	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 2019
Arsenic (As)	<0.3	6	ng/m ³	EPA/625/R-96/D10 a Compendium Method 10-3.1 & 3.2, Jun 1999
Nickel (Ni)	<3	20	ng/m ³	EPA/625/R-96/D10 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.


 Ninad Soundankar
 Technical Manager (Chemical)
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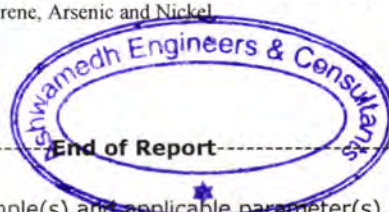
Sample / Report No.	AA/08/20/0326	Report Date	24/08/2020
Name & Address of Customer	PNP Maritime Services Private Limited 2nd Floor, Lansdowne House Building, M.B. Marg, Near Regal Cinema, Apollo Bunder, Colaba, Mumbai - 400 001		
Sample Collected by	Laboratory	Sample Description/ Type	Ambient Air (Group: Atmospheric Pollution, Sub Group: Ambient Air Quality)
Sampling Location	Near Custom Building	Date-Sampling	06/08/2020 to 07/08/2020
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. plastic bladder	Date-Receipt of Sample	08/08/2020
Sampling Procedure	As per Method Reference	Date-Start of Analysis	08/08/2020
Order Reference	As per PO No. PNP/February/2019- 2020/013 Dated 26/02/2020	Date-Completion of Analysis	24/08/2020

Meteorological Data / Environmental Conditions

Average Wind Velocity 23 km/h	Wind Direction SW	Relative Humidity (Max./Min.): 85/62 %	Temperature (Max./Min.): 29/25 °C	Duration of Survey 24 h
Parameter	Results	NAAQS # 2009	Unit	Method
CHEMICAL TESTING				
Sulphur Dioxide (SO ₂)	6.9	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	268	100	µg/m ³	IS 5182 (Part 23): 2006, RA 2017
Particulate Matter (size less than 2.5µm) or PM _{2.5}	112	60	µg/m ³	USEPA CFR 40, Part 50, Appendix L
Ozone (O ₃)	26.7	180	µg/m ³	AWMA 3rd Ed., Method 411, Page no. 403, 1988
Lead (Pb)	<0.02	1	µg/m ³	EPA/625/R-96/D10 a Compendium Method 10-3.1 & 3.2, Jun 1999
Carbon Monoxide (CO)	1.30	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)	1.50	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 2019
Arsenic (As)	<0.3	6	ng/m ³	EPA/625/R-96/D10 a Compendium Method 10-3.1 & 3.2, Jun 1999
Nickel (Ni)	<3	20	ng/m ³	EPA/625/R-96/D10 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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Sample / Report No.	AA/08/20/0327	Report Date	24/08/2020
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	06/08/2020 to 07/08/2020
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. plastic bladder	Date-Receipt of Sample	08/08/2020
Sampling Procedure	As per Method Reference	Date-Start of Analysis	08/08/2020
Order Reference	As per PO No. PNP/February/2019- 2020/013 Dated 26/02/2020	Date-Completion of Analysis	24/08/2020

Meteorological Data / Environmental Conditions

Average Wind Velocity 18 km/h	Wind Direction SE	Relative Humidity (Max./Min.): 87/65 %	Temperature (Max./Min.): 29/25 °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 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	276	100	µg/m ³	IS 5182 (Part 23): 2006, RA 2017
Particulate Matter (size less than 2.5µm) or PM _{2.5}	113	60	µg/m ³	USEPA CFR 40, Part 50, Appendix L
Ozone (O ₃)	30.9	180	µg/m ³	AWMA, 3rd Ed., Method 411, Page no. 403, 1988
Lead (Pb)	<0.02	1	µg/m ³	EPA/625/R-96/D10 a Compendium Method 10-3.1 & 3.2, Jun 1999
Carbon Monoxide (CO)	1.44	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)	2.0	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 10-3.1 & 3.2, Jun 1999
Nickel (Ni)	<3	20	ng/m ³	EPA/625/R-96/D10 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.


 Ninad Soundankar
 Technical Manager (Chemical)
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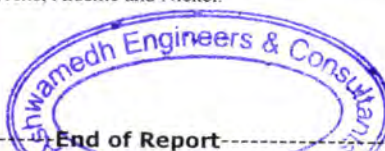
Sample / Report No.	AA/08/20/0328	Report Date	24/08/2020
Name & Address of Customer	PNP Maritime Services Private Limited 2nd Floor, Lansdowne House Building, M.B. Marg, Near Regal Cinema, Apollo Bunder, Colaba, Mumbai - 400 001		
Sample Collected by	Laboratory	Sample Description/ Type	Ambient Air (Group: Atmospheric Pollution Sub Group: Ambient Air Quality)
Sampling Location	Near DIL Main Gate	Date-Sampling	06/08/2020 to 07/08/2020
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. plastic bladder	Date-Receipt of Sample	08/08/2020
Sampling Procedure	As per Method Reference	Date-Start of Analysis	08/08/2020
Order Reference	As per PO No. PNP/February/2019- 2020/013 Dated 26/02/2020	Date-Completion of Analysis	24/08/2020

Meteorological Data / Environmental Conditions

Average Wind Velocity 23 km/h	Wind Direction SW	Relative Humidity (Max./Min.): 85/62 %	Temperature (Max./Min.): 29/25 °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): 2001, RA 2017
Nitrogen Dioxide (NO ₂)	26.4	80	µg/m ³	IS 5182 (Part 6): 2006, RA 2017
Particulate Matter (size less than 10 µm) or PM ₁₀	268	100	µg/m ³	IS 5182 (Part 23): 2006, RA 2017
Particulate Matter (size less than 2.5µm) or PM _{2.5}	112	60	µg/m ³	USEPA CFR 40, Part 50, Appendix L
Ozone (O ₃)	26.7	180	µg/m ³	AWMA, 3rd Ed., Method 411, Page no. 403, 1988
Lead (Pb)	<0.02	1	µg/m ³	EPA/625/R-96/D10 a Compendium Method 10-3.1 & 3.2, Jun 1999
Carbon Monoxide (CO)	1.7	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)	2.13	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 2019
Arsenic (As)	<0.3	6	ng/m ³	EPA/625/R-96/D10 a Compendium Method 10-3.1 & 3.2, Jun 1999
Nickel (Ni)	<3	20	ng/m ³	EPA/625/R-96/D10 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.

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

Sample / Report No.	AA/08/20/0329	Report Date	24/08/2020
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	06/08/2020 to 07/08/2020
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. plastic bladder	Date-Receipt of Sample	08/08/2020
Sampling Procedure	As per Method Reference	Date-Start of Analysis	08/08/2020
Order Reference	As per PO No. PNP/February/2019- 2020/013 Dated 26/02/2020	Date-Completion of Analysis	24/08/2020

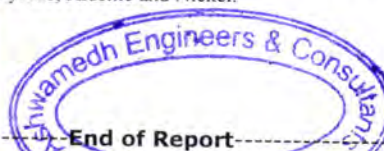
Meteorological Data / Environmental Conditions

Average Wind Velocity 18 km/h	Wind Direction SE	Relative Humidity (Max./Min.): 87/65 %	Temperature (Max./Min.): 29/25 °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 2): 2001, 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	216	100	µg/m ³	IS 5182 (Part 23): 2006, RA 2017
Particulate Matter (size less than 2.5µm) or PM _{2.5}	110	60	µg/m ³	USEPA CFR 40, Part 50, Appendix L
Ozone (O ₃)	<19.6	180	µg/m ³	AWMA, 3rd Ed., Method 411, Page no. 403, 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)	1.24	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	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 2019
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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 Technical Manager (Chemical)
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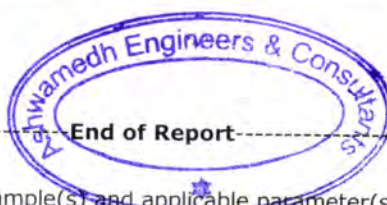
NOISE LEVEL MEASUREMENT REPORT

Sample / Report No.	N/08/20/0330	Report Date	10/08/2020
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	06/08/2020

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)	72.4	71.3	CPCB Protocol for Ambient Level Noise Monitoring, July 2015 AEC/C/SAP/SAM/35 & 36
	2100 (Night Time)	66.2	65.4	
B. Near Jetty No. 1	0910 (Day Time)	68.9	68.1	
	2110 (Night Time)	64.4	63.1	
C. Near Jetty No. 2	0920 (Day Time)	73.2	72.3	
	2120 (Night Time)	69.5	68.3	
D. Near Jetty No. 3	0930 (Day Time)	76.7	75.6	
	2130 (Night Time)	72.3	71.6	
E. Near Jetty No. 5	0940 (Day Time)	60.8	60.1	
	2140 (Night Time)	58.4	57.7	
F. Near Weight Bridge	0950 (Day Time)	72.6	71.3	
	2150 (Night Time)	66.8	65.3	
G. Near Custom Building	1000 (Day Time)	65.1	64.2	
	2200 (Night Time)	62.7	60.6	
H. Near Lal Gate	1010 (Day Time)	63.3	62.4	
	2210 (Night Time)	62.3	61.2	
I. Near DIL Main Gate	1020 (Day Time)	72.2	71.1	
	2220 (Night Time)	67.3	66.5	
J. DIL Godown Back Side	1130 (Day Time)	61.3	60.2	
	2330 (Night Time)	58.2	57.6	
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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AMBIENT AIR QUALITY MONITORING REPORT

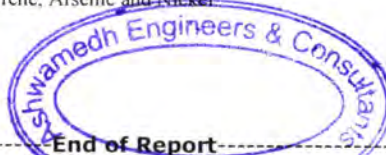
Sample / Report No.	AA/08/20/3156	Report Date	24/08/2020
Name & Address of Customer	PNP Maritime Services Private Limited 2nd Floor, Lansdowne House Building, M.B. Marg, Near Regal Cinema, Apollo Bunder, Colaba, Mumbai - 400 001		
Sample Collected by	Laboratory	Sample Description/ Type	Ambient Air (Group: Atmospheric Pollution Sub Group: Ambient Air Quality)
Sampling Location	Near Main Gate	Date-Sampling	10/08/2020 to 11/08/2020
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. plastic bladder	Date-Receipt of Sample	12/08/2020
Sampling Procedure	As per Method Reference	Date-Start of Analysis	12/08/2020
Order Reference	As per PO No. PNP/February/2019- 2020/013 Dated 26/02/2020	Date-Completion of Analysis	24/08/2020

Meteorological Data / Environmental Conditions

Average Wind Velocity 12 km/h	Wind Direction SW	Relative Humidity (Max./Min.): 89/67 %	Temperature (Max./Min.): 28/24 °C	Duration of Survey 24 h
Parameter	Results	NAAQS # 2009	Unit	Method
CHEMICAL TESTING				
Sulphur Dioxide (SO ₂)	7.8	80	µg/m ³	IS 5182 (Part 2): 2001, 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	342	100	µg/m ³	IS 5182 (Part 23): 2006, RA 2017
Particulate Matter (size less than 2.5µm) or PM _{2.5}	129	60	µg/m ³	USEPA CFR 40, Part 50, Appendix L
Ozone (O ₃)	35.1	180	µg/m ³	AWMA 3rd Ed., Method 411, Page no. 403, 1988
Lead (Pb)	<0.02	1	µg/m ³	EPA/625/R-96/D10 a Compendium Method 10-3.1 & 3.2, Jun 1999
Carbon Monoxide (CO)	1.30	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)	1.50	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 2019
Arsenic (As)	<0.3	6	ng/m ³	EPA/625/R-96/D10 a Compendium Method 10-3.1 & 3.2, Jun 1999
Nickel (Ni)	<3	20	ng/m ³	EPA/625/R-96/D10 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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AMBIENT AIR QUALITY MONITORING REPORT

Sample / Report No.	AA/08/20/3157	Report Date	24/08/2020
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	10/08/2020 to 11/08/2020
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. plastic bladder	Date-Receipt of Sample	12/08/2020
Sampling Procedure	As per Method Reference	Date-Start of Analysis	12/08/2020
Order Reference	As per PO No. PNP/February/2019- 2020/013 Dated 26/02/2020	Date-Completion of Analysis	24/08/2020

Meteorological Data / Environmental Conditions

Average Wind Velocity 12 km/h	Wind Direction SW	Relative Humidity (Max./Min.): 89/67 %	Temperature (Max./Min.): 28/24 °C	Duration of Survey 24 h
Parameter	Results	NAAQS # 2009	Unit	Method
CHEMICAL TESTING				
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	346	100	µg/m ³	IS 5182 (Part 23): 2006, RA 2017
Particulate Matter (size less than 2.5µm) or PM _{2.5}	129	60	µg/m ³	USEPA CFR 40, Part 50, Appendix L
Ozone (O ₃)	30.9	180	µg/m ³	AWMA 3rd Ed., Method 411, Page no. 403, 1988
Lead (Pb)	<0.02	1	µg/m ³	EPA/625/R-96/D10 a Compendium Method IO-3.1 & 3.2, Jun 1999
Carbon Monoxide (CO)	1.48	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)	1.30	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 IO-3.1 & 3.2, Jun 1999
Nickel (Ni)	<3	20	ng/m ³	EPA/625/R-96/D10 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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End of Report

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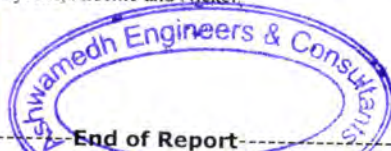
Sample / Report No.	AA/08/20/3158	Report Date	24/08/2020
Name & Address of Customer	PNP Maritime Services Private Limited 2nd Floor, Lansdowne House Building, M.B. Marg, Near Regal Cinema, Apollo Bunder, Colaba, Mumbai - 400 001		
Sample Collected by	Laboratory	Sample Description/ Type	Ambient Air (Group: Atmospheric Pollution Sub Group: Ambient Air Quality)
Sampling Location	Near Jetty No. 2	Date-Sampling	10/08/2020 to 11/08/2020
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. plastic bladder	Date-Receipt of Sample	12/08/2020
Sampling Procedure	As per Method Reference	Date-Start of Analysis	12/08/2020
Order Reference	As per PO No. PNP/February/2019- 2020/013 Dated 26/02/2020	Date-Completion of Analysis	24/08/2020

Meteorological Data / Environmental Conditions

Average Wind Velocity 12 km/h	Wind Direction SW	Relative Humidity (Max./Min.): 89/67 %	Temperature (Max./Min.): 28/24 °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 2): 2001, RA 2017
Nitrogen Dioxide (NO ₂)	28.8	80	µg/m ³	IS 5182 (Part 6): 2006, RA 2017
Particulate Matter (size less than 10 µm) or PM ₁₀	280	100	µg/m ³	IS 5182 (Part 23): 2006, RA 2017
Particulate Matter (size less than 2.5µm) or PM _{2.5}	126	60	µg/m ³	USEPA CFR 40, Part 50, Appendix L
Ozone (O ₃)	26.7	180	µg/m ³	AWMA 3rd Ed., Method 411, Page no. 403, 1988
Lead (Pb)	<0.02	1	µg/m ³	EPA/625/R-96/D10 a Compendium Method 10-3.1 & 3.2, Jun 1999
Carbon Monoxide (CO)	1.48	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)	1.47	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 2019
Arsenic (As)	<0.3	6	ng/m ³	EPA/625/R-96/D10 a Compendium Method 10-3.1 & 3.2, Jun 1999
Nickel (Ni)	<3	20	ng/m ³	EPA/625/R-96/D10 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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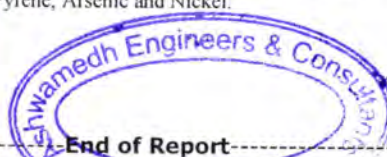
Sample / Report No.	AA/08/20/3159	Report Date	24/08/2020
Name & Address of Customer	PNP Maritime Services Private Limited 2nd Floor, Lansdowne House Building, M.B. Marg, Near Regal Cinema, Apollo Bunder, Colaba, Mumbai - 400 001		
Sample Collected by	Laboratory	Sample Description/ Type	Ambient Air (Group: Atmospheric Pollution Sub Group: Ambient Air Quality)
Sampling Location	Near Jetty No. 3	Date-Sampling	10/08/2020 to 11/08/2020
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. plastic bladder	Date-Receipt of Sample	12/08/2020
Sampling Procedure	As per Method Reference	Date-Start of Analysis	12/08/2020
Order Reference	As per PO No. PNP/February/2019- 2020/013 Dated 26/02/2020	Date-Completion of Analysis	24/08/2020

Meteorological Data / Environmental Conditions

Average Wind Velocity 12 km/h	Wind Direction SW	Relative Humidity (Max./Min.): 89/67 %	Temperature (Max./Min.): 28/24 °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 2): 2001, RA 2017
Nitrogen Dioxide (NO ₂)	28.1	80	µg/m ³	IS 5182 (Part 6): 2006, RA 2017
Particulate Matter (size less than 10 µm) or PM ₁₀	295	100	µg/m ³	IS 5182 (Part 23): 2006, RA 2017
Particulate Matter (size less than 2.5µm) or PM _{2.5}	123	60	µg/m ³	USEPA CFR 40, Part 50, Appendix L
Ozone (O ₃)	25.3	180	µg/m ³	AWMA, 3rd Ed., Method 411, Page no. 403, 1988
Lead (Pb)	<0.02	1	µg/m ³	EPA/625/R-96/D10 a Compendium Method 10-3.1 & 3.2, Jun 1999
Carbon Monoxide (CO)	1.7	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)	1.30	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 10-3.1 & 3.2, Jun 1999
Nickel (Ni)	<3	20	ng/m ³	EPA/625/R-96/D10 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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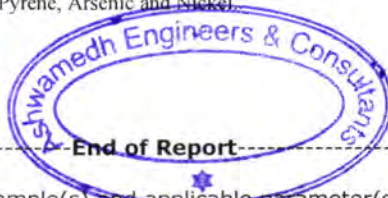
Sample / Report No.	AA/08/20/3160	Report Date	24/08/2020
Name & Address of Customer	PNP Maritime Services Private Limited 2nd Floor, Lansdowne House Building, M.B. Marg, Near Regal Cinema, Apollo Bunder, Colaba, Mumbai – 400 001		
Sample Collected by	Laboratory	Sample Description/ Type	Ambient Air (Group: Atmospheric Pollution Sub Group: Ambient Air Quality)
Sampling Location	Near Jetty No. 5	Date-Sampling	10/08/2020 to 11/08/2020
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. plastic bladder	Date-Receipt of Sample	12/08/2020
Sampling Procedure	As per Method Reference	Date-Start of Analysis	12/08/2020
Order Reference	As per PO No. PNP/February/2019- 2020/013 Dated 26/02/2020	Date-Completion of Analysis	24/08/2020

Meteorological Data / Environmental Conditions

Average Wind Velocity 12 km/h	Wind Direction SW	Relative Humidity (Max./Min.): 89/67 %	Temperature (Max./Min.): 28/24 °C	Duration of Survey 24 h
Parameter	Results	NAAQS # 2009	Unit	Method
CHEMICAL TESTING				
Sulphur Dioxide (SO ₂)	6.6	80	µg/m ³	IS 5182 (Part 2): 2001, RA 2017
Nitrogen Dioxide (NO ₂)	22.6	80	µg/m ³	IS 5182 (Part 6): 2006, RA 2017
Particulate Matter (size less than 10 µm) or PM ₁₀	270	100	µg/m ³	IS 5182 (Part 23): 2006, RA 2017
Particulate Matter (size less than 2.5µm) or PM _{2.5}	91	60	µg/m ³	USEPA CFR 40, Part 50, Appendix L
Ozone (O ₃)	28.1	180	µg/m ³	AWMA, 3rd Ed., Method 411, Page no. 403, 1988
Lead (Pb)	<0.02	1	µg/m ³	EPA/625/R-96/D10 a Compendium Method 10-3.1 & 3.2, Jun 1999
Carbon Monoxide (CO)	1.23	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)	1.11	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 2019
Arsenic (As)	<0.3	6	ng/m ³	EPA/625/R-96/D10 a Compendium Method 10-3.1 & 3.2, Jun 1999
Nickel (Ni)	<3	20	ng/m ³	EPA/625/R-96/D10 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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AMBIENT AIR QUALITY MONITORING REPORT

Sample / Report No.	AA/08/20/3161	Report Date	24/08/2020
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	10/08/2020 to 11/08/2020
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. plastic bladder	Date-Receipt of Sample	12/08/2020
Sampling Procedure	As per Method Reference	Date-Start of Analysis	12/08/2020
Order Reference	As per PO No. PNP/February/2019- 2020/013 Dated 26/02/2020	Date-Completion of Analysis	24/08/2020

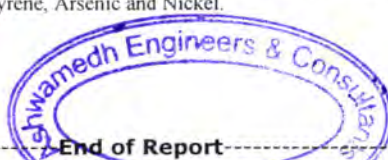
Meteorological Data / Environmental Conditions

Average Wind Velocity 12 km/h	Wind Direction SW	Relative Humidity (Max./Min.): 89/67 %	Temperature (Max./Min.): 28/24 °C	Duration of Survey 24 h
Parameter	Results	NAAQS # 2009	Unit	Method
CHEMICAL TESTING				
Sulphur Dioxide (SO ₂)	7.8	80	µg/m ³	IS 5182 (Part 2): 2001, RA 2017
Nitrogen Dioxide (NO ₂)	27.1	80	µg/m ³	IS 5182 (Part 6): 2006, RA 2017
Particulate Matter (size less than 10 µm) or PM ₁₀	296	100	µg/m ³	IS 5182 (Part 23): 2006, RA 2017
Particulate Matter (size less than 2.5µm) or PM _{2.5}	124	60	µg/m ³	USEPA CFR 40, Part 50, Appendix L
Ozone (O ₃)	25.3	180	µg/m ³	AWMA, 3rd Ed., Method 411, Page no. 403, 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)	1.58	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)	1.26	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 10-3.1 & 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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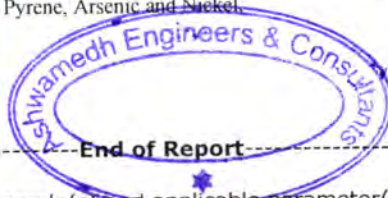
Sample / Report No.	AA/08/20/3162	Report Date	24/08/2020
Name & Address of Customer	PNP Maritime Services Private Limited 2nd Floor, Lansdowne House Building, M.B. Marg, Near Regal Cinema, Apollo Bunder, Colaba, Mumbai – 400 001		
Sample Collected by	Laboratory	Sample Description/ Type	Ambient Air (Group: Atmospheric Pollution Sub Group: Ambient Air Quality)
Sampling Location	Near Custom Building	Date-Sampling	10/08/2020 to 11/08/2020
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. plastic bladder	Date-Receipt of Sample	12/08/2020
Sampling Procedure	As per Method Reference	Date-Start of Analysis	12/08/2020
Order Reference	As per PO No. PNP/February/2019- 2020/013 Dated 26/02/2020	Date-Completion of Analysis	24/08/2020

Meteorological Data / Environmental Conditions

Average Wind Velocity 12 km/h	Wind Direction SW	Relative Humidity (Max./Min.): 89/67 %	Temperature (Max./Min.): 28/24 °C	Duration of Survey 24 h
Parameter	Results	NAAQS # 2009	Unit	Method
CHEMICAL TESTING				
Sulphur Dioxide (SO ₂)	7.6	80	µg/m ³	IS 5182 (Part 2): 2001, RA 2017
Nitrogen Dioxide (NO ₂)	23.6	80	µg/m ³	IS 5182 (Part 6): 2006, RA 2017
Particulate Matter (Size less than 10 µm) or PM ₁₀	279	100	µg/m ³	IS 5182 (Part 23): 2006, RA 2017
Particulate Matter (Size less than 2.5µm) or PM _{2.5}	122	60	µg/m ³	USEPA CFR 40, Part 50, Appendix L
Ozone (O ₃)	29.5	180	µg/m ³	AWMA 3rd Ed., Method 411, Page no. 403, 1988
Lead (Pb)	<0.02	1	µg/m ³	EPA/625/R-96/D10 a Compendium Method 10-3.1 & 3.2, Jun 1999
Carbon Monoxide (CO)	1.36	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)	1.20	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 2019
Arsenic (As)	<0.3	6	ng/m ³	EPA/625/R-96/D10 a Compendium Method 10-3.1 & 3.2, Jun 1999
Nickel (Ni)	<3	20	ng/m ³	EPA/625/R-96/D10 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.

Ninaad Soundankar
 Ninaad Soundankar
 Technical Manager (Chemical)
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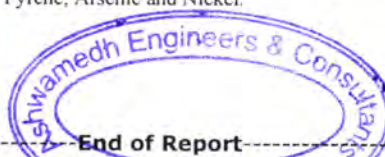
Sample / Report No.	AA/08/20/3163	Report Date	24/08/2020
Name & Address of Customer	PNP Maritime Services Private Limited 2nd Floor, Lansdowne House Building, M.B. Marg, Near Regal Cinema, Apollo Bunder, Colaba, Mumbai - 400 001		
Sample Collected by	Laboratory	Sample Description/ Type	Ambient Air (Group: Atmospheric Pollution Sub Group: Ambient Air Quality)
Sampling Location	Near Lal Gate	Date-Sampling	10/08/2020 to 11/08/2020
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. plastic bladder	Date-Receipt of Sample	12/08/2020
Sampling Procedure	As per Method Reference	Date-Start of Analysis	12/08/2020
Order Reference	As per PO No. PNP/February/2019- 2020/013 Dated 26/02/2020	Date-Completion of Analysis	24/08/2020

Meteorological Data / Environmental Conditions

Average Wind Velocity 12 km/h	Wind Direction SW	Relative Humidity (Max./Min.): 89/67 %	Temperature (Max./Min.): 28/24 °C	Duration of Survey 24 h
Parameter	Results	NAAQS # 2009	Unit	Method
CHEMICAL TESTING				
Sulphur Dioxide (SO ₂)	7.4	80	µg/m ³	IS 5182 (Part 2): 2001, RA 2017
Nitrogen Dioxide (NO ₂)	22.2	80	µg/m ³	IS 5182 (Part 6): 2006, RA 2017
Particulate Matter (size less than 10 µm) or PM ₁₀	284	100	µg/m ³	IS 5182 (Part 23): 2006, RA 2017
Particulate Matter (size less than 2.5µm) or PM _{2.5}	121	60	µg/m ³	USEPA CFR 40, Part 50, Appendix L
Ozone (O ₃)	26.7	180	µg/m ³	AWMA 3rd Ed., Method 411, Page no. 403, 1988
Lead (Pb)	<0.02	1	µg/m ³	EPA/625/R-96/D10 a Compendium Method 10-3.1 & 3.2, Jun 1999
Carbon Monoxide (CO)	1.26	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)	1.40	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 2019
Arsenic (As)	<0.3	6	ng/m ³	EPA/625/R-96/D10 a Compendium Method 10-3.1 & 3.2, Jun 1999
Nickel (Ni)	<3	20	ng/m ³	EPA/625/R-96/D10 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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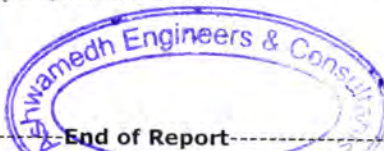
Sample / Report No:	AA/08/20/3164	Report Date	24/08/2020
Name & Address of Customer	PNP Maritime Services Private Limited 2nd Floor, Lansdowne House Building, M.B. Marg, Near Regal Cinema, Apollo Bunder, Colaba, Mumbai - 400 001		
Sample Collected by	Laboratory	Sample Description/ Type	Ambient Air (Group: Atmospheric Pollution Sub Group: Ambient Air Quality)
Sampling Location	Near DIL Main Gate	Date-Sampling	10/08/2020 to 11/08/2020
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. plastic bladder	Date-Receipt of Sample	12/08/2020
Sampling Procedure	As per Method Reference	Date-Start of Analysis	12/08/2020
Order Reference	As per PO No. PNP/February/2019- 2020/013 Dated 26/02/2020	Date-Completion of Analysis	24/08/2020

Meteorological Data / Environmental Conditions

Average Wind Velocity 12 km/h	Wind Direction SW	Relative Humidity (Max./Min.): 89/67 %	Temperature (Max./Min.): 28/24 °C	Duration of Survey 24 h
Parameter	Results	NAAQS # 2009	Unit	Method
CHEMICAL TESTING				
Sulphur Dioxide (SO ₂)	7.9	80	µg/m ³	IS 5182 (Part 2): 2001, RA 2017
Nitrogen Dioxide (NO ₂)	24.1	80	µg/m ³	IS 5182 (Part 6): 2006, RA 2017
Particulate Matter (size less than 10 µm) or PM ₁₀	279	100	µg/m ³	IS 5182 (Part 23): 2006, RA 2017
Particulate Matter (size less than 2.5µm) or PM _{2.5}	123	60	µg/m ³	USEPA CFR 40, Part 50, Appendix L
Ozone (O ₃)	23.9	180	µg/m ³	AWMA 3rd Ed., Method 411, Page no. 403, 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)	1.30	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)	1.72	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 10-3.1 & 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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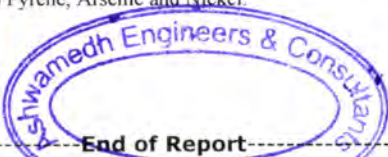
Sample / Report No.	AA/08/20/3165	Report Date	24/08/2020
Name & Address of Customer	PNP Maritime Services Private Limited 2nd Floor, Lansdowne House Building, M.B. Marg, Near Regal Cinema, Apollo Bunder, Colaba, Mumbai – 400 001		
Sample Collected by	Laboratory	Sample Description/ Type	Ambient Air (Group: Atmospheric Pollution Sub Group: Ambient Air Quality)
Sampling Location	DIL Godown Back Side	Date-Sampling	10/08/2020 to 11/08/2020
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. plastic bladder	Date-Receipt of Sample	12/08/2020
Sampling Procedure	As per Method Reference	Date-Start of Analysis	12/08/2020
Order Reference	As per PO No. PNP/February/2019- 2020/013 Dated 26/02/2020	Date-Completion of Analysis	24/08/2020

Meteorological Data / Environmental Conditions

Average Wind Velocity 12 km/h	Wind Direction SW	Relative Humidity (Max./Min.): 89/67 %	Temperature (Max./Min.): 28/24 °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): 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	223	100	µg/m ³	IS 5182 (Part 23): 2006, RA 2017
Particulate Matter (size less than 2.5µm) or PM _{2.5}	129	60	µg/m ³	USEPA CFR 40, Part 50, Appendix L
Ozone (O ₃)	<19.6	180	µg/m ³	AWMA 3rd Ed., Method 411, Page no. 403, 1988
Lead (Pb)	<0.02	1	µg/m ³	EPA/625/R-96/D10 a Compendium Method IO-3.1 & 3.2, Jun 1999
Carbon Monoxide (CO)	1.03	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	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 IO-3.1 & 3.2, Jun 1999
Nickel (Ni)	<3	20	ng/m ³	EPA/625/R-96/D10 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.

H. S. Patil
 Ninad Soundankar
 Technical Manager (Chemical)
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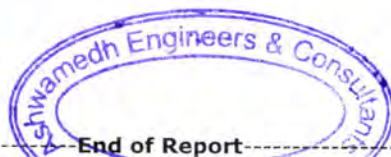
NOISE LEVEL MEASUREMENT REPORT

Sample / Report No.	N/08/20/3166	Report Date	14/08/2020
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	10/08/2020

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)	72.3	71.2	CPCB Protocol for Ambient Level Noise Monitoring, July 2015 AEC/C/SAP/SAM/35 & 36
	2100 (Night Time)	68.9	66.2	
B. Near Jetty No. 1	0910 (Day Time)	68.4	67.3	
	2110 (Night Time)	64.3	63.1	
C. Near Jetty No. 2	0920 (Day Time)	72.7	71.5	
	2120 (Night Time)	68.4	67.2	
D. Near Jetty No. 3	0930 (Day Time)	76.6	75.2	
	2130 (Night Time)	56.3	55.3	
E. Near Jetty No. 5	0940 (Day Time)	61.3	60.7	
	2140 (Night Time)	60.1	59.1	
F. Near Weight Bridge	0950 (Day Time)	72.9	71.8	
	2150 (Night Time)	62.7	61.4	
G. Near Custom Building	1000 (Day Time)	63.5	62.4	
	2200 (Night Time)	61.7	60.5	
H. Near Lal Gate	1010 (Day Time)	66.3	65.2	
	2210 (Night Time)	58.9	57.6	
I. Near DIL Main Gate	1020 (Day Time)	61.2	60.1	
	2220 (Night Time)	57.2	56.5	
J. DIL Godown Back Side	1030 (Day Time)	60.5	60.2	
	2230 (Night Time)	57.4	55.3	
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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AMBIENT AIR QUALITY MONITORING REPORT

Sample / Report No.	AA/08/20/3361	Report Date	24/08/2020
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	13/08/2020 to 14/08/2020
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. plastic bladder	Date-Receipt of Sample	17/08/2020
Sampling Procedure	As per Method Reference	Date-Start of Analysis	17/08/2020
Order Reference	As per PO No. PNP/February/2019- 2020/013 Dated 26/02/2020	Date-Completion of Analysis	24/08/2020

Meteorological Data / Environmental Conditions

Average Wind Velocity 21 km/h	Wind Direction SW	Relative Humidity (Max./Min.): 89/66 %	Temperature (Max./Min.): 27/25 °C	Duration of Survey 24 h
Parameter	Results	NAAQS # 2009	Unit	Method
CHEMICAL TESTING				
Sulphur Dioxide (SO ₂)	7.9	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	350	100	µg/m ³	IS 5182 (Part 23): 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)	32.3	180	µg/m ³	AWMA 3rd Ed., Method 411, Page no. 403, 1988
Lead (Pb)	<0.02	1	µg/m ³	EPA/625/R-96/D10 a Compendium Method IO-3.1 & 3.2, Jun 1999
Carbon Monoxide (CO)	1.19	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)	1.14	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 I2): 2004, RA 2019
Arsenic (As)	<0.3	6	ng/m ³	EPA/625/R-96/D10 a Compendium Method IO-3.1 & 3.2, Jun 1999
Nickel (Ni)	<3	20	ng/m ³	EPA/625/R-96/D10 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 / Report No.	AA/08/20/3362	Report Date	24/08/2020
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	13/08/2020 to 14/08/2020
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. plastic bladder	Date-Receipt of Sample	17/08/2020
Sampling Procedure	As per Method Reference	Date-Start of Analysis	17/08/2020
Order Reference	As per PO No. PNP/February/2019- 2020/013 Dated 26/02/2020	Date-Completion of Analysis	24/08/2020

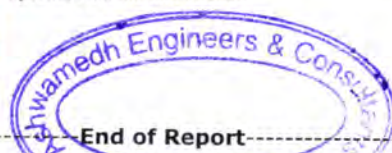
Meteorological Data / Environmental Conditions

Average Wind Velocity 21 km/h	Wind Direction SW	Relative Humidity (Max./Min.): 89/66 %	Temperature (Max./Min.): 27/25 °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 2): 2001, RA 2017
Nitrogen Dioxide (NO ₂)	22.5	80	µg/m ³	IS 5182 (Part 6): 2006, RA 2017
Particulate Matter (size less than 10 µm) or PM ₁₀	340	100	µg/m ³	IS 5182 (Part 23): 2006, RA 2017
Particulate Matter (size less than 2.5µm) or PM _{2.5}	126	60	µg/m ³	USEPA CFR 40, Part 50, Appendix L
Ozone (O ₃)	35.1	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 IO-3.1 & 3.2, Jun 1999
Carbon Monoxide (CO)	1.68	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)	1.10	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 2019
Arsenic (As)	<0.3	6	ng/m ³	EPA/625/R-96/D10 a Compendium Method IO-3.1 & 3.2, Jun 1999
Nickel (Ni)	<3	20	ng/m ³	EPA/625/R-96/D10 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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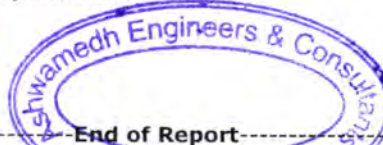
Sample / Report No.	AA/08/20/3363	Report Date	24/08/2020
Name & Address of Customer	PNP Maritime Services Private Limited 2nd Floor, Lansdowne House Building, M.B. Marg, Near Regal Cinema, Apollo Bunder, Colaba, Mumbai – 400 001		
Sample Collected by	Laboratory	Sample Description/ Type	Ambient Air (Group: Atmospheric Pollution Sub Group: Ambient Air Quality)
Sampling Location	Near Jetty No. 2	Date-Sampling	13/08/2020 to 14/08/2020
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. plastic bladder	Date-Receipt of Sample	17/08/2020
Sampling Procedure	As per Method Reference	Date-Start of Analysis	17/08/2020
Order Reference	As per PO No. PNP/February/2019- 2020/013 Dated 26/02/2020	Date-Completion of Analysis	24/08/2020

Meteorological Data / Environmental Conditions

Average Wind Velocity 21 km/h	Wind Direction SW	Relative Humidity (Max./Min.): 89/66 %	Temperature (Max./Min.): 27/25 °C	Duration of Survey 24 h
Parameter	Results	NAAQS # 2009	Unit	Method
CHEMICAL TESTING				
Sulphur Dioxide (SO ₂)	7.8	80	µg/m ³	IS 5182 (Part 2): 2001, RA 2017
Nitrogen Dioxide (NO ₂)	22.9	80	µg/m ³	IS 5182 (Part 6): 2006, RA 2017
Particulate Matter (size less than 10 µm) or PM ₁₀	315	100	µg/m ³	IS 5182 (Part 23): 2006, RA 2017
Particulate Matter (size less than 2.5µm) or PM _{2.5}	130	60	µg/m ³	USEPA CFR 40, Part 50, Appendix L
Ozone (O ₃)	32.3	180	µg/m ³	AWMA, 3rd Ed., Method 411, Page no. 403, 1988
Lead (Pb)	<0.02	1	µg/m ³	EPA/625/R-96/D10 a Compendium Method 10-3.1 & 3.2, Jun 1999
Carbon Monoxide (CO)	1.41	4	mg/m ³	CPCB Guidelines, 37/2012-13, Page no.16
Ammonia (NH ₃)	<4	400	µg/m ³	AEC/C/SAP/AA-7
Benzene (C ₆ H ₆)	1.50	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 2019
Arsenic (As)	<0.3	6	ng/m ³	EPA/625/R-96/D10 a Compendium Method 10-3.1 & 3.2, Jun 1999
Nickel (Ni)	<3	20	ng/m ³	EPA/625/R-96/D10 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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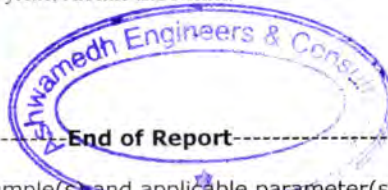
Sample / Report No.	AA/08/20/3364	Report Date	24/08/2020
Name & Address of Customer	PNP Maritime Services Private Limited 2nd Floor, Lansdowne House Building, M.B. Marg, Near Regal Cinema, Apollo Bunder, Colaba, Mumbai - 400 001		
Sample Collected by	Laboratory	Sample Description/ Type	Ambient Air (Group: Atmospheric Pollution Sub Group: Ambient Air Quality)
Sampling Location	Near Jetty No. 3	Date-Sampling	13/08/2020 to 14/08/2020
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. plastic bladder	Date-Receipt of Sample	17/08/2020
Sampling Procedure	As per Method Reference	Date-Start of Analysis	17/08/2020
Order Reference	As per PO No. PNP/February/2019- 2020/013 Dated 26/02/2020	Date-Completion of Analysis	24/08/2020

Meteorological Data / Environmental Conditions

Average Wind Velocity 21 km/h	Wind Direction SW	Relative Humidity (Max./Min.): 89/66 %	Temperature (Max./Min.): 27/25 °C	Duration of Survey 24 h
Parameter	Results	NAAQS # 2009	Unit	Method
CHEMICAL TESTING				
Sulphur Dioxide (SO ₂)	7.6	80	µg/m ³	IS 5182 (Part 2): 2001, RA 2017
Nitrogen Dioxide (NO ₂)	29.0	80	µg/m ³	IS 5182 (Part 6): 2006, RA 2017
Particulate Matter (size less than 10 µm) or PM ₁₀	324	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 L
Ozone (O ₃)	28.1	180	µg/m ³	AWMA 3rd Ed., Method 411, Page no. 403, 1988
Lead (Pb)	<0.02	1	µg/m ³	EPA/625/R-96/D10 a Compendium Method 10-3.1 & 3.2, Jun 1999
Carbon Monoxide (CO)	1.10	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)	1.28	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 10-3.1 & 3.2, Jun 1999
Nickel (Ni)	<3	20	ng/m ³	EPA/625/R-96/D10 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.

H. Soundankar
 Nihad Soundankar
 Technical Manager (Chemical)
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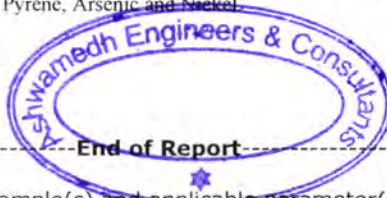
Sample / Report No.	AA/08/20/3365	Report Date	24/08/2020
Name & Address of Customer	PNP Maritime Services Private Limited 2nd Floor, Lansdowne House Building, M.B. Marg, Near Regal Cinema, Apollo Bunder, Colaba, Mumbai - 400 001		
Sample Collected by	Laboratory	Sample Description/ Type	Ambient Air (Group: Atmospheric Pollution Sub Group: Ambient Air Quality)
Sampling Location	Near Jetty No. 5	Date-Sampling	13/08/2020 to 14/08/2020
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. plastic bladder	Date-Receipt of Sample	17/08/2020
Sampling Procedure	As per Method Reference	Date-Start of Analysis	17/08/2020
Order Reference	As per PO No. PNP/February/2019- 2020/013 Dated 26/02/2020	Date-Completion of Analysis	24/08/2020

Meteorological Data / Environmental Conditions

Average Wind Velocity 21 km/h	Wind Direction SW	Relative Humidity (Max./Min.): 89/66 %	Temperature (Max./Min.): 27/25 °C	Duration of Survey 24 h
Parameter	Results	NAAQS # 2009	Unit	Method
CHEMICAL TESTING				
Sulphur Dioxide (SO ₂)	7.8	80	µg/m ³	IS 5182 (Part 2): 2001, RA 2017
Nitrogen Dioxide (NO ₂)	24.1	80	µg/m ³	IS 5182 (Part 6): 2006, RA 2017
Particulate Matter (size less than 10 µm) or PM ₁₀	253	100	µg/m ³	IS 5182 (Part 23): 2006, RA 2017
Particulate Matter (size less than 2.5µm) or PM _{2.5}	110	60	µg/m ³	USEPA CFR 40, Part 50, Appendix L
Ozone (O ₃)	28.1	180	µg/m ³	AWMA 3rd Ed., Method 411, Page no. 403, 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)	1.18	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)	1.15	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 2019
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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Sample / Report No.	AA/08/20/3366	Report Date	24/08/2020
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	13/08/2020 to 14/08/2020
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. plastic bladder	Date-Receipt of Sample	17/08/2020
Sampling Procedure	As per Method Reference	Date-Start of Analysis	17/08/2020
Order Reference	As per PO No. PNP/February/2019- 2020/013 Dated 26/02/2020	Date-Completion of Analysis	24/08/2020

Meteorological Data / Environmental Conditions

Average Wind Velocity 21 km/h	Wind Direction SW	Relative Humidity (Max./Min.): 89/66 %	Temperature (Max./Min.): 27/25 °C	Duration of Survey 24 h
Parameter	Results	NAAQS # 2009	Unit	Method
CHEMICAL TESTING				
Sulphur Dioxide (SO ₂)	7.3	80	µg/m ³	IS 5182 (Part 2): 2001, RA 2017
Nitrogen Dioxide (NO ₂)	26.4	80	µg/m ³	IS 5182 (Part 6): 2006, RA 2017
Particulate Matter (size less than 10 µm) or PM ₁₀	250	100	µg/m ³	IS 5182 (Part 23): 2006, RA 2017
Particulate Matter (size less than 2.5µm) or PM _{2.5}	130	60	µg/m ³	USEPA CFR 40, Part 50, Appendix L
Ozone (O ₃)	19.6	180	µg/m ³	AWMA, 3rd Ed., Method 411, Page no. 403, 1988
Lead (Pb)	<0.02	1	µg/m ³	EPA/625/R-96/010 a Compendium Method IO-3.1 G 3.2, Jun 1999
Carbon Monoxide (CO)	1.12	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)	1.51	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 IO-3.1 G 3.2, Jun 1999
Nickel (Ni)	<3	20	ng/m ³	EPA/625/R-96/010 a Compendium Method IO-3.1 G 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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Sample / Report No.	AA/08/20/3367	Report Date	24/08/2020
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	13/08/2020 to 14/08/2020
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. plastic bladder	Date-Receipt of Sample	17/08/2020
Sampling Procedure	As per Method Reference	Date-Start of Analysis	17/08/2020
Order Reference	As per PO No. PNP/February/2019- 2020/013 Dated 26/02/2020	Date-Completion of Analysis	24/08/2020

Meteorological Data / Environmental Conditions

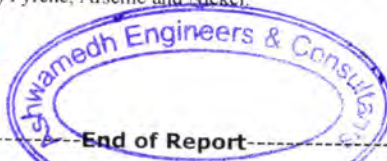
Average Wind Velocity 21 km/h	Wind Direction SW	Relative Humidity (Max./Min.): 89/66 %	Temperature (Max./Min.): 27/25 °C	Duration of Survey 24 h
Parameter	Results	NAAQS # 2009	Unit	Method
CHEMICAL TESTING				
Sulphur Dioxide (SO ₂)	7.1	80	µg/m ³	IS 5182 (Part 2): 2001, RA 2017
Nitrogen Dioxide (NO ₂)	29.3	80	µg/m ³	IS 5182 (Part 6): 2006, RA 2017
Particulate Matter (size less than 10 µm) or PM ₁₀	295	100	µg/m ³	IS 5182 (Part 23): 2006, RA 2017
Particulate Matter (size less than 2.5µm) or PM _{2.5}	130	60	µg/m ³	USEPA CFR 40, Part 50, Appendix L
Ozone (O ₃)	30.9	180	µg/m ³	AWMA, 3rd Ed., Method 411, Page no. 403, 1988
Lead (Pb)	<0.02	1	µg/m ³	EPA/625/R-96/D10 a Compendium Method 10-3.1 & 3.2, Jun 1999
Carbon Monoxide (CO)	1.20	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)	1.38	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 10-3.1 & 3.2, Jun 1999
Nickel (Ni)	<3	20	ng/m ³	EPA/625/R-96/D10 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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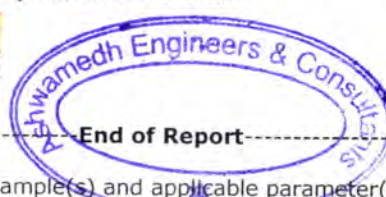
Sample / Report No.	AA/08/20/3368	Report Date	24/08/2020
Name & Address of Customer	PNP Maritime Services Private Limited 2nd Floor, Lansdowne House Building, M.B. Marg, Near Regal Cinema, Apollo Bunder, Colaba, Mumbai - 400 001		
Sample Collected by	Laboratory	Sample Description/ Type	Ambient Air (Group: Atmospheric Pollution Sub Group: Ambient Air Quality)
Sampling Location	Near Lal Gate	Date-Sampling	13/08/2020 to 14/08/2020
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. plastic bladder	Date-Receipt of Sample	17/08/2020
Sampling Procedure	As per Method Reference	Date-Start of Analysis	17/08/2020
Order Reference	As per PO No. PNP/February/2019- 2020/013 Dated 26/02/2020	Date-Completion of Analysis	24/08/2020

Meteorological Data / Environmental Conditions

Average Wind Velocity 21 km/h	Wind Direction SW	Relative Humidity (Max./Min.): 89/66 %	Temperature (Max./Min.): 27/25 °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): 2001, RA 2017
Nitrogen Dioxide (NO ₂)	29	80	µg/m ³	IS 5182 (Part 6): 2006, RA 2017
Particulate Matter (size less than 10 µm) or PM ₁₀	298	100	µg/m ³	IS 5182 (Part 23): 2006, RA 2017
Particulate Matter (size less than 2.5µm) or PM _{2.5}	126	60	µg/m ³	USEPA CFR 40, Part 50, Appendix L
Ozone (O ₃)	25.3	180	µg/m ³	AWMA, 3rd Ed., Method 411, Page no. 403, 1988
Lead (Pb)	<0.02	1	µg/m ³	EPA/625/R-96/D10 a Compendium Method 10-3.1 & 3.2, Jun 1999
Carbon Monoxide (CO)	1.33	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)	1.28	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 10-3.1 & 3.2, Jun 1999
Nickel (Ni)	<3	20	ng/m ³	EPA/625/R-96/D10 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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Sample / Report No.	AA/08/20/3369	Report Date	24/08/2020
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	13/08/2020 to 14/08/2020
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. plastic bladder	Date-Receipt of Sample	17/08/2020
Sampling Procedure	As per Method Reference	Date-Start of Analysis	17/08/2020
Order Reference	As per PO No. PNP/February/2019- 2020/013 Dated 26/02/2020	Date-Completion of Analysis	24/08/2020

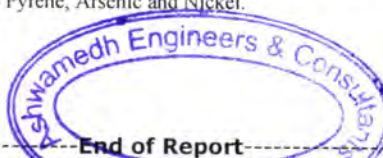
Meteorological Data / Environmental Conditions

Average Wind Velocity 21 km/h	Wind Direction SW	Relative Humidity (Max./Min.): 89/66 %	Temperature (Max./Min.): 27/25 °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 2): 2001, RA 2017
Nitrogen Dioxide (NO ₂)	22.4	80	µg/m ³	IS 5182 (Part 6): 2006, RA 2017
Particulate Matter (size less than 10 µm) or PM ₁₀	299	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 L
Ozone (O ₃)	28.1	180	µg/m ³	AWMA, 3rd Ed., Method 411, Page no. 403, 1988
Lead (Pb)	<0.02	1	µg/m ³	EPA/625/R-96/D10 a Compendium Method IO-3.1 & 3.2, Jun 1999
Carbon Monoxide (CO)	1.20	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)	1.60	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 I2): 2004, RA 2019
Arsenic (As)	<0.3	6	ng/m ³	EPA/625/R-96/D10 a Compendium Method IO-3.1 & 3.2, Jun 1999
Nickel (Ni)	<3	20	ng/m ³	EPA/625/R-96/D10 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.

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

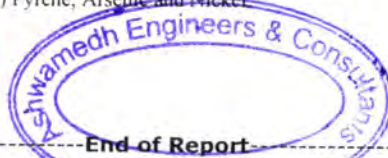
Sample / Report No.	AA/08/20/3370	Report Date	24/08/2020
Name & Address of Customer	PNP Maritime Services Private Limited 2nd Floor, Lansdowne House Building, M.B. Marg, Near Regal Cinema, Apollo Bunder, Colaba, Mumbai - 400 001		
Sample Collected by	Laboratory	Sample Description/ Type	Ambient Air (Group: Atmospheric Pollution Sub Group: Ambient Air Quality)
Sampling Location	DIL Godown Back Side	Date-Sampling	13/08/2020 to 14/08/2020
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. plastic bladder	Date-Receipt of Sample	17/08/2020
Sampling Procedure	As per Method Reference	Date-Start of Analysis	17/08/2020
Order Reference	As per PO No. PNP/February/2019- 2020/013 Dated 26/02/2020	Date-Completion of Analysis	24/08/2020

Meteorological Data / Environmental Conditions

Average Wind Velocity 21 km/h	Wind Direction SW	Relative Humidity (Max./Min.): 89/66 %	Temperature (Max./Min.): 27/25 °C	Duration of Survey 24 h
Parameter	Results	NAAQS # 2009	Unit	Method
CHEMICAL TESTING				
Sulphur Dioxide (SO ₂)	7.9	80	µg/m ³	IS 5182 (Part 2): 2001, RA 2017
Nitrogen Dioxide (NO ₂)	29	80	µg/m ³	IS 5182 (Part 6): 2006, RA 2017
Particulate Matter (size less than 10 µm) or PM ₁₀	239	100	µg/m ³	IS 5182 (Part 23): 2006, RA 2017
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)	<19.6	180	µg/m ³	AWMA 3rd Ed., Method 411, Page no. 403, 1988
Lead (Pb)	<0.02	1	µg/m ³	EPA/625/R-96/D10 a Compendium Method 10-3.1 & 3.2, Jun 1999
Carbon Monoxide (CO)	1.28	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	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 10-3.1 & 3.2, Jun 1999
Nickel (Ni)	<3	20	ng/m ³	EPA/625/R-96/D10 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

H. S. Soundankar
 Ninad Soundankar
 Technical Manager (Chemical)
 Reviewed & Authorised by



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NOISE LEVEL MEASUREMENT REPORT

Sample / Report No.	N/08/20/3371	Report Date	19/08/2020
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	13/08/2020

Location	Time (h)	Results		Method
		Noise Level dB (A) Fast Response	Noise Level dB (A) Slow Response	
A. Near Main Gate	0900 (Day Time)	73.3	72.6	
	2100 (Night Time)	71.2	70.1	
B. Near Jetty No. 1	0910 (Day Time)	65.4	64.9	
	2110 (Night Time)	63.1	61.7	
C. Near Jetty No. 2	0920 (Day Time)	74.9	73.6	
	2120 (Night Time)	72.3	70.8	
D. Near Jetty No. 3	0930 (Day Time)	75.7	74.6	
	2130 (Night Time)	73.6	71.7	
E. Near Jetty No. 5	0940 (Day Time)	62.4	61.3	
	2140 (Night Time)	60.2	58.1	
F. Near Weight Bridge	0950 (Day Time)	72.6	71.2	
	2150 (Night Time)	69.7	68.3	
G. Near Custom Building	1000 (Day Time)	61.2	60.6	
	2200 (Night Time)	58.2	56.4	
H. Near Lal Gate	1010 (Day Time)	62.3	61.6	
	2210 (Night Time)	60.8	58.3	
I. Near DIL Main Gate	1020 (Day Time)	72.5	72.1	
	2220 (Night Time)	70.3	69.3	
J. DIL Godown Back Side	1030 (Day Time)	61.8	60.6	
	2230 (Night Time)	59.3	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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AMBIENT AIR QUALITY MONITORING REPORT

Sample / Report No.	AA/08/20/3476	Report Date	27/08/2020
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	17/08/2020 to 18/08/2020
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. plastic bladder	Date-Receipt of Sample	19/08/2020
Sampling Procedure	As per Method Reference	Date-Start of Analysis	19/08/2020
Order Reference	As per PO No. PNP/February/2019- 2020/013 Dated 26/02/2020	Date-Completion of Analysis	27/08/2020

Meteorological Data / Environmental Conditions

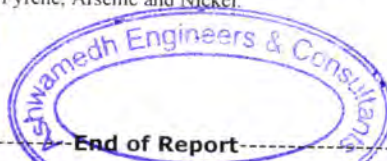
Average Wind Velocity 22 km/h	Wind Direction SW	Relative Humidity (Max./Min.): 90/67 %	Temperature (Max./Min.): 27/25 °C	Duration of Survey 24 h
Parameter	Results	NAAQS # 2009	Unit	Method
CHEMICAL TESTING				
Sulphur Dioxide (SO ₂)	6.8	80	µg/m ³	IS 5182 (Part 2): 2001, RA 2017
Nitrogen Dioxide (NO ₂)	26.2	80	µg/m ³	IS 5182 (Part 6): 2006, RA 2017
Particulate Matter (size less than 10 µm) or PM ₁₀	258	100	µg/m ³	IS 5182 (Part 23): 2006, RA 2017
Particulate Matter (size less than 2.5µm) or PM _{2.5}	121	60	µg/m ³	USEPA CFR 40, Part 50, Appendix L
Ozone (O ₃)	22.4	180	µg/m ³	AWMA, 3rd Ed., Method 411, Page no. 403, 1988
Lead (Pb)	<0.02	1	µg/m ³	EPA/625/R-96/D10 a Compendium Method 10-3.1 & 3.2, Jun 1999
Carbon Monoxide (CO)	1.19	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)	1.24	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 2019
Arsenic (As)	<0.3	6	ng/m ³	EPA/625/R-96/D10 a Compendium Method 10-3.1 & 3.2, Jun 1999
Nickel (Ni)	<3	20	ng/m ³	EPA/625/R-96/D10 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.

(Signature)

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 Technical Manager (Chemical)
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End of Report

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AMBIENT AIR QUALITY MONITORING REPORT

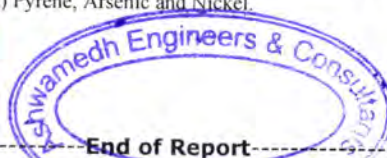
Sample / Report No.	AA/08/20/3477	Report Date	27/08/2020
Name & Address of Customer	PNP Maritime Services Private Limited 2nd Floor, Lansdowne House Building, M.B. Marg, Near Regal Cinema, Apollo Bunder, Colaba, Mumbai – 400 001		
Sample Collected by	Laboratory	Sample Description/ Type	Ambient Air (Group: Atmospheric Pollution Sub Group: Ambient Air Quality)
Sampling Location	Near Jetty No. 1	Date-Sampling	17/08/2020 to 18/08/2020
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. plastic bladder	Date-Receipt of Sample	19/08/2020
Sampling Procedure	As per Method Reference	Date-Start of Analysis	19/08/2020
Order Reference	As per PO No. PNP/February/2019- 2020/013 Dated 26/02/2020	Date-Completion of Analysis	27/08/2020

Meteorological Data / Environmental Conditions

Average Wind Velocity 22 km/h	Wind Direction SW	Relative Humidity (Max./Min.): 90/67 %	Temperature (Max./Min.): 27/25 °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): 2001, RA 2017
Nitrogen Dioxide (NO ₂)	21.5	80	µg/m ³	IS 5182 (Part 6): 2006, RA 2017
Particulate Matter (size less than 10 µm) or PM ₁₀	311	100	µg/m ³	IS 5182 (Part 23): 2006, RA 2017
Particulate Matter (size less than 2.5µm) or PM _{2.5}	111	60	µg/m ³	USEPA CFR 40, Part 50, Appendix L
Ozone (O ₃)	26.7	180	µg/m ³	AWMA 3rd Ed., Method 411, Page no. 403, 1988
Lead (Pb)	<0.02	1	µg/m ³	EPA/625/R-96/D10 a Compendium Method IO-3.1 & 3.2, Jun 1999
Carbon Monoxide (CO)	1.36	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)	1.36	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 2019
Arsenic (As)	<0.3	6	ng/m ³	EPA/625/R-96/D10 a Compendium Method IO-3.1 & 3.2, Jun 1999
Nickel (Ni)	<3	20	ng/m ³	EPA/625/R-96/D10 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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 Technical Manager (Chemical)
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AMBIENT AIR QUALITY MONITORING REPORT

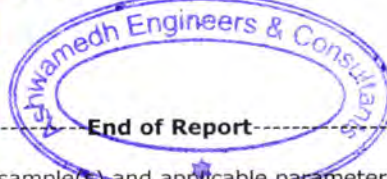
Sample / Report No.	AA/08/20/3478	Report Date	27/08/2020
Name & Address of Customer	PNP Maritime Services Private Limited 2nd Floor, Lansdowne House Building, M.B. Marg, Near Regal Cinema, Apollo Bunder, Colaba, Mumbai – 400 001		
Sample Collected by	Laboratory	Sample Description/ Type	Ambient Air (Group: Atmospheric Pollution Sub Group: Ambient Air Quality)
Sampling Location	Near Jetty No. 2	Date-Sampling	13/08/2020 to 14/08/2020
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. plastic bladder	Date-Receipt of Sample	17/08/2020
Sampling Procedure	As per Method Reference	Date-Start of Analysis	17/08/2020
Order Reference	As per PO No. PNP/February/2019- 2020/013 Dated 26/02/2020	Date-Completion of Analysis	27/08/2020

Meteorological Data / Environmental Conditions

Average Wind Velocity 22 km/h	Wind Direction SW	Relative Humidity (Max./Min.): 90/67 %	Temperature (Max./Min.): 27/25 °C	Duration of Survey 24 h
Parameter	Results	NAAQS # 2009	Unit	Method
CHEMICAL TESTING				
Sulphur Dioxide (SO ₂)	7.4	80	µg/m ³	IS 5182 (Part 2): 2001, RA 2017
Nitrogen Dioxide (NO ₂)	23.1	80	µg/m ³	IS 5182 (Part 6): 2006, RA 2017
Particulate Matter (size less than 10 µm) or PM ₁₀	316	100	µg/m ³	IS 5182 (Part 23): 2006, RA 2017
Particulate Matter (size less than 2.5µm) or PM _{2.5}	109	60	µg/m ³	USEPA CFR 40, Part 50, Appendix L
Ozone (O ₃)	25.3	180	µg/m ³	AWMA, 3rd Ed., Method 411, Page no. 403, 1988
Lead (Pb)	<0.02	1	µg/m ³	EPA/625/R-96/D10 a Compendium Method 10-3.1 & 3.2, Jun 1999
Carbon Monoxide (CO)	1.13	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)	1.36	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 10-3.1 & 3.2, Jun 1999
Nickel (Ni)	<3	20	ng/m ³	EPA/625/R-96/D10 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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AMBIENT AIR QUALITY MONITORING REPORT

Sample / Report No.	AA/08/20/3479	Report Date	27/08/2020
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	17/08/2020 to 18/08/2020
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. plastic bladder	Date-Receipt of Sample	19/08/2020
Sampling Procedure	As per Method Reference	Date-Start of Analysis	19/08/2020
Order Reference	As per PO No. PNP/February/2019- 2020/013 Dated 26/02/2020	Date-Completion of Analysis	27/08/2020

Meteorological Data / Environmental Conditions

Average Wind Velocity 22 km/h	Wind Direction SW	Relative Humidity (Max./Min.): 90/67 %	Temperature (Max./Min.): 27/25 °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 2): 2001, RA 2017
Nitrogen Dioxide (NO ₂)	22.6	80	µg/m ³	IS 5182 (Part 6): 2006, RA 2017
Particulate Matter (size less than 10 µm) or PM ₁₀	250	100	µg/m ³	IS 5182 (Part 23): 2006, RA 2017
Particulate Matter (size less than 2.5µm) or PM _{2.5}	130	60	µg/m ³	USEPA CFR 40, Part 50, Appendix L
Ozone (O ₃)	19.6	180	µg/m ³	AWMA, 3rd Ed., Method 411, Page no. 403, 1988
Lead (Pb)	<0.02	1	µg/m ³	EPA/625/R-96/D10 a Compendium Method 10-3.1 & 3.2, Jun 1999
Carbon Monoxide (CO)	1.19	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)	1.39	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 2019
Arsenic (As)	<0.3	6	ng/m ³	EPA/625/R-96/D10 a Compendium Method 10-3.1 & 3.2, Jun 1999
Nickel (Ni)	<3	20	ng/m ³	EPA/625/R-96/D10 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.

(Signature)

Ninad Soundankar
 Technical Manager (Chemical)
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End of Report

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AMBIENT AIR QUALITY MONITORING REPORT

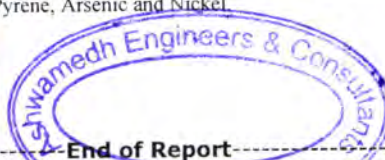
Sample / Report No.	AA/08/20/3480	Report Date	27/08/2020
Name & Address of Customer	PNP Maritime Services Private Limited 2nd Floor, Lansdowne House Building, M.B. Marg, Near Regal Cinema, Apollo Bunder, Colaba, Mumbai – 400 001		
Sample Collected by	Laboratory	Sample Description/ Type	Ambient Air (Group: Atmospheric Pollution Sub Group: Ambient Air Quality)
Sampling Location	Near Jetty No. 5	Date-Sampling	17/08/2020 to 18/08/2020
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. plastic bladder	Date-Receipt of Sample	19/08/2020
Sampling Procedure	As per Method Reference	Date-Start of Analysis	19/08/2020
Order Reference	As per PO No. PNP/February/2019- 2020/013 Dated 26/02/2020	Date-Completion of Analysis	27/08/2020

Meteorological Data / Environmental Conditions

Average Wind Velocity 22 km/h	Wind Direction SW	Relative Humidity (Max./Min.): 90/67 %	Temperature (Max./Min.): 27/25 °C	Duration of Survey 24 h
Parameter	Results	NAAQS # 2009	Unit	Method
CHEMICAL TESTING				
Sulphur Dioxide (SO ₂)	6.4	80	µg/m ³	IS 5182 (Part 2): 2001, RA 2017
Nitrogen Dioxide (NO ₂)	23.1	80	µg/m ³	IS 5182 (Part 6): 2006, RA 2017
Particulate Matter (size less than 10 µm) or PM ₁₀	235	100	µg/m ³	IS 5182 (Part 23): 2006, RA 2017
Particulate Matter (size less than 2.5µm) or PM _{2.5}	105	60	µg/m ³	USEPA CFR 40, Part 50, Appendix L
Ozone (O ₃)	21.0	180	µg/m ³	AWMA, 3rd Ed., Method 411, Page no. 403, 1988
Lead (Pb)	<0.02	1	µg/m ³	EPA/625/R-96/D10 a Compendium Method 10-3.1 & 3.2, Jun 1999
Carbon Monoxide (CO)	1.28	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)	1.10	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 2019
Arsenic (As)	<0.3	6	ng/m ³	EPA/625/R-96/D10 a Compendium Method 10-3.1 & 3.2, Jun 1999
Nickel (Ni)	<3	20	ng/m ³	EPA/625/R-96/D10 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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End of Report

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AMBIENT AIR QUALITY MONITORING REPORT

Sample / Report No.	AA/08/20/3481	Report Date	27/08/2020
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	17/08/2020 to 18/08/2020
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. plastic bladder	Date-Receipt of Sample	19/08/2020
Sampling Procedure	As per Method Reference	Date-Start of Analysis	19/08/2020
Order Reference	As per PO No. PNP/February/2019- 2020/013 Dated 26/02/2020	Date-Completion of Analysis	27/08/2020

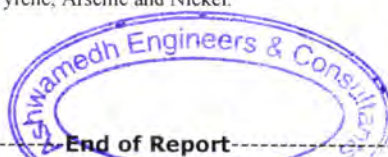
Meteorological Data / Environmental Conditions

Average Wind Velocity 22 km/h	Wind Direction SW	Relative Humidity (Max./Min.): 90/67 %	Temperature (Max./Min.): 27/25 °C	Duration of Survey 24 h
Parameter	Results	NAAQS # 2009	Unit	Method
CHEMICAL TESTING				
Sulphur Dioxide (SO ₂)	6.9	80	µg/m ³	IS 5182 (Part 2): 2001, RA 2017
Nitrogen Dioxide (NO ₂)	26.7	80	µg/m ³	IS 5182 (Part 6): 2006, RA 2017
Particulate Matter (size less than 10 µm) or PM ₁₀	350	100	µg/m ³	IS 5182 (Part 23): 2006, RA 2017
Particulate Matter (size less than 2.5µm) or PM _{2.5}	98	60	µg/m ³	USEPA CFR 40, Part 50, Appendix L
Ozone (O ₃)	26.7	180	µg/m ³	AWMA, 3rd Ed., Method 411, 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)	1.31	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)	1.12	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 2019
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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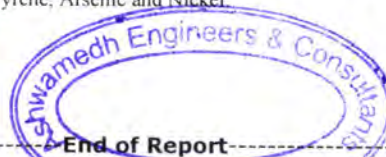
Sample / Report No.	AA/08/20/3482	Report Date	27/08/2020
Name & Address of Customer	PNP Maritime Services Private Limited 2nd Floor, Lansdowne House Building, M.B. Marg, Near Regal Cinema, Apollo Bunder, Colaba, Mumbai - 400 001		
Sample Collected by	Laboratory	Sample Description/ Type	Ambient Air (Group: Atmospheric Pollution Sub Group: Ambient Air Quality)
Sampling Location	Near Custom Building	Date-Sampling	17/08/2020 to 18/08/2020
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. plastic bladder	Date-Receipt of Sample	19/08/2020
Sampling Procedure	As per Method Reference	Date-Start of Analysis	19/08/2020
Order Reference	As per PO No. PNP/February/2019- 2020/013 Dated 26/02/2020	Date-Completion of Analysis	27/08/2020

Meteorological Data / Environmental Conditions

Average Wind Velocity 22 km/h	Wind Direction SW	Relative Humidity (Max./Min.): 90/67 %	Temperature (Max./Min.): 27/25 °C	Duration of Survey 24 h
Parameter	Results	NAAQS # 2009	Unit	Method
CHEMICAL TESTING				
Sulphur Dioxide (SO ₂)	7.4	80	µg/m ³	IS 5182 (Part 2): 2001, RA 2017
Nitrogen Dioxide (NO ₂)	27.6	80	µg/m ³	IS 5182 (Part 6): 2006, RA 2017
Particulate Matter (size less than 10 µm) or PM ₁₀	330	100	µg/m ³	IS 5182 (Part 23): 2006, RA 2017
Particulate Matter (size less than 2.5µm) or PM _{2.5}	127	60	µg/m ³	USEPA CFR 40, Part 50, Appendix L
Ozone (O ₃)	26.7	180	µg/m ³	AWMA, 3rd Ed., Method 411, Page no. 403, 1988
Lead (Pb)	<0.02	1	µg/m ³	EPA/625/R-96/D10 a Compendium Method IO-3.1 & 3.2, Jun 1999
Carbon Monoxide (CO)	1.30	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)	1.12	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 2019
Arsenic (As)	<0.3	6	ng/m ³	EPA/625/R-96/D10 a Compendium Method IO-3.1 & 3.2, Jun 1999
Nickel (Ni)	<3	20	ng/m ³	EPA/625/R-96/D10 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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 Technical Manager (Chemical)
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Sample / Report No.	AA/08/20/3483	Report Date	24/08/2020
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	17/08/2020 to 18/08/2020
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. plastic bladder	Date-Receipt of Sample	19/08/2020
Sampling Procedure	As per Method Reference	Date-Start of Analysis	19/08/2020
Order Reference	As per PO No. PNP/February/2019- 2020/013 Dated 26/02/2020	Date-Completion of Analysis	27/08/2020

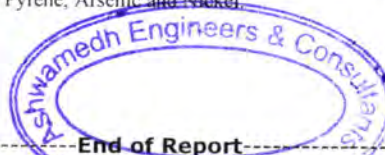
Meteorological Data / Environmental Conditions

Average Wind Velocity 22 km/h	Wind Direction SW	Relative Humidity (Max./Min.): 90/67 %	Temperature (Max./Min.): 27/25 °C	Duration of Survey 24 h
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Parameter	Results	NAAQS # 2009	Unit	Method
CHEMICAL TESTING				
Sulphur Dioxide (SO ₂)	7.9	80	µg/m ³	IS 5182 (Part 2): 2001, RA 2017
Nitrogen Dioxide (NO ₂)	31.4	80	µg/m ³	IS 5182 (Part 6): 2006, RA 2017
Particulate Matter (size less than 10 µm) or PM ₁₀	338	100	µg/m ³	IS 5182 (Part 23): 2006, RA 2017
Particulate Matter (size less than 2.5µm) or PM _{2.5}	122	60	µg/m ³	USEPA CFR 40, Part 50, Appendix L
Ozone (O ₃)	26.7	180	µg/m ³	AWMA, 3rd Ed., Method 411, Page no. 403, 1988
Lead (Pb)	<0.02	1	µg/m ³	EPA/625/R-96/D10 a Compendium Method 10-3.1 & 3.2, Jun 1999
Carbon Monoxide (CO)	1.30	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)	1.31	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 2019
Arsenic (As)	<0.3	6	ng/m ³	EPA/625/R-96/D10 a Compendium Method 10-3.1 & 3.2, Jun 1999
Nickel (Ni)	<3	20	ng/m ³	EPA/625/R-96/D10 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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AMBIENT AIR QUALITY MONITORING REPORT

Sample / Report No.	AA/08/20/3484	Report Date	27/08/2020
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	17/08/2020 to 18/08/2020
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. plastic bladder	Date-Receipt of Sample	19/08/2020
Sampling Procedure	As per Method Reference	Date-Start of Analysis	19/08/2020
Order Reference	As per PO No. PNP/February/2019- 2020/013 Dated 26/02/2020	Date-Completion of Analysis	27/08/2020

Meteorological Data / Environmental Conditions

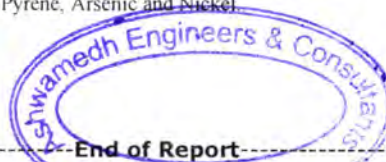
Average Wind Velocity 22 km/h	Wind Direction SW	Relative Humidity (Max./Min.): 89/66 %	Temperature (Max./Min.): 27/25 °C	Duration of Survey 24 h
Parameter	Results	NAAQS # 2009	Unit	Method
CHEMICAL TESTING				
Sulphur Dioxide (SO ₂)	7.4	80	µg/m ³	IS 5182 (Part 2): 2001, RA 2017
Nitrogen Dioxide (NO ₂)	23.6	80	µg/m ³	IS 5182 (Part 6): 2006, RA 2017
Particulate Matter (size less than 10 µm) or PM ₁₀	310	100	µg/m ³	IS 5182 (Part 23): 2006, RA 2017
Particulate Matter (size less than 2.5µm) or PM _{2.5}	124	60	µg/m ³	USEPA CFR 40, Part 50, Appendix L
Ozone (O ₃)	23.9	180	µg/m ³	AWMA, 3rd Ed., Method 411, Page no. 403, 1988
Lead (Pb)	<0.02	1	µg/m ³	EPA/625/R-96/D10 a Compendium Method 10-3.1 & 3.2, Jun 1999
Carbon Monoxide (CO)	1.26	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)	1.0	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 10-3.1 & 3.2, Jun 1999
Nickel (Ni)	<3	20	ng/m ³	EPA/625/R-96/D10 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.

Nina Soundankar

Nina Soundankar
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Sample / Report No.	AA/08/20/3485	Report Date	27/08/2020
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	17/08/2020 to 18/08/2020
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. plastic bladder	Date-Receipt of Sample	19/08/2020
Sampling Procedure	As per Method Reference	Date-Start of Analysis	19/08/2020
Order Reference	As per PO No. PNP/February/2019- 2020/013 Dated 26/02/2020	Date-Completion of Analysis	27/08/2020

Meteorological Data / Environmental Conditions

Average Wind Velocity 22 km/h	Wind Direction SW	Relative Humidity (Max./Min.): 90/67 %	Temperature (Max./Min.): 27/25 °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 2): 2001, RA 2017
Nitrogen Dioxide (NO ₂)	23.6	80	µg/m ³	IS 5182 (Part 6): 2006, RA 2017
Particulate Matter (size less than 10 µm) or PM ₁₀	278	100	µg/m ³	IS 5182 (Part 23): 2006, RA 2017
Particulate Matter (size less than 2.5µm) or PM _{2.5}	116	60	µg/m ³	USEPA CFR 40, Part 50, Appendix L
Ozone (O ₃)	<19.6	180	µg/m ³	AWMA, 3rd Ed., Method 411, Page no. 403, 1988
Lead (Pb)	<0.02	1	µg/m ³	EPA/625/R-96/D10 a Compendium Method 10-3.1 & 3.2, Jun 1999
Carbon Monoxide (CO)	1.09	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	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 10-3.1 & 3.2, Jun 1999
Nickel (Ni)	<3	20	ng/m ³	EPA/625/R-96/D10 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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NOISE LEVEL MEASUREMENT REPORT

Sample / Report No.	N/08/20/3486	Report Date	21/08/2020
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	17/08/2020

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)	74.3	73.2	CPCB Protocol for Ambient Level Noise Monitoring, July 2015 AEC/C/SAP/SAM/35 & 36
	2200 (Night Time)	70.6	68.1	
B. Near Jetty No. 1	0910 (Day Time)	65.7	64.5	
	22100 (Night Time)	62.4	60.3	
C. Near Jetty No. 2	0920 (Day Time)	74.4	73.3	
	2220 (Night Time)	71.8	69.2	
D. Near Jetty No. 3	0930 (Day Time)	76.2	75.7	
	2230 (Night Time)	73.5	71.6	
E. Near Jetty No. 5	0940 (Day Time)	60.9	60.2	
	2240 (Night Time)	58.2	56.4	
F. Near Weight Bridge	0950 (Day Time)	70.8	70.1	
	2250 (Night Time)	68.3	66.6	
G. Near Custom Building	1000 (Day Time)	63.2	62.4	
	2310 (Night Time)	61.7	59.3	
H. Near Lal Gate	1020 (Day Time)	66.4	65.2	
	2320 (Night Time)	63.2	61.8	
I. Near DIL Main Gate	1030 (Day Time)	70.2	69.7	
	2320 (Night Time)	68.4	65.7	
J. DIL Godown Back Side	1030 (Day Time)	62.1	61.5	
	2330 (Night Time)	60.2	58.9	
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	

(Signature)

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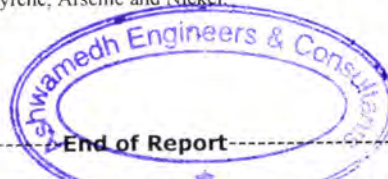
Sample / Report No.	AA/08/20/3649	Report Date	01/09/2020
Name & Address of Customer	PNP Maritime Services Private Limited 2nd Floor, Lansdowne House Building, M.B. Marg, Near Regal Cinema, Apollo Bunder, Colaba, Mumbai - 400 001		
Sample Collected by	Laboratory	Sample Description/ Type	Ambient Air (Group: Atmospheric Pollution Sub Group: Ambient Air Quality)
Sampling Location	Near Main Gate	Date-Sampling	20/08/2020 to 21/08/2020
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. plastic bladder	Date-Receipt of Sample	22/08/2020
Sampling Procedure	As per Method Reference	Date-Start of Analysis	22/08/2020
Order Reference	As per PO No. PNP/February/2019- 2020/013 Dated 26/02/2020	Date-Completion of Analysis	01/09/2020

Meteorological Data / Environmental Conditions

Average Wind Velocity 16 km/h	Wind Direction WSW	Relative Humidity (Max./Min.): 90/67 %	Temperature (Max./Min.): 29/25 °C	Duration of Survey 24 h
Parameter	Results	NAAQS # 2009	Unit	Method
CHEMICAL TESTING				
Sulphur Dioxide (SO ₂)	7.3	80	µg/m ³	IS 5182 (Part 2): 2001, 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	279	100	µg/m ³	IS 5182 (Part 23): 2006, RA 2017
Particulate Matter (size less than 2.5µm) or PM _{2.5}	109	60	µg/m ³	USEPA CFR 40, Part 50, Appendix L
Ozone (O ₃)	26.7	180	µg/m ³	AWMA, 3rd Ed., Method 411, 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)	1.28	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 II): 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 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 / Report No.	AA/08/20/3650	Report Date	01/09/2020
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	20/08/2020 to 21/08/2020
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. plastic bladder	Date-Receipt of Sample	22/08/2020
Sampling Procedure	As per Method Reference	Date-Start of Analysis	22/08/2020
Order Reference	As per PO No. PNP/February/2019- 2020/013 Dated 26/02/2020	Date-Completion of Analysis	01/09/2020

Meteorological Data / Environmental Conditions

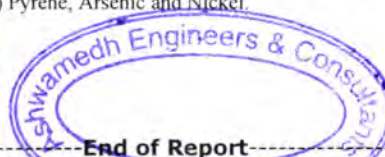
Average Wind Velocity 16 km/h	Wind Direction WSW	Relative Humidity (Max./Min.): 90/67 %	Temperature (Max./Min.): 29/25 °C	Duration of Survey 24 h
Parameter	Results	NAAQS # 2009	Unit	Method
CHEMICAL TESTING				
Sulphur Dioxide (SO ₂)	6.5	80	µg/m ³	IS 5182 (Part 2): 2001, RA 2017
Nitrogen Dioxide (NO ₂)	25.7	80	µg/m ³	IS 5182 (Part 6): 2006, RA 2017
Particulate Matter (size less than 10 µm) or PM ₁₀	336	100	µg/m ³	IS 5182 (Part 23): 2006, RA 2017
Particulate Matter (size less than 2.5µm) or PM _{2.5}	127	60	µg/m ³	USEPA CFR 40, Part 50, Appendix L
Ozone (O ₃)	22.5	180	µg/m ³	AWMA, 3rd Ed., Method 411, Page no. 403, 1988
Lead (Pb)	<0.02	1	µg/m ³	EPA/625/R-96/D10 a Compendium Method 10-3.1 & 3.2, Jun 1999
Carbon Monoxide (CO)	1.31	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)	1.24	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 I2): 2004, RA 2019
Arsenic (As)	<0.3	6	ng/m ³	EPA/625/R-96/D10 a Compendium Method 10-3.1 & 3.2, Jun 1999
Nickel (Ni)	<3	20	ng/m ³	EPA/625/R-96/D10 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.

(Signature)

Ninad Soundankar
 Technical Manager (Chemical)
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Note:

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AMBIENT AIR QUALITY MONITORING REPORT

Sample / Report No.	AA/08/20/3651	Report Date	01/09/2020
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	20/08/2020 to 21/08/2020
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. plastic bladder	Date-Receipt of Sample	22/08/2020
Sampling Procedure	As per Method Reference	Date-Start of Analysis	22/08/2020
Order Reference	As per PO No. PNP/February/2019- 2020/013 Dated 26/02/2020	Date-Completion of Analysis	01/09/2020

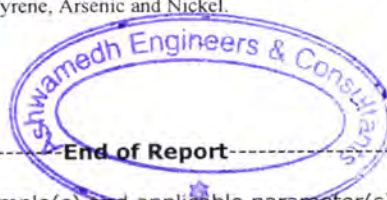
Meteorological Data / Environmental Conditions

Average Wind Velocity 16 km/h	Wind Direction WSW	Relative Humidity (Max./Min.): 90/67 %	Temperature (Max./Min.): 29/25 °C	Duration of Survey 24 h
Parameter	Results	NAAQS # 2009	Unit	Method
CHEMICAL TESTING				
Sulphur Dioxide (SO ₂)	7.8	80	µg/m ³	IS 5182 (Part 2): 2001, 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	325	100	µg/m ³	IS 5182 (Part 23): 2006, RA 2017
Particulate Matter (size less than 2.5µm) or PM _{2.5}	115	60	µg/m ³	USEPA CFR 40, Part 50, Appendix L
Ozone (O ₃)	28.1	180	µg/m ³	AWMA 3rd Ed., Method 411, Page no. 403, 1988
Lead (Pb)	<0.02	1	µg/m ³	EPA/625/R-96/D10 a Compendium Method 10-3.1 & 3.2, Jun 1999
Carbon Monoxide (CO)	1.19	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)	1.35	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 10-3.1 & 3.2, Jun 1999
Nickel (Ni)	<3	20	ng/m ³	EPA/625/R-96/D10 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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AMBIENT AIR QUALITY MONITORING REPORT

Sample / Report No.	AA/08/20/3652	Report Date	01/09/2020
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	20/08/2020 to 21/08/2020
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. plastic bladder	Date-Receipt of Sample	22/08/2020
Sampling Procedure	As per Method Reference	Date-Start of Analysis	22/08/2020
Order Reference	As per PO No. PNP/February/2019- 2020/013 Dated 26/02/2020	Date-Completion of Analysis	01/09/2020

Meteorological Data / Environmental Conditions

Average Wind Velocity 16 km/h	Wind Direction WSW	Relative Humidity (Max./Min.): 90/67 %	Temperature (Max./Min.): 29/25 °C	Duration of Survey 24 h
Parameter	Results	NAAQS # 2009	Unit	Method
CHEMICAL TESTING				
Sulphur Dioxide (SO ₂)	7.3	80	µg/m ³	IS 5182 (Part 2): 2001, RA 2017
Nitrogen Dioxide (NO ₂)	26.4	80	µg/m ³	IS 5182 (Part 6): 2006, RA 2017
Particulate Matter (size less than 10 µm) or PM ₁₀	258	100	µg/m ³	IS 5182 (Part 23): 2006, RA 2017
Particulate Matter (size less than 2.5µm) or PM _{2.5}	101	60	µg/m ³	USEPA CFR 40, Part 50, Appendix L
Ozone (O ₃)	22.5	180	µg/m ³	AWMA, 3rd Ed., Method 411, Page no. 403, 1988
Lead (Pb)	<0.02	1	µg/m ³	EPA/625/R-96/D10 a Compendium Method 10-3.1 & 3.2, Jun 1999
Carbon Monoxide (CO)	1.26	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)	1.38	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 I2): 2004, RA 2019
Arsenic (As)	<0.3	6	ng/m ³	EPA/625/R-96/D10 a Compendium Method 10-3.1 & 3.2, Jun 1999
Nickel (Ni)	<3	20	ng/m ³	EPA/625/R-96/D10 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.

A. S. Soundankar
 Ninad Soundankar
 Technical Manager (Chemical)
 Reviewed & Authorised by



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AMBIENT AIR QUALITY MONITORING REPORT

Sample / Report No.	AA/08/20/3653	Report Date	01/09/2020
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	20/08/2020 to 21/08/2020
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. plastic bladder	Date-Receipt of Sample	22/08/2020
Sampling Procedure	As per Method Reference	Date-Start of Analysis	22/08/2020
Order Reference	As per PO No. PNP/February/2019- 2020/013 Dated 26/02/2020	Date-Completion of Analysis	01/09/2020

Meteorological Data / Environmental Conditions

Average Wind Velocity 16 km/h	Wind Direction WSW	Relative Humidity (Max./Min.): 90/67 %	Temperature (Max./Min.): 29/25 °C	Duration of Survey 24 h
Parameter	Results	NAAQS # 2009	Unit	Method
CHEMICAL TESTING				
Sulphur Dioxide (SO ₂)	6.6	80	µg/m ³	IS 5182 (Part 2): 2001, RA 2017
Nitrogen Dioxide (NO ₂)	26.4	80	µg/m ³	IS 5182 (Part 6): 2006, RA 2017
Particulate Matter (size less than 10 µm) or PM ₁₀	246	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 L
Ozone (O ₃)	32.3	180	µg/m ³	AWMA, 3rd Ed., Method 411, Page no. 403, 1988
Lead (Pb)	<0.02	1	µg/m ³	EPA/625/R-96/D10 a Compendium Method IO-3.1 & 3.2, Jun 1999
Carbon Monoxide (CO)	1.31	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)	1.28	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 I2): 2004, RA 2019
Arsenic (As)	<0.3	6	ng/m ³	EPA/625/R-96/D10 a Compendium Method IO-3.1 & 3.2, Jun 1999
Nickel (Ni)	<3	20	ng/m ³	EPA/625/R-96/D10 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.

Ninad Soundankar
 Ninad Soundankar
 Technical Manager (Chemical)
 Reviewed & Authorised by



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AMBIENT AIR QUALITY MONITORING REPORT

Sample / Report No.	AA/08/20/3654	Report Date	01/09/2020
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	20/08/2020 to 21/08/2020
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. plastic bladder	Date-Receipt of Sample	22/08/2020
Sampling Procedure	As per Method Reference	Date-Start of Analysis	22/08/2020
Order Reference	As per PO No. PNP/February/2019- 2020/013 Dated 26/02/2020	Date-Completion of Analysis	01/09/2020

Meteorological Data / Environmental Conditions

Average Wind Velocity 16 km/h	Wind Direction WSW	Relative Humidity (Max./Min.): 90/67 %	Temperature (Max./Min.): 29/25 °C	Duration of Survey 24 h
Parameter	Results	NAAQS # 2009	Unit	Method
CHEMICAL TESTING				
Sulphur Dioxide (SO ₂)	7.4	80	µg/m ³	IS 5182 (Part 2): 2001, RA 2017
Nitrogen Dioxide (NO ₂)	30.3	80	µg/m ³	IS 5182 (Part 6): 2006, RA 2017
Particulate Matter (size less than 10 µm) or PM ₁₀	291	100	µg/m ³	IS 5182 (Part 23): 2006, RA 2017
Particulate Matter (size less than 2.5µm) or PM _{2.5}	116	60	µg/m ³	USEPA CFR 40, Part 50, Appendix I
Ozone (O ₃)	32.3	180	µg/m ³	AWMA 3rd Ed., Method 411, Page no. 403.1988
Lead (Pb)	<0.02	1	µg/m ³	EPA/625/R-96/D10 a Compendium Method 10-3.1 & 3.2, Jun 1999
Carbon Monoxide (CO)	1.36	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)	1.23	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 10-3.1 & 3.2, Jun 1999
Nickel (Ni)	<3	20	ng/m ³	EPA/625/R-96/D10 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.

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

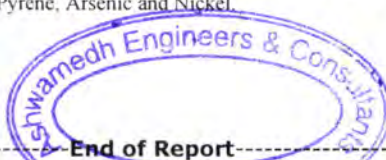
Sample / Report No.	AA/08/20/3655	Report Date	01/09/2020
Name & Address of Customer	PNP Maritime Services Private Limited 2nd Floor, Lansdowne House Building, M.B. Marg, Near Regal Cinema, Apollo Bunder, Colaba, Mumbai - 400 001		
Sample Collected by	Laboratory	Sample Description/ Type	Ambient Air (Group: Atmospheric Pollution Sub Group: Ambient Air Quality)
Sampling Location	Near Custom Building	Date-Sampling	20/08/2020 to 21/08/2020
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. plastic bladder	Date-Receipt of Sample	22/08/2020
Sampling Procedure	As per Method Reference	Date-Start of Analysis	22/08/2020
Order Reference	As per PO No. PNP/February/2019- 2020/013 Dated 26/02/2020	Date-Completion of Analysis	01/09/2020

Meteorological Data / Environmental Conditions

Average Wind Velocity 16 km/h	Wind Direction WSW	Relative Humidity (Max./Min.): 90/67 %	Temperature (Max./Min.): 29/25 °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): 2001, RA 2017
Nitrogen Dioxide (NO ₂)	22.6	80	µg/m ³	IS 5182 (Part 6): 2006, RA 2017
Particulate Matter (size less than 10 µm) or PM ₁₀	347	100	µg/m ³	IS 5182 (Part 23): 2006, RA 2017
Particulate Matter (size less than 2.5µm) or PM _{2.5}	115	60	µg/m ³	USEPA CFR 40, Part 50, Appendix L
Ozone (O ₃)	26.7	180	µg/m ³	AWMA 3rd Ed., Method 411, Page no. 403, 1988
Lead (Pb)	<0.02	1	µg/m ³	EPA/625/R-96/D10 a Compendium Method IO-3.1 & 3.2, Jun 1999
Carbon Monoxide (CO)	1.39	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)	1.29	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 2019
Arsenic (As)	<0.3	6	ng/m ³	EPA/625/R-96/D10 a Compendium Method IO-3.1 & 3.2, Jun 1999
Nickel (Ni)	<3	20	ng/m ³	EPA/625/R-96/D10 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.

H. S. Soundankar
 Ninad Soundankar
 Technical Manager (Chemical)
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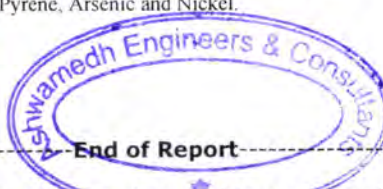
Sample / Report No.	AA/08/20/3656	Report Date	01/09/2020
Name & Address of Customer	PNP Maritime Services Private Limited 2nd Floor, Lansdowne House Building, M.B. Marg, Near Regal Cinema, Apollo Bunder, Colaba, Mumbai - 400 001		
Sample Collected by	Laboratory	Sample Description/ Type	Ambient Air (Group: Atmospheric Pollution Sub Group: Ambient Air Quality)
Sampling Location	Near Lal Gate	Date-Sampling	20/08/2020 to 21/08/2020
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. plastic bladder	Date-Receipt of Sample	22/08/2020
Sampling Procedure	As per Method Reference	Date-Start of Analysis	22/08/2020
Order Reference	As per PO No. PNP/February/2019- 2020/013 Dated 26/02/2020	Date-Completion of Analysis	01/09/2020

Meteorological Data / Environmental Conditions

Average Wind Velocity 16 km/h	Wind Direction WSW	Relative Humidity (Max./Min.): 90/67 %	Temperature (Max./Min.): 29/25 °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 2): 2001, RA 2017
Nitrogen Dioxide (NO ₂)	34.4	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}	130	60	µg/m ³	USEPA CFR 40, Part 50, Appendix L
Ozone (O ₃)	21.1	180	µg/m ³	AWMA, 3rd Ed., Method 411, Page no. 403, 1988
Lead (Pb)	<0.02	1	µg/m ³	EPA/625/R-96/D10 a Compendium Method IO-3.1 & 3.2, Jun 1999
Carbon Monoxide (CO)	1.25	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)	1.37	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 IO-3.1 & 3.2, Jun 1999
Nickel (Ni)	<3	20	ng/m ³	EPA/625/R-96/D10 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.

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

Sample / Report No.	AA/08/20/3657	Report Date	01/09/2020
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	20/08/2020 to 21/08/2020
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. plastic bladder	Date-Receipt of Sample	22/08/2020
Sampling Procedure	As per Method Reference	Date-Start of Analysis	22/08/2020
Order Reference	As per PO No. PNP/February/2019- 2020/013 Dated 26/02/2020	Date-Completion of Analysis	01/09/2020

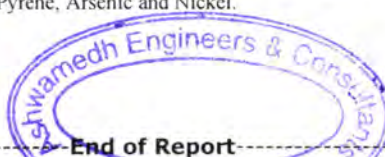
Meteorological Data / Environmental Conditions

Average Wind Velocity 16 km/h	Wind Direction WSW	Relative Humidity (Max./Min.): 90/67 %	Temperature (Max./Min.): 29/25 °C	Duration of Survey 24 h
Parameter	Results	NAAQS # 2009	Unit	Method
CHEMICAL TESTING				
Sulphur Dioxide (SO ₂)	7.05	80	µg/m ³	IS 5182 (Part 2): 2001, 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	339	100	µg/m ³	IS 5182 (Part 23): 2006, RA 2017
Particulate Matter (size less than 2.5µm) or PM _{2.5}	130	60	µg/m ³	USEPA CFR 40, Part 50, Appendix L
Ozone (O ₃)	21.1	180	µg/m ³	AWMA 3rd Ed., Method 411, Page no. 403, 1988
Lead (Pb)	<0.02	1	µg/m ³	EPA/625/R-96/D10 a Compendium Method 10-3.1 & 3.2, Jun 1999
Carbon Monoxide (CO)	1.33	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)	1.15	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 2019
Arsenic (As)	<0.3	6	ng/m ³	EPA/625/R-96/D10 a Compendium Method 10-3.1 & 3.2, Jun 1999
Nickel (Ni)	<3	20	ng/m ³	EPA/625/R-96/D10 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 / Report No.	AA/08/20/3658	Report Date	01/09/2020
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	20/08/2020 to 21/08/2020
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. plastic bladder	Date-Receipt of Sample	22/08/2020
Sampling Procedure	As per Method Reference	Date-Start of Analysis	22/08/2020
Order Reference	As per PO No. PNP/February/2019- 2020/013 Dated 26/02/2020	Date-Completion of Analysis	01/09/2020

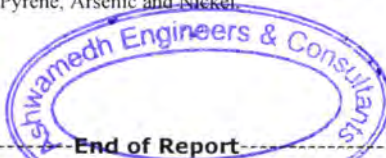
Meteorological Data / Environmental Conditions

Average Wind Velocity 16 km/h	Wind Direction WSW	Relative Humidity (Max./Min.): 90/67 %	Temperature (Max./Min.): 29/25 °C	Duration of Survey 24 h
Parameter	Results	NAAQS # 2009	Unit	Method
CHEMICAL TESTING				
Sulphur Dioxide (SO ₂)	6.9	80	µg/m ³	IS 5182 (Part 2): 2001, RA 2017
Nitrogen Dioxide (NO ₂)	28.8	80	µg/m ³	IS 5182 (Part 6): 2006, RA 2017
Particulate Matter (size less than 10 µm) or PM ₁₀	290	100	µg/m ³	IS 5182 (Part 23): 2006, RA 2017
Particulate Matter (size less than 2.5µm) or PM _{2.5}	126	60	µg/m ³	USEPA CFR 40, Part 50, Appendix L
Ozone (O ₃)	<19.6	180	µg/m ³	AWMA 3rd Ed., Method 411, Page no. 403, 1988
Lead (Pb)	<0.02	1	µg/m ³	EPA/625/R-96/D10 a Compendium Method 10-3.1 & 3.2, Jun 1999
Carbon Monoxide (CO)	1.18	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	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 2019
Arsenic (As)	<0.3	6	ng/m ³	EPA/625/R-96/D10 a Compendium Method 10-3.1 & 3.2, Jun 1999
Nickel (Ni)	<3	20	ng/m ³	EPA/625/R-96/D10 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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NOISE LEVEL MEASUREMENT REPORT

Sample / Report No.	N/08/20/3659	Report Date	25/08/2020
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	20/08/2020

Location	Time (h)	Results		Method
		Noise Level dB (A) Fast Response	Noise Level dB (A) Slow Response	
A. Near Main Gate	0900 (Day Time)	75.3	74.8	CPCB Protocol for Ambient Level Noise Monitoring, July 2015 AEC/C/SAP/SAM/35 & 36
	2200 (Night Time)	69.5	67.3	
B. Near Jetty No. 1	0910 (Day Time)	62.4	61.9	
	2210 (Night Time)	61.3	60.8	
C. Near Jetty No. 2	0920 (Day Time)	75.7	74.2	
	2220 (Night Time)	70.8	68.3	
D. Near Jetty No. 3	0930 (Day Time)	73.9	72.4	
	2230 (Night ime)	71.6	70.5	
E. Near Jetty No. 5	0940 (Day Time)	62.8	61.3	
	2240 (Night Time)	59.3	57.3	
F. Near Weight Bridge	0950 (Day Time)	72.2	71.7	
	2250 (Night Time)	66.5	65.3	
G. Near Custom Building	1000 (Day Time)	61.6	61.1	
	2310 (Night Time)	60.5	58.8	
H. Near Lal Gate	1020 (Day Time)	64.4	60.9	
	2320 (Night Time)	62.3	60.1	
I. Near DIL Main Gate	1030 (Day Time)	62.2	61.7	
	2320 (Night Time)	60.3	56.5	
J. DIL Godown Back Side	1030 (Day Time)	63.1	62.6	
	2330 (Night Time)	60.3	58.3	
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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AMBIENT AIR QUALITY MONITORING REPORT

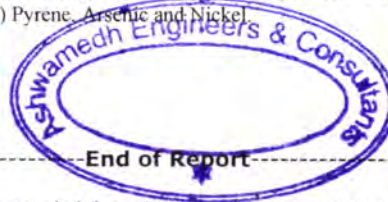
Sample / Report No.	AA/08/20/3806	Report Date	01/09/2020
Name & Address of Customer	PNP Maritime Services Private Limited 2nd Floor, Lansdowne House Building, M.B. Marg, Near Regal Cinema, Apollo Bunder, Colaba, Mumbai - 400 001		
Sample Collected by	Laboratory	Sample Description/ Type	Ambient Air (Group: Atmospheric Pollution Sub Group: Ambient Air Quality)
Sampling Location	Near Main Gate	Date-Sampling	24/08/2020 to 25/08/2020
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. plastic bladder	Date-Receipt of Sample	26/08/2020
Sampling Procedure	As per Method Reference	Date-Start of Analysis	26/08/2020
Order Reference	As per PO No. PNP/February/2019- 2020/013 Dated 26/02/2020	Date-Completion of Analysis	01/09/2020

Meteorological Data / Environmental Conditions

Average Wind Velocity 22 km/h	Wind Direction SW	Relative Humidity (Max./Min.): 90/68 %	Temperature (Max./Min.): 30/24 °C	Duration of Survey 24 h
Parameter	Results	NAAQS # 2009	Unit	Method
CHEMICAL TESTING				
Sulphur Dioxide (SO ₂)	7.8	80	µg/m ³	IS 5182 (Part 2): 2001, RA 2017
Nitrogen Dioxide (NO ₂)	25.7	80	µg/m ³	IS 5182 (Part 6): 2006, RA 2017
Particulate Matter (size less than 10 µm) or PM ₁₀	299	100	µg/m ³	IS 5182 (Part 23): 2006, RA 2017
Particulate Matter (size less than 2.5µm) or PM _{2.5}	118	60	µg/m ³	USEPA CFR 40, Part 50, Appendix L
Ozone (O ₃)	28.1	180	µg/m ³	AWMA, 3rd Ed., Method 411, Page no. 403.1988
Lead (Pb)	<0.02	1	µg/m ³	EPA/625/R-96/D10 a Compendium Method 10-3.1 & 3.2, Jun 1999
Carbon Monoxide (CO)	1.36	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)	1.43	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 10-3.1 & 3.2, Jun 1999
Nickel (Ni)	<3	20	ng/m ³	EPA/625/R-96/D10 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)

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

Sample / Report No.	AA/08/20/3807	Report Date	01/09/2020
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	24/08/2020 to 25/08/2020
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. plastic bladder	Date-Receipt of Sample	26/08/2020
Sampling Procedure	As per Method Reference	Date-Start of Analysis	26/08/2020
Order Reference	As per PO No. PNP/February/2019- 2020/013 Dated 26/02/2020	Date-Completion of Analysis	01/09/2020

Meteorological Data / Environmental Conditions

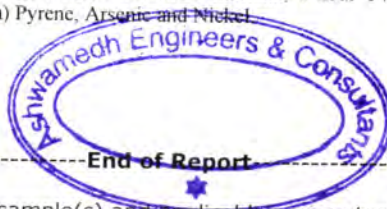
Average Wind Velocity 22 km/h	Wind Direction SW	Relative Humidity (Max./Min.): 90/68 %	Temperature (Max./Min.): 30/24 °C	Duration of Survey 24 h
Parameter	Results	NAAQS # 2009	Unit	Method
CHEMICAL TESTING				
Sulphur Dioxide (SO ₂)	7.1	80	µg/m ³	IS 5182 (Part 2): 2001, RA 2017
Nitrogen Dioxide (NO ₂)	28.3	80	µg/m ³	IS 5182 (Part 6): 2006, RA 2017
Particulate Matter (size less than 10 µm) or PM ₁₀	341	100	µg/m ³	IS 5182 (Part 23): 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)	25.3	180	µg/m ³	AWMA, 3rd Ed., Method 411, Page no. 403, 1988
Lead (Pb)	<0.02	1	µg/m ³	EPA/625/R-96/D10 a Compendium Method 10-3.1 & 3.2, Jun 1999
Carbon Monoxide (CO)	1.35	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)	1.21	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 2019
Arsenic (As)	<0.3	6	ng/m ³	EPA/625/R-96/D10 a Compendium Method 10-3.1 & 3.2, Jun 1999
Nickel (Ni)	<3	20	ng/m ³	EPA/625/R-96/D10 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

H. Soundankar

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

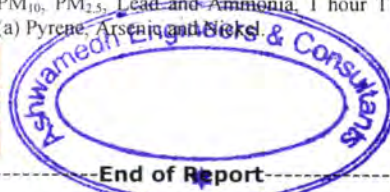
Sample / Report No.	AA/08/20/3808	Report Date	01/09/2020
Name & Address of Customer	PNP Maritime Services Private Limited 2nd Floor, Lansdowne House Building, M.B. Marg, Near Regal Cinema, Apollo Bunder, Colaba, Mumbai - 400 001		
Sample Collected by	Laboratory	Sample Description/ Type	Ambient Air (Group: Atmospheric Pollution Sub Group: Ambient Air Quality)
Sampling Location	Near Jetty No. 2	Date-Sampling	24/08/2020 to 25/08/2020
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. plastic bladder	Date-Receipt of Sample	26/08/2020
Sampling Procedure	As per Method Reference	Date-Start of Analysis	26/08/2020
Order Reference	As per PO No. PNP/February/2019- 2020/013 Dated 26/02/2020	Date-Completion of Analysis	01/09/2020

Meteorological Data / Environmental Conditions

Average Wind Velocity 22 km/h	Wind Direction SW	Relative Humidity (Max./Min.): 90/68 %	Temperature (Max./Min.): 30/24 °C	Duration of Survey 24 h
Parameter	Results	NAAQS # 2009	Unit	Method
CHEMICAL TESTING				
Sulphur Dioxide (SO ₂)	6.9	80	µg/m ³	IS 5182 (Part 2): 2001, RA 2017
Nitrogen Dioxide (NO ₂)	22.2	80	µg/m ³	IS 5182 (Part 6): 2006, RA 2017
Particulate Matter (size less than 10 µm) or PM ₁₀	336	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 L
Ozone (O ₃)	21.0	180	µg/m ³	AWMA, 3rd Ed., Method 411, Page no. 403, 1988
Lead (Pb)	<0.02	1	µg/m ³	EPA/625/R-96/D10 a Compendium Method IO-3.1 & 3.2, Jun 1999
Carbon Monoxide (CO)	1.33	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)	1.24	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 2019
Arsenic (As)	<0.3	6	ng/m ³	EPA/625/R-96/D10 a Compendium Method IO-3.1 & 3.2, Jun 1999
Nickel (Ni)	<3	20	ng/m ³	EPA/625/R-96/D10 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.

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

Sample / Report No.	AA/08/20/3809	Report Date	01/09/2020
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	24/08/2020 to 25/08/2020
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. plastic bladder	Date-Receipt of Sample	26/08/2020
Sampling Procedure	As per Method Reference	Date-Start of Analysis	26/08/2020
Order Reference	As per PO No. PNP/February/2019- 2020/013 Dated 26/02/2020	Date-Completion of Analysis	01/09/2020

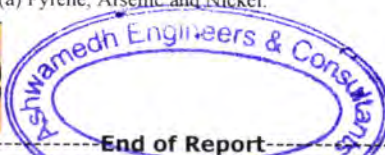
Meteorological Data / Environmental Conditions

Average Wind Velocity 22km/h	Wind Direction SW	Relative Humidity (Max./Min.): 90/68 %	Temperature (Max./Min.): 30/24 °C	Duration of Survey 24 h
Parameter	Results	NAAQS # 2009	Unit	Method
CHEMICAL TESTING				
Sulphur Dioxide (SO ₂)	7.8	80	µg/m ³	IS 5182 (Part 2): 2001, RA 2017
Nitrogen Dioxide (NO ₂)	24.5	80	µg/m ³	IS 5182 (Part 6): 2006, RA 2017
Particulate Matter (size less than 10 µm) or PM ₁₀	303	100	µg/m ³	IS 5182 (Part 23): 2006, RA 2017
Particulate Matter (size less than 2.5µm) or PM _{2.5}	114	60	µg/m ³	USEPA CFR 40, Part 50, Appendix L
Ozone (O ₃)	26.2	180	µg/m ³	AWMA, 3rd Ed., Method 411, Page no. 403, 1988
Lead (Pb)	<0.02	1	µg/m ³	EPA/625/R-96/D10 a Compendium Method 10-3.1 & 3.2, Jun 1999
Carbon Monoxide (CO)	1.29	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)	1.11	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 2019
Arsenic (As)	<0.3	6	ng/m ³	EPA/625/R-96/D10 a Compendium Method 10-3.1 & 3.2, Jun 1999
Nickel (Ni)	<3	20	ng/m ³	EPA/625/R-96/D10 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.

H. Sufar
 Ninad Sourdankar
 Technical Manager (Chemical)
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AMBIENT AIR QUALITY MONITORING REPORT

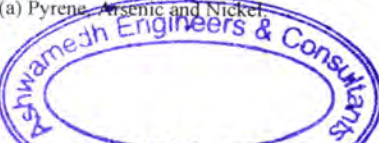
Sample / Report No.	AA/08/20/3810	Report Date	01/09/2020
Name & Address of Customer	PNP Maritime Services Private Limited 2nd Floor, Lansdowne House Building, M.B. Marg, Near Regal Cinema, Apollo Bunder, Colaba, Mumbai - 400 001		
Sample Collected by	Laboratory	Sample Description/ Type	Ambient Air (Group: Atmospheric Pollution Sub Group: Ambient Air Quality)
Sampling Location	Near Jetty No. 5	Date-Sampling	24/08/2020 to 25/08/2020
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. plastic bladder	Date-Receipt of Sample	26/08/2020
Sampling Procedure	As per Method Reference	Date-Start of Analysis	26/08/2020
Order Reference	As per PO No. PNP/February/2019- 2020/013 Dated 26/02/2020	Date-Completion of Analysis	01/09/2020

Meteorological Data / Environmental Conditions

Average Wind Velocity 22 km/h	Wind Direction SW	Relative Humidity (Max./Min.): 90/68 %	Temperature (Max./Min.): 30/24 °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 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	298	100	µg/m ³	IS 5182 (Part 23): 2006, RA 2017
Particulate Matter (size less than 2.5µm) or PM _{2.5}	115	60	µg/m ³	USEPA CFR 40, Part 50, Appendix L
Ozone (O ₃)	23.9	180	µg/m ³	AWMA, 3rd Ed., Method 411, Page no. 403, 1988
Lead (Pb)	<0.02	1	µg/m ³	EPA/625/R-96/D10 a Compendium Method 10-3.1 & 3.2, Jun 1999
Carbon Monoxide (CO)	1.26	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)	1.35	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 2019
Arsenic (As)	<0.3	6	ng/m ³	EPA/625/R-96/D10 a Compendium Method 10-3.1 & 3.2, Jun 1999
Nickel (Ni)	<3	20	ng/m ³	EPA/625/R-96/D10 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.

(Signature)
 Ninal Soundankar
 Technical Manager (Chemical)
 Reviewed & Authorised by



End of Report

Note:

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TC-5509

AMBIENT AIR QUALITY MONITORING REPORT

Sample / Report No.	AA/08/20/3811	Report Date	01/09/2020
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	24/08/2020 to 25/08/2020
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. plastic bladder	Date-Receipt of Sample	26/08/2020
Sampling Procedure	As per Method Reference	Date-Start of Analysis	26/08/2020
Order Reference	As per PO No. PNP/February/2019- 2020/013 Dated 26/02/2020	Date-Completion of Analysis	01/09/2020

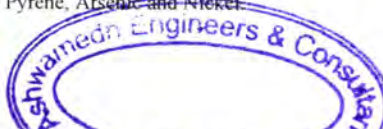
Meteorological Data / Environmental Conditions

Average Wind Velocity 22 km/h	Wind Direction SW	Relative Humidity (Max./Min.): 90/68 %	Temperature (Max./Min.): 30/24 °C	Duration of Survey 24 h
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Parameter	Results	NAAQS # 2009	Unit	Method
CHEMICAL TESTING				
Sulphur Dioxide (SO ₂)	7.9	80	µg/m ³	IS 5182 (Part 2): 2001, RA 2017
Nitrogen Dioxide (NO ₂)	28.6	80	µg/m ³	IS 5182 (Part 6): 2006, RA 2017
Particulate Matter (size less than 10 µm) or PM ₁₀	308	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 L
Ozone (O ₃)	23.9	180	µg/m ³	AWMA, 3rd Ed., Method 411, Page no. 403, 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)	1.28	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)	1.14	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 10-3.1 & 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

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

Sample / Report No.	AA/08/20/3812	Report Date	01/09/2020
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	24/09/2020 to 25/09/2020
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. plastic bladder	Date-Receipt of Sample	26/08/2020
Sampling Procedure	As per Method Reference	Date-Start of Analysis	26/08/2020
Order Reference	As per PO No. PNP/February/2019- 2020/013 Dated 26/02/2020	Date-Completion of Analysis	01/09/2020

Meteorological Data / Environmental Conditions

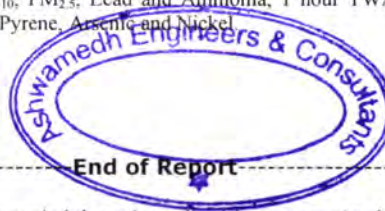
Average Wind Velocity 22 km/h	Wind Direction SW	Relative Humidity (Max./Min.): 90/68 %	Temperature (Max./Min.): 30/24 °C	Duration of Survey 24 h
Parameter	Results	NAAQS # 2009	Unit	Method
CHEMICAL TESTING				
Sulphur Dioxide (SO ₂)	7.6	80	µg/m ³	IS 5182 (Part 2): 2001, RA 2017
Nitrogen Dioxide (NO ₂)	25.2	80	µg/m ³	IS 5182 (Part 6): 2006, RA 2017
Particulate Matter (size less than 10 µm) or PM ₁₀	287	100	µg/m ³	IS 5182 (Part 23): 2006, RA 2017
Particulate Matter (size less than 2.5µm) or PM _{2.5}	125	60	µg/m ³	USEPA CFR 40, Part 50, Appendix L
Ozone (O ₃)	32.3	180	µg/m ³	AWMA, 3rd Ed., Method 411, Page no. 403, 1988
Lead (Pb)	<0.02	1	µg/m ³	EPA/625/R-96/010 a Compendium Method IO-3.1 6 3.2, Jun 1999
Carbon Monoxide (CO)	1.20	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)	1.28	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 I2): 2004, RA 2019
Arsenic (As)	<0.3	6	ng/m ³	EPA/625/R-96/010 a Compendium Method IO-3.1 6 3.2, Jun 1999
Nickel (Ni)	<3	20	ng/m ³	EPA/625/R-96/010 a Compendium Method IO-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

Ninad Soundankar

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

Sample / Report No.	AA/08/20/3813	Report Date	01/09/2020
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	24/08/2020 to 25/08/2020
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. plastic bladder	Date-Receipt of Sample	26/08/2020
Sampling Procedure	As per Method Reference	Date-Start of Analysis	26/08/2020
Order Reference	As per PO No. PNP/February/2019- 2020/013 Dated 26/02/2020	Date-Completion of Analysis	01/09/2020

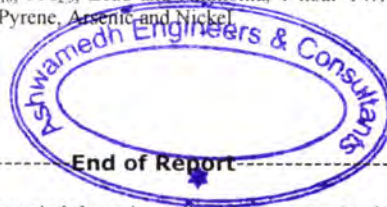
Meteorological Data / Environmental Conditions

Average Wind Velocity 22 km/h	Wind Direction SW	Relative Humidity (Max./Min.): 90/68 %	Temperature (Max./Min.): 30/24 °C	Duration of Survey 24 h
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Parameter	Results	NAAQS # 2009	Unit	Method
CHEMICAL TESTING				
Sulphur Dioxide (SO ₂)	7.4	80	µg/m ³	IS 5182 (Part 2): 2001, RA 2017
Nitrogen Dioxide (NO ₂)	29	80	µg/m ³	IS 5182 (Part 6): 2006, RA 2017
Particulate Matter (size less than 10 µm) or PM ₁₀	293	100	µg/m ³	IS 5182 (Part 23): 2006, RA 2017
Particulate Matter (size less than 2.5µm) or PM _{2.5}	100	60	µg/m ³	USEPA CFR 40, Part 50, Appendix L
Ozone (O ₃)	23.9	180	µg/m ³	AWMA, 3rd Ed., Method 411, Page no. 403, 1988
Lead (Pb)	<0.02	1	µg/m ³	EPA/625/R-96/D10 a Compendium Method 10-3.1 & 3.2, Jun 1999
Carbon Monoxide (CO)	1.39	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)	1.39	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 10-3.1 & 3.2, Jun 1999
Nickel (Ni)	<3	20	ng/m ³	EPA/625/R-96/D10 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

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

Sample / Report No.	AA/08/20/3814	Report Date	01/09/2020
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	24/08/2020 to 25/08/2020
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. plastic bladder	Date-Receipt of Sample	26/08/2020
Sampling Procedure	As per Method Reference	Date-Start of Analysis	26/08/2020
Order Reference	As per PO No. PNP/February/2019- 2020/013 Dated 26/02/2020	Date-Completion of Analysis	01/09/2020

Meteorological Data / Environmental Conditions

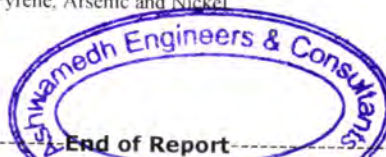
Average Wind Velocity 22 km/h	Wind Direction SW	Relative Humidity (Max./Min.): 90/68 %	Temperature (Max./Min.): 30/24 °C	Duration of Survey 24 h
Parameter	Results	NAAQS # 2009	Unit	Method
CHEMICAL TESTING				
Sulphur Dioxide (SO ₂)	7.1	80	µg/m ³	IS 5182 (Part 2): 2001, RA 2017
Nitrogen Dioxide (NO ₂)	35.4	80	µg/m ³	IS 5182 (Part 6): 2006, RA 2017
Particulate Matter (size less than 10 µm) or PM ₁₀	289	100	µg/m ³	IS 5182 (Part 23): 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)	21.0	180	µg/m ³	AWMA, 3rd Ed., Method 411, Page no. 403, 1988
Lead (Pb)	<0.02	1	µg/m ³	EPA/625/R-96/D10 a Compendium Method 10-3.1 & 3.2, Jun 1999
Carbon Monoxide (CO)	1.43	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)	1.35	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 2019
Arsenic (As)	<0.3	6	ng/m ³	EPA/625/R-96/D10 a Compendium Method 10-3.1 & 3.2, Jun 1999
Nickel (Ni)	<3	20	ng/m ³	EPA/625/R-96/D10 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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AMBIENT AIR QUALITY MONITORING REPORT

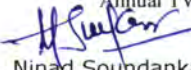
Sample / Report No.	AA/08/20/3815	Report Date	01/09/2020
Name & Address of Customer	PNP Maritime Services Private Limited 2nd Floor, Lansdowne House Building, M.B. Marg, Near Regal Cinema, Apollo Bunder, Colaba, Mumbai - 400 001		
Sample Collected by	Laboratory	Sample Description/ Type	Ambient Air (Group: Atmospheric Pollution Sub Group: Ambient Air Quality)
Sampling Location	DIL Godown Back Side	Date-Sampling	24/08/2020 to 25/08/2020
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. plastic bladder	Date-Receipt of Sample	26/08/2020
Sampling Procedure	As per Method Reference	Date-Start of Analysis	26/08/2020
Order Reference	As per PO No. PNP/February/2019- 2020/013 Dated 26/02/2020	Date-Completion of Analysis	01/09/2020

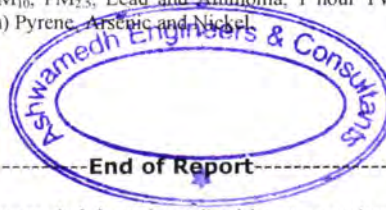
Meteorological Data / Environmental Conditions

Average Wind Velocity 22 km/h	Wind Direction SWS	Relative Humidity (Max./Min.): 90/68%	Temperature (Max./Min.): 30/24 °C	Duration of Survey 24 h
Parameter	Results	NAAQS # 2009	Unit	Method
CHEMICAL TESTING				
Sulphur Dioxide (SO ₂)	7.8	80	µg/m ³	IS 5182 (Part 2): 2001, RA 2017
Nitrogen Dioxide (NO ₂)	22.7	80	µg/m ³	IS 5182 (Part 6): 2006, RA 2017
Particulate Matter (size less than 10 µm) or PM ₁₀	297	100	µg/m ³	IS 5182 (Part 23): 2006, RA 2017
Particulate Matter (size less than 2.5µm) or PM _{2.5}	102	60	µg/m ³	USEPA CFR 40, Part 50, Appendix L
Ozone (O ₃)	21.0	180	µg/m ³	AWMA, 3rd Ed., Method 411, Page no. 403, 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)	1.28	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	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 10-3.1 & 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.


 Ninad Soundankar
 Technical Manager (Chemical)
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TC-5509

NOISE LEVEL MEASUREMENT REPORT

Sample / Report No.	N/08/20/3816	Report Date	29/08/2020
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	24/08/2020

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)	73.8	72.3	CPCB Protocol for Ambient Level Noise Monitoring, July 2015 AEC/C/SAP/SAM/35 & 36
	2200 (Night Time)	71.6	70.5	
B. Near Jetty No. 1	0910 (Day Time)	66.2	64.2	
	2210 (Night Time)	63.6	62.1	
C. Near Jetty No. 2	0920 (Day Time)	76.1	74.5	
	2220 (Night Time)	73.5	72.8	
D. Near Jetty No. 3	0930 (Day Time)	61.3	60.6	
	2230 (Night Time)	60.1	59.8	
E. Near Jetty No. 5	0940 (Day Time)	72.7	71.9	
	2240 (Night Time)	70.2	68.8	
F. Near Weight Bridge	0950 (Day Time)	62.3	61.2	
	2250 (Night Time)	60.3	59.7	
G. Near Custom Building	1000 (Day Time)	64.5	63.6	
	2310 (Night Time)	62.4	61.3	
H. Near Lal Gate	1020 (Day Time)	61.2	60.3	
	2320 (Night Time)	59.8	57.3	
I. Near DIL Main Gate	1030 (Day Time)	66.3	64.8	
	2320 (Night Time)	63.2	61.6	
J. DIL Godown Back Side	1030 (Day Time)	71.9	70.2	
	2330 (Night Time)	69.6	67.6	

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

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

Sample / Report No.	AA/08/20/4036	Report Date	10/09/2020
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	27/08/2020 to 28/08/2020
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. plastic bladder	Date-Receipt of Sample	29/08/2020
Sampling Procedure	As per Method Reference	Date-Start of Analysis	29/08/2020
Order Reference	As per PO No. PNP/February/2019- 2020/013 Dated 26/02/2020	Date-Completion of Analysis	10/09/2020

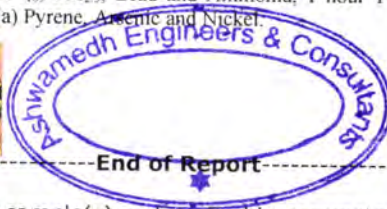
Meteorological Data / Environmental Conditions

Average Wind Velocity 15 km/h	Wind Direction SW	Relative Humidity (Max./Min.): 88/65 %	Temperature (Max./Min.): 29/24 °C	Duration of Survey 24 h
Parameter	Results	NAAQS # 2009	Unit	Method
CHEMICAL TESTING				
Sulphur Dioxide (SO ₂)	6.6	80	µg/m ³	IS 5182 (Part 2): 2001, RA 2017
Nitrogen Dioxide (NO ₂)	29.1	80	µg/m ³	IS 5182 (Part 6): 2006, RA 2017
Particulate Matter (size less than 10 µm) or PM ₁₀	309	100	µg/m ³	IS 5182 (Part 23): 2006, RA 2017
Particulate Matter (size less than 2.5µm) or PM _{2.5}	124	60	µg/m ³	USEPA CFR 40, Part 50, Appendix L
Ozone (O ₃)	22.5	180	µg/m ³	AWMA 3rd Ed., Method 411, Page no. 403, 1988
Lead (Pb)	<0.02	1	µg/m ³	EPA/625/R-96/D10 a Compendium Method 10-3.1 & 3.2, Jun 1999
Carbon Monoxide (CO)	1.23	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)	1.25	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 2019
Arsenic (As)	<0.3	6	ng/m ³	EPA/625/R-96/D10 a Compendium Method 10-3.1 & 3.2, Jun 1999
Nickel (Ni)	<3	20	ng/m ³	EPA/625/R-96/D10 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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Note:

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AMBIENT AIR QUALITY MONITORING REPORT

Sample / Report No.	AA/08/20/4037	Report Date	10/09/2020
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	27/08/2020 to 28/08/2020
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. plastic bladder	Date-Receipt of Sample	29/08/2020
Sampling Procedure	As per Method Reference	Date-Start of Analysis	29/08/2020
Order Reference	As per PO No. PNP/February/2019- 2020/013 Dated 26/02/2020	Date-Completion of Analysis	10/09/2020

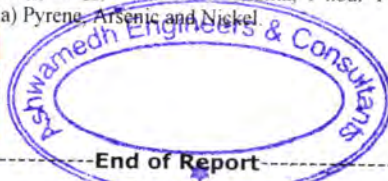
Meteorological Data / Environmental Conditions

Average Wind Velocity 15 km/h	Wind Direction SW	Relative Humidity (Max./Min.): 88/65 %	Temperature (Max./Min.): 29/24 °C	Duration of Survey 24 h
Parameter	Results	NAAQS # 2009	Unit	Method
CHEMICAL TESTING				
Sulphur Dioxide (SO ₂)	7.8	80	µg/m ³	IS 5182 (Part 2): 2001, RA 2017
Nitrogen Dioxide (NO ₂)	22.9	80	µg/m ³	IS 5182 (Part 6): 2006, RA 2017
Particulate Matter (size less than 10 µm) or PM ₁₀	350	100	µg/m ³	IS 5182 (Part 23): 2006, RA 2017
Particulate Matter (size less than 2.5µm) or PM _{2.5}	130	60	µg/m ³	USEPA CFR 40, Part 50, Appendix L
Ozone (O ₃)	29.5	180	µg/m ³	AWMA, 3rd Ed., Method 411, Page no. 403.1988
Lead (Pb)	<0.02	1	µg/m ³	EPA/625/R-96/D10 a Compendium Method 10-3.1 & 3.2, Jun 1999
Carbon Monoxide (CO)	1.41	4	mg/m ³	CPCB Guidelines, 37/2012-13, Page no.16
Ammonia (NH ₃)	<4	400	µg/m ³	AEC/C/SAP/AA-7
Benzene (C ₆ H ₆)	1.17	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 2019
Arsenic (As)	<0.3	6	ng/m ³	EPA/625/R-96/D10 a Compendium Method 10-3.1 & 3.2, Jun 1999
Nickel (Ni)	<3	20	ng/m ³	EPA/625/R-96/D10 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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AMBIENT AIR QUALITY MONITORING REPORT

Sample / Report No.	AA/08/20/4038	Report Date	10/09/2020
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	27/08/2020 to 28/08/2020
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. plastic bladder	Date-Receipt of Sample	29/08/2020
Sampling Procedure	As per Method Reference	Date-Start of Analysis	29/08/2020
Order Reference	As per PO No. PNP/February/2019- 2020/013 Dated 26/02/2020	Date-Completion of Analysis	10/09/2020

Meteorological Data / Environmental Conditions

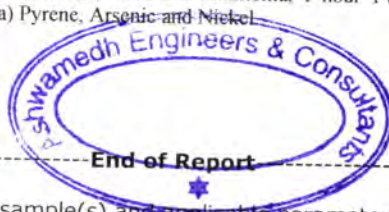
Average Wind Velocity 15 km/h	Wind Direction SW	Relative Humidity (Max./Min.): 88/65 %	Temperature (Max./Min.): 29/24 °C	Duration of Survey 24 h
Parameter	Results	NAAQS # 2009	Unit	Method
CHEMICAL TESTING				
Sulphur Dioxide (SO ₂)	7.5	80	µg/m ³	IS 5182 (Part 2): 2001, RA 2017
Nitrogen Dioxide (NO ₂)	28.3	80	µg/m ³	IS 5182 (Part 6): 2006, RA 2017
Particulate Matter (size less than 10 µm) or PM ₁₀	348	100	µg/m ³	IS 5182 (Part 23): 2006, RA 2017
Particulate Matter (size less than 2.5µm) or PM _{2.5}	113	60	µg/m ³	USEPA CFR 40, Part 50, Appendix L
Ozone (O ₃)	22.4	180	µg/m ³	AWMA, 3rd Ed., Method 411, Page no. 403, 1988
Lead (Pb)	<0.02	1	µg/m ³	EPA/625/R-96/D10 a Compendium Method 10-3.1 & 3.2, Jun 1999
Carbon Monoxide (CO)	1.39	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)	1.21	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 2019
Arsenic (As)	<0.3	6	ng/m ³	EPA/625/R-96/D10 a Compendium Method 10-3.1 & 3.2, Jun 1999
Nickel (Ni)	<3	20	ng/m ³	EPA/625/R-96/D10 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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AMBIENT AIR QUALITY MONITORING REPORT

Sample / Report No.	AA/08/20/4039	Report Date	10/09/2020
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	27/08/2020 to 28/08/2020
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. plastic bladder	Date-Receipt of Sample	29/08/2020
Sampling Procedure	As per Method Reference	Date-Start of Analysis	29/08/2020
Order Reference	As per PO No. PNP/February/2019- 2020/013 Dated 26/02/2020	Date-Completion of Analysis	10/09/2020

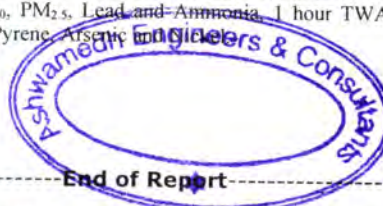
Meteorological Data / Environmental Conditions

Average Wind Velocity 15 km/h	Wind Direction SW	Relative Humidity (Max./Min.): 88/65 %	Temperature (Max./Min.): 29/24 °C	Duration of Survey 24 h
Parameter	Results	NAAQS # 2009	Unit	Method
CHEMICAL TESTING				
Sulphur Dioxide (SO ₂)	7.6	80	µg/m ³	IS 5182 (Part 2): 2001, RA 2017
Nitrogen Dioxide (NO ₂)	21.7	80	µg/m ³	IS 5182 (Part 6): 2006, RA 2017
Particulate Matter (size less than 10 µm) or PM ₁₀	335	100	µg/m ³	IS 5182 (Part 23): 2006, RA 2017
Particulate Matter (size less than 2.5µm) or PM _{2.5}	125	60	µg/m ³	USEPA CFR 40, Part 50, Appendix L
Ozone (O ₃)	30.9	180	µg/m ³	AWMA, 3rd Ed., Method 411, Page no. 403, 1988
Lead (Pb)	<0.02	1	µg/m ³	EPA/625/R-96/D10 a Compendium Method 10-3.1 & 3.2, Jun 1999
Carbon Monoxide (CO)	1.38	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)	1.31	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 2019
Arsenic (As)	<0.3	6	ng/m ³	EPA/625/R-96/D10 a Compendium Method 10-3.1 & 3.2, Jun 1999
Nickel (Ni)	<3	20	ng/m ³	EPA/625/R-96/D10 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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Sample / Report No.	AA/08/20/4040	Report Date	10/09/2020
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	27/08/2020 to 28/08/2020
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. plastic bladder	Date-Receipt of Sample	29/08/2020
Sampling Procedure	As per Method Reference	Date-Start of Analysis	29/08/2020
Order Reference	As per PO No. PNP/February/2019- 2020/013 Dated 26/02/2020	Date-Completion of Analysis	10/09/2020

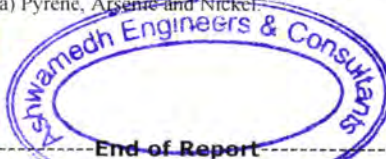
Meteorological Data / Environmental Conditions

Average Wind Velocity 15 km/h	Wind Direction SW	Relative Humidity (Max./Min.): 88/65 %	Temperature (Max./Min.): 29/24 °C	Duration of Survey 24 h
Parameter	Results	NAAQS # 2009	Unit	Method
CHEMICAL TESTING				
Sulphur Dioxide (SO ₂)	7.6	80	µg/m ³	IS 5182 (Part 2): 2001, RA 2017
Nitrogen Dioxide (NO ₂)	24.5	80	µg/m ³	IS 5182 (Part 6): 2006, RA 2017
Particulate Matter (size less than 10 µm) or PM ₁₀	309	100	µg/m ³	IS 5182 (Part 23): 2006, RA 2017
Particulate Matter (size less than 2.5µm) or PM _{2.5}	126	60	µg/m ³	USEPA CFR 40, Part 50, Appendix L
Ozone (O ₃)	21.0	180	µg/m ³	AWMA 3rd Ed., Method 411, Page no. 403, 1988
Lead (Pb)	<0.02	1	µg/m ³	EPA/625/R-96/D10 a Compendium Method 10-3.1 & 3.2, Jun 1999
Carbon Monoxide (CO)	1.33	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)	1.26	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 2019
Arsenic (As)	<0.3	6	ng/m ³	EPA/625/R-96/D10 a Compendium Method 10-3.1 & 3.2, Jun 1999
Nickel (Ni)	<3	20	ng/m ³	EPA/625/R-96/D10 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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AMBIENT AIR QUALITY MONITORING REPORT

Sample / Report No.	AA/08/20/4041	Report Date	10/09/2020
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	27/08/2020 to 28/08/2020
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. plastic bladder	Date-Receipt of Sample	29/08/2020
Sampling Procedure	As per Method Reference	Date-Start of Analysis	29/08/2020
Order Reference	As per PO No. PNP/February/2019- 2020/013 Dated 26/02/2020	Date-Completion of Analysis	10/09/2020

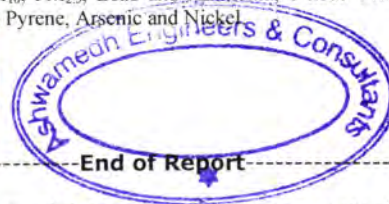
Meteorological Data / Environmental Conditions

Average Wind Velocity 15 km/h	Wind Direction SW	Relative Humidity (Max./Min.): 88/65 %	Temperature (Max./Min.): 29/24 °C	Duration of Survey 24 h
Parameter	Results	NAAQS # 2009	Unit	Method
CHEMICAL TESTING				
Sulphur Dioxide (SO ₂)	8.1	80	µg/m ³	IS 5182 (Part 2): 2001, 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	321	100	µg/m ³	IS 5182 (Part 23): 2006, RA 2017
Particulate Matter (size less than 2.5µm) or PM _{2.5}	101	60	µg/m ³	USEPA CFR 40, Part 50, Appendix L
Ozone (O ₃)	30.9	180	µg/m ³	AWMA, 3rd Ed., Method 411, Page no. 403, 1988
Lead (Pb)	<0.02	1	µg/m ³	EPA/625/R-96/D10 a Compendium Method 10-3.1 & 3.2, Jun 1999
Carbon Monoxide (CO)	1.41	4	mg/m ³	CPCB Guidelines, 37/2012-13, Page no.16
Ammonia (NH ₃)	<4	400	µg/m ³	AEC/C/SAP/AA-7
Benzene (C ₆ H ₆)	1.34	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 10-3.1 & 3.2, Jun 1999
Nickel (Ni)	<3	20	ng/m ³	EPA/625/R-96/D10 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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AMBIENT AIR QUALITY MONITORING REPORT

Sample / Report No.	AA/08/20/4042	Report Date	10/09/2020
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	27/08/2020 to 28/08/2020
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. plastic bladder	Date-Receipt of Sample	29/08/2020
Sampling Procedure	As per Method Reference	Date-Start of Analysis	29/08/2020
Order Reference	As per PO No. PNP/February/2019- 2020/013 Dated 26/02/2020	Date-Completion of Analysis	10/09/2020

Meteorological Data / Environmental Conditions

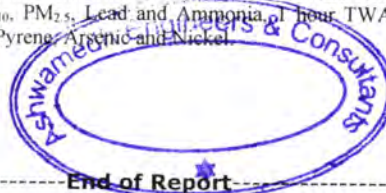
Average Wind Velocity 15 km/h	Wind Direction SW	Relative Humidity (Max./Min.): 88/65 %	Temperature (Max./Min.): 29/24 °C	Duration of Survey 24 h
Parameter	Results	NAAQS # 2009	Unit	Method
CHEMICAL TESTING				
Sulphur Dioxide (SO ₂)	6.9	80	µg/m ³	IS 5182 (Part 2): 2001, RA 2017
Nitrogen Dioxide (NO ₂)	36.2	80	µg/m ³	IS 5182 (Part 6): 2006, RA 2017
Particulate Matter (size less than 10 µm) or PM ₁₀	265	100	µg/m ³	IS 5182 (Part 23): 2006, RA 2017
Particulate Matter (size less than 2.5µm) or PM _{2.5}	97	60	µg/m ³	USEPA CFR 40, Part 50, Appendix L
Ozone (O ₃)	29.5	180	µg/m ³	AWMA 3rd Ed., Method 411, 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 1999
Carbon Monoxide (CO)	1.68	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)	1.21	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 2019
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

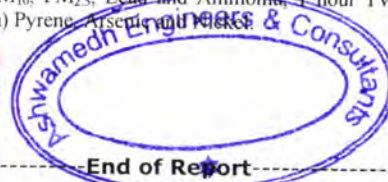
Sample / Report No.	AA/08/20/4043	Report Date	10/09/2020
Name & Address of Customer	PNP Maritime Services Private Limited 2nd Floor, Lansdowne House Building, M.B. Marg, Near Regal Cinema, Apollo Bunder, Colaba, Mumbai – 400 001		
Sample Collected by	Laboratory	Sample Description/ Type	Ambient Air (Group: Atmospheric Pollution Sub Group: Ambient Air Quality)
Sampling Location	Near Lal Gate	Date-Sampling	27/08/2020 to 28/08/2020
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. plastic bladder	Date-Receipt of Sample	29/08/2020
Sampling Procedure	As per Method Reference	Date-Start of Analysis	29/08/2020
Order Reference	As per PO No. PNP/February/2019- 2020/013 Dated 26/02/2020	Date-Completion of Analysis	10/09/2020

Meteorological Data / Environmental Conditions

Average Wind Velocity 15 km/h	Wind Direction SW	Relative Humidity (Max./Min.): 88/65 %	Temperature (Max./Min.): 29/24 °C	Duration of Survey 24 h
Parameter	Results	NAAQS # 2009	Unit	Method
CHEMICAL TESTING				
Sulphur Dioxide (SO ₂)	6.9	80	µg/m ³	IS 5182 (Part 2): 2001, 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	326	100	µg/m ³	IS 5182 (Part 23): 2006, RA 2017
Particulate Matter (size less than 2.5µm) or PM _{2.5}	139	60	µg/m ³	USEPA CFR 40, Part 50, Appendix L
Ozone (O ₃)	36.5	180	µg/m ³	AWMA 3rd Ed., Method 411, Page no. 403, 1988
Lead (Pb)	<0.02	1	µg/m ³	EPA/625/R-96/D10 a Compendium Method 10-3.1 & 3.2, Jun 1999
Carbon Monoxide (CO)	1.23	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)	1.23	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 I2): 2004, RA 2019
Arsenic (As)	<0.3	6	ng/m ³	EPA/625/R-96/D10 a Compendium Method 10-3.1 & 3.2, Jun 1999
Nickel (Ni)	<3	20	ng/m ³	EPA/625/R-96/D10 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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Sample / Report No.	AA/08/20/4044	Report Date	10/09/2020
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	27/08/2020 to 28/08/2020
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. plastic bladder	Date-Receipt of Sample	29/08/2020
Sampling Procedure	As per Method Reference	Date-Start of Analysis	29/08/2020
Order Reference	As per PO No. PNP/February/2019- 2020/013 Dated 26/02/2020	Date-Completion of Analysis	10/09/2020

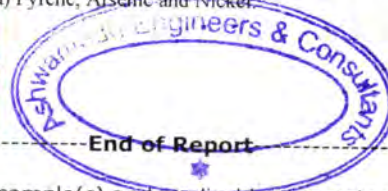
Meteorological Data / Environmental Conditions

Average Wind Velocity 15 km/h	Wind Direction SW	Relative Humidity (Max./Min.): 88/65 %	Temperature (Max./Min.): 29/24 °C	Duration of Survey 24 h
Parameter	Results	NAAQS # 2009	Unit	Method
CHEMICAL TESTING				
Sulphur Dioxide (SO ₂)	6.9	80	µg/m ³	IS 5182 (Part 2): 2001, RA 2017
Nitrogen Dioxide (NO ₂)	31.6	80	µg/m ³	IS 5182 (Part 6): 2006, RA 2017
Particulate Matter (size less than 10 µm) or PM ₁₀	268	100	µg/m ³	IS 5182 (Part 23): 2006, RA 2017
Particulate Matter (size less than 2.5µm) or PM _{2.5}	118	60	µg/m ³	USEPA CFR 40, Part 50, Appendix L
Ozone (O ₃)	26.7	180	µg/m ³	AWMA, 3rd Ed., Method 411, Page no. 403, 1988
Lead (Pb)	<0.02	1	µg/m ³	EPA/625/R-96/D10 a Compendium Method 10-3.1 & 3.2, Jun 1999
Carbon Monoxide (CO)	1.29	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)	1.24	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 I2): 2004, RA 2019
Arsenic (As)	<0.3	6	ng/m ³	EPA/625/R-96/D10 a Compendium Method 10-3.1 & 3.2, Jun 1999
Nickel (Ni)	<3	20	ng/m ³	EPA/625/R-96/D10 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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Sample / Report No.	AA/08/20/4045	Report Date	10/09/2020
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	27/08/2020 to 28/08/2020
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. plastic bladder	Date-Receipt of Sample	29/08/2020
Sampling Procedure	As per Method Reference	Date-Start of Analysis	29/08/2020
Order Reference	As per PO No. PNP/February/2019- 2020/013 Dated 26/02/2020	Date-Completion of Analysis	10/09/2020

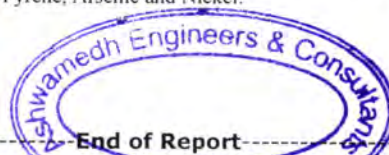
Meteorological Data / Environmental Conditions

Average Wind Velocity 15 km/h	Wind Direction SW	Relative Humidity (Max./Min.): 88/65 %	Temperature (Max./Min.): 29/24 °C	Duration of Survey 24 h
Parameter	Results	NAAQS # 2009	Unit	Method
CHEMICAL TESTING				
Sulphur Dioxide (SO ₂)	7.8	80	µg/m ³	IS 5182 (Part 2): 2001, RA 2017
Nitrogen Dioxide (NO ₂)	29.3	80	µg/m ³	IS 5182 (Part 6): 2006, RA 2017
Particulate Matter (size less than 10 µm) or PM ₁₀	261	100	µg/m ³	IS 5182 (Part 23): 2006, RA 2017
Particulate Matter (size less than 2.5µm) or PM _{2.5}	129	60	µg/m ³	USEPA CFR 40, Part 50, Appendix L
Ozone (O ₃)	<19.6	180	µg/m ³	AWMA, 3rd Ed., Method 411, Page no. 403, 1988
Lead (Pb)	<0.02	1	µg/m ³	EPA/625/R-96/D10 a Compendium Method 10-3.1 & 3.2, Jun 1999
Carbon Monoxide (CO)	1.34	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	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 10-3.1 & 3.2, Jun 1999
Nickel (Ni)	<3	20	ng/m ³	EPA/625/R-96/D10 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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 Technical Manager (Chemical)
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NOISE LEVEL MEASUREMENT REPORT

Sample / Report No.	N/08/20/4046	Report Date	01/09/2020
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	27/08/2020

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)	72.4	71.3	
	2100 (Night Time)	70.8	69.7	
B. Near Jetty No. 1	0910 (Day Time)	63.2	62.7	
	2110 (Night Time)	61.8	60.6	
C. Near Jetty No. 2	0920 (Day Time)	74.6	73.9	
	2120 (Night Time)	71.7	70.3	
D. Near Jetty No. 3	0930 (Day Time)	76.7	75.5	
	2130 (Night Time)	74.3	73.2	
E. Near Jetty No. 5	0940 (Day Time)	63.5	62.4	
	2140 (Night Time)	60.7	59.3	
F. Near Weight Bridge	0950 (Day Time)	74.7	73.2	
	2150 (Night Time)	72.3	71.6	
G. Near Custom Building	1000 (Day Time)	62.8	61.3	
	2200 (Night Time)	60.8	58.3	
H. Near Lal Gate	1010 (Day Time)	66.5	65.6	
	2210 (Night Time)	64.2	63.5	
I. Near DIL Main Gate	1020 (Day Time)	67.9	66.6	
	2220 (Night Time)	65.4	63.1	
J. DIL Godown Back Side	1030 (Day Time)	63.4	62.4	
	2230 (Night Time)	61.7	60.3	

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

(Signature)

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AMBIENT AIR QUALITY MONITORING REPORT

Sample / Report No.	AA/09/20/3004	Report Date	10/09/2020
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	31/08/2020 to 01/09/2020
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. plastic bladder	Date-Receipt of Sample	02/09/2020
Sampling Procedure	As per Method Reference	Date-Start of Analysis	02/09/2020
Order Reference	As per PO No. PNP/February/2019- 2020/013 Dated 26/02/2020	Date-Completion of Analysis	10/09/2020

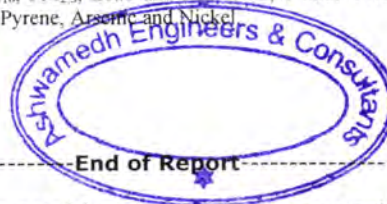
Meteorological Data / Environmental Conditions

Average Wind Velocity 14 km/h	Wind Direction SW	Relative Humidity (Max./Min.): 89/65 %	Temperature (Max./Min.): 29/24 °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): 2001, RA 2017
Nitrogen Dioxide (NO ₂)	31.6	80	µg/m ³	IS 5182 (Part 6): 2006, RA 2017
Particulate Matter (size less than 10 µm) or PM ₁₀	326	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 L
Ozone (O ₃)	25.3	180	µg/m ³	AWMA 3rd Ed., Method 411, Page no. 403, 1988
Lead (Pb)	<0.02	1	µg/m ³	EPA/625/R-96/D10 a Compendium Method IO-3.1 & 3.2, Jun 1999
Carbon Monoxide (CO)	1.31	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 II): 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 IO-3.1 & 3.2, Jun 1999
Nickel (Ni)	<3	20	ng/m ³	EPA/625/R-96/D10 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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 Technical Manager (Chemical)
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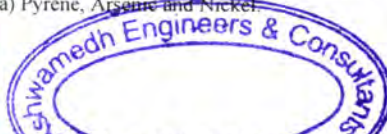
Sample / Report No.	AA/09/20/3005	Report Date	10/09/2020
Name & Address of Customer	PNP Maritime Services Private Limited 2nd Floor, Lansdowne House Building, M.B. Marg, Near Regal Cinema, Apollo Bunder, Colaba, Mumbai – 400 001		
Sample Collected by	Laboratory	Sample Description/ Type	Ambient Air (Group: Atmospheric Pollution Sub Group: Ambient Air Quality)
Sampling Location	Near Jetty No. 1	Date-Sampling	31/08/2020 to 01/09/2020
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. plastic bladder	Date-Receipt of Sample	02/09/2020
Sampling Procedure	As per Method Reference	Date-Start of Analysis	02/09/2020
Order Reference	As per PO No. PNP/February/2019- 2020/013 Dated 26/02/2020	Date-Completion of Analysis	10/09/2020

Meteorological Data / Environmental Conditions

Average Wind Velocity 14 km/h	Wind Direction SW	Relative Humidity (Max./Min.): 89/65 %	Temperature (Max./Min.): 29/24 °C	Duration of Survey 24 h
Parameter	Results	NAAQS # 2009	Unit	Method
CHEMICAL TESTING				
Sulphur Dioxide (SO ₂)	7.9	80	µg/m ³	IS 5182 (Part 2): 2001, RA 2017
Nitrogen Dioxide (NO ₂)	27.6	80	µg/m ³	IS 5182 (Part 6): 2006, RA 2017
Particulate Matter (size less than 10 µm) or PM ₁₀	338	100	µg/m ³	IS 5182 (Part 23): 2006, RA 2017
Particulate Matter (size less than 2.5µm) or PM _{2.5}	118	60	µg/m ³	USEPA CFR 40, Part 50, Appendix L
Ozone (O ₃)	36.5	180	µg/m ³	AWMA 3rd Ed., Method 411, Page no. 403, 1988
Lead (Pb)	<0.02	1	µg/m ³	EPA/625/R-96/D10 a Compendium Method 10-3.1 & 3.2, Jun 1999
Carbon Monoxide (CO)	1.43	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)	1.27	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 2019
Arsenic (As)	<0.3	6	ng/m ³	EPA/625/R-96/D10 a Compendium Method 10-3.1 & 3.2, Jun 1999
Nickel (Ni)	<3	20	ng/m ³	EPA/625/R-96/D10 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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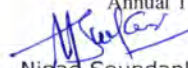
AMBIENT AIR QUALITY MONITORING REPORT

Sample / Report No.	AA/09/20/3006	Report Date	10/09/2020
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	31/08/2020 to 01/09/2020
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. plastic bladder	Date-Receipt of Sample	02/09/2020
Sampling Procedure	As per Method Reference	Date-Start of Analysis	02/09/2020
Order Reference	As per PO No. PNP/February/2019- 2020/013 Dated 26/02/2020	Date-Completion of Analysis	10/09/2020

Meteorological Data / Environmental Conditions

Average Wind Velocity 14 km/h	Wind Direction SW	Relative Humidity (Max./Min.): 89/65 %	Temperature (Max./Min.): 29/24 °C	Duration of Survey 24 h
Parameter	Results	NAAQS # 2009	Unit	Method
CHEMICAL TESTING				
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	327	100	µg/m ³	IS 5182 (Part 23): 2006, RA 2017
Particulate Matter (size less than 2.5µm) or PM _{2.5}	103	60	µg/m ³	USEPA CFR 40, Part 50, Appendix I
Ozone (O ₃)	26.7	180	µg/m ³	AWMA, 3rd Ed., Method 411, Page no. 403, 1988
Lead (Pb)	<0.02	1	µg/m ³	EPA/625/R-96/D10 a Compendium Method IO-3.1 6 3.2, Jun 1999
Carbon Monoxide (CO)	1.25	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)	1.21	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 2019
Arsenic (As)	<0.3	6	ng/m ³	EPA/625/R-96/D10 a Compendium Method IO-3.1 6 3.2, Jun 1999
Nickel (Ni)	<3	20	ng/m ³	EPA/625/R-96/D10 a Compendium Method IO-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 / Report No.	AA/09/20/3007	Report Date	10/09/2020
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	31/08/2020 to 01/09/2020
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. plastic bladder	Date-Receipt of Sample	02/09/2020
Sampling Procedure	As per Method Reference	Date-Start of Analysis	02/09/2020
Order Reference	As per PO No. PNP/February/2019- 2020/013 Dated 26/02/2020	Date-Completion of Analysis	10/09/2020

Meteorological Data / Environmental Conditions

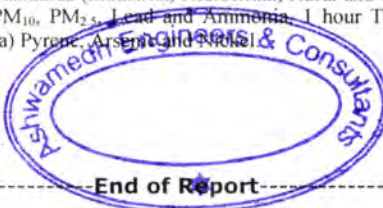
Average Wind Velocity 14 km/h	Wind Direction SW	Relative Humidity (Max./Min.): 89/65 %	Temperature (Max./Min.): 29/24 °C	Duration of Survey 24 h
Parameter	Results	NAAQS # 2009	Unit	Method
CHEMICAL TESTING				
Sulphur Dioxide (SO ₂)	7.2	80	µg/m ³	IS 5182 (Part 2): 2001, RA 2017
Nitrogen Dioxide (NO ₂)	26.9	80	µg/m ³	IS 5182 (Part 6): 2006, RA 2017
Particulate Matter (size less than 10 µm) or PM ₁₀	296	100	µg/m ³	IS 5182 (Part 23): 2006, RA 2017
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)	33.7	180	µg/m ³	AWMA, 3rd Ed., Method 411, Page no. 403, 1988
Lead (Pb)	<0.02	1	µg/m ³	EPA/625/R-96/D10 a Compendium Method IO-3.1 & 3.2, Jun 1999
Carbon Monoxide (CO)	1.31	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)	1.45	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 IO-3.1 & 3.2, Jun 1999
Nickel (Ni)	<3	20	ng/m ³	EPA/625/R-96/D10 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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Note:

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AMBIENT AIR QUALITY MONITORING REPORT

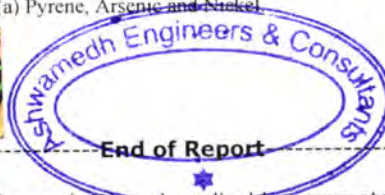
Sample / Report No.	AA/09/20/3008	Report Date	10/09/2020
Name & Address of Customer	PNP Maritime Services Private Limited 2nd Floor, Lansdowne House Building, M.B. Marg, Near Regal Cinema, Apollo Bunder, Colaba, Mumbai – 400 001		
Sample Collected by	Laboratory	Sample Description/ Type	Ambient Air (Group: Atmospheric Pollution Sub Group: Ambient Air Quality)
Sampling Location	Near Jetty No.5	Date-Sampling	31/08/2020 to 01/09/2020
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. plastic bladder	Date-Receipt of Sample	02/09/2020
Sampling Procedure	As per Method Reference	Date-Start of Analysis	02/09/2020
Order Reference	As per PO No. PNP/February/2019- 2020/013 Dated 26/02/2020	Date-Completion of Analysis	10/09/2020

Meteorological Data / Environmental Conditions

Average Wind Velocity 14 km/h	Wind Direction SW	Relative Humidity (Max./Min.): 89/65 %	Temperature (Max./Min.): 29/24 °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 2): 2001, RA 2017
Nitrogen Dioxide (NO ₂)	22.4	80	µg/m ³	IS 5182 (Part 6): 2006, RA 2017
Particulate Matter (size less than 10 µm) or PM ₁₀	279	100	µg/m ³	IS 5182 (Part 23): 2006, RA 2017
Particulate Matter (size less than 2.5µm) or PM _{2.5}	99	60	µg/m ³	USEPA CFR 40, Part 50, Appendix L
Ozone (O ₃)	25.3	180	µg/m ³	AWMA, 3rd Ed., Method 411, Page no. 403, 1988
Lead (Pb)	<0.02	1	µg/m ³	EPA/625/R-96/D10 a Compendium Method 10-3.1 & 3.2, Jun 1999
Carbon Monoxide (CO)	1.22	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)	1.25	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 2019
Arsenic (As)	<0.3	6	ng/m ³	EPA/625/R-96/D10 a Compendium Method 10-3.1 & 3.2, Jun 1999
Nickel (Ni)	<3	20	ng/m ³	EPA/625/R-96/D10 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.

Ninad Soundankar
 Ninad Soundankar
 Technical Manager (Chemical)
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Sample / Report No.	AA/09/20/3009	Report Date	10/09/2020
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	31/08/2020 to 01/09/2020
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. plastic bladder	Date-Receipt of Sample	02/09/2020
Sampling Procedure	As per Method Reference	Date-Start of Analysis	02/09/2020
Order Reference	As per PO No. PNP/February/2019- 2020/013 Dated 26/02/2020	Date-Completion of Analysis	10/09/2020

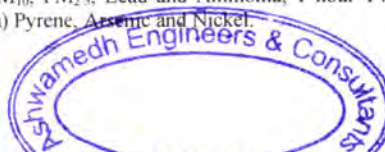
Meteorological Data / Environmental Conditions

Average Wind Velocity 14 km/h	Wind Direction SW	Relative Humidity (Max./Min.): 89/65 %	Temperature (Max./Min.): 29/24 °C	Duration of Survey 24 h
Parameter	Results	NAAQS # 2009	Unit	Method
CHEMICAL TESTING				
Sulphur Dioxide (SO ₂)	7.4	80	µg/m ³	IS 5182 (Part 2): 2001, RA 2017
Nitrogen Dioxide (NO ₂)	22.4	80	µg/m ³	IS 5182 (Part 6): 2006, RA 2017
Particulate Matter (size less than 10 µm) or PM ₁₀	268	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 L
Ozone (O ₃)	28.1	180	µg/m ³	AWMA, 3rd Ed., Method 411, Page no. 403, 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)	1.36	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)	1.34	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 2019
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.

Ninad Soundankar
 Ninad Soundankar
 Technical Manager (Chemical)
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Sample / Report No.	AA/09/20/3010	Report Date	10/09/2020
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	31/08/2020 to 01/09/2020
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. plastic bladder	Date-Receipt of Sample	02/09/2020
Sampling Procedure	As per Method Reference	Date-Start of Analysis	02/09/2020
Order Reference	As per PO No. PNP/February/2019- 2020/013 Dated 26/02/2020	Date-Completion of Analysis	10/09/2020

Meteorological Data / Environmental Conditions

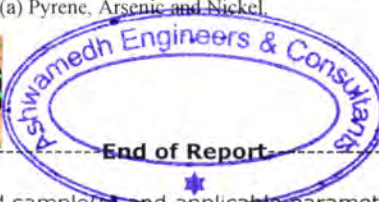
Average Wind Velocity 14 km/h	Wind Direction SW	Relative Humidity (Max./Min.): 89/65 %	Temperature (Max./Min.): 29/24 °C	Duration of Survey 24 h
Parameter	Results	NAAQS # 2009	Unit	Method
CHEMICAL TESTING				
Sulphur Dioxide (SO ₂)	6.8	80	µg/m ³	IS 5182 (Part 2): 2001, RA 2017
Nitrogen Dioxide (NO ₂)	34.2	80	µg/m ³	IS 5182 (Part 6): 2006, RA 2017
Particulate Matter (size less than 10 µm) or PM ₁₀	309	100	µg/m ³	IS 5182 (Part 23): 2006, RA 2017
Particulate Matter (size less than 2.5µm) or PM _{2.5}	112	60	µg/m ³	USEPA CFR 40, Part 50, Appendix L
Ozone (O ₃)	22.4	180	µg/m ³	AWMA 3rd Ed., Method 411, Page no. 403, 1988
Lead (Pb)	<0.02	1	µg/m ³	EPA/625/R-96/D10 a Compendium Method IO-3.1 & 3.2, Jun 1999
Carbon Monoxide (CO)	1.43	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)	1.36	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 I2): 2004, RA 2019
Arsenic (As)	<0.3	6	ng/m ³	EPA/625/R-96/D10 a Compendium Method IO-3.1 & 3.2, Jun 1999
Nickel (Ni)	<3	20	ng/m ³	EPA/625/R-96/D10 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.

(Signature)
 Ninad Soundankar

Technical Manager (Chemical)
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Sample / Report No.	AA/09/20/3011	Report Date	10/09/2020
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	31/08/2020 to 01/09/2020
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. plastic bladder	Date-Receipt of Sample	02/09/2020
Sampling Procedure	As per Method Reference	Date-Start of Analysis	02/09/2020
Order Reference	As per PO No. PNP/February/2019- 2020/013 Dated 26/02/2020	Date-Completion of Analysis	10/09/2020

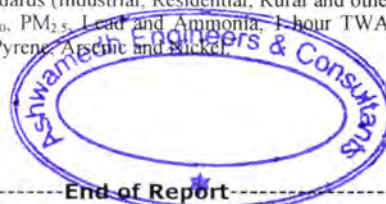
Meteorological Data / Environmental Conditions

Average Wind Velocity 14 km/h	Wind Direction SW	Relative Humidity (Max./Min.): 89/65 %	Temperature (Max./Min.): 29/24 °C	Duration of Survey 24 h
Parameter	Results	NAAQS # 2009	Unit	Method
CHEMICAL TESTING				
Sulphur Dioxide (SO ₂)	6.4	80	µg/m ³	IS 5182 (Part 2): 2001, RA 2017
Nitrogen Dioxide (NO ₂)	21.2	80	µg/m ³	IS 5182 (Part 6): 2006, RA 2017
Particulate Matter (size less than 10 µm) or PM ₁₀	276	100	µg/m ³	IS 5182 (Part 23): 2006, RA 2017
Particulate Matter (size less than 2.5µm) or PM _{2.5}	110	60	µg/m ³	USEPA CFR 40, Part 50, Appendix L
Ozone (O ₃)	32.3	180	µg/m ³	AWMA 3rd Ed., Method 411, Page no. 403, 1988
Lead (Pb)	<0.02	1	µg/m ³	EPA/625/R-96/D10 a Compendium Method 10-3.1 & 3.2, Jun 1999
Carbon Monoxide (CO)	1.33	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 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 10-3.1 & 3.2, Jun 1999
Nickel (Ni)	<3	20	ng/m ³	EPA/625/R-96/D10 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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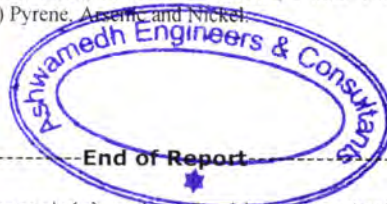
Sample / Report No.	AA/09/20/3012	Report Date	10/09/2020
Name & Address of Customer	PNP Maritime Services Private Limited 2nd Floor, Lansdowne House Building, M.B. Marg, Near Regal Cinema, Apollo Bunder, Colaba, Mumbai - 400 001		
Sample Collected by	Laboratory	Sample Description/ Type	Ambient Air (Group: Atmospheric Pollution Sub Group: Ambient Air Quality)
Sampling Location	Near DIL Main Gate	Date-Sampling	31/08/2020 to 01/09/2020
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. plastic bladder	Date-Receipt of Sample	02/09/2020
Sampling Procedure	As per Method Reference	Date-Start of Analysis	02/09/2020
Order Reference	As per PO No. PNP/February/2019- 2020/013 Dated 26/02/2020	Date-Completion of Analysis	10/09/2020

Meteorological Data / Environmental Conditions

Average Wind Velocity 14 km/h	Wind Direction SW	Relative Humidity (Max./Min.): 89/65 %	Temperature (Max./Min.): 29/24 °C	Duration of Survey 24 h
Parameter	Results	NAAQS # 2009	Unit	Method
CHEMICAL TESTING				
Sulphur Dioxide (SO ₂)	6.6	80	µg/m ³	IS 5182 (Part 2): 2001, RA 2017
Nitrogen Dioxide (NO ₂)	32.8	80	µg/m ³	IS 5182 (Part 6): 2006, RA 2017
Particulate Matter (size less than 10 µm) or PM ₁₀	330	100	µg/m ³	IS 5182 (Part 23): 2006, RA 2017
Particulate Matter (size less than 2.5µm) or PM _{2.5}	113	60	µg/m ³	USEPA CFR 40, Part 50, Appendix L
Ozone (O ₃)	29.5	180	µg/m ³	AWMA, 3rd Ed., Method 411, Page no. 403, 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)	1.16	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)	1.29	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 10-3.1 & 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.

Ninad Soundankar
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AMBIENT AIR QUALITY MONITORING REPORT

Sample / Report No.	AA/09/20/3013	Report Date	10/09/2020
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	31/08/2020 to 01/09/2020
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. plastic bladder	Date-Receipt of Sample	02/09/2020
Sampling Procedure	As per Method Reference	Date-Start of Analysis	02/09/2020
Order Reference	As per PO No. PNP/February/2019- 2020/013 Dated 26/02/2020	Date-Completion of Analysis	10/09/2020

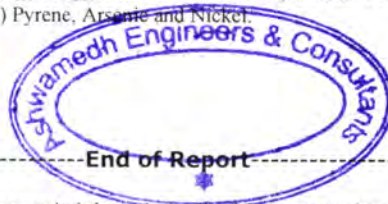
Meteorological Data / Environmental Conditions

Average Wind Velocity 14 km/h	Wind Direction SW	Relative Humidity (Max./Min.): 89/65 %	Temperature (Max./Min.): 29/24 °C	Duration of Survey 24 h
Parameter	Results	NAAQS # 2009	Unit	Method
CHEMICAL TESTING				
Sulphur Dioxide (SO ₂)	7.4	80	µg/m ³	IS 5182 (Part 2): 2001, RA 2017
Nitrogen Dioxide (NO ₂)	20.5	80	µg/m ³	IS 5182 (Part 6): 2006, RA 2017
Particulate Matter (size less than 10 µm) or PM ₁₀	288	100	µg/m ³	IS 5182 (Part 23): 2006, RA 2017
Particulate Matter (size less than 2.5µm) or PM _{2.5}	115	60	µg/m ³	USEPA CFR 40, Part 50, Appendix L
Ozone (O ₃)	<19.6	180	µg/m ³	AWMA,3rd Ed., Method 411,Page no. 403,1988
Lead (Pb)	<0.02	1	µg/m ³	EPA/625/R-96/D10 a Compendium Method IO-3.1 & 3.2, Jun 1999
Carbon Monoxide (CO)	1.13	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	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 IO-3.1 & 3.2, Jun 1999
Nickel (Ni)	<3	20	ng/m ³	EPA/625/R-96/D10 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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TC-5509

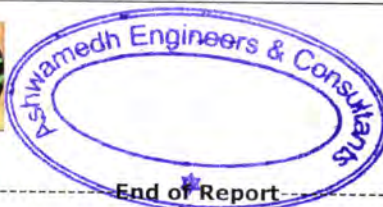
NOISE LEVEL MEASUREMENT REPORT

Sample / Report No.	N/09/20/3014	Report Date	05/09/2020
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	31/08/2020

Location	Time (h)	Results		Method
		Noise Level dB (A) Fast Response	Noise Level dB (A) Slow Response	
A. Near Main Gate	0900 (Day Time)	73.8	72.9	
	2100 (Night Time)	71.3	70.1	
B. Near Jetty No. 1	0910 (Day Time)	62.4	61.5	
	2110 (Night Time)	60.8	59.2	
C. Near Jetty No. 2	0920 (Day Time)	76.1	75.6	
	2120 (Night Time)	73.7	72.4	
D. Near Jetty No. 3	0930 (Day Time)	75.8	74.7	
	2130 (Night Time)	72.6	71.3	
E. Near Jetty No. 5	0940 (Day Time)	62.2	61.1	
	2140 (Night Time)	60.3	59.7	
F. Near Weight Bridge	0950 (Day Time)	73.3	72.2	
	2150 (Night Time)	71.8	70.3	
G. Near Custom Building	1000 (Day Time)	66.1	65.3	
	2200 (Night Time)	64.7	63.2	
H. Near Lal Gate	1010 (Day Time)	63.6	62.1	
	2210 (Night Time)	61.6	60.7	
I. Near DIL Main Gate	1020 (Day Time)	62.1	61.2	
	2220 (Night Time)	60.3	58.2	
J. DIL Godown Back Side	1030 (Day Time)	64.7	63.9	
	2230 (Night Time)	62.3	61.7	
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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MONITORING REPORT

Sample / Report No.	(1) AA/08/20/3018N (2) AA/08/20/3067N (3) AA/08/20/3167N (4) AA/08/20/3372N	Report Date: 10/09/2020
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 Main Gate	
Sampling Procedure	By Particle Counter	
Duration of Survey	24 hours	

Sr. No.	Parameter	Units	Results				Method
			03.08.2020	06.08.2020	10.08.2020	13.08.2020	
	Date	-	03.08.2020	06.08.2020	10.08.2020	13.08.2020	
1.	Particles	-					
a.	0.3 μ	Particle/m ³	210089	212030	188059	215769	By Particle Counter
b.	0.5 μ	Particle/m ³	77587	75629	76064	76072	By Particle Counter
c.	1.0 μ	Particle/m ³	21096	22504	25614	21493	By Particle Counter
d.	2.5 μ	Particle/m ³	11696	17112	20963	15149	By Particle Counter
e.	5.0 μ	Particle/m ³	3296	4504	6748	4005	By Particle Counter
f.	10 μ	Particle/m ³	2203	3440	5374	3277	By Particle Counter

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Sample / Report No.	(1) AA/08/20/3487N (2) AA/08/20/3660N (3) AA/08/20/3817N (4) AA/08/20/4047N (5) AA/09/20/3015N	Report Date: 10/09/2020
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 Main Gate	
Sampling Procedure	By Particle Counter	
Duration of Survey	24 hours	

Sr. No.	Parameter	Units	Results					Method
			17.08.2020	20.08.2020	24.08.2020	27.08.2020	31.08.2020	
	Date	-	17.08.2020	20.08.2020	24.08.2020	27.08.2020	31.08.2020	
1.	Particles	-						
a.	0.3 µ	Particle/m ³	284478	249633	276300	234726	240056	By Particle Counter
b.	0.5 µ	Particle/m ³	122828	98906	95094	88405	85961	By Particle Counter
c.	1.0 µ	Particle/m ³	47329	28265	26677	28329	25135	By Particle Counter
d.	2.5 µ	Particle/m ³	43646	17559	13270	16208	11074	By Particle Counter
e.	5.0 µ	Particle/m ³	17588	6133	7206	8958	6240	By Particle Counter
f.	10 µ	Particle/m ³	14946	4372	6915	8607	5656	By Particle Counter



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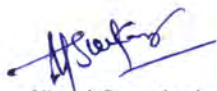
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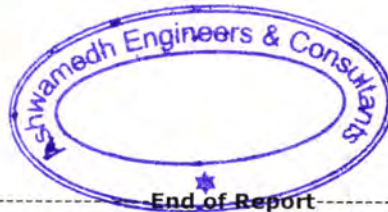
MONITORING REPORT

Sample / Report No.	(1) AA/08/20/3019N (2) AA/08/20/3068N (3) AA/08/20/3168N (4) AA/08/20/3373N	Report Date: 10/09/2020
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 Jetty No. 1	
Sampling Procedure	By Particle Counter	
Duration of Survey	24 hours	

Sr. No.	Parameter	Units	Results				Method Reference
			03.08.2020	06.08.2020	10.08.2020	13.08.2020	
	Date	-	03.08.2020	06.08.2020	10.08.2020	13.08.2020	
1.	Particles	-					
a.	0.3 μ	Particle/m ³	242030	217344	177721	230785	By Particle Counter
b.	0.5 μ	Particle/m ³	86452	99393	76211	80919	By Particle Counter
c.	1.0 μ	Particle/m ³	21012	36839	33196	21945	By Particle Counter
d.	2.5 μ	Particle/m ³	11527	32540	31863	16493	By Particle Counter
e.	5.0 μ	Particle/m ³	2666	10732	10268	3977	By Particle Counter
f.	10 μ	Particle/m ³	1748	8551	8616	3137	By Particle Counter



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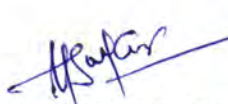
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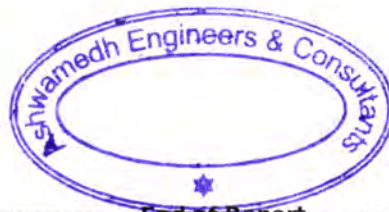
MONITORING REPORT

Sample / Report No.	(1) AA/08/20/3488N (2) AA/08/20/3661N (3) AA/08/20/3818N (4) AA/08/20/4048N (5) AA/09/20/3016N	Report Date: 10/09/2020
	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
			17.08.2020	20.08.2020	24.08.2020	27.08.2020	31.08.2020	
	Date	-	17.08.2020	20.08.2020	24.08.2020	27.08.2020	31.08.2020	
1.	Particles	-						
a.	0.3 µ	Particle/m ³	228558	258445	205601	220475	297566	By Particle Counter
b.	0.5 µ	Particle/m ³	101967	117449	72819	81306	128582	By Particle Counter
c.	1.0 µ	Particle/m ³	42750	35916	21241	26151	40778	By Particle Counter
d.	2.5 µ	Particle/m ³	39825	26629	11254	14269	19232	By Particle Counter
e.	5.0 µ	Particle/m ³	14311	8896	5893	7672	10119	By Particle Counter
f.	10 µ	Particle/m ³	11761	6976	5537	7509	8036	By Particle Counter



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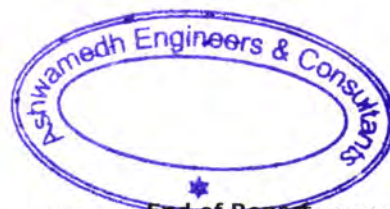
MONITORING REPORT

Sample / Report No.	(1) AA/08/20/3020N (2) AA/08/20/3069N (3) AA/08/20/3169N (4) AA/08/20/3374N	Report Date: 10/09/2020
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 Jetty No. 2	
Sampling Procedure	By Particle Counter	
Duration of Survey	24 hours	

Sr. No.	Parameter	Units	Results				Method Reference
			03.08.2020	06.08.2020	10.08.2020	13.08.2020	
	Date	-	03.08.2020	06.08.2020	10.08.2020	13.08.2020	
1.	Particles	-					
a.	0.3 µ	Particle/m ³	221611	247579	245360	215582	By Particle Counter
b.	0.5 µ	Particle/m ³	91995	111107	88450	91289	By Particle Counter
c.	1.0 µ	Particle/m ³	26463	33233	24918	34363	By Particle Counter
d.	2.5 µ	Particle/m ³	16525	24095	13358	27393	By Particle Counter
e.	5.0 µ	Particle/m ³	4417	8717	3710	9123	By Particle Counter
f.	10 µ	Particle/m ³	2920	6577	2411	7125	By Particle Counter

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Sample / Report No.	(1) AA/08/20/3489N (2) AA/08/20/3662N (3) AA/08/20/3819N (4) AA/08/20/4049N (5) AA/09/20/3017N	Report Date: 10/09/2020
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 Jetty No. 2	
Sampling Procedure	By Particle Counter	
Duration of Survey	24 hours	

Sr. No.	Parameter	Units	Results					Method Reference
			17.08.2020	20.08.2020	24.08.2020	27.08.2020	31.08.2020	
	Date	-	17.08.2020	20.08.2020	24.08.2020	27.08.2020	31.08.2020	
1.	Particles	-						
a.	0.3 μ	Particle/m ³	232301	211713	192417	229461	258500	By Particle Counter
b.	0.5 μ	Particle/m ³	111284	86260	69507	81423	91633	By Particle Counter
c.	1.0 μ	Particle/m ³	39659	30795	20039	26217	26814	By Particle Counter
d.	2.5 μ	Particle/m ³	37691	26795	11455	14418	12651	By Particle Counter
e.	5.0 μ	Particle/m ³	15163	12446	6832	7498	6106	By Particle Counter
f.	10 μ	Particle/m ³	12606	10611	6461	7187	5769	By Particle Counter



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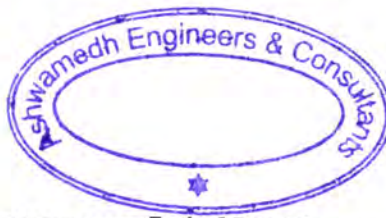
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Sample / Report No.	(1) AA/08/20/3021N (2) AA/08/20/3070N (3) AA/08/20/3170N (4) AA/08/20/3375N	Report Date: 10/09/2020
Name and Address of Customer	PNP Maritime Services Private Limited, 2nd Floor, Lansdowne House Building, M.B. Marg, Near Regal Cinema, 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 Jetty No. 3	
Sampling Procedure	By Particle Counter	
Duration of Survey	24 hours	

Sr. No.	Parameter	Units	Results				Method Reference
			03.08.2020	06.08.2020	10.08.2020	13.08.2020	
	Date	-	03.08.2020	06.08.2020	10.08.2020	13.08.2020	
1.	Particles	-					
a.	0.3 μ	Particle/m ³	244890	246336	251653	219666	By Particle Counter
b.	0.5 μ	Particle/m ³	84080	95221	102726	95219	By Particle Counter
c.	1.0 μ	Particle/m ³	19163	25636	32309	30796	By Particle Counter
d.	2.5 μ	Particle/m ³	10494	17070	22593	24726	By Particle Counter
e.	5.0 μ	Particle/m ³	2914	4719	6302	7824	By Particle Counter
f.	10 μ	Particle/m ³	2017	3337	4236	6233	By Particle Counter



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Sample / Report No.	(1) AA/08/20/3490N (2) AA/08/20/3663N (3) AA/08/20/3820N (4) AA/08/20/4050N (5) AA/09/20/3018N	Report Date: 10/09/2020
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 Jetty No. 3	
Sampling Procedure	By Particle Counter	
Duration of Survey	24 hours	

Sr. No.	Parameter	Units	Results					Method Reference
			17.08.2020	20.08.2020	24.08.2020	27.08.2020	31.08.2020	
	Date	-	17.08.2020	20.08.2020	24.08.2020	27.08.2020	31.08.2020	
1.	Particles	-						
a.	0.3 μ	Particle/m ³	264645	208856	255845	244719	225886	By Particle Counter
b.	0.5 μ	Particle/m ³	112642	113974	95432	84493	78487	By Particle Counter
c.	1.0 μ	Particle/m ³	41803	38760	26836	24112	22781	By Particle Counter
d.	2.5 μ	Particle/m ³	39572	32261	12355	11543	11262	By Particle Counter
e.	5.0 μ	Particle/m ³	18291	11895	6048	5162	6570	By Particle Counter
f.	10 μ	Particle/m ³	15926	9467	9162	4910	6165	By Particle Counter



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Sample / Report No.	(1) AA/08/20/3022N (2) AA/08/20/3071N (3) AA/08/20/3171N (4) AA/08/20/3376N	Report Date: 10/09/2020
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 Jetty No. 5	
Sampling Procedure	By Particle Counter	
Duration of Survey	24 hours	

Sr. No.	Parameter	Units	Results				Method Reference
			03.08.2020	06.08.2020	10.08.2020	13.08.2020	
	Date	-	03.08.2020	06.08.2020	10.08.2020	13.08.2020	
1.	Particles	-					
a.	0.3 µ	Particle/m ³	142229	212598	167101	185188	By Particle Counter
b.	0.5 µ	Particle/m ³	48291	72975	66582	71051	By Particle Counter
c.	1.0 µ	Particle/m ³	10873	19786	21831	28167	By Particle Counter
d.	2.5 µ	Particle/m ³	5864	15335	20552	23608	By Particle Counter
e.	5.0 µ	Particle/m ³	1701	4955	8338	7838	By Particle Counter
f.	10 µ	Particle/m ³	1179	4131	7189	6341	By Particle Counter



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Sample / Report No.	(1) AA/08/20/3491N (2) AA/08/20/3664N (3) AA/08/20/3821N (4) AA/08/20/4051N (5) AA/09/20/3019N	Report Date: 10/09/2020
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 Jetty No. 5	
Sampling Procedure	By Particle Counter	
Duration of Survey	24 hours	

Sr. No.	Parameter	Units	Results					Method Reference
			17.08.2020	20.08.2020	24.08.2020	27.08.2020	31.08.2020	
	Date	-	17.08.2020	20.08.2020	24.08.2020	27.08.2020	31.08.2020	
1.	Particles	-						
a.	0.3 μ	Particle/m ³	133959	230854	161226	162183	178718	By Particle Counter
b.	0.5 μ	Particle/m ³	24215	115047	53268	56948	63787	By Particle Counter
c.	1.0 μ	Particle/m ³	3212	38061	17296	19099	15959	By Particle Counter
d.	2.5 μ	Particle/m ³	692	27400	11418	11645	6801	By Particle Counter
e.	5.0 μ	Particle/m ³	119	8586	5223	6192	3020	By Particle Counter
f.	10 μ	Particle/m ³	60	6270	5108	6414	2950	By Particle Counter



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Sample / Report No.	(1) AA/08/20/3023N (2) AA/08/20/3072N (3) AA/08/20/3172N (4) AA/08/20/3377N	Report Date: 10/09/2020
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
			03.08.2020	06.08.2020	10.08.2020	13.08.2020	
	Date	-	03.08.2020	06.08.2020	10.08.2020	13.08.2020	
1.	Particles	-					
a.	0.3 μ	Particle/m ³	245943	247174	251964	218919	By Particle Counter
b.	0.5 μ	Particle/m ³	72372	68552	99727	97837	By Particle Counter
c.	1.0 μ	Particle/m ³	14552	11726	26630	37956	By Particle Counter
d.	2.5 μ	Particle/m ³	5385	4009	13826	33494	By Particle Counter
e.	5.0 μ	Particle/m ³	1203	860	3406	11130	By Particle Counter
f.	10 μ	Particle/m ³	685	443	1919	9018	By Particle Counter


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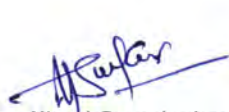
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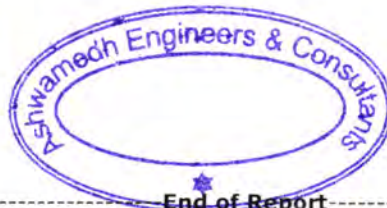
MONITORING REPORT

Sample / Report No.	(1) AA/08/20/3492N (2) AA/08/20/3665N (3) AA/08/20/3822N (4) AA/08/20/4052N (5) AA/09/20/3020N	Report Date: 10/09/2020
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
			17.08.2020	20.08.2020	24.08.2020	27.08.2020	31.08.2020	
	Date	-	17.08.2020	20.08.2020	24.08.2020	27.08.2020	31.08.2020	
1.	Particles	-						
a.	0.3 μ	Particle/m ³	251605	263870	232495	247004	251518	By Particle Counter
b.	0.5 μ	Particle/m ³	144218	133780	83487	95344	86214	By Particle Counter
c.	1.0 μ	Particle/m ³	51191	45796	26190	27070	24396	By Particle Counter
d.	2.5 μ	Particle/m ³	43797	32027	12761	13788	10275	By Particle Counter
e.	5.0 μ	Particle/m ³	17374	10024	5928	6103	5744	By Particle Counter
f.	10 μ	Particle/m ³	14213	7505	5040	5544	5245	By Particle Counter



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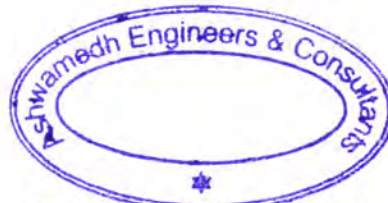
MONITORING REPORT

Sample / Report No.	(1) AA/08/20/3024N (2) AA/08/20/3073N (3) AA/08/20/3173N (4) AA/08/20/3378N	Report Date: 10/09/2020
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 Custom Building	
Sampling Procedure	By Particle Counter	
Duration of Survey	24 hours	

Sr. No.	Parameter	Units	Results				Method Reference
			03.08.2020	06.08.2020	10.08.2020	13.08.2020	
	Date	-	03.08.2020	06.08.2020	10.08.2020	13.08.2020	
1.	Particles	-					
a.	0.3 µ	Particle/m ³	245755	251476	237194	192906	By Particle Counter
b.	0.5 µ	Particle/m ³	111076	126517	106924	92448	By Particle Counter
c.	1.0 µ	Particle/m ³	30180	40384	32756	39916	By Particle Counter
d.	2.5 µ	Particle/m ³	18031	31732	21641	40963	By Particle Counter
e.	5.0 µ	Particle/m ³	4575	9390	5136	15661	By Particle Counter
f.	10 µ	Particle/m ³	3135	6807	3371	13289	By Particle Counter

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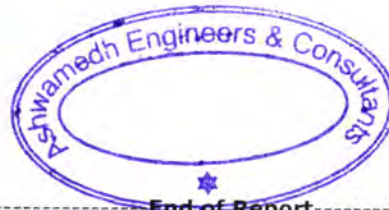
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Sample / Report No.	(1) AA/08/20/3493N (2) AA/08/20/3666N (3) AA/08/20/3823N (4) AA/08/20/4053N (5) AA/09/20/3021N	Report Date: 10/09/2020
Name and Address of Customer	PNP Maritime Services Private Limited, 2nd Floor, Lansdowne House Building, M.B. 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 Custom Building	
Sampling Procedure	By Particle Counter	
Duration of Survey	24 hours	

Sr. No.	Parameter	Units	Results					Method Reference
			17.08.2020	20.08.2020	24.08.2020	27.08.2020	31.08.2020	
	Date	-	17.08.2020	20.08.2020	24.08.2020	27.08.2020	31.08.2020	
1.	Particles	-						
a.	0.3 µ	Particle/m ³	221403	248457	241606	306008	197630	By Particle Counter
b.	0.5 µ	Particle/m ³	100590	102784	94926	111505	75595	By Particle Counter
c.	1.0 µ	Particle/m ³	36810	29749	27585	32274	23355	By Particle Counter
d.	2.5 µ	Particle/m ³	30253	22993	11007	14471	13252	By Particle Counter
e.	5.0 µ	Particle/m ³	11614	8088	5302	7470	8647	By Particle Counter
f.	10 µ	Particle/m ³	9468	6206	4480	7026	8706	By Particle Counter


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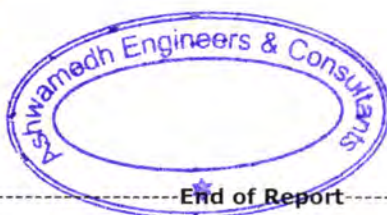
MONITORING REPORT

Sample / Report No.	(1) AA/08/20/3025N (2) AA/08/20/3074N (3) AA/08/20/3174N (4) AA/08/20/3379N	Report Date: 10/09/2020
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 Lal Gate	
Sampling Procedure	By Particle Counter	
Duration of Survey	24 hours	

Sr. No.	Parameter	Units	Results				Method Reference
			03.08.2020	06.08.2020	10.08.2020	13.08.2020	
	Date	-	03.08.2020	06.08.2020	10.08.2020	13.08.2020	
1.	Particles	-					
a.	0.3 μ	Particle/m ³	212895	247498	241178	229018	By Particle Counter
b.	0.5 μ	Particle/m ³	72630	106739	103151	102615	By Particle Counter
c.	1.0 μ	Particle/m ³	17922	28475	29944	38132	By Particle Counter
d.	2.5 μ	Particle/m ³	9003	16759	20174	38855	By Particle Counter
e.	5.0 μ	Particle/m ³	2121	4121	5156	15343	By Particle Counter
f.	10 μ	Particle/m ³	1211	2601	3677	13207	By Particle Counter



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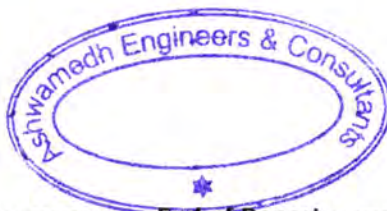
MONITORING REPORT

Sample / Report No.	(1) AA/08/20/3494N (2) AA/08/20/3667N (3) AA/08/20/3824N (4) AA/08/20/4054N (5) AA/09/20/3022N	Report Date: 10/09/2020
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 Lal Gate	
Sampling Procedure	By Particle Counter	
Duration of Survey	24 hours	

Sr. No.	Parameter	Units	Results					Method Reference
			17.08.2020	20.08.2020	24.08.2020	27.08.2020	31.08.2020	
	Date	-	17.08.2020	20.08.2020	24.08.2020	27.08.2020	31.08.2020	
1.	Particles	-						
a.	0.3 µ	Particle/m ³	197253	216598	244066	297302	292156	By Particle Counter
b.	0.5 µ	Particle/m ³	86434	45110	104753	121841	10311	By Particle Counter
c.	1.0 µ	Particle/m ³	28139	6845	33229	35802	25369	By Particle Counter
d.	2.5 µ	Particle/m ³	23941	2314	19769	16397	11430	By Particle Counter
e.	5.0 µ	Particle/m ³	9878	511	10220	8292	6687	By Particle Counter
f.	10 µ	Particle/m ³	8117	306	9719	7343	5550	By Particle Counter

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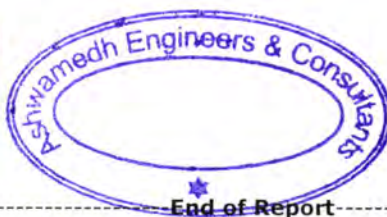
MONITORING REPORT

Sample / Report No.	(1) AA/08/20/3026N (2) AA/08/20/3075N (3) AA/08/20/3175N (4) AA/08/20/3380N	Report Date: 10/09/2020
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 DIL Main Gate	
Sampling Procedure	By Particle Counter	
Duration of Survey	24 hours	

Sr. No.	Parameter	Units	Results				Method Reference
			03.08.2020	06.08.2020	10.08.2020	13.08.2020	
	Date	-	03.08.2020	06.08.2020	10.08.2020	13.08.2020	
1.	Particles	-					
a.	0.3 μ	Particle/m ³	241512	208760	212916	234794	By Particle Counter
b.	0.5 μ	Particle/m ³	91256	98155	105925	114976	By Particle Counter
c.	1.0 μ	Particle/m ³	25902	39597	35165	48664	By Particle Counter
d.	2.5 μ	Particle/m ³	17554	40571	26893	45826	By Particle Counter
e.	5.0 μ	Particle/m ³	4142	12730	6939	19070	By Particle Counter
f.	10 μ	Particle/m ³	2775	10867	5369	16378	By Particle Counter



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Note:

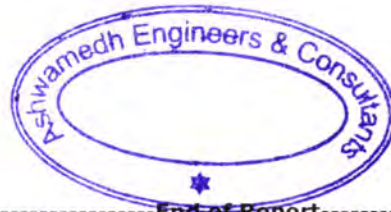
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Sample / Report No.	(1) AA/08/20/3495N (2) AA/08/20/3668N (3) AA/08/20/3825N (4) AA/08/20/4055N (5) AA/09/20/3023N	Report Date: 10/09/2020
Name and Address of Customer	PNP Maritime Services Private Limited, 2nd Floor, Lansdowne House Building, M.B. 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 DIL Main Gate	
Sampling Procedure	By Particle Counter	
Duration of Survey	24 hours	

Sr. No.	Parameter	Units	Results					Method Reference
			17.08.2020	20.08.2020	24.08.2020	27.08.2020	31.08.2020	
	Date	-	17.08.2020	20.08.2020	24.08.2020	27.08.2020	31.08.2020	
1.	Particles	-						
a.	0.3 μ	Particle/m ³	216003	268781	200007	323151	228665	By Particle Counter
b.	0.5 μ	Particle/m ³	98850	53231	72034	126228	68146	By Particle Counter
c.	1.0 μ	Particle/m ³	29933	7991	23662	34463	18478	By Particle Counter
d.	2.5 μ	Particle/m ³	23848	2405	13066	14836	8430	By Particle Counter
e.	5.0 μ	Particle/m ³	9155	511	7430	7694	4232	By Particle Counter
f.	10 μ	Particle/m ³	7413	271	6810	6126	3873	By Particle Counter


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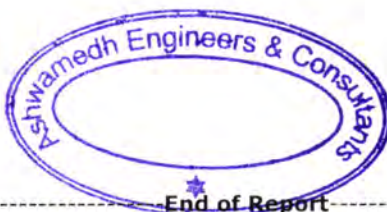
MONITORING REPORT

Sample / Report No.	(1) AA/08/20/3027N (2) AA/08/20/3076N (3) AA/08/20/3176N (4) AA/08/20/3381N	Report Date: 10/09/2020
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	DIL Godown Back Side	
Sampling Procedure	By Particle Counter	
Duration of Survey	24 hours	

Sr. No.	Parameter	Units	Results				Method Reference
			03.08.2020	06.08.2020	10.08.2020	13.08.2020	
	Date	-	03.08.2020	06.08.2020	10.08.2020	13.08.2020	
1.	Particles	-					
a.	0.3 μ	Particle/m ³	199183	169946	157736	182944	By Particle Counter
b.	0.5 μ	Particle/m ³	88119	82199	37121	93361	By Particle Counter
c.	1.0 μ	Particle/m ³	31011	33676	6101	41648	By Particle Counter
d.	2.5 μ	Particle/m ³	26988	30369	1935	41255	By Particle Counter
e.	5.0 μ	Particle/m ³	7644	9048	384	13747	By Particle Counter
f.	10 μ	Particle/m ³	5877	7413	247	11432	By Particle Counter



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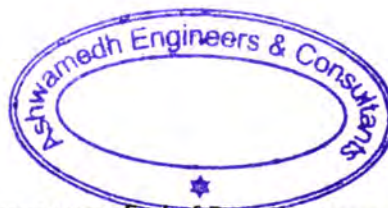
MONITORING REPORT

Sample / Report No.	(1) AA/08/20/3496N (3) AA/08/20/3826N (5) AA/09/20/3024N	(2) AA/08/20/3669N (4) AA/08/20/4056N	Report Date: 10/09/2020
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	DIL Godown Back Side		
Sampling Procedure	By Particle Counter		
Duration of Survey	24 hours		

Sr. No.	Parameter	Units	Results					Method Reference
			17.08.2020	20.08.2020	24.08.2019	27.08.2020	31.08.2020	
	Date	-	17.08.2020	20.08.2020	24.08.2019	27.08.2020	31.08.2020	
1.	Particles	-						
a.	0.3 μ	Particle/m ³	193619	130872	181131	262748	186155	By Particle Counter
b.	0.5 μ	Particle/m ³	78622	30217	67672	85324	72598	By Particle Counter
c.	1.0 μ	Particle/m ³	27144	5111	22028	23366	23409	By Particle Counter
d.	2.5 μ	Particle/m ³	20156	2241	12626	10377	11541	By Particle Counter
e.	5.0 μ	Particle/m ³	6881	754	6314	5065	6220	By Particle Counter
f.	10 μ	Particle/m ³	5328	481	6248	4638	5741	By Particle Counter



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ANNEXURE III

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.

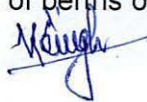
Sir,
This has reference to your online Proposal No. IA/MH/MIS/59562/2016 dated 12 September, 2019, submitted to this Ministry for grant of Environmental and CRZ Clearance in terms of the provisions of the Environment Impact Assessment (EIA) Notification, 2006 and Coastal Regulation Zone (CRZ) Notification, 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/renowned Universities/accredited Consultant with rich experiences in marine science aspects. The monitoring should cover various physico-chemical parameters along with PHc coupled with biological indices such as microbes, plankton, benthos and fishes on a periodic basis during construction and operation phase of the project. Any deviations in the parameters shall be given adequate care with suitable measures to conserve the marine environment and its resources.
- (xvii) Continuous online monitoring of air and water covering the total area shall be carried out and the compliance report of the same shall be submitted along with the 6 monthly compliance report to the regional office of MoEF&CC.
- (xviii) The material recovered from the cutting activity shall be used for filling low-lying areas within the project boundaries. The actions shall be in accordance with proposed landscape planning concepts to minimize major landscape changes. The change in land use pattern shall be limited to the proposed port limits and be carried out in such a way as to ensure proper drainage by providing surface drainage systems including storm water network.
- (xix) Suitable preventive measures be taken to trap spillage of fuel / engine oil and lubricants from the construction site. Measures should be taken to contain, control and recover the accidental spills of fuel during cargo handling.
- (xx) All the recommendations mentioned in the rapid risk assessment report, disaster management plan and safety guidelines shall be implemented.
- (xxi) Necessary arrangement for general safety and occupational health of people should be done in letter and spirit.
- (xxii) All the mitigation measures submitted in the EIA report shall be prepared in a matrix format and the compliance for each mitigation plan shall be submitted to the RO, MoEF&CC along with half yearly compliance report.
- (xxiii) The company shall draw up and implement Corporate Social Responsibility Plan as per the Company's Act of 2013.
- (xxiv) As per the Ministry's Office Memorandum F.No. 22-65/2017-IA.III dated 01 May, 2018, project proponent has proposed that an amount of Rs. 2.65 Crores (0.25% of the project cost) shall be earmarked under Corporate Environment Responsibility



(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.

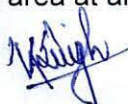
B. Standard Conditions:

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:

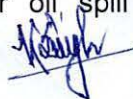
- i. Noise level survey shall be carried as per the prescribed guidelines and report in this regard shall be submitted to Regional Officer of the Ministry as a part of six-monthly compliance report.
- ii. Noise from vehicles, power machinery and equipment on-site should not exceed the prescribed limit.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

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- 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 IV

ENVIRONMENTAL STATUS REPORT

(AS PER EC CONSTRUCTION PHASE CONDITION:10)

PNP Maritime Services Private Limited

Environmental Status Report (ESR)

As per EC condition (v)

April 2020 to September 2020

“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

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	Mr. 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.

