



5<sup>th</sup> December, 2022

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 2022 to September 2022**

**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 on dated 20.08.2020**

Dear Sir,

We are submitting a half-yearly Compliance Report (hard & soft copy) in respect of the 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, S.R.O. Raigad I
2. Member Secretary, Maharashtra Pollution Control Board, Sion, Mumbai
3. Member Secretary, State Environmental Impact Assessment Authority, Govt. of Maharashtra, Mumbai

**PNP MARITIME SERVICES PVT. LTD.**

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Port Office: PNP Port Dharamtar at Shahabaj, Dist. Raigad. Tel.: +91-2143-320766.

Website: www.pnpport.com CIN: U63090MH1999PTC121461

**M/s PNP Maritime Services Pvt. Ltd.**

# **Environmental Clearance Compliance Report**

April 2022 to September 2022

**"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

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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
	<b>SPECIFIC CONDITIONS:</b>			
(i)	The Environmental and CRZ Clearance to the project is primarily under provisions of EIA Notification, 2006 and CRZ Notification, 2011. It does not tantamount to approvals/consent /permissions etc. required to be obtained under any other Act/Rule/regulation The Project Proponent is under obligation to obtain approvals /clearances under any other Acts/ Regulations or Statutes as applicable to the project.	MCZMA has recommended the project for CRZ Clearance vide Letter No. CRZ-2017/CR-323/TC4 dated 24 January,2019		
(ii)	The project proponent shall abide by all the commitments and recommendations made in the Form-II, EIA and EMP report, submissions made during Public Hearing and also that have been made during their presentation to EAC.	PP agrees with the condition		
(iii)	Construction activity shall be carried out strictly according to the provisions of the CRZ Notification, 2011. No construction works other than those permitted in Coastal Regulation Zone Notification shall be carried out in Coastal Regulation Zone area.	Local and central rules and regulations including those under CRZ Notification 1991 and its amendments have been followed during construction and operation phase		
(iv)	All the recommendations and conditions specified by the Maharashtra State Coastal Zone Management Authority (MCZMA) vide letter No. CRZ-2017/CR-323/TC 4 dated 24 January, 2019 shall be complied with.	PP will comply with the condition		
(v)	The project proponent shall comply with the air pollution mitigation measures as submitted.	Regular monitoring has been carried out by a MoEF&CC recognized laboratory.  The monitoring report has been attached.	✓	
(vi)	The Project proponent shall ensure that no creeks or rivers are blocked due to any activities at the project site and free flow of water is maintained. Creek water monitoring program shall be implemented during the construction phase.	No creeks or rivers are blocked due to any activities at the project site.  Regular monitoring is being carried out by a MoEF&CC recognized laboratory.  The monitoring report has been attached.	✓	
(vii)	No underwater blasting is permitted.	PP agrees with the condition		
(viii)	Dredging shall not be carried out during the	No dredging is carried out	✓	

	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.	during the fish breeding season.  All measures will be taken to reduce the impacts on marine environment  Regular monitoring has been carried out by a MoEF&CC recognized laboratory.  The monitoring report has been attached.		
(ix)	Wherever possible, dredged material shall be used for bank nourishment. Otherwise, deposit the dredged material within the port premises in non-CRZ areas for land development in a manner that it does not enter the channel. With the enhanced quantities, the impact of dumping on the estuarine environment should be studied and necessary measures shall be taken on priority basis if any adverse impact is observed.	Dredged material will be used for land development with all necessary measures for adverse impact		
(x)	An independent monitoring be carried out by any Government Agency/Institute to evaluate the impact during dredging. Impact of dredged material on estuarine environment along with shore line changes should be studied by the PP and necessary mitigation measures be taken in case any adverse impact is observed. The details shall be submitted along with the six-monthly monitoring report.	PP agrees with the condition.  Regular monitoring has been carried out by a MoEF&CC recognized laboratory.  The six-monthly monitoring report is attached.	✓	
(xi)	Marine ecological studies and its mitigation measures for protection of phytoplankton, zooplanktons, macrobenthos, estuaries, sea-grass, algae, sea weeds, Crustaceans, Fishes, coral reefs and mangroves etc. as given in the EIA-EMP Report shall be complied with in letter and spirit	PP will comply with the condition		
(xii)	Marine ecology shall be monitored regularly also in terms of sea weeds, sea grasses, mudflats, sand dunes, fisheries, echinoderms, shrimps, turtles, corals, 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 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	Noted		

	and spirit.			
(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 programmed 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 physio-chemical parameters along with pH coupled with biological indices such as microbes, plankton, benthos and fishes on a periodic basis during construction and operation phase of the project. Any deviations in the parameters shall be given adequate care with suitable measures to conserve the marine environment and its resources.	PP agrees with the condition.		
(xvii)	Continuous online monitoring of air and water covering the total area shall be carried out and the compliance report of the same shall be submitted along with the 6 monthly compliance report to the regional office of MoEF&CC.	PP agrees with the condition.  Regular monitoring has been carried out by a MoEF recognized laboratory.  The monitoring report has been attached.	✓	
(xviii)	The material recovered from the cutting activity shall be used for filling low-lying areas within the project boundaries. The actions shall be in accordance with proposed landscape planning concepts to minimize major landscape changes. The change in land use pattern shall be limited to the proposed port limits and be carried out in such a way as to ensure proper drainage by providing surface drainage systems including storm water network.	The material will be stored and used for back filling and landscape.		
(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	PP agreed with the condition		

	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.	PP has submitted half yearly compliance report		
(xxiii)	The company shall draw up and implement Corporate Social Responsibility Plan as per the Company's Act of 2013.	PP will comply with the condition		
(xxiv)	As per the Ministry's Office Memorandum F.No. 22-65/2017-IA.III dated 01 May, 2018, project proponent has proposed that an amount of Rs. 2.65 Crores (0.25% of the project cost) shall be earmarked under Corporate Environment Responsibility (CER) Plan for the activities such as Health, Water supply, Sanitation, Road development, Solar lights in nearby areas and Education etc. The activities proposed under CER shall be restricted to the affected area around the project. The entire activities proposed under the CER shall be treated as project and shall be monitored. The monitoring report shall be submitted to the regional office as a part of half yearly compliance report, and to the District Collector. It should be posted on the website of the project proponent.	Noted		
<b>B.</b>	<b>Standard Conditions:</b>			
<b>I.</b>	<b>Statutory compliance:</b>			
(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	Noted		

	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 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)/RD3231-16/CR/B-3912 dated: 19.03.2016 has been obtained from MPCB and Consent to Establish for expansion vide Consent no. Format 1.0/CAC/UAN No. 0000105351/CE-2107000798 dated 14.07.2021 has been obtained from MPCB.	✓	
(vii)	The project proponent shall obtain the necessary permission from the Central Ground Water Authority, in case of drawl of ground water I from the competent authority concerned in case of drawl of surface water required for the project.	Noted		
(viii)	All excavation related dewatering shall be as duly authorized by the CGWA. A NOC from the CGWA shall be obtained for all dewatering and ground water abstraction	Noted		
(ix)	A certificate of adequacy of available power from the agency supplying power to the project along with the load allowed for the project should be obtained.	Noted		
(x)	All other statutory clearances such as the approvals for storage of diesel from Chief Controller of Explosives, Fire Department, Coast Guard, Civil Aviation Department shall be obtained, as applicable by project proponents from the respective competent authorities.	Noted		
<b>II.</b>	<b>Air quality monitoring and preservation:</b>			
(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,	PP agrees with the condition. Regular monitoring has been carried out by a MoEF recognized laboratory.		

	and SO <sub>2</sub> and NO <sub>x</sub> in reference to SO <sub>2</sub> and NO <sub>x</sub> 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	The monitoring report has been attached.		
(ii)	Appropriate Air Pollution Control (APC) system shall be provided for all the dust generating points including fugitive dust from all vulnerable sources, so as to comply prescribed emission standards.	PP agrees with the condition.		
(iii)	Shrouding shall be carried out in the work site enclosing the dock/proposed facility area. This will act as dust curtain as well achieving zero dust discharge from the site. These curtain or shroud will be immensely effective in restricting disturbance from wind in affecting the dry dock operations, preventing waste dispersion, improving working conditions through provision of shade for the workers.	PP will comply with the condition.		
(iv)	Dust collectors shall be deployed in all areas where blasting (surface cleaning) and painting operations are to be carried out, supplemented by stacks for effective dispersion.	PP will comply with the condition		
(v)	The Vessels shall comply the emission norms prescribed from time to time.	Noted		
(vi)	Diesel power generating sets proposed as source of backup power should be of enclosed type and conform to rules made under the Environment (Protection) Act, 1986. The height of stack of DG sets should be equal to the height needed for the combined capacity of all proposed DG sets. Use of low Sulphur diesel. The location of the DG sets may be decided with in consultation with State Pollution Control Board.	DG set will used enclosed type and will be used only in case of power failure.		
(vii)	A detailed traffic management and traffic decongestion plan shall be drawn up to ensure that the current level of service of the roads within a 05 kms radius of the project is maintained and improved upon after the 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	Noted		

	and shall also have their consent to the implementation of components of the plan which involve the participation of these departments.			
<b>III</b>	<b>Water quality monitoring and preservation:</b>			
(i)	The Project proponent shall ensure that no creeks or rivers are blocked due to any activities at the project site and free flow of water is maintained.	No creeks or rivers are blocked due to any activities at the project site		
(ii)	Appropriate measures must be taken while undertaking digging activities to avoid any likely degradation of water quality. Silt curtains shall be used to contain the spreading of suspended sediment during dredging within the dredging area.	PP agree with the condition		
(iii)	No ships docking at the proposed project site will discharge its on-board waste water untreated in to the estuary/ channel. All such wastewater load will be diverted to the proposed Effluent Treatment Plant of the project site.	10 KLD STP provided as per earlier EC, Now PP has proposed 50 KLD STP for proposed expansion		
(iv)	Measures should be taken to contain, control and recover the accidental spills of fuel and cargo handle.	Noted		
(v)	The project proponents will draw up and implement a plan for the management of temperature differences between intake waters and discharge waters.	PP will comply with the condition		
(vi)	Spillage of fuel / engine oil and lubricants from the construction site are a source of organic pollution which impacts marine life. This shall be prevented by suitable precautions and also by providing necessary mechanisms to trap the spillage.	PP will comply with the condition		
(vii)	Total fresh water use shall not exceed the proposed requirement as provided in the project details. Prior permission from competent authority shall be obtained for use of fresh water.	Noted		
(viii)	Sewage Treatment Plant shall be provided to treat the wastewater generated from the project. Treated water shall be reused for horticulture, flushing, backwash, HVAC purposes and dust suppression.	PP will comply with the condition.		
(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		
<b>IV</b>	<b>Noise monitoring and prevention:</b>			
(i)	Noise level survey shall be carried as per the prescribed guidelines and report in this regard shall be submitted to Regional Officer of the Ministry as a part of six-monthly compliance report.	Regular monitoring has been carried out by a MoEF&CC recognized laboratory. The monitoring report has been attached.	✓	
(ii)	Noise from vehicles, power machinery and equipment on-site should not exceed the prescribed limit. Equipment should be regularly serviced. Attention should also be given to muffler maintenance and enclosure of noisy equipment's.	The ambient noise levels will be monitored. Construction activities will not be carried out during night time. Efforts will be taken to reduce noise levels during construction phase.		
(iii)	Acoustic enclosures for DG sets, noise barriers for ground-run bays, ear plugs for operating personnel shall be implemented as mitigation measures for noise impact due to ground sources.	Regular monitoring has been carried out by a MoEF&CC recognized laboratory. The monitoring report has been attached.		
(iv)	The ambient noise levels should conform to the standards prescribed under E(P)A Rules, 1986 viz. 75 dB(A) during day time and 70 dB(A) during night time.	The ambient noise levels will be monitored. Construction activities will not be carried out during night time. Efforts will be taken to reduce noise levels during construction phase.		
<b>V</b>	<b>Energy Conservation measures:</b>			
(i)	Provide solar power generation on roof tops of buildings, for solar light system for all common areas, street lights, parking around project area and maintain the same regularly;	PP agree with the condition		
(ii)	Provide LED lights in their offices and residential areas.	PP will comply with the condition		
<b>VI</b>	<b>Waste management:</b>			
(i)	Dredged material shall be disposed safely in the designated areas.	PP will comply with the condition		
(ii)	Shoreline should not be disturbed due to dumping. Periodical study on shore line changes shall be conducted and mitigation carried out, if necessary. The details shall be submitted along with the six-monthly monitoring report.	Noted		
(iii)	Necessary arrangements for the treatment of the effluents and solid wastes must be made and it must be ensured that they conform to the standards laid down by the competent authorities including the Central	PP agrees with the condition		



	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.	PP agrees with the condition		
(v)	Any wastes from construction and demolition activities related thereto shall be managed so as to strictly conform to the Construction and Demolition Waste Management Rules, 2016.	PP agrees with the condition		
(vi)	A certificate from the competent authority handling municipal solid wastes should be obtained, indicating the existing civic capacities of handling and their adequacy to cater to the M.S.W. generated from project.	Noted		
(vii)	Used CFLs and TFLs should be properly collected and disposed off/sent for recycling as per the prevailing guidelines/ rules of the regulatory authority to avoid mercury contamination.	Noted		
(viii)	Oil spill contingency plan shall be prepared and part of DMP to tackle emergencies. The equipment and recovery of oil from a spill would be assessed. Guidelines given in MARPOL and Shipping Acts for oil spill management would be followed. Mechanism for integration of terminals oil contingency plan with the overall area contingency plan under the co-ordination of Coast should be covered.	Noted		
<b>VII</b>	<b>Green Belt:</b>			
(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		
<b>VIII</b>	<b>Marine Ecology:</b>			
(i)	Dredging shall not be carried out during the fish breeding and spawning seasons.	Noted		
(ii)	Dredging, etc. shall be carried out in the confined manner to reduce the impacts on marine environment.	PP agrees with the condition		
(iii)	The dredging schedule shall be so planned that the turbidity developed is dispersed soon enough to prevent any stress on the fish population.	Noted		
(iv)	While carrying out dredging, an independent monitoring shall be carried out through a Government Agency/Institute to assess the impact and necessary measures	Regular monitoring has been carried out by a MoEF&CC recognized laboratory.		

	shall be taken on priority basis if any adverse impact is observed.	The monitoring report has been attached		
(v)	A detailed marine biodiversity management plan shall be prepared through the NIO or any other institute of repute on marine, brackish water and fresh water ecology and biodiversity and submitted to and implemented to the satisfaction of the State Biodiversity Board and the CRZ authority. The report shall be based on a study of the impact of the project activities on the intertidal biotopes, corals and coral communities, molluscs, sea grasses, sea weeds, sub-tidal habitats, fishes, other marine and aquatic micro, macro and mega flora and fauna including benthos, plankton, turtles, birds etc. as also the productivity. The data collection and impact assessment shall be as per standards survey methods and include underwater photography.	Noted		
(vi)	Marine ecology shall be monitored regularly also in terms of sea weeds, sea grasses, mudflats, sand dunes, fisheries, echinoderms, shrimps, turtles, corals, coastal vegetation, mangroves and other marine biodiversity components including all micro, macro and mega floral and faunal components of marine biodiversity	Noted		
(vii)	The project proponent shall ensure that water traffic does not impact the aquatic wildlife sanctuaries that fall along the stretch of the river.	Noted		
<b>IX</b>	<b>Public hearing and Human health issues:</b>			
(i)	The work space shall be maintained as per international standards for occupational health and safety with provision of fresh air respirators, blowers, and fans to prevent any accumulation and inhalation of undesirable levels of pollutants including VOCs.	PP will comply with the condition		
(ii)	Workers shall be strictly enforced to wear personal protective equipment's like dust mask, ear muffs or ear plugs, whenever and wherever necessary/ required. Special visco-elastic gloves will be used by labour exposed to hazards from vibration.	PP agrees with condition		
(iii)	In case of repair of any old vessels, excessive care shall be taken while handling Asbestos & Freon gas. Besides, fully enclosed covering should be provided for the temporary storage of asbestos materials at site before disposal to CTSDF.	PP will comply with the condition		
(iv)	Safety training shall be given to all workers	PP agrees with the condition		

	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.	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		
<b>X</b>	<b>Corporate Environment Responsibility:</b>			
(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.		
(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	Noted		

	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.	Noted		
<b>XI.</b>	<b>Miscellaneous:</b>			
(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 2022 to September 2022 is currently being submitted.  The half yearly compliance report to MPCB regularly submitted.		
(v)	The project proponent shall submit the environmental statement for each financial year in Form-V to the concerned State Pollution Control Board as prescribed under the Environment (Protection) Rules, 1986, as amended subsequently and put on the website of the company	Noted		
(vi)	The criteria pollutant levels namely; PM <sub>2.5</sub> , PM <sub>10</sub> , SO <sub>2</sub> , NO <sub>x</sub> (ambient levels) or critical sectoral parameters, indicated for the project shall be monitored and displayed at a convenient location near the main gate of the company in the public domain	Noted and PP will be complied with.		
(vii)	The project proponent shall inform the Regional Office as well as the Ministry, the date of financial closure and final approval	Noted		

	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.	Noted		
(ix)	No further expansion or modifications in the plant shall be carried out without prior approval of the Ministry of Environment, Forests and Climate Change (MoEF&CC).	Noted		
(x)	Concealing factual data or submission of false/fabricated data may result in revocation of this environmental clearance and attract action under the provisions of Environment (Protection) Act, 1986.	PP understand the issue and shall be abided accordingly.		
(xi)	The Ministry may revoke or suspend the clearance, if implementation of any of the above conditions is not satisfactory.	Noted		
(xii)	The Ministry reserves the right to stipulate additional conditions if found necessary. The Company in a time bound manner shall implement these conditions.	Noted		
(xiii)	The Regional Office of this Ministry shall monitor compliance of the stipulated conditions. The project authorities should extend full cooperation to the officer (s) of the Regional Office by furnishing the requisite data / information/monitoring reports.	PP have cooperated with the officials for requisite data/Information/monitoring reports		
(xiv)	The above conditions shall be enforced, inter-alia under the provisions of the Water (Prevention & Control of Pollution) Act, 1974, the Air (Prevention & Control of Pollution) Act, 1981, the Environment (Protection) Act, 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	Noted. The provisions of the approved Coastal Zone Management Plan of Maharashtra and the Supreme Court's order have been complied with.		
(xv)	Any appeal against this EC shall lie with the National Green Tribunal, if preferred, within a period of 30 days as prescribed under Section 16 of the National Green Tribunal Act, 2010.	Noted		
8	This issues with the approval of the Competent Authority.	Noted		

**CONDITIONS OF CONSENT TO ESTABLISH EXPANSION**

**Consent to Establish Expansion vide file no.: Format1.0/CC/UAN  
No.0000105351/CE-2107000798 dated 14.07.2021**

Sr.	Conditions	Compliance	☑	P															
1.	The consent to Establish is granted for a period up to commissioning of unit or upto 5 year whichever is earlier	Noted.																	
2.	The capital investment of the project is Rs. 1061.56 Crs. (As per C.A Certificate submitted by industry Existing CI is Rs.3.21 Crs. + Expansion/Increase in CI- Rs. 1058.35 Crs.)	C.A Certificate was submitted to the MPCB.																	
3.	<p><b>Consent is valid for handling of:</b></p> <table border="1"> <thead> <tr> <th>Sr. No.</th> <th>Product name</th> <th>Maximum Quantity</th> <th>UOM</th> </tr> </thead> <tbody> <tr> <td colspan="4">Products</td> </tr> <tr> <td>1</td> <td>Jetty: for Cargo handling, Handling of Coal, Sulphur, 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.</td> <td>14</td> <td>MT/A</td> </tr> </tbody> </table>	Sr. No.	Product name	Maximum Quantity	UOM	Products				1	Jetty: for Cargo handling, Handling of 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.	14	MT/A	Noted.					
Sr. No.	Product name	Maximum Quantity	UOM																
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	<p>Conditions under Water (P&amp;CP), 1974 Act for discharge of effluent</p> <table border="1"> <thead> <tr> <th>Sr. No.</th> <th>Description</th> <th>Permitted (in CMD)</th> <th>Standard to</th> <th>Disposal Path</th> </tr> </thead> <tbody> <tr> <td>1</td> <td>Trade effluent</td> <td>0</td> <td>As per Schedule-I</td> <td>Not Applicable</td> </tr> <tr> <td>2</td> <td>Domestic Effluent</td> <td>31</td> <td>As per Schedule-I</td> <td>On land for gardening</td> </tr> </tbody> </table>	Sr. No.	Description	Permitted (in CMD)	Standard to	Disposal Path	1	Trade effluent	0	As per Schedule-I	Not Applicable	2	Domestic Effluent	31	As per Schedule-I	On land for gardening	The 31 m <sup>3</sup> /day of sewage generated will be treated in Sewage Treatment Plant of 50 m <sup>3</sup> /day capacity.		
Sr. No.	Description	Permitted (in CMD)	Standard to	Disposal Path															
1	Trade effluent	0	As per Schedule-I	Not Applicable															
2	Domestic Effluent	31	As per Schedule-I	On land for gardening															

	nt							
5.	Conditions under Air (P& CP) Act, 1981 for air emissions:					Acoustic enclosure provided		
	<b>Sr. No.</b>	<b>Stack No.</b>	<b>Description of Stack/ source</b>	<b>Number of Stack</b>	<b>Standard to be achieved</b>			
	1	S-1	DG set [80 kVA]	1	As per Schedule -II			
	2	S-2	DG set [500 kVA]	1	As per Schedule -II			
	3	S-3	DG set [160 kVA]	1	As per Schedule -II			
	4	S-4	DG set [30 kVA]	1	As per Schedule -II			
	5	S-5	DG set [2000 kVA]	1	As per Schedule -II			
6.	Non-Hazardous Wastes:					Biodegradable waste will be composted and used as manure. Non-biodegradable waste will sold to authorized party		
	<b>Sr. No.</b>	<b>Type of Waste</b>	<b>Quantity</b>	<b>UoM</b>	<b>Treatment</b>	<b>Disposal</b>		
	1	Biodegradable waste	89	Kg/day	Composting	Used as manure		
	2	Non-Biodegradable waste	59	Kg/day	Sale	Sale to authorized party		
7.	Conditions under Hazardous & Other Wastes (M&TM) Rules 2016 for treatment and disposal of hazardous waste:					Used oil will be handed over to authorized preprocessor		
	<b>Sr. No.</b>	<b>Category No./ Type</b>	<b>Quantity</b>	<b>UoM</b>	<b>Treatment</b>	<b>Disposal</b>		
	1	5.2 Wastes or residues containing oil	500	MT/A	Sale to authorized preprocessor/CH	Sale to authorized preprocessor/C HWTSD F		

					WTS DF			
8.	The Board reserves the right to review, amend, suspend, revoke this consent and the same shall be binding on the industry.	Noted						
9.	This consent should not be construed as exemption from obtaining necessary NOC/ permission from any other Government authorities.	Noted						
10.	This consent is issued pursuant to the decision of the 23 <sup>rd</sup> Consent Appraisal committee Meeting held on 17.03.2021	Noted						
11.	The applicant shall comply with the conditions of the Environment Clearance granted by MoEF, GOI vide letter No. J-16011/38/2001-IA-III dated 06.10.2003	PP complies with the condition						
12.	The applicant shall comply with the conditions of the Environment Clearance granted by MoEF, GOI vide letter No. F. No. 10-70/2016-IA-III dated 20.08.2020	PP complies with the condition						
13.	The applicant shall submit Environment management Plan in the Board.	PP has submitted EMP.						
14.	The applicant shall submit BG of Rs. 25 Lakhs towards compliances of consent conditions and Environment Clearances conditions.	PP has submitted BG of Rs. 25 lakh						
15.	The waste generated due to proposed activity should no be disposed off in CRZ area,	Waste generated will sold to authorized party						
16.	No chemical products should be stored in the CRZ area except those permissible as per annexure of the CRZ Notification -2011 and Amendments in thereto	Noted						
17.	The applicant shall prepare disaster management plan and shall be updated time to tome	PP will comply with the condition						
18.	The applicant shall obtain Consent to Operate from Maharashtra Pollution Control Board before actual Commencement of the Unit/ Activity. (Establish)	Noted						



## SCHEDULE-I

### Terms & conditions for compliance of Water Pollution Control

Sr.	Conditions	Compliance	<input type="checkbox"/>	P																																
1.	A] Generation- As per your application the treated effluent generation is Nil. B] Treatment- NA C] Disposal- NA	Not Applicable																																		
2.	<p>A] As per your application, you have provided Sewage Treatment Plant of designed capacity 50 CMD for the treatment of 31 CMD of sewage.</p> <p>B] The application shall operate the sewage treatment system to treat the sewage so as to achieve the following standards.</p> <table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="text-align: center;">Sr. No</th> <th style="text-align: center;">Parameters</th> <th colspan="2" style="text-align: center;">Standards</th> </tr> </thead> <tbody> <tr> <td style="text-align: center;">1</td> <td style="text-align: center;">pH</td> <td style="text-align: center;">Not to exceed</td> <td style="text-align: center;">5.5-9.0</td> </tr> <tr> <td style="text-align: center;">2</td> <td style="text-align: center;">BOD</td> <td style="text-align: center;">Not to exceed</td> <td style="text-align: center;">10</td> </tr> <tr> <td style="text-align: center;">3</td> <td style="text-align: center;">COD</td> <td style="text-align: center;">Not to exceed</td> <td style="text-align: center;">50</td> </tr> <tr> <td style="text-align: center;">4</td> <td style="text-align: center;">TSS</td> <td style="text-align: center;">Not to exceed</td> <td style="text-align: center;">20</td> </tr> <tr> <td style="text-align: center;">5</td> <td style="text-align: center;">NH4 N</td> <td style="text-align: center;">Not to exceed</td> <td style="text-align: center;">5</td> </tr> <tr> <td style="text-align: center;">6</td> <td style="text-align: center;">N-total</td> <td style="text-align: center;">Not to exceed</td> <td style="text-align: center;">10</td> </tr> <tr> <td style="text-align: center;">7</td> <td style="text-align: center;">Fecal Coliform</td> <td style="text-align: center;">Not to exceed</td> <td style="text-align: center;">Less than 100</td> </tr> </tbody> </table> <p>C] The treated sewage shall be recycled for secondary purposes to the maximum extent and remaining shall be discharged on land for gardening within premise after confirming above standards. In no case, sewage shall find its way for gardening/ outside factory premises.</p>	Sr. No	Parameters	Standards		1	pH	Not to exceed	5.5-9.0	2	BOD	Not to exceed	10	3	COD	Not to exceed	50	4	TSS	Not to exceed	20	5	NH4 N	Not to exceed	5	6	N-total	Not to exceed	10	7	Fecal Coliform	Not to exceed	Less than 100	Noted		
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3.	The Board reserves its rights to review plans, specifications or other data relating to plant setup for the treatment of waterworks for the purification there of & the system for the disposal of sewage or trade effluent or in connection with the grant of any consent conditions. The applicant shall obtain prior consent of the Board to take steps to establish the unit or establish any treatment and disposal system or an extension or addition thereto.	Noted																																		
4.	The industry shall ensure replacement of pollution control system or its part after expiry of its expected life as defined by	Agreed																																		

	manufacture so as to ensure the compliance of the standards and safety of the operation thereof.																					
5.	<p>The applicant shall comply with the provisions of the Water (Prevention &amp; Control of Pollution) Act, 1974 and as amended, by installing water meters and other provisions as contained in the said act:</p> <table border="1"> <thead> <tr> <th>Sr. No.</th> <th>Purpose for water consumed</th> <th>Water consumption quantity (CMD)</th> </tr> </thead> <tbody> <tr> <td>1.</td> <td>Industrial Cooling, spraying in mine pits or boiler feed</td> <td>40.00</td> </tr> <tr> <td>2.</td> <td>Domestic purpose</td> <td>33.00</td> </tr> <tr> <td>3.</td> <td>Processing whereby water gets polluted &amp; pollutants are easily biodegradable</td> <td>0.00</td> </tr> <tr> <td>4.</td> <td>Processing whereby water gets polluted &amp; pollutants are not easily biodegradable and are toxic</td> <td>0.00</td> </tr> <tr> <td>5.</td> <td>Gardening</td> <td>0</td> </tr> </tbody> </table>	Sr. No.	Purpose for water consumed	Water consumption quantity (CMD)	1.	Industrial Cooling, spraying in mine pits or boiler feed	40.00	2.	Domestic purpose	33.00	3.	Processing whereby water gets polluted & pollutants are easily biodegradable	0.00	4.	Processing whereby water gets polluted & pollutants are not easily biodegradable and are toxic	0.00	5.	Gardening	0	Agreed		
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5.	Gardening	0																				
6.	The Applicant shall provide Specific Water Pollution control system as per the conditions of EP Act, 1986 and rule made there under form time to time/ Environmental Clearance/CREP guidelines.	STP of 50 m <sup>3</sup> /day proposed to provide on the site.																				

## SCHEDULE-II

### Terms & conditions for compliance of Air Pollution Control

Sr.	Conditions	Compliance		P																																																																
1.	<p>As per your application, you have provided the Air pollution control (APC) system and erected following stack (s) to observe the following fuel pattern:</p> <table border="1" style="width: 100%; border-collapse: collapse; margin-top: 10px;"> <thead> <tr> <th style="width: 8%;">Stack No.</th> <th style="width: 12%;">Stack Attached To</th> <th style="width: 10%;">APC System</th> <th style="width: 8%;">Height In Mtrs.</th> <th style="width: 10%;">Type of Fuel</th> <th style="width: 5%;">S %</th> <th style="width: 8%;">Pollutant</th> <th style="width: 8%;">Standard</th> </tr> </thead> <tbody> <tr> <td rowspan="3" style="text-align: center;">S-1</td> <td rowspan="3" style="text-align: center;">DG set [80 kVA]</td> <td rowspan="3" style="text-align: center;">Acoustic Enclosure</td> <td rowspan="3" style="text-align: center;">3.0</td> <td rowspan="3" style="text-align: center;">Diesel 6.25 Kg/H R</td> <td rowspan="3" style="text-align: center;">1</td> <td style="text-align: center;">SO<sub>2</sub></td> <td style="text-align: center;">3.0 kG/day</td> </tr> <tr> <td style="text-align: center;">Other</td> <td style="text-align: center;">-</td> </tr> <tr> <td style="text-align: center;">Other</td> <td style="text-align: center;">-</td> </tr> <tr> <td rowspan="3" style="text-align: center;">S-2</td> <td rowspan="3" style="text-align: center;">DG set [500 kVA]</td> <td rowspan="3" style="text-align: center;">Acoustic Enclosure</td> <td rowspan="3" style="text-align: center;">5.0</td> <td rowspan="3" style="text-align: center;">Diesel 41.66 Kg/H R</td> <td rowspan="3" style="text-align: center;">1</td> <td style="text-align: center;">SO<sub>2</sub></td> <td style="text-align: center;">19.99 kG/day</td> </tr> <tr> <td style="text-align: center;">Other</td> <td style="text-align: center;">-</td> </tr> <tr> <td style="text-align: center;">Other</td> <td style="text-align: center;">-</td> </tr> <tr> <td rowspan="3" style="text-align: center;">S-3</td> <td rowspan="3" style="text-align: center;">DG set [160 kVA]</td> <td rowspan="3" style="text-align: center;">Acoustic Enclosure</td> <td rowspan="3" style="text-align: center;">3.0</td> <td rowspan="3" style="text-align: center;">Diesel 12.5 Kg/H R</td> <td rowspan="3" style="text-align: center;">1</td> <td style="text-align: center;">SO<sub>2</sub></td> <td style="text-align: center;">6.0 kG/day</td> </tr> <tr> <td style="text-align: center;">Other</td> <td style="text-align: center;">-</td> </tr> <tr> <td style="text-align: center;">Other</td> <td style="text-align: center;">-</td> </tr> <tr> <td rowspan="3" style="text-align: center;">S-4</td> <td rowspan="3" style="text-align: center;">DG set [30 kVA]</td> <td rowspan="3" style="text-align: center;">Acoustic Enclosure</td> <td rowspan="3" style="text-align: center;">3.0</td> <td rowspan="3" style="text-align: center;">Diesel 2.08 Kg/H R</td> <td rowspan="3" style="text-align: center;">1</td> <td style="text-align: center;">SO<sub>2</sub></td> <td style="text-align: center;">1.0 kG/day</td> </tr> <tr> <td style="text-align: center;">Other</td> <td style="text-align: center;">-</td> </tr> <tr> <td style="text-align: center;">Other</td> <td style="text-align: center;">-</td> </tr> <tr> <td style="text-align: center;">S-5</td> <td style="text-align: center;">DG set [2000 kVA]</td> <td style="text-align: center;">Acoustic Enclosure</td> <td style="text-align: center;">5.0</td> <td style="text-align: center;">Diesel 400</td> <td style="text-align: center;">1</td> <td style="text-align: center;">SO<sub>2</sub></td> <td style="text-align: center;">192 kG/day</td> </tr> </tbody> </table>	Stack No.	Stack Attached To	APC System	Height In Mtrs.	Type of Fuel	S %	Pollutant	Standard	S-1	DG set [80 kVA]	Acoustic Enclosure	3.0	Diesel 6.25 Kg/H R	1	SO <sub>2</sub>	3.0 kG/day	Other	-	Other	-	S-2	DG set [500 kVA]	Acoustic Enclosure	5.0	Diesel 41.66 Kg/H R	1	SO <sub>2</sub>	19.99 kG/day	Other	-	Other	-	S-3	DG set [160 kVA]	Acoustic Enclosure	3.0	Diesel 12.5 Kg/H R	1	SO <sub>2</sub>	6.0 kG/day	Other	-	Other	-	S-4	DG set [30 kVA]	Acoustic Enclosure	3.0	Diesel 2.08 Kg/H R	1	SO <sub>2</sub>	1.0 kG/day	Other	-	Other	-	S-5	DG set [2000 kVA]	Acoustic Enclosure	5.0	Diesel 400	1	SO <sub>2</sub>	192 kG/day	Noted		
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2.	The Applicant shall provide Specific Air Pollution control equipment's as per the conditions of EP Act, 1986 and rule made there under from time to time/ Environmental Clearance/CREP guidelines.						PP agrees with the condition.				
3.	The Applicant shall obtain necessary prior permission for providing additional control equipment with necessary specifications and operation thereof or alteration or replacement/ alternation well before its life come to an end or erection or new pollution control equipment.						PP agrees with the condition.				
4.	The Board reserves its rights to vary all or any of the condition in the consent, if due to any technological improvement or otherwise such variation (including the change of any control equipment other in whole or in part in necessary)						Noted				
5.	The trucks will be covered with tarpaulin sheets to prevent coal from spiling/ creating ai pollution nuisance during coal transportation.						PP agrees with the condition.				
6.	To mitigate the dust emission during loading of cargos such as coal 1] Mix of truck movement and conveyor system shall be considered for cargo movement between the barges to storage area. 2]Grab unloaders or clamp shell buckets shall be provided to reduce dust, spillage, handling loss etc. during cargo loading on trucks.						PP agrees with the condition.				
7.	During cargo handling the dust shall be controlled by using water foggers. Wind screens shall be used to reduce fugitive emission, stock piles, excavated earthen material etc. shall be managed with water sprinkling to avoid dust being airborne from the specific site.						PP agrees with the condition.				
8.	PP shall implement Traffic Management plan and recommendations as per the PNP Port Expansion Traffic Impact Study of October 2018						Noted				
9.	The PP shall ensure that fugitive emission from the activity are control so as to maintain clean and safe environment in and around the port premises.						PP agrees with the condition.				
10.	All entry point, internal roads and loading/unloading area must be road worthy for movement of heavy vehicles by using low permeability material (Concrete or bitumen) and be cleaned regularly to minimize potential for dust generation and off site impact.						PP agrees with the condition.				
11.	PP shall implement Traffic Management Study Report of October 2018						PP agrees with the condition.				
12.	The Coal from jetty shall be removed using close system to control dust/fugitive emissions and shall meet the standards that may be prescribed.						PP agrees with the condition.				

	The side wall of 5 meter height shall be provided and for the dust suppression, water sprinkling arrangement of water pressure of minimum 4 Kg/cm shall be maintained during lading of coal on trucks at coal storage yard. The entire operation of coal handling shall be done with operating dust and wind suppression equipment's and monitoring of ambient air quality as per guidelines of the board. The handling of coal shall be done as per the Environmentally Sound management. The qty of coal to be handled will be assessed based on the stockyard size, maximum permissible safe height, dwell time, mode of evacuation and the capacity of roads to evacuate the traffic induced. PP shall submit designed details of pollution control system proposed for coal.			
13.	PP shall achieve the National Ambient Air Quality Standards prescribed vide Government of India, Notification No. B-29016/20/90/PCI-L dated 18.11.2009 as amended	Noted		

### SCHEDULE-III

#### Details of Bank Guarantees:

Sr.	Consent (C2E/C2O/C2R)	Amt of BG Imposed	Submission Period	Purpose of BG	Compliance Period	Validity Date	Compliance
1	Consent to Establish for expansion ie Handling of additional cargoes from 5 MTPA capacity to 19 MTPA capacity	Rs.25 lakh	15 Days	Towards O and M of pollution control system Compliance consent conditions & Conditions of EC.	Continuous	30/04/2026	The BG in Format required by MPCB was submitted

#### BG Forfeiture History

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

#### BG Return Details

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

### SCHEDULE-IV

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

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



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

		and industry specific standard under EP Rules 1986		
20.	Separate drainage system shall be provided for collection of trade and sewage effluents. Terminal manholes shall be provided at the end of the collection system with arrangement for measuring the flow. No effluent shall be admitted in the pipes/sewers downstream of the terminal manholes. No effluent shall find its way other than in designed and provided collection system.	Separate drainage system has been provided and no external effluent is admitted into the collection system		
21.	Neither storm water nor discharge from other premises shall be allowed to mix the effluent from the factory.	Wastewater and storm water are not allowed to mix with the effluent.		
22.	The industry should not cause any nuisance in surrounding area.	Agreed. The industry will not cause any nuisance in surrounding area.		
23.	The industry shall take adequate measure for control of noise levels from its own sources within the premises so as to maintain ambient air quality standard in respect of noise to less than 75 db(A) during day time and 70 db(A) during night time. Day time is reckoned in between 6 a.m and 10 p.m and night time is reckoned between 10 p.m and 6 a.m.	The ambient noise levels will be monitored. Construction activities will not be carried out during night time. Efforts will be taken to reduce noise levels during construction phase.		
24.	The industry shall create the Environment Cell by appointing an Environmental Engineer, Chemist and Agriculture expert for looking after day to day activities related to Environment and irrigation field where treated effluent is used for irrigation	An Environment Cell has been created which is responsible for implementing the Environment Management Plan on the project site.		
25.	The applicant shall provide ports in the chimney/(s) and facilities such as ladder, platform etc. for monitoring the air emissions and the same shall be open for inspection to/and for use of the Board's Staff. The chimney(s) vents attached to various sources of emission shall be designated by numbers such as S-1, S-2 etc. and these shall be painted /displayed to facilitate identification.	Noted		
26.	The industry should comply with the Hazardous and Other Wastes (M&TM) Rules, 2016 and submit the Annual Returns as per Rule 6(5) & 20 (2) of Hazardous and other Wastes (M& TM) Rules, 2016 for the preceding year April to March	Form IV is regularly submitted by 30 <sup>th</sup> June of every year.		

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

**CONDITIONS OF CONSENT TO OPERATE**

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

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

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

## SCHEDULE-I

### Terms & conditions for compliance of Water Pollution Control

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

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

## SCHEDULE-II

### Terms & conditions for compliance of Air Pollution Control

Sr.	Conditions	Compliance	☑	P																
1.	<p>As per your application, you have provided the Air pollution control (APC) system and erected following stack (s) to observe the following fuel pattern:</p> <table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="text-align: center;">Stack No.</th> <th style="text-align: center;">Stack Attached To</th> <th style="text-align: center;">APC System</th> <th style="text-align: center;">Height In Mtrs.</th> <th style="text-align: center;">Type of Fuel</th> <th style="text-align: center;">Quantity</th> <th style="text-align: center;">S %</th> <th style="text-align: center;">SO<sub>2</sub></th> </tr> </thead> <tbody> <tr> <td style="text-align: center;">Not Applicable</td> <td style="text-align: center;">Not Applicable</td> <td style="text-align: center;">Not Applicable</td> <td style="text-align: center;">Not Applicable</td> <td style="text-align: center;">Not Applicable</td> <td style="text-align: center;">--</td> <td style="text-align: center;">--</td> <td style="text-align: center;">--</td> </tr> </tbody> </table>	Stack No.	Stack Attached To	APC System	Height In Mtrs.	Type of Fuel	Quantity	S %	SO <sub>2</sub>	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable	--	--	--	Noted		
Stack No.	Stack Attached To	APC System	Height In Mtrs.	Type of Fuel	Quantity	S %	SO <sub>2</sub>													
Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable	--	--	--													
2.	The Applicant shall provide Specific Air Pollution control equipments as per the conditions of EP Act, 1986 and rule made there under from time to time/ Environmental Clearance/CREP guidelines.	PP agrees with the condition.																		
3.	<p>The applicant shall operate and maintain above mentioned air pollution control system, so as to achieve the level of pollutants to the following standards:</p> <table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="text-align: center;">Parameters</th> <th colspan="2" style="text-align: center;">Standards</th> </tr> </thead> <tbody> <tr> <td style="text-align: center;">Total Particulate Matter</td> <td style="text-align: center;">Not to exceed</td> <td style="text-align: center;">150 mg/Nm<sup>3</sup></td> </tr> </tbody> </table>	Parameters	Standards		Total Particulate Matter	Not to exceed	150 mg/Nm <sup>3</sup>	Agreed												
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Total Particulate Matter	Not to exceed	150 mg/Nm <sup>3</sup>																		
4.	The Applicant shall obtain necessary prior permission for providing additional control equipment with necessary specifications and operation thereof or alteration or replacement/ alternation well before its life come to an end or erection or new pollution control equipment.	PP agrees with the condition.																		
5.	The Board reserves its rights to vary all or any of the condition in the consent, if due to any technological improvement or otherwise such variation (including the change of any control equipment other in whole or in part in necessary)	Noted																		



### **SCHEDULE-III**

#### **Details of Bank Guarantees:**

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

#### **BG Forfeiture History**

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

#### **BG Return Details**

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

### SCHEDULE-IV

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

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

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

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21.	Neither storm water nor discharge from other premises shall be allowed to mix the effluent from the factory.	Wastewater and storm water are not allowed to mix with the effluent.		
22.	The industry should not cause any nuisance in surrounding area.	Agreed. The industry will not cause any nuisance in surrounding area.		
23.	The industry shall take adequate measure for control of noise levels from its own sources within the premises so as to maintain ambient air quality standard in respect of noise to less than 75 db(A) during day time and 70 db(A) during night time. Day time is reckoned in between 6 a.m and 10 p.m and night time is reckoned between 10 p.m and 6 a.m.	The ambient noise levels will be monitored. Construction activities will not be carried out during night time. Efforts will be taken to reduce noise levels during construction phase.		
24.	The industry shall create the Environment Cell by appointing an Environmental Engineer, Chemist and Agriculture expert for looking after day to day activities related to Environment and irrigation field where treated effluent is used for irrigation	An Environment Cell has been created which is responsible for implementing the Environment Management Plan on the project site.		
25.	The applicant shall provide ports in the chimney/(s) and facilities such as ladder, platform etc. for monitoring the air emissions and the same shall be open for inspection to/and for use of the Board's Staff. The chimney(s) vents attached to various sources	Not applicable.		
26.	The industry should comply with the Hazardous and Other Wastes (M&TM) Rules, 2016 and submit the Annual Returns as per Rule 6(5) & 20 (2) of Hazardous and other Wastes (M& TM) Rules, 2016 for the preceding year April to March in Form-IV by 30 <sup>th</sup> June of every year.	Form IV is regularly submitted by 30 <sup>th</sup> June of every year.		
27.	The applicant shall install a separate meter showing the consumption of energy for operation	Separate meters		

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

**ANNEXURE I**

**Previous Compliance Report  
Acknowledgement copy**





1st June, 2022

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

*Prasad*  
3-6-22  
आवक लिफाफा (नं.शा.)  
पर्यावरण व वातावरणासंबंधी बदल विभाग  
मंत्रालय, मुंबई ४०० ०३२

**Subject: Half-yearly Compliance Report:**  
**October 2021 to March 2022**

**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 20<sup>th</sup> 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**

*[Signature]*  
**Project Proponent**



**Enclosure:** A hard copy of the compliance and monitoring report

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

*o/c*

*[Signature]*  
08/06/22  
महाराष्ट्र प्रदूषण नियंत्रण मंडळ  
कार्यलय बॉर्डर, २ रा मजला, सायन सर्बल,  
सिनेफ्लिट समोर, तावन (पूर्व),  
मुंबई - ४०० ०२२.

**PNP MARITIME SERVICES PVT. LTD.**

Head Office: A-5, Ionic, 1B, Arthur Bunder Road, Colaba, Mumbai 400 005, India  
Admin. Office: 2nd Floor, Lansdowne House, Mahakavi Bhushan Road, Colaba, Mumbai 400 005  
Tel.: 2288 4536/37/38/39/40 Fax 2288 4535  
Port Office: PNP Port Dharmatar at Shehabaj, Dist. Raigad. Tel: +91 2143 320768.  
Website: www.pnpport.com CIN: UB3060MH1999PTC121481

Website: www.mpcb.gov.in



**ANNEXURE II**

**Site Photographs**

**Project Site**



**Drinking water facility**



**First Aid Box**



**Water Tank**







**ANNEXURE IV**

**Environmental Clearance Letter**



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: 20<sup>th</sup> 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](mailto: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.**

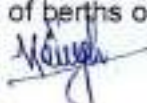
Sir,  
This has reference to your online Proposal No. IA/MH/MIS/59562/2016 dated 12 September, 2019, submitted to this Ministry for grant of Environmental and CRZ Clearance in terms of the provisions of the Environment Impact Assessment (EIA) Notification, 2006 and Coastal Regulation Zone (CRZ) Notification, 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 46<sup>th</sup> meeting held during 25-26 November, 2019 and 53<sup>rd</sup> 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 Mm<sup>3</sup>. 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 <sup>3</sup>
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 53<sup>rd</sup> 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 53<sup>rd</sup> meeting held during 23-24 July, 2020, based on the information submitted and clarifications provided by the Project Proponent and detailed discussions held on all the issues, recommended the project for grant of environmental and CRZ clearance with stipulated specific conditions along with other Standard EC Conditions as specified by the Ministry vide OM dated 04 January, 2019 for the said project/activity. As per recommendations of the EAC, the Ministry of Environment, Forest and Climate Change hereby accords Environmental and CRZ Clearance to the project 'Expansion and Modernization of existing PNP Port' at Gut No. 346, Dharamtar Creek, Village Shahbaj, District Raigad, Maharashtra by M/s PNP Maritime Services Pvt Ltd, under the provisions of the EIA Notification, 2006 and amendments/circulars issued thereon and CRZ Notification, 2011, and subject to the specific and general conditions as under:-

**A. Specific Conditions:**

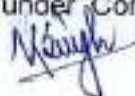
- (i) The Environmental and CRZ Clearance to the project is primarily under provisions of EIA Notification, 2006 and CRZ Notification, 2011. It does not tantamount to approvals/consent/permissions etc required to be obtained under any other Act/Rule/regulation. The Project Proponent is under obligation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





necessary mitigation measures be taken in case any adverse impact is observed. The details shall be submitted along with the six-monthly monitoring report.

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





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

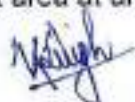
## **B. Standard Conditions:**

### **I. Statutory compliance:**

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

### **II. Air quality monitoring and preservation:**

- i. The project proponent shall install system to carryout Ambient Air Quality monitoring for common/criterion parameters relevant to the main pollutants released (e.g. PM<sub>10</sub> and PM<sub>2.5</sub> in reference to PM emission, and SO<sub>2</sub> and NO<sub>x</sub> in reference to SO<sub>2</sub> and NO<sub>x</sub> emissions) within and outside the project area at least at four locations (one within and three outside the plant area at an angle of 120° each), covering upwind and downwind directions.

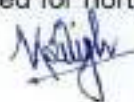




- ii. Appropriate Air Pollution Control (APC) system shall be provided for all the dust generating points including fugitive dust from all vulnerable sources, so as to comply prescribed emission standards.
- iii. Shrouding shall be carried out in the work site enclosing the dock/proposed facility area.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

### III. Water quality monitoring and preservation:

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





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

#### **IV. Noise monitoring and prevention:**

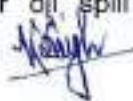
- i. Noise level survey shall be carried as per the prescribed guidelines and report in this regard shall be submitted to Regional Officer of the Ministry as a part of six-monthly compliance report.
- ii. Noise from vehicles, power machinery and equipment on-site should not exceed the prescribed limit.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

#### **V. Energy Conservation measures:**

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

#### **VI. Waste management:**

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





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

#### **VII. Green Belt:**

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

#### **VIII. Marine Ecology:**

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

#### **IX. Public hearing and Human health issues:**

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




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

#### **X. Corporate Environment Responsibility:**

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

#### **XI. Miscellaneous:**

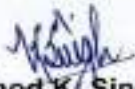
- i. The project proponent shall make public the environmental clearance granted for their project along with the environmental conditions and safeguards at their cost by prominently advertising it at least in two local newspapers of the District or State, of which one shall be in the vernacular language within seven days and in addition this shall also be displayed in the project proponent's website permanently.
- ii. The copies of the environmental clearance shall be submitted by the project proponents to the Heads of local bodies, Panchayats and Municipal Bodies in addition to the relevant offices of the Government who in turn has to display the same for 30 days from the date of receipt.
- iii. The project proponent shall upload the status of compliance of the stipulated environment clearance conditions, including results of monitored data on their website and update the same on half-yearly basis.
- iv. The project proponent shall submit six-monthly reports on the status of the compliance of the stipulated environmental conditions on the website of the ministry of Environment, Forest and Climate Change at environment clearance portal.
- v. The project proponent shall submit the environmental statement for each financial year in Form-V to the concerned State Pollution Control Board as prescribed under the Environment (Protection) Rules, 1986, as amended subsequently and put on the website of the company.
- vi. The criteria pollutant levels namely; PM<sub>2.5</sub>, PM<sub>10</sub>, SO<sub>2</sub>, NO<sub>x</sub> (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, 15<sup>th</sup> 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, 3<sup>rd</sup> and 4<sup>th</sup> floor, Opp. Cine Planet, Sion Circle, Mumbai - 400 022.
- 5) Monitoring Cell, MoEF&CC, Indira Paryavaran Bhavan, New Delhi.
- 6) Guard File/ Record File/ Notice Board/MoEF&CC website.

  
(Dr. Vinod K. Singh)  
Scientist E

**ANNEXURE V**

**Consent to Establish**





## MAHARASHTRA POLLUTION CONTROL BOARD

Tel: 24010706/24010437  
Fax: 24023516  
Website: <http://mpcb.gov.in>  
Email: [cac-cell@mpcb.gov.in](mailto:cac-cell@mpcb.gov.in)



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

RED/L.S.I (R46)

No:- Format1.0/CAC/UAN No.0000105351/CE - 2107000798

Date: 14/07/2021

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



Your Service is Our Duty

**Sub: Consent to Establish for expansion i.e. handling of additional cargos under red category**

- Ref:**
1. Consent to operate granted by the Board to the port vide No.CC/UAN no.103714/CR-2104001333 Dated 27.04.2021 valid up to 31.12.2025.
  2. Environmental Clearance granted by MOEF, GOI, vide no. J-16011/38/2001-IA-III Dated 06.10.2003
  3. Environmental Clearance granted to the port for expansion activity by MOEFCC, GOI vide no.10-70/2016-IA-III Dated 20.08.2020
  4. The minutes of the CAC meeting held on 17.03.2021

Your application No.MPCB-CONSENT-0000105351 Dated 29.12.2020

For: grant of Consent to Establish under Section 25 of the Water (Prevention & Control of Pollution) Act, 1974 & under Section 21 of the Air (Prevention & Control of Pollution) Act, 1981 and Authorization under Rule 6 of the Hazardous & Other Wastes (Management & Transboundary Movement) Rules 2016 is considered and the consent is hereby granted subject to the following terms and conditions and as detailed in the schedule I, II, III & IV annexed to this order:

1. **The consent to establish is granted for a period up to commissioning of the unit or up to 5 year whichever is earlier.**
2. **The capital investment of the project is Rs.1061.56 Crs. (As per C.A Certificate submitted by industry Existing CI is-Rs. 3.21 Crs + Expansion/Increase in C.I. - Rs. 1058.35Crs)**
3. **Consent is valid for handling of:**

Sr No	Product	Maximum Quantity	UOM
Products			
1	Jetty: For Cargo Handling of 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 carqo (Non-Hazardous) and Port Based Industries etc.	14	MT/A



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

Sr No	Description	Permitted (in CMD)	Standards to	Disposal Path
1.	Trade effluent	0	As per Schedule-I	Not Applicable
2.	Domestic effluent	31	As per Schedule-I	On land for gardening

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

Sr No.	Stack No.	Description of stack / source	Number of Stack	Standards to be achieved
1	S-1	DG set [ 80 KVA ]	1	As per Schedule -II
2	S-2	DG set [ 500 KVA ]	1	As per Schedule -II
3	S-3	DG set [160 KVA ]	1	As per Schedule -II
4	S-4	DG set [ 30 KVA ]	1	As per Schedule -II
5	S-5	DG set [ 2000 KVA ]	1	As per Schedule -II

6. **Non-Hazardous Wastes:**

Sr No	Type of Waste	Quantity	UoM	Treatment	Disposal
1	Biodegradable waste	89	Kg/Day	Composting	Used as manure
2	Non Biodegradable waste	59	Kg/Day	Sale	Sale to authorized party

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

Sr No	Category No./ Type	Quantity	UoM	Treatment	Disposal
1	5.2 Wastes or residues containing oil	500	MT/A	Recycle	Sale to authorised party / CHWTSDF

8. The Board reserves the right to review, amend, suspend, revoke this consent and the same shall be binding on the industry.
9. This consent should not be construed as exemption from obtaining necessary NOC/ permission from any other Government authorities.
10. This consent is issued pursuant to the decision of the 23rd Consent Appraisal Committee Meeting held on 17.03.2021.
11. The applicant shall comply with the conditions of the Environmental Clearance granted by MOEF, GOI, vide letter No. J-16011/38/2001-IA-III dated 06.10.2003.
12. The applicant shall comply with the conditions of the Environmental Clearance granted by MOEF, GOI, vide letter No. F.No.10-70/2016-IA-III dated 20.08.2020..
13. The applicant shall submit Environmental Management Plan in the Board.
14. The applicant shall submit BG of Rs.25 Lakhs towards compliances of consent conditions and Environmental Clearances conditions.
15. The waste generated due to proposed activity should not be disposed off in CRZ area.
16. No chemical products should be stored in the CRZ area except those permissible as per annexure of the CRZ Notification -2011 and Amendments in thereto.



17. The applicant shall prepare disaster management plan and shall be updated time to time.
18. The applicant shall obtain Consent to Operate from Maharashtra Pollution Control Board before actual commencement of the Unit/Activity. (Establish)

For and on behalf of the  
Maharashtra Pollution Control Board.

(Ashok Shingare IAS),  
Member Secretary

**Received Consent fee of -**

Sr.No	Amount(Rs.)	Transaction/DR.No.	Date	Transaction Type
1	2116700.00	TXN2101000026	01/01/2021	Online Payment

**Copy to:**

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





**SCHEDULE-I**

**Terms & conditions for compliance of Water Pollution Control:**

1. A) Generation - As per your application the treated effluent generation is Nil.  
B) Treatment - NA  
C) Disposal - NA
2. A) As per your application, you have provided Sewage Treatment Plant of designed capacity 50 CMD for the treatment of 31 CMD of sewage.  
B) The Applicant shall operate the sewage treatment system to treat the sewage so as to achieve the following standards.

Sr.No	Parameters	Standards (mg/l)	
1	pH	Not to exceed	5.5 to 9.0
2	BOD 3 days 27°C	Not to exceed	10 mg/l
3	COD	Not to exceed	50 mg/l
4	Total Suspended Solids	Not to exceed	20 mg/l
5	NH4 N	Not to exceed	5 mg/l
6	N- Total	Not to exceed	10 mg/l
7	Fecal Coliform	Not to exceed	Less than 100

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

Sr. No.	Purpose for water consumed	Water consumption quantity (CMD)
1.	Industrial Cooling, spraying in mine pits or boiler feed	40.00
2.	Domestic purpose	33.00
3.	Processing whereby water gets polluted & pollutants are easily biodegradable	0.00



Sr. No.	Purpose for water consumed	Water consumption quantity (CMD)
4.	Processing whereby water gets polluted & pollutants are not easily biodegradable and are toxic	0.00
5.	Gardening	0

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

**SCHEDULE-II**

**Terms & conditions for compliance of Air Pollution Control:**

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

Stack No.	Source	APC System provided/proposed	Stack Height(in mtr)	Type of Fuel	Sulphur Content(in %)	Pollutant	Standard
S-1	DG set [ 80 KVA ]	Acoustic Enclosure	3.00	Diesel 6.25 Kg/Hr	1	SO2	3.0 Kg/Day
						Other	-
						Other	-
S-2	DG set [ 500 KVA ]	Acoustic Enclosure	5.00	Diesel 41.66 Kg/Hr	1	SO2	19.99 Kg/Day
						Other	-
						Other	-
S-3	DG set [ 160 KVA ]	Acoustic Enclosure	3.00	Diesel 12.5 Kg/Hr	1	SO2	6 Kg/Day
						Other	-
						Other	-
S-4	DG set [ 30 KVA ]	Acoustic Enclosure	3.00	Diesel 2.08 Kg/Hr	1	SO2	1.0 Kg/Day
						Other	-
						Other	-
S-5	DG set [2000 KVA ]	Acoustic Enclosure	5.00	Diesel 400 Kg/Hr	1	SO2	192 Kg/Day
						Other	-
						Other	-



Stack No.	Source	APC System provided/proposed	Stack Height(in mtr)	Type of Fuel	Sulphur Content(in %)	Pollutant	Standard
---	Coal stock yard		0.00	-	-	SPM [ The difference in the value of suspended particulate matter, delta measured between 25 and 30 meters from the coal stock yard in the downward and leeward wind direction ] not exceed to 150 µg/m3	-
						Other	-
						Other	-

- The Applicant shall provide Specific Air Pollution control equipments as per the conditions of EP Act, 1986 and rule made there under from time to time/ Environmental Clearance / CREP guidelines.
- The Applicant shall obtain necessary prior permission for providing additional control equipment with necessary specifications and operation thereof or alteration or replacement/alteration well before its life come to an end or erection of new pollution control equipment.
- The Board reserves its rights to vary all or any of the condition in the consent, if due to any technological improvement or otherwise such variation (including the change of any control equipment, other in whole or in part is necessary).
- The trucks will be covered with tarpaulin sheets to prevent coal dust from spilling /creating air pollution nuisance during coal transportation.
- To mitigate the dust emission during loading of cargos such as coal, 1] Mix of truck movement and conveyor system shall be considered for cargo movement between the barges to storage area.2] Grab unloaders or clamp shell buckets shall be provided to reduce dust, spillage, handling loss etc. during cargo loading on trucks.
- During the cargo handling the dust shall be controlled by using water foggers., wind screens shall be used to reduce fugitive emission, stock piles, excavated earthen materials etc. shall be managed with water sprinkling to avoid dust being airborne from the specific site.
- PP shall implement Traffic Management Plan and recommendations as per the PNP Port Expansion Traffic Impact Study Report of October -2018.
- The PP shall ensure that fugitive emission from the activity are control so as to maintain clean and safe environment in and around the port premises.
- All entry point , internal roads and loading /unloading areas must be made road worthy for movement of heavy vehicles by using low permeability material ( Concrete or bitumen) and be cleaned regularly to minimize potential for dust generation and off site impact
- PP shall implement Traffic Management Plan and recommendations as per the PNP Port Expansion Traffic Impact Study Report of October -2018.





12. The coal from jetty shall be removed using close system to control dust / fugitive emissions and shall meet the standards that may be prescribed. The side wall of 5 meters height shall be provided and for the dust suppression, water sprinkling arrangement of water pressure of minimum 4 Kg/cm shall be maintained during loading of coal on trucks at coal storage yard. The entire operation of coal handling shall be done with operating dust and wind suppression equipment's and monitoring of ambient air quality as per guidelines of the Board. The handling of coal shall be done as per the Environmentally Sound management. The qty of coal to be handled will be assessed based on the stockyard size, maximum permissible safe height, dwell time, mode of evacuation and the capacity of roads to evacuate the traffic induced. PP shall submit designed details of pollution control system proposed for coal yard.
13. PP shall achieve the National Ambient Air Quality standards prescribed vide Government of India, Notification No. B-29016/20/90/PCI-L dated. 18.11.2009 as amended.

**SCHEDULE-III  
Details of Bank Guarantees:**

Sr. No	Consent (C2E/C2O/C2R)	Amt of BG Imposed	Submission Period	Purpose of BG	Compliance Period	Validity Date
1	Consent to Establish for expansion.i.e. Handling of additional cargoes from 5 MTPA capacity to 19 MTPA capacity	Rs.25 Lakhs	15 days	Towards compliances of consent to Establish conditions and conditions of Environmental Clearances	Continuous	30.04.2026

**BG Forfeiture History**

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

**BG Return details**

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

**SCHEDULE-IV  
General Conditions:**

1. The Energy source for lighting purpose shall preferably be LED based
2. The PP shall harvest rainwater from roof tops of the buildings and storm water drains to recharge the ground water and utilize the same for different industrial applications within the plant
3. Conditions for D.G. Set
  - a) Noise from the D.G. Set should be controlled by providing an acoustic enclosure or by treating the room acoustically.



- b) Industry should provide acoustic enclosure for control of noise. The acoustic enclosure/ acoustic treatment of the room should be designed for minimum 25 dB (A) insertion loss or for meeting the ambient noise standards, whichever is on higher side. A suitable exhaust muffler with insertion loss of 25 dB (A) shall also be provided. The measurement of insertion loss will be done at different points at 0.5 meters from acoustic enclosure/room and then average.
  - c) Industry should make efforts to bring down noise level due to DG set, outside industrial premises, within ambient noise requirements by proper siting and control measures.
  - d) Installation of DG Set must be strictly in compliance with recommendations of DG Set manufacturer.
  - e) A proper routine and preventive maintenance procedure for DG set should be set and followed in consultation with the DG manufacturer which would help to prevent noise levels of DG set from deteriorating with use.
  - f) D.G. Set shall be operated only in case of power failure.
  - g) The applicant should not cause any nuisance in the surrounding area due to operation of D.G. Set.
  - h) The applicant shall comply with the notification of MoEFCC, India on Environment (Protection) second Amendment Rules vide GSR 371(E) dated 17.05.2002 and its amendments regarding noise limit for generator sets run with diesel.
4. The applicant shall maintain good housekeeping.
  5. The non-hazardous solid waste arising in the factory premises, sweepings, etc. be disposed of scientifically so as not to cause any nuisance / pollution. The applicant shall take necessary permissions from civic authorities for disposal of solid waste.
  6. The applicant shall not change or alter the quantity, quality, the rate of discharge, temperature or the mode of the effluent/emissions or hazardous wastes or control equipments provided for without previous written permission of the Board. The industry will not carry out any activity, for which this consent has not been granted/without prior consent of the Board.
  7. The industry shall ensure that fugitive emissions from the activity are controlled so as to maintain clean and safe environment in and around the factory premises.
  8. The industry shall submit quarterly statement in respect of industries obligation towards consent and pollution control compliance's duly supported with documentary evidences (format can downloaded from MPCB official site).
  9. The industry shall submit official e-mail address and any change will be duly informed to the MPCB.
  10. The industry shall achieve the National Ambient Air Quality standards prescribed vide Government of India, Notification No. B-29016/20/90/PCI-L dated. 18.11.2009 as amended.
  11. The Board reserves its rights to review plans, specifications or other data relating to plant setup for the treatment of waterworks for the purification thereof & the system for the disposal of sewage or trade effluent or in connection with the grant of any consent conditions. The Applicant shall obtain prior consent of the Board to take steps to establish the unit or establish any treatment and disposal system or an extension or addition thereto.
  12. The industry shall ensure replacement of pollution control system or its parts after expiry of its expected life as defined by manufacturer so as to ensure the compliance of standards and safety of the operation thereof.
  13. The PP shall provide personal protection equipment as per norms of Factory Act
  14. Industry should monitor effluent quality, stack emissions and ambient air quality monthly/quarterly.





15. Whenever due to any accident or other unforeseen act or even, such emissions occur or is apprehended to occur in excess of standards laid down, such information shall be forthwith Reported to Board, concerned Police Station, office of Directorate of Health Services, Department of Explosives, Inspectorate of Factories and Local Body. In case of failure of pollution control equipments, the production process connected to it shall be stopped.
16. The applicant shall provide an alternate electric power source sufficient to operate all pollution control facilities installed to maintain compliance with the terms and conditions of the consent. In the absence, the applicant shall stop, reduce or otherwise, control production to abide by terms and conditions of this consent.
17. The industry shall recycle/reprocess/reuse/recover Hazardous Waste as per the provision contain in the Hazardous and Other Wastes (M & TM) Rules 2016, which can be recycled /processed /reused /recovered and only waste which has to be incinerated shall go to incineration and waste which can be used for land filling and cannot be recycled/reprocessed etc. should go for that purpose, in order to reduce load on incineration and landfill site/environment.
18. An inspection book shall be opened and made available to the Board's officers during their visit to the applicant.
19. Industry shall strictly comply with the Water (P&CP) Act, 1974, Air (P&CP) Act, 1981 and Environmental Protection Act, 1986 and industry specific standard under EP Rules 1986 which are available on MPCB website (www.mpcb.gov.in).
20. Separate drainage system shall be provided for collection of trade and sewage effluents. Terminal manholes shall be provided at the end of the collection system with arrangement for measuring the flow. No effluent shall be admitted in the pipes/sewers downstream of the terminal manholes. No effluent shall find its way other than in designed and provided collection system.
21. Neither storm water nor discharge from other premises shall be allowed to mix with the effluents from the factory.
22. The industry should not cause any nuisance in surrounding area.
23. The industry shall take adequate measures for control of noise levels from its own sources within the premises so as to maintain ambient air quality standard in respect of noise to less than 75 dB (A) during day time and 70 dB (A) during night time. Day time is reckoned in between 6 a.m. and 10 p.m. and night time is reckoned between 10 p.m. and 6 a.m.
24. The industry shall create the Environmental Cell by appointing an Environmental Engineer, Chemist and Agriculture expert for looking after day to day activities related to Environment and irrigation field where treated effluent is used for irrigation.
25. The applicant shall provide ports in the chimney/(s) and facilities such as ladder, platform etc. for monitoring the air emissions and the same shall be open for inspection to/and for use of the Board's Staff. The chimney(s) vents attached to various sources of emission shall be designated by numbers such as S-1, S-2, etc. and these shall be painted/ displayed to facilitate identification.
26. The industry should comply with the Hazardous and Other Wastes (M & TM) Rules, 2016 and submit the Annual Returns as per Rule 6(5) & 20(2) of Hazardous and Other Wastes (M & TM) Rules, 2016 for the preceding year April to March in Form-V by 30th June of every year.
27. The applicant shall install a separate meter showing the consumption of energy for operation of domestic and industrial effluent treatment plants and air pollution control system. A register showing consumption of chemicals used for treatment shall be maintained.



28. The applicant shall bring minimum 33% of the available open land under green coverage/ plantation. The applicant shall submit a yearly statement by 30th September every year on available open plot area, number of trees surviving as on 31st March of the year and number of trees planted by September end.
29. The Board reserves its rights to review plans, specifications or other data relating to plant setup for the treatment of waterworks for the purification thereof & the system for the disposal of sewage or trade effluent or in connection with the grant of any consent conditions.
30. The firm shall submit to this office, the 30th day of September every year, the Environment Statement Report for the financial year ending 31st March in the prescribed FORM-V as per the provisions of Rule 14 of the Environment (Protection) (second Amendment) Rules, 1992.
31. The Applicant shall obtain necessary prior permission for providing additional control equipment with necessary specifications and operation thereof or alteration or replacement/alteration well before its life come to an end or erection of new pollution control equipment.
32. The Board reserves its rights to vary all or any of the condition in the consent, if due to any technological improvement or otherwise such variation (including the change of any control equipment, other in whole or in part is necessary).
33. The applicant shall provide facility for collection of environmental samples and samples of trade and sewage effluents, air emissions and hazardous waste to the Board staff at the terminal or designated points and shall pay to the Board for the services rendered in this behalf.

For and on behalf of the  
Maharashtra Pollution Control Board.



  
(Ashok Shingare IAS),  
Member Secretary

**ANNEXURE VI**  
**Consent To Operate**



## MAHARASHTRA POLLUTION CONTROL BOARD

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



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

RED/S.S.I (R46)

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

Date: 27/04/2021

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



Your Service is Our Duty

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

**Ref:**

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

Your application No.MPCB-CONSENT-0000103714 Dated 07.12.2020

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

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

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

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

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

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





# Maharashtra Pollution Control Board

## 6087bd50c8ae785842a6fdb7

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

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

6. **Non-Hazardous Wastes:**

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

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

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

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

For and on behalf of the  
Maharashtra Pollution Control Board.

(Ashok Shingare IAS),  
Member Secretary

**Received Consent fee of -**

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

**Copy to:**

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



**SCHEDULE-I**

**Terms & conditions for compliance of Water Pollution Control:**

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

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

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

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



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

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

**SCHEDULE-II**

**Terms & conditions for compliance of Air Pollution Control:**

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

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

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

Parameters	Standards
Total Particulate Matter	Not to exceed 150 mg/ Nm <sup>3</sup>

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

**SCHEDULE-III**

**Details of Bank Guarantees:**

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



**BG Forfeiture History**

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

**BG Return details**

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

**SCHEDULE-IV  
General Conditions:**

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





# Maharashtra Pollution Control Board

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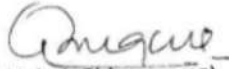
8. The industry shall submit quarterly statement in respect of industries obligation towards consent and pollution control compliance's duly supported with documentary evidences (format can downloaded from MPCB official site).
9. The industry shall submit official e-mail address and any change will be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



**Maharashtra Pollution Control Board**  
**6087bd50c8ae785842a6fdb7**

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

For and on behalf of the  
Maharashtra Pollution Control Board.

  
(Ashok Shingare IAS),  
Member Secretary

**ANNEXURE VII**

**Environmental Monitoring Report**

### AMBIENT AIR QUALITY MONITORING REPORT

Sample / Report No		Report Date: 10/11/2022
Name and Address of Customer	<b>PNP Maritime Services Private Limited,</b> 2nd Floor, Lansdowne House Building, M. B. Marg, Near Regal Cinema, Apollo Bunder, Colaba, Mumbai – 400 001	Order Reference As per PO No. PNP/March/2021- 2022/20 Dated 31/03/2022
Sample Description/Type	Ambient Air	
Sampling Location	<b>Near Custom Building</b>	
Sampling Procedure	As per Method Reference	

<b>Meteorological Data / Environmental Conditions</b>					
Date	Average Wind velocity	Prominent Wind Direction	Relative Humidity (Max./Min.)	Temperature (Max./Min.)	Duration of Survey
01/10/2022	9	NW	76/64	30/24	24 Hours
02/10/2022	10	NW	78/64	30/24	24 Hours
03/10/2022	14	NW	73/61	31/24	24 Hours
04/10/2022	10	W	80/68	30/25	24 Hours
05/10/2022	12	NW	82/70	31/25	24 Hours
06/10/2022	9	NW	78/66	30/25	24 Hours
07/10/2022	7	N	80/68	31/25	24 Hours
08/10/2022	11	NW	78/66	31/24	24 Hours
09/10/2022	10	N	78/64	31/25	24 Hours
10/10/2022	2	N	76/64	31/24	24 Hours
11/10/2022	8	NW	78/66	31/24	24 Hours
12/10/2022	6	SE	84/72	31/23	24 Hours
13/10/2022	3	NE	80/68	30/24	24 Hours
14/10/2022	6	NE	84/72	30/24	24 Hours
15/10/2022	9	E	73/61	31/25	24 Hours

**Note:**

1. The result listed refer only to the tested sample(s) and applicable parameter (s).
2. This report is not to be reproduced except in full, without written approval of the laboratory.
3. Perishable samples will be disposed immediately after report dispatch.
4. Non-perishable samples will be stored for 15 days to one month after report dispatch or as per the regulatory norms.



<b>Meteorological Data / Environmental Conditions</b>					
Date	Average Wind velocity	Prominent Wind Direction	Relative Humidity (Max./Min.)	Temperature (Max./Min.)	Duration of Survey
16/10/2022	6	NW	67/55	30/23	24 Hours
17/10/2022	7	E	78/66	31/24	24 Hours
18/10/2022	9	NW	82/70	31/25	24 Hours
19/10/2022	6	NW	84/72	30/23	24 Hours
20/10/2022	6	NW	85/73	31/24	24 Hours
21/10/2022	9	NW	87/75	31/24	24 Hours
22/10/2022	5	NE	67/55	30/22	24 Hours
23/10/2022	6	NW	68/55	31/23	24 Hours
24/10/2022	2	NE	65/53	30/22	24 Hours
25/10/2022	5	NE	68/56	30/22	24 Hours
26/10/2022	8	NE	64/52	31/23	24 Hours
27/10/2022	6	NE	62/50	33/22	24 Hours
28/10/2022	5	E	70/58	30/22	24 Hours
29/10/2022	6	NE	68/56	32/23	24 Hours
30/10/2022	8	NW	78/64	30/23	24 Hours
31/10/2022	9	E	65/53	31/22	24 Hours

*K Shewale*

Kavita Shewale  
 Section In-charge (Chemical)  
 Reviewed & Authorised by



-----End of Report-----

**Note:**

1. The result listed refer only to the tested sample(s) and applicable parameter (s).
2. This report is not to be reproduced except in full, without written approval of the laboratory.
3. Perishable samples will be disposed immediately after report dispatch.
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### AMBIENT AIR QUALITY MONITORING REPORT

Sample ID : AA/10/22/5113	Report No. AA/10/22/5113	Report Date	11/10/2022
Name and address of Customer	<b>PNP Maritime Services Private Limited</b> 2nd Floor, Lansdowne House, Mahakavi Bhushan Road, Colaba, Mumbai - 400001, Maharashtra		
Sampling done by	Laboratory	Sample Description / Type	Ambient Air
Sampling Location	Near DIL Godown Back Side(PNP Port)	Date - Sampling	03/10/2022 to 04/10/2022
Sample Quantity / Packing	PM <sub>10</sub> , Bap, Metals: 1 x 3 no. filter paper PM <sub>2.5</sub> : 1 x 1 no. filter paper SO <sub>2</sub> , NO <sub>2</sub> : 30 ml x 6 no. plastic bottle each NH <sub>3</sub> : 10 ml x 24 no. plastic bottle Ozone: 10 ml x 1 no. plastic bottle C <sub>6</sub> H <sub>6</sub> : 6 no. charcoal tubes CO: 1 no. bladder	Date - Receipt of Sample	06/10/2022
Sampling Procedure	As Per Method Reference	Date - Start of Analysis	06/10/2022
Order Reference	PO No. PNP/March/2021-2022/020 Dated 31.03.2022	Date - Completion of Analysis	10/10/2022

#### Meteorological Data / Environmental Conditions

Average Wind Velocity 14 km/h	Wind Direction N-W	Relative Humidity (Max./Min.): 73/61%	Temperature (Max./Min.): 31/24°C	Duration of Survey 24 h
Parameter	Result	NAAQS# 2009	Unit	Method

#### Chemical Testing; Group: Atmospheric Pollution

Sulphur Dioxide (SO <sub>2</sub> )	<b>8.4</b>	80	µg/m <sup>3</sup>	IS 5182 (Part 2) 2001
Nitrogen Dioxide (NO <sub>2</sub> )	<b>20.9</b>	80	µg/m <sup>3</sup>	IS 5182 (Part 6) 2006
Particulate Matter (size less than 10 µm) or PM <sub>10</sub>	<b>212</b>	100	µg/m <sup>3</sup>	IS 5182 (Part 23) 2006
Particulate Matter (size less than 2.5µm) or PM <sub>2.5</sub>	<b>48</b>	60	µg/m <sup>3</sup>	CPCB Guideline, Volume 1,36/2012-13, Page No 15 2013
Ozone (O <sub>3</sub> )	<b>BLQ</b> (LOQ:19.6)	180	µg/m <sup>3</sup>	Methods of Air Sampling and Analysis (AWMA) 3rd Ed. Method 411 Page no. 403 1988
Lead (as Pb)	<b>BLQ</b> (LOQ:0.02)	1	µg/m <sup>3</sup>	EPA/625/R-96/D10 a Compendium Method 10-31 & 32
Carbon Monoxide (CO)	<b>BLQ</b> (LOQ:0.5)	4	mg/m <sup>3</sup>	CPCB Guidelines, Volume II, 37/2012-13, Page no 16 2013
Ammonia (NH <sub>3</sub> )	<b>BLQ</b> (LOQ:20)	400	µg/m <sup>3</sup>	CPCB Guidelines, Volume 1,36/2012-13, Page No 35: 2013
Benzene (C <sub>6</sub> H <sub>6</sub> )	<b>BLQ</b> (LOQ:1)	5	µg/m <sup>3</sup>	IS 5182 (Part 11) 2006
Benzo (a) pyrene (BaP) Particulate Phase only	<b>BLQ</b> (LOQ:0.2)	1	ng/m <sup>3</sup>	IS 5182 (Part 12) 2004
Arsenic (as As)	<b>BLQ</b> (LOQ:0.3)	6	ng/m <sup>3</sup>	EPA/625/R-96/D10 a Compendium Method 10-31 & 34
Nickel (as Ni)	<b>BLQ</b> (LOQ:3)	20	ng/m <sup>3</sup>	EPA/625/R-96/D10 a Compendium Method 10-31 & 32

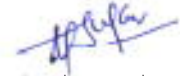
BLQ: Below Limit of Quantification, LOQ: Limit of Quantification

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, PM<sub>10</sub>, PM<sub>2.5</sub>, Lead and Ammonia, 1 hour TWA in case of Carbon Monoxide and Ozone, Annual TWA in case of Benzene, Benzo (a) Pyrene, Arsenic and Nickel

  
Ninad Soundankar  
Technical Manager (Chemical)  
Reviewed & Authorised by

Sample ID : AA/10/22/5113	Report No. AA/10/22/5113	Report Date	11/10/2022
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Ninad Soundankar  
Technical Manager (Chemical)  
Reviewed & Authorised by



Note:

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





### AMBIENT AIR QUALITY MONITORING REPORT

Sample ID : AA/10/22/5112	Report No. AA/10/22/5112	Report Date	11/10/2022
Name and address of Customer	<b>PNP Maritime Services Private Limited</b> 2nd Floor, Lansdowne House, Mahakavi Bhushan Road, Colaba, Mumbai - 400001, Maharashtra		
Sampling done by	Laboratory	Sample Description / Type	Ambient Air
Sampling Location	Near DIL Main Gate(PNP Port)	Date - Sampling	03/10/2022 to 04/10/2022
Sample Quantity / Packing	PM <sub>10</sub> : Bap, Metals: 1 x 3 no. filter paper PM <sub>2.5</sub> : 1 x 1 no. filter paper SO <sub>2</sub> , NO <sub>2</sub> : 30 ml x 6 no. plastic bottle each NH <sub>3</sub> : 10 ml x 24 no. plastic bottle Ozone: 10 ml x 1 no. plastic bottle C <sub>6</sub> H <sub>6</sub> : 6 no. charcoal tubes CO: 1 no. bladder	Date - Receipt of Sample	06/10/2022
Sampling Procedure	As Per Method Reference	Date - Start of Analysis	06/10/2022
Order Reference	PO No. PNP/March/2021-2022/020 Dated 31.03.2022	Date - Completion of Analysis	10/10/2022

#### Meteorological Data / Environmental Conditions

Average Wind Velocity 14 km/h	Wind Direction N-W	Relative Humidity (Max./Min.): 73/61%	Temperature (Max./Min.): 31/24°C	Duration of Survey 24 h
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Parameter	Result	NAAQS# 2009	Unit	Method
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#### Chemical Testing; Group: Atmospheric Pollution

Sulphur Dioxide (SO <sub>2</sub> )	7.3	80	µg/m <sup>3</sup>	IS 5182 (Part 2): 2001
Nitrogen Dioxide (NO <sub>2</sub> )	22.9	80	µg/m <sup>3</sup>	IS 5182 (Part 6): 2006
Particulate Matter (size less than 10 µm) or PM <sub>10</sub>	276	100	µg/m <sup>3</sup>	IS 5182 (Part 23): 2006
Particulate Matter (size less than 2.5µm) or PM <sub>2.5</sub>	61	60	µg/m <sup>3</sup>	CPCB Guideline, Volume I,36/2012-13, Page No.15, 2013
Ozone (O <sub>3</sub> )	BLQ (LOQ:19.6)	180	µg/m <sup>3</sup>	Methods of Air Sampling and Analysis (AWMA) 3rd Ed., Method 411, Page no. 403, 1988
Lead (as Pb)	BLQ (LOQ:0.02)	1	µg/m <sup>3</sup>	EPA/625/R-95/010 a Compendium Method 10-316 3 2
Carbon Monoxide (CO)	1.43	4	mg/m <sup>3</sup>	CPCB Guidelines, Volume II, 37/2012-13, Page no.16, 2013
Ammonia (NH <sub>3</sub> )	BLQ (LOQ:20)	400	µg/m <sup>3</sup>	CPCB Guidelines, Volume I,36/2012-13, Page No.35, 2013
Benzene (C <sub>6</sub> H <sub>6</sub> )	1.30	5	µg/m <sup>3</sup>	IS 5182 (Part II): 2006
Benzo (a) pyrene (BaP) Particulate Phase only	BLQ (LOQ:0.2)	1	ng/m <sup>3</sup>	IS 5182 (Part 12): 2004
Arsenic (as As)	BLQ (LOQ:0.3)	6	ng/m <sup>3</sup>	EPA/625/R-95/010 a Compendium Method 10-316 3 4
Nickel (as Ni)	BLQ (LOQ:3)	20	ng/m <sup>3</sup>	EPA/625/R-95/010 a Compendium Method 10-318 3 2

BLQ: Below Limit of Quantification, LOQ: Limit of Quantification

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, PM<sub>10</sub>, PM<sub>2.5</sub>, 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

Ninas Soundankar  
Technical Manager (Chemical)  
Reviewed & Authorised by



Sample ID : AA/10/22/5112	Report No. AA/10/22/5112	Report Date	11/10/2022
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Ninad Soundankar  
Technical Manager (Chemical)  
Reviewed & Authorised by



End of Report

**Note:**

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



### AMBIENT AIR QUALITY MONITORING REPORT

Sample ID : AA/10/22/5111	Report No. AA/10/22/5111	Report Date	11/10/2022
Name and address of Customer	<b>PNP Maritime Services Private Limited</b> 2nd Floor, Lansdowne House, Mahakavi Bhushan Road, Colaba, Mumbai - 400001, Maharashtra		
Sampling done by	Laboratory	Sample Description / Type	Ambient Air
Sampling Location	Near Lal Gate (PNP Port)	Date - Sampling	03/10/2022 to 04/10/2022
Sample Quantity / Packing	PM <sub>10</sub> , Bap, Metals: 1 x 3 no. filter paper PM <sub>2.5</sub> : 1 x 1 no. filter paper SO <sub>2</sub> , NO <sub>2</sub> : 30 ml x 6 no. plastic bottle each NH <sub>3</sub> : 10 ml x 24 no. plastic bottle Ozone: 10 ml x 1 no. plastic bottle C <sub>6</sub> H <sub>6</sub> : 6 no. charcoal tubes CO: 1 no. bladder	Date - Receipt of Sample	06/10/2022
Sampling Procedure	As Per Method Reference	Date - Start of Analysis	06/10/2022
Order Reference	PO No. PNP/March/2021-2022/020 Dated 31.03.2022	Date - Completion of Analysis	10/10/2022

#### Meteorological Data / Environmental Conditions

Average Wind Velocity 14 km/h	Wind Direction N-W	Relative Humidity (Max./Min.): 73/61%	Temperature (Max./Min.): 31/24°C	Duration of Survey 24 h
Parameter	Result	NAAQS# 2009	Unit	Method

#### Chemical Testing; Group: Atmospheric Pollution

Sulphur Dioxide (SO <sub>2</sub> )	12.6	80	µg/m <sup>3</sup>	IS 5182 (Part 2) 2001
Nitrogen Dioxide (NO <sub>2</sub> )	33.8	80	µg/m <sup>3</sup>	IS 5182 (Part 6) 2006
Particulate Matter (size less than 10 µm) or PM <sub>10</sub>	391	100	µg/m <sup>3</sup>	IS 5182 (Part 23) 2006
Particulate Matter (size less than 2.5 µm) or PM <sub>2.5</sub>	59	60	µg/m <sup>3</sup>	CPCB Guideline, Volume I, 36/2012-13, Page No 15 2013
Ozone (O <sub>3</sub> )	BLQ (LOQ:19.6)	180	µg/m <sup>3</sup>	Methods of Air Sampling and Analysis (AWMA) 3rd Ed. Method 411, Page no. 403 1988
Lead (as Pb)	BLQ (LOQ:0.02)	1	µg/m <sup>3</sup>	EPA/625/R-96/D10 a Compendium Method 10-31 & 32
Carbon Monoxide (CO)	1.98	4	mg/m <sup>3</sup>	CPCB Guidelines, Volume II, 37/2012-13, Page no 16: 2013
Ammonia (NH <sub>3</sub> )	BLQ (LOQ:20)	400	µg/m <sup>3</sup>	CPCB Guidelines, Volume I, 36/2012-13, Page No 35: 2013
Benzene (C <sub>6</sub> H <sub>6</sub> )	BLQ (LOQ:1)	5	µg/m <sup>3</sup>	IS 5182 (Part II) 2006
Benzo (a) pyrene (BaP) Particulate Phase only	BLQ (LOQ:0.2)	1	ng/m <sup>3</sup>	IS 5182 (Part 12): 2004
Arsenic (as As)	BLQ (LOQ:0.3)	6	ng/m <sup>3</sup>	EPA/625/R-96/D10 a Compendium Method 10-31 & 34
Nickel (as Ni)	BLQ (LOQ:3)	20	ng/m <sup>3</sup>	EPA/625/R-96/D10 a Compendium Method 10-31 & 32

BLQ: Below Limit of Quantification, LOQ: Limit of Quantification

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, PM<sub>10</sub>, PM<sub>2.5</sub>, Lead and Ammonia, 1 hour TWA in case of Carbon Monoxide and Ozone, Annual TWA in case of Benzene, Benzo (a) Pyrene, Arsenic and Nickel

  
Ninad Soundankar  
Technical Manager (Chemical)  
Reviewed & Authorised by



Sample ID : AA/10/22/5111	Report No. AA/10/22/5111	Report Date	11/10/2022
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Nisha Soundankar  
Technical Manager (Chemical)  
Reviewed & Authorised by



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### AMBIENT AIR QUALITY MONITORING REPORT

Sample ID : AA/10/22/5110	Report No. AA/10/22/5110	Report Date	11/10/2022
Name and address of Customer	<b>PNP Maritime Services Private Limited</b> 2nd Floor, Lansdowne House, Mahakavi Bhushan Road, Colaba, Mumbai - 400001, Maharashtra		
Sampling done by	Laboratory	Sample Description / Type	Ambient Air
Sampling Location	Near Custom Building(PNP Port)	Date - Sampling	03/10/2022 to 04/10/2022
Sample Quantity / Packing	PM <sub>10</sub> , Bap, Metals: 1 x 3 no. filter paper PM <sub>2.5</sub> : 1 x 1 no. filter paper SO <sub>2</sub> , NO <sub>2</sub> : 30 ml x 6 no. plastic bottle each NH <sub>3</sub> : 10 ml x 24 no. plastic bottle Ozone: 10 ml x 1 no. plastic bottle C <sub>6</sub> H <sub>6</sub> : 6 no. charcoal tubes CO: 1 no. bladder	Date - Receipt of Sample	06/10/2022
Sampling Procedure	As Per Method Reference	Date - Start of Analysis	06/10/2022
Order Reference	PO No. PNP/March/2021-2022/020 Dated 31.03.2022	Date - Completion of Analysis	10/10/2022

#### Meteorological Data / Environmental Conditions

Average Wind Velocity 14 km/h	Wind Direction N-W	Relative Humidity (Max./Min.): 73/61%	Temperature (Max./Min.): 31/24°C	Duration of Survey 24 h
Parameter	Result	NAAQS# 2009	Unit	Method

#### Chemical Testing; Group: Atmospheric Pollution

Sulphur Dioxide (SO <sub>2</sub> )	8.4	80	µg/m <sup>3</sup>	IS 5182 (Part 2): 2001
Nitrogen Dioxide (NO <sub>2</sub> )	22.4	80	µg/m <sup>3</sup>	IS 5182 (Part 6): 2006
Particulate Matter (size less than 10 µm) or PM <sub>10</sub>	298	100	µg/m <sup>3</sup>	IS 5182 (Part 23): 2006
Particulate Matter (size less than 2.5µm) or PM <sub>2.5</sub>	60	60	µg/m <sup>3</sup>	CPCB Guideline, Volume I,36/2012-13, Page No 15:2013
Ozone (O <sub>3</sub> )	BLQ (LOQ:19.6)	180	µg/m <sup>3</sup>	Methods of Air Sampling and Analysis (AWMA), 3rd Ed., Method 411 Page no. 403, 1988
Lead (as Pb)	BLQ (LOQ:0.02)	1	µg/m <sup>3</sup>	EPA/625/R-96/D10 a Compendium Method 10-31 & 3.2
Carbon Monoxide (CO)	0.93	4	mg/m <sup>3</sup>	CPCB Guidelines, Volume II, 37/2012-13, Page no 16: 2013
Ammonia (NH <sub>3</sub> )	BLQ (LOQ:20)	400	µg/m <sup>3</sup>	CPCB Guidelines, Volume I,36/2012-13, Page No 35: 2013
Benzene (C <sub>6</sub> H <sub>6</sub> )	BLQ (LOQ:1)	5	µg/m <sup>3</sup>	IS 5182 (Part 11): 2006
Benzo (a) pyrene (BaP) Particulate Phase only	BLQ (LOQ:0.2)	1	ng/m <sup>3</sup>	IS 5182 (Part 12): 2004
Arsenic (as As)	BLQ (LOQ:0.3)	6	ng/m <sup>3</sup>	EPA/625/R-96/D10 a Compendium Method 10-31 & 3.4
Nickel (as Ni)	BLQ (LOQ:3)	20	ng/m <sup>3</sup>	EPA/625/R-96/D10 a Compendium Method 10-31 & 3.2

BLQ: Below Limit of Quantification, LOQ: Limit of Quantification

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, PM<sub>10</sub>, PM<sub>2.5</sub>, 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

  
Nishad Soundankar  
Technical Manager (Chemical)  
Reviewed & Authorised by



Sample ID : AA/10/22/5110

Report No. AA/10/22/5110

Report Date

11/10/2022



Ninad Soundankar  
Technical Manager (Chemical)  
Reviewed & Authorised by



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### AMBIENT AIR QUALITY MONITORING REPORT

Sample ID : AA/10/22/5109	Report No. AA/10/22/5109	Report Date	11/10/2022
Name and address of Customer	<b>PNP Maritime Services Private Limited</b> 2nd Floor, Lansdowne House, Mahakavi Bhushan Road, Colaba, Mumbai - 400001, Maharashtra		
Sampling done by	Laboratory	Sample Description / Type	Ambient Air
Sampling Location	Near PNP Jetty No.5 (PNP Port)	Date - Sampling	03/10/2022 to 04/10/2022
Sample Quantity / Packing	PM <sub>10</sub> : Bap, Metals: 1 x 3 no. filter paper PM <sub>2.5</sub> : 1 x 1 no. filter paper SO <sub>2</sub> , NO <sub>2</sub> : 30 ml x 6 no. plastic bottle each NH <sub>3</sub> : 10 ml x 24 no. plastic bottle Ozone: 10 ml x 1 no. plastic bottle C <sub>6</sub> H <sub>6</sub> : 6 no. charcoal tubes CO: 1 no. bladder	Date - Receipt of Sample	06/10/2022
Sampling Procedure	As Per Method Reference	Date - Start of Analysis	06/10/2022
Order Reference	PO No. PNP/March/2021-2022/020 Dated 31.03.2022	Date - Completion of Analysis	10/10/2022

#### Meteorological Data / Environmental Conditions

Average Wind Velocity 14 km/h	Wind Direction N-W	Relative Humidity (Max./Min.): 73/61%	Temperature (Max./Min.): 31/24°C	Duration of Survey 24 h
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Parameter	Result	NAAQS# 2009	Unit	Method
<b>Chemical Testing; Group: Atmospheric Pollution</b>				
Sulphur Dioxide (SO <sub>2</sub> )	9.4	80	µg/m <sup>3</sup>	IS 5182 (Part 2): 2001
Nitrogen Dioxide (NO <sub>2</sub> )	23.2	80	µg/m <sup>3</sup>	IS 5182 (Part 6): 2006
Particulate Matter (size less than 10 µm) or PM <sub>10</sub>	300	100	µg/m <sup>3</sup>	IS 5182 (Part 23): 2006
Particulate Matter (size less than 2.5µm) or PM <sub>2.5</sub>	109	60	µg/m <sup>3</sup>	CPCB Guideline, Volume I, 36/2012-13, Page No 15: 2013
Ozone (O <sub>3</sub> )	BLQ (LOQ:19.6)	180	µg/m <sup>3</sup>	Methods of Air Sampling and Analysis (AWMA), 3rd Ed., Method 411, Page no. 403:1988
Lead (as Pb)	BLQ (LOQ:0.02)	1	µg/m <sup>3</sup>	EPA/625/R-96/010 a Compendium Method 10-316.3.2
Carbon Monoxide (CO)	1.63	4	mg/m <sup>3</sup>	CPCB Guidelines, Volume II, 37/2012-13, Page no 16: 2013
Ammonia (NH <sub>3</sub> )	BLQ (LOQ:20)	400	µg/m <sup>3</sup>	CPCB Guidelines, Volume I, 36/2012-13, Page No 35: 2013
Benzene (C <sub>6</sub> H <sub>6</sub> )	1.10	5	µg/m <sup>3</sup>	IS 5182 (Part II): 2006
Benzo (a) pyrene (BaP) Particulate Phase only	BLQ (LOQ:0.2)	1	ng/m <sup>3</sup>	IS 5182 (Part 12): 2004
Arsenic (as As)	BLQ (LOQ:0.3)	6	ng/m <sup>3</sup>	EPA/625/R-96/010 a Compendium Method 10-316.3.4
Nickel (as Ni)	BLQ (LOQ:3)	20	ng/m <sup>3</sup>	EPA/625/R-96/010 a Compendium Method 10-316.3.2


BLQ: Below Limit of Quantification, LOQ: Limit of Quantification

TWA Time Weighted Average

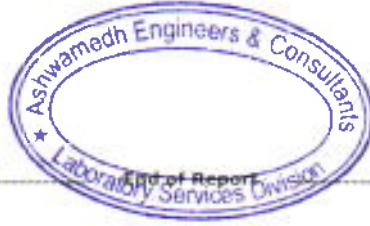
# NAAQS (National Ambient Air Quality Standards (Industrial, Residential, Rural and other Area) specified as: 24 hours TWA in case of Sulphur Dioxide, Nitrogen Dioxide, PM<sub>10</sub>, PM<sub>2.5</sub>, Lead and Ammonia, 1 hour TWA in case of Carbon Monoxide and Ozone, Annual TWA in case of Benzene, Benzo (a) Pyrene, Arsenic and Nickel

  
Ninad Soundankar  
Technical Manager (Chemical)  
Reviewed & Authorised by

Sample ID : AA/10/22/5109	Report No. AA/10/22/5109	Report Date	11/10/2022
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Ninad Soundankar  
Technical Manager (Chemical)  
Reviewed & Authorised by



End of Report

Note:

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### AMBIENT AIR QUALITY MONITORING REPORT

Sample ID: AA/10/22/5108	Report No. AA/10/22/5108	Report Date	11/10/2022
Name and address of Customer	<b>PNP Maritime Services Private Limited</b> 2nd Floor, Lansdowne House, Mahakavi Bhushan Road, Colaba, Mumbai - 400001, Maharashtra		
Sampling done by	Laboratory	Sample Description / Type	Ambient Air
Sampling Location	Near PNP Jetty No 5 (PNP Port)	Date - Sampling	03/10/2022 to 04/10/2022
Sample Quantity / Packing	PM <sub>10</sub> , Bap, Metals: 1 x 3 no. filter paper PM <sub>2.5</sub> : 1 x 1 no. filter paper SO <sub>2</sub> , NO <sub>2</sub> : 30 ml x 6 no. plastic bottle each NH <sub>3</sub> : 10 ml x 24 no. plastic bottle Ozone: 10 ml x 1 no. plastic bottle C <sub>6</sub> H <sub>6</sub> : 6 no. charcoal tubes CO: 1 no. bladder	Date - Receipt of Sample	06/10/2022
Sampling Procedure	As Per Method Reference	Date - Start of Analysis	06/10/2022
Order Reference	PO No. PNP/March/2021-2022/020 Dated 31.03.2022	Date - Completion of Analysis	10/10/2022

#### Meteorological Data / Environmental Conditions

Average Wind Velocity 14 km/h	Wind Direction N-W	Relative Humidity (Max./Min.): 73/61%	Temperature (Max./Min.): 31/24°C	Duration of Survey 24 h
Parameter	Result	NAAQS# 2009	Unit	Method

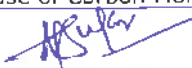
#### Chemical Testing; Group: Atmospheric Pollution

Sulphur Dioxide (SO <sub>2</sub> )	7.3	80	µg/m <sup>3</sup>	IS 5182 (Part 2): 2001
Nitrogen Dioxide (NO <sub>2</sub> )	18.2	80	µg/m <sup>3</sup>	IS 5182 (Part 6): 2006
Particulate Matter (size less than 10 µm) or PM <sub>10</sub>	240	100	µg/m <sup>3</sup>	IS 5182 (Part 23): 2006
Particulate Matter (size less than 2.5µm) or PM <sub>2.5</sub>	58	60	µg/m <sup>3</sup>	CPCB Guideline, Volume I, 36/2012-13, Page No 15: 2013
Ozone (O <sub>3</sub> )	BLQ (LOQ:19.6)	180	µg/m <sup>3</sup>	Methods of Air Sampling and Analysis (AWMA), 3rd Ed., Method 411 Page no. 403, 1988
Lead (as Pb)	BLQ (LOQ:0.02)	1	µg/m <sup>3</sup>	EPA/625/R-96/010 a Compendium Method 10-31 & 32
Carbon Monoxide (CO)	BLQ (LOQ:0.5)	4	mg/m <sup>3</sup>	CPCB Guidelines, Volume II 37/2012-13, Page no 16: 2013
Ammonia (NH <sub>3</sub> )	BLQ (LOQ:20)	400	µg/m <sup>3</sup>	CPCB Guidelines, Volume I, 36/2012-13, Page No 35: 2013
Benzene (C <sub>6</sub> H <sub>6</sub> )	BLQ (LOQ:1)	5	µg/m <sup>3</sup>	IS 5182 (Part 11): 2006
Benzo (a) pyrene (BaP) Particulate Phase only	BLQ (LOQ:0.2)	1	ng/m <sup>3</sup>	IS 5182 (Part 12): 2004
Arsenic (as As)	BLQ (LOQ:0.3)	6	ng/m <sup>3</sup>	EPA/625/R-96/010 a Compendium Method 10-31 & 34
Nickel (as Ni)	BLQ (LOQ:3)	20	ng/m <sup>3</sup>	EPA/625/R-96/010 a Compendium Method 10-31 & 32

BLQ: Below Limit of Quantification, LOQ: Limit of Quantification

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, PM<sub>10</sub>, PM<sub>2.5</sub>, 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

  
**Nihal Soundankar**  
Technical Manager (Chemical)  
Reviewed & Authorised by



Sample ID : AA/10/22/5108	Report No. AA/10/22/5108	Report Date	11/10/2022
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Ninad Soundankar  
Technical Manager (Chemical)  
Reviewed & Authorised by



**Note:**

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



**AMBIENT AIR QUALITY MONITORING REPORT**

Sample ID : AA/10/22/5107	Report No. AA/10/22/5107	Report Date	11/10/2022
Name and address of Customer	<b>PNP Maritime Services Private Limited</b> 2nd Floor, Lansdowne House, Mahakavi Bhushan Road, Colaba, Mumbai - 400001, Maharashtra		
Sampling done by	Laboratory	Sample Description / Type	Ambient Air
Sampling Location	Near PNP Jetty No. 3 (PNP Port)	Date - Sampling	03/10/2022 to 04/10/2022
Sample Quantity / Packing	PM <sub>10</sub> , Bap, Metals: 1 x 3 no. filter paper PM <sub>2.5</sub> : 1 x 1 no. filter paper SO <sub>2</sub> , NO <sub>2</sub> : 30 ml x 6 no. plastic bottle each NH <sub>3</sub> : 10 ml x 24 no. plastic bottle Ozone: 10 ml x 1 no. plastic bottle C <sub>6</sub> H <sub>6</sub> : 6 no. charcoal tubes CO: 1 no. bladder	Date - Receipt of Sample	06/10/2022
Sampling Procedure	As Per Method Reference	Date - Start of Analysis	06/10/2022
Order Reference	PO No. PNP/March/2021-2022/020 Dated 31.03.2022	Date - Completion of Analysis	10/10/2022

**Meteorological Data / Environmental Conditions**

Average Wind Velocity 14 km/h	Wind Direction N-W	Relative Humidity (Max./Min.): 73/61%	Temperature (Max./Min.): 31/24°C	Duration of Survey 24 h
Parameter	Result	NAAQS# 2009	Unit	Method

**Chemical Testing; Group: Atmospheric Pollution**

Sulphur Dioxide (SO <sub>2</sub> )	<b>11.5</b>	80	µg/m <sup>3</sup>	IS 5182 (Part 2) 2001
Nitrogen Dioxide (NO <sub>2</sub> )	<b>30</b>	80	µg/m <sup>3</sup>	IS 5182 (Part 6) 2006
Particulate Matter (size less than 10 µm) or PM <sub>10</sub>	<b>333</b>	100	µg/m <sup>3</sup>	IS 5182 (Part 23) 2006
Particulate Matter (size less than 2.5µm) or PM <sub>2.5</sub>	<b>121</b>	60	µg/m <sup>3</sup>	CPCB Guideline, Volume I 36/2012-13 Page No 15 2013
Ozone (O <sub>3</sub> )	<b>BLQ</b> (LOQ:19.6)	180	µg/m <sup>3</sup>	Methods of Air Sampling and Analysis (AWMA), 3rd Ed. Method 411 Page no. 403 1988
Lead (as Pb)	<b>BLQ</b> (LOQ:0.02)	1	µg/m <sup>3</sup>	EPA/625/R-96/010 a Compendium Method 10-31 & 32
Carbon Monoxide (CO)	<b>1.43</b>	4	mg/m <sup>3</sup>	CPCB Guidelines, Volume II, 37/2012-13 Page no 16 2013
Ammonia (NH <sub>3</sub> )	<b>BLQ</b> (LOQ:20)	400	µg/m <sup>3</sup>	CPCB Guidelines, Volume I 36/2012-13 Page No 35 2013
Benzene (C <sub>6</sub> H <sub>6</sub> )	<b>1.21</b>	5	µg/m <sup>3</sup>	IS 5182 (Part 11) 2006
Benzo (a) pyrene (BaP) Particulate Phase only	<b>BLQ</b> (LOQ:0.2)	1	ng/m <sup>3</sup>	IS 5182 (Part 12) 2004
Arsenic (as As)	<b>BLQ</b> (LOQ:0.3)	6	ng/m <sup>3</sup>	EPA/625/R-96/010 a Compendium Method 10-31 & 34
Nickel (as Ni)	<b>BLQ</b> (LOQ:3)	20	ng/m <sup>3</sup>	EPA/625/R-96/010 a Compendium Method 10-31 & 32

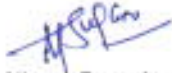
BLQ: Below Limit of Quantification, LOQ: Limit of Quantification

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, PM<sub>10</sub>, PM<sub>2.5</sub>, 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

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

Sample ID : AA/10/22/5107	Report No, AA/10/22/5107	Report Date	11/10/2022
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Ninad Soundankar  
Technical Manager (Chemical)  
Reviewed & Authorised by



Note:

1. The result listed refer only to the tested sample(s) and applicable parameter(s).
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**AMBIENT AIR QUALITY MONITORING REPORT**

Sample ID : AA/10/22/5106	Report No. AA/10/22/5106	Report Date	11/10/2022
Name and address of Customer	<b>PNP Maritime Services Private Limited</b> 2nd Floor, Lansdowne House, Mahakavi Bhushan Road, Colaba, Mumbai - 400001, Maharashtra		
Sampling done by	Laboratory	Sample Description / Type	Ambient Air
Sampling Location	Near PNP Jetty No.2 (PNP Port)	Date - Sampling	03/10/2022 to 04/10/2022
Sample Quantity / Packing	PM <sub>10</sub> : Bap, Metals: 1 x 3 no. filter paper PM <sub>2.5</sub> : 1 x 1 no. filter paper SO <sub>2</sub> , NO <sub>2</sub> : 30 ml x 6 no. plastic bottle each NH <sub>3</sub> : 10 ml x 24 no. plastic bottle Ozone: 10 ml x 1 no. plastic bottle C <sub>6</sub> H <sub>6</sub> : 6 no. charcoal tubes CO: 1 no. bladder	Date - Receipt of Sample	06/10/2022
Sampling Procedure	As Per Method Reference	Date - Start of Analysis	06/10/2022
Order Reference	PO No. PNP/March/2021-2022/020 Dated 31.03.2022	Date - Completion of Analysis	10/10/2022

**Meteorological Data / Environmental Conditions**

Average Wind Velocity 14 km/h	Wind Direction N-W	Relative Humidity (Max./Min.): 73/61%	Temperature (Max./Min.): 31/24°C	Duration of Survey 24 h
Parameter	Result	NAAQS# 2009	Unit	Method

**Chemical Testing; Group: Atmospheric Pollution**

Sulphur Dioxide (SO <sub>2</sub> )	9.4	80	µg/m <sup>3</sup>	IS 5182 (Part 2): 2001
Nitrogen Dioxide (NO <sub>2</sub> )	28.2	80	µg/m <sup>3</sup>	IS 5182 (Part 6): 2006
Particulate Matter (size less than 10 µm) or PM <sub>10</sub>	315	100	µg/m <sup>3</sup>	IS 5182 (Part 23): 2006
Particulate Matter (size less than 2.5µm) or PM <sub>2.5</sub>	90	60	µg/m <sup>3</sup>	CPCB Guideline, Volume I 36/2012-13, Page No 15 2013
Ozone (O <sub>3</sub> )	BLQ (LOQ:19.6)	180	µg/m <sup>3</sup>	Methods of Air Sampling and Analysis (AWMA), 3rd Ed. Method 411 Page no 403 1988
Lead (as Pb)	BLQ (LOQ:0.02)	1	µg/m <sup>3</sup>	EPA/625/R-96/D10 a Compendium Method 10-31 & 32
Carbon Monoxide (CO)	1.48	4	mg/m <sup>3</sup>	CPCB Guidelines, Volume II 37/2012-13, Page no 16 2013
Ammonia (NH <sub>3</sub> )	BLQ (LOQ:20)	400	µg/m <sup>3</sup>	CPCB Guidelines, Volume I 36/2012-13, Page No 35 2013
Benzene (C <sub>6</sub> H <sub>6</sub> )	1.21	5	µg/m <sup>3</sup>	IS 5182 (Part 11): 2006
Benzo (a) pyrene (BaP) Particulate Phase only	BLQ (LOQ:0.2)	1	ng/m <sup>3</sup>	IS 5182 (Part 12): 2004
Arsenic (as As)	BLQ (LOQ:0.3)	6	ng/m <sup>3</sup>	EPA/625/R-96/D10 a Compendium Method 10-31 & 34
Nickel (as Ni)	BLQ (LOQ:3)	20	ng/m <sup>3</sup>	EPA/625/R-96/D10 a Compendium Method 10-31 & 32

BLQ: Below Limit of Quantification, LOQ: Limit of Quantification

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, PM<sub>10</sub>, PM<sub>2.5</sub>, 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



Sample ID : AA/10/22/5106

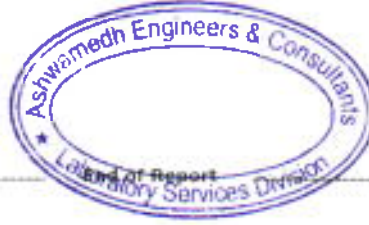
Report No. AA/10/22/5106

Report Date

11/10/2022



Ninad Soundankar  
Technical Manager (Chemical)  
Reviewed & Authorised by



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



### AMBIENT AIR QUALITY MONITORING REPORT

Sample ID : AA/10/22/5105	Report No. AA/10/22/5105	Report Date	11/10/2022
Name and address of Customer	<b>PNP Maritime Services Private Limited</b> 2nd Floor, Lansdowne House, Mahakavi Bhushan Road, Colaba, Mumbai - 400001, Maharashtra		
Sampling done by	Laboratory	Sample Description / Type	Ambient Air
Sampling Location	Near PNP Jetty No. 1 (PNP Port)	Date - Sampling	03/10/2022 to 04/10/2022
Sample Quantity / Packing	PM <sub>10</sub> : Bap, Metals: 1 x 3 no. filter paper PM <sub>2.5</sub> : 1 x 1 no. filter paper SO <sub>2</sub> , NO <sub>2</sub> : 30 ml x 6 no. plastic bottle each NH <sub>3</sub> : 10 ml x 24 no. plastic bottle Ozone: 10 ml x 1 no. plastic bottle C <sub>6</sub> H <sub>6</sub> : 6 no. charcoal tubes CO: 1 no. bladder	Date - Receipt of Sample	06/10/2022
Sampling Procedure	As Per Method Reference	Date - Start of Analysis	06/10/2022
Order Reference	PO No. PNP/March/2021-2022/020 Dated 31.03.2022	Date - Completion of Analysis	10/10/2022

#### Meteorological Data / Environmental Conditions

Average Wind Velocity 14 km/h	Wind Direction N-W	Relative Humidity (Max./Min.): 73/61%	Temperature (Max./Min.): 31/24°C	Duration of Survey 24 h
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Parameter	Result	NAAQS# 2009	Unit	Method
<b>Chemical Testing; Group: Atmospheric Pollution</b>				
Sulphur Dioxide (SO <sub>2</sub> )	10.5	80	µg/m <sup>3</sup>	IS 5182 (Part 2) 2001
Nitrogen Dioxide (NO <sub>2</sub> )	20.9	80	µg/m <sup>3</sup>	IS 5182 (Part 5) 2006
Particulate Matter (size less than 10 µm) or PM <sub>10</sub>	275	100	µg/m <sup>3</sup>	IS 5182 (Part 23) 2006
Particulate Matter (size less than 2.5µm) or PM <sub>2.5</sub>	82	60	µg/m <sup>3</sup>	CPCB Guideline Volume I 36/2012-13 Page No 15 2013
Ozone (O <sub>3</sub> )	BLQ (LOQ:19.6)	180	µg/m <sup>3</sup>	Methods of Air Sampling and Analysis (AWMA) 3rd Ed. Method 4ii Page no. 403 1988
Lead (as Pb)	BLQ (LOQ:0.02)	1	µg/m <sup>3</sup>	EPA/625/R-96/010 a Compendium Method 10-31 & 32
Carbon Monoxide (CO)	1.43	4	mg/m <sup>3</sup>	CPCB Guidelines Volume II 37/2012-13 Page no 16: 2013
Ammonia (NH <sub>3</sub> )	BLQ (LOQ:20)	400	µg/m <sup>3</sup>	CPCB Guidelines Volume I 36/2012-13 Page No 35 2013
Benzene (C <sub>6</sub> H <sub>6</sub> )	1.14	5	µg/m <sup>3</sup>	IS 5182 (Part II) 2006
Benzo (a) pyrene (BaP) Particulate Phase only	BLQ (LOQ:0.2)	1	ng/m <sup>3</sup>	IS 5182 (Part 12) 2004
Arsenic (as As)	BLQ (LOQ:0.3)	6	ng/m <sup>3</sup>	EPA/625/R-96/010 a Compendium Method 10-31 & 34
Nickel (as Ni)	BLQ (LOQ:3)	20	ng/m <sup>3</sup>	EPA/625/R-96/010 a Compendium Method 10-31 & 32

BLQ: Below Limit of Quantification, LOQ: Limit of Quantification

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, PM<sub>10</sub>, PM<sub>2.5</sub>, 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

  
Ninal Soundankar  
Technical Manager (Chemical)  
Reviewed & Authorised by

Sample ID : AA/10/22/5105

Report No. AA/10/22/5105

Report Date

11/10/2022



Ninad Soundankar  
Technical Manager (Chemical)  
Reviewed & Authorised by



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### AMBIENT AIR QUALITY MONITORING REPORT

Sample ID : AA/10/22/5104	Report No. AA/10/22/5104	Report Date	11/10/2022
Name and address of Customer	<b>PNP Maritime Services Private Limited</b> 2nd Floor, Lansdowne House, Mahakavi Bhushan Road, Colaba, Mumbai - 400001, Maharashtra		
Sampling done by	Laboratory	Sample Description / Type	Ambient Air
Sampling Location	Near PNP Main Gate (PNP Port)	Date - Sampling	03/10/2022 to 04/10/2022
Sample Quantity / Packing	PM <sub>10</sub> : Bap, Metals: 1 x 3 no. filter paper PM <sub>2.5</sub> : 1 x 1 no. filter paper SO <sub>2</sub> , NO <sub>2</sub> : 30 ml x 6 no. plastic bottle each NH <sub>3</sub> : 10 ml x 24 no. plastic bottle Ozone: 10 ml x 1 no. plastic bottle C <sub>6</sub> H <sub>6</sub> : 6 no. charcoal tubes CO: 1 no. bladder	Date - Receipt of Sample	06/10/2022
Sampling Procedure	As Per Method Reference	Date - Start of Analysis	06/10/2022
Order Reference	PO No. PNP/March/2021-2022/020 Dated 31.03.2022	Date - Completion of Analysis	10/10/2022

#### Meteorological Data / Environmental Conditions

Average Wind Velocity 14 km/h	Wind Direction S-W	Relative Humidity (Max./Min.): 73/61%	Temperature (Max./Min.): 31/24°C	Duration of Survey 24 h
Parameter	Result	NAAQS# 2009	Unit	Method

#### Chemical Testing; Group: Atmospheric Pollution

Sulphur Dioxide (SO <sub>2</sub> )	8.4	80	µg/m <sup>3</sup>	IS 5182 (Part 2) 2001
Nitrogen Dioxide (NO <sub>2</sub> )	23.2	80	µg/m <sup>3</sup>	IS 5182 (Part 6) 2006
Particulate Matter (size less than 10 µm) or PM <sub>10</sub>	302	100	µg/m <sup>3</sup>	IS 5182 (Part 23) 2006
Particulate Matter (size less than 2.5µm) or PM <sub>2.5</sub>	110	60	µg/m <sup>3</sup>	CPCB Guideline, Volume 1,36/2012-13, Page No 15 2013
Ozone (O <sub>3</sub> )	BLQ (LOQ:19.6)	180	µg/m <sup>3</sup>	Methods of Air Sampling and Analysis (AWMA), 3rd Ed. Method 4M Page no 403 1988
Lead (as Pb)	BLQ (LOQ:0.02)	1	µg/m <sup>3</sup>	EPA/625/R-96/010 a Compendium Method 10-31 & 32
Carbon Monoxide (CO)	1.33	4	mg/m <sup>3</sup>	CPCB Guidelines, Volume II, 37/2012-13, Page no 16 2013
Ammonia (NH <sub>3</sub> )	BLQ (LOQ:20)	400	µg/m <sup>3</sup>	CPCB Guidelines, Volume 1,36/2012-13, Page No 35 2013
Benzene (C <sub>6</sub> H <sub>6</sub> )	1.13	5	µg/m <sup>3</sup>	IS 5182 (Part II) 2006
Benzo (a) pyrene (BaP) Particulate Phase only	BLQ (LOQ:0.2)	1	ng/m <sup>3</sup>	IS 5182 (Part 12) 2004
Arsenic (as As)	BLQ (LOQ:0.3)	6	ng/m <sup>3</sup>	EPA/625/R-96/010 a Compendium Method 10-31 & 34
Nickel (as Ni)	BLQ (LOQ:3)	20	ng/m <sup>3</sup>	EPA/625/R-96/010 a Compendium Method 10-31 & 32

BLQ: Below Limit of Quantification, LOQ: Limit of Quantification

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, PM<sub>10</sub>, PM<sub>2.5</sub>, Lead and Ammonia, 1 hour TWA in case of Carbon Monoxide and Ozone, Annual TWA in case of Benzene, Benzo (a) Pyrene, Arsenic and Nickel

  
Ninad Soundankar  
Technical Manager (Chemical)  
Reviewed & Authorised by



Sample ID : AA/10/22/5104	Report No. AA/10/22/5104	Report Date	11/10/2022
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Ninad Soundankar  
Technical Manager (Chemical)  
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### NOISE LEVEL MEASUREMENT REPORT

Sample ID: N/10/22/6130	Report No: N/10/22/6130	Report Date	08/10/2022
Name and Address of Customer	<b>PNP Maritime Services Private Limited</b> 2nd Floor, Lansdowne House, Mahakavi Bhushan Road, Colaba, Mumbai - 400 001		
Monitoring Done By	Laboratory	Sample Description /Type	Ambient Noise
Order Reference	As per PO No. PNP/March/2021- 2022/020 Dated 31.03.2022	Date-Monitoring	03/10/2022

#### Chemical Testing; Group: Atmospheric Pollution

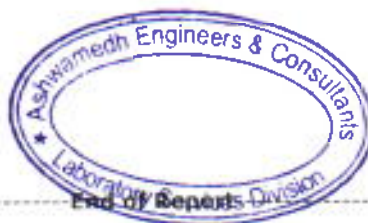
Location	Time (h)	Results Noise Level dB (A) Fast Response	Results Noise Level dB (A) Slow Response	Method
A. Near Main Gate (PNP Port)	09:00	73.6	72.7	DPCB Protocol for Ambient Level Noise Monitoring July AEC/C/SAP/SAM/358/36 Issue no. 4 Issue date 01.04.2018
	21:00	67.7	66.4	
B. Near Jetty No. 1 (PNP Port)	09:10	73.4	72.5	
	21:10	67.6	66.3	
C. Near Jetty No. 2 (PNP Port)	09:20	72.5	71.7	
	21:20	66.5	65.5	
D. Near Jetty No. 3 (PNP Port)	09:30	71.2	70.4	
	21:30	65.7	64.5	
E. Near Jetty No. 5 (PNP Port)	09:40	72.4	71.6	
	21:40	66.5	65.3	
F. Near Weight Bridge (PNP Port)	09:50	73.3	72.4	
	21:50	67.4	66.3	
G. Near Custom Building (PNP Port)	10:00	72.4	71.5	
	22:00	66.3	65.3	
H. Near Lal Gate (PNP Port)	10:10	73.2	72.3	
	22:10	67.3	66.2	
I. Near DIL Main Gate (PNP Port)	10:20	72.3	71.4	
	22:20	66.2	65.2	
J. DIL Godown Back Side (PNP Port)	11:30	72.3	71.3	
	23:30	66.0	65.1	

#### 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  
Technical Manager (Chemical)  
Reviewed & Authorised by



#### Note:

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### AMBIENT AIR QUALITY MONITORING REPORT

Sample ID : AA/10/22/5208	Report No. AA/10/22/5208	Report Date	13/10/2022
Name and address of Customer	<b>PNP Maritime Services Private Limited</b> 2nd Floor, Lansdowne House, Mahakavi Bhushan Road, Colaba, Mumbai - 400001, Maharashtra		
Sampling done by	Laboratory	Sample Description / Type	Ambient Air
Sampling Location	Near DIL Godown Back Side (PNP Port)	Date - Sampling	06/10/2022 to 07/10/2022
Sample Quantity / Packing	PM <sub>10</sub> : Bap, Metals: 1 x 3 no. filter paper PM <sub>2.5</sub> : 1 x 1 no. filter paper SO <sub>2</sub> , NO <sub>2</sub> : 30 ml x 6 no. plastic bottle each NH <sub>3</sub> : 10 ml x 24 no. plastic bottle Ozone: 10 ml x 1 no. plastic bottle C <sub>6</sub> H <sub>6</sub> : 6 no. charcoal tubes CO: 1 no. bladder	Date - Receipt of Sample	08/10/2022
Sampling Procedure	As per Method Reference	Date - Start of Analysis	08/10/2022
Order Reference	As per PO No. PNP/March/2021-2022/020 Dated 31.03.2022	Date - Completion of Analysis	12/10/2022

#### Meteorological Data / Environmental Conditions

Average Wind Velocity 9 km/h	Wind Direction N-W	Relative Humidity (Max./Min.): 78/66%	Temperature (Max./Min.): 30/25°C	Duration of Survey 24 h
Parameter	Result	NAAQS# 2009	Unit	Method

#### Chemical Testing; Group: Atmospheric Pollution

Sulphur Dioxide (SO <sub>2</sub> )	<b>6.3</b>	80	µg/m <sup>3</sup>	IS 5182 (Part 2) 2001
Nitrogen Dioxide (NO <sub>2</sub> )	<b>18.2</b>	80	µg/m <sup>3</sup>	IS 5182 (Part 6) 2006
Particulate Matter (size less than 10 µm) or PM <sub>10</sub>	<b>194</b>	100	µg/m <sup>3</sup>	IS 5182 (Part 23) 2006
Particulate Matter (size less than 2.5µm) or PM <sub>2.5</sub>	<b>59</b>	60	µg/m <sup>3</sup>	CPCB Guideline, Volume I 36/2012-13, Page No 15 2013
Ozone (O <sub>3</sub> )	<b>BLQ</b> (LOQ:19.6)	180	µg/m <sup>3</sup>	Methods of Air Sampling and Analysis (AWMA), 3rd Ed. Method 411, Page no. 403 :1988
Lead (as Pb)	<b>BLQ</b> (LOQ:0.02)	1	µg/m <sup>3</sup>	EPA/625/R-96/010 a Compendium Method 10-31 & 32
Carbon Monoxide (CO)	<b>0.8</b>	4	mg/m <sup>3</sup>	CPCB Guidelines, Volume II, 37/2012-13, Page no 16 2013
Ammonia (NH <sub>3</sub> )	<b>BLQ</b> (LOQ:20)	400	µg/m <sup>3</sup>	CPCB Guidelines, Volume I 36/2012-13, Page No 35 2013
Benzene (C <sub>6</sub> H <sub>6</sub> )	<b>BLQ</b> (LOQ:1)	5	µg/m <sup>3</sup>	IS 5182 (Part 11) 2006
Benzo (a) pyrene (BaP) Particulate Phase only	<b>BLQ</b> (LOQ:0.2)	1	ng/m <sup>3</sup>	IS 5182 (Part 12) 2004
Arsenic (as As)	<b>BLQ</b> (LOQ:0.3)	6	ng/m <sup>3</sup>	EPA/625/R-96/010 a Compendium Method 10-31 & 34
Nickel (as Ni)	<b>BLQ</b> (LOQ:3)	20	ng/m <sup>3</sup>	EPA/625/R-96/010 a Compendium Method 10-31 & 32

BLQ: Below Limit of Quantification, LOQ: Limit of Quantification

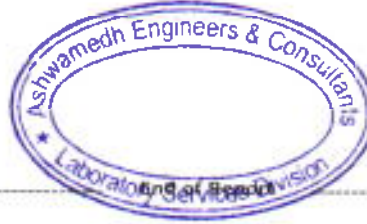
TWA Time Weighted Average

# NAAQS (National Ambient Air Quality Standards (Industrial, Residential, Rural and other Area) specified as: 24 hours TWA in case of Sulphur Dioxide, Nitrogen Dioxide, PM<sub>10</sub>, PM<sub>2.5</sub>, Lead and Ammonia, 1 hour TWA in case of Carbon Monoxide and Ozone, Annual TWA in case of Benzene, Benzo (a) Pyrene, Arsenic and Nickel

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

Sample ID : AA/10/22/5208	Report No. AA/10/22/5208	Report Date	13/10/2022
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Ninad Soundankar  
Technical Manager (Chemical)  
Reviewed & Authorised by



Note:

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### AMBIENT AIR QUALITY MONITORING REPORT

Sample ID : AA/10/22/5207	Report No. AA/10/22/5207	Report Date	13/10/2022
Name and address of Customer	<b>PNP Maritime Services Private Limited</b> 2nd Floor, Lansdowne House, Mahakavi Bhushan Road, Colaba, Mumbai - 400001, Maharashtra		
Sampling done by	Laboratory	Sample Description / Type	Ambient Air
Sampling Location	Near DIL Main Gate (PNP Port)	Date - Sampling	06/10/2022 to 07/10/2022
Sample Quantity / Packing	PM <sub>10</sub> , Bap, Metals: 1 x 3 no. filter paper PM <sub>2.5</sub> : 1 x 1 no. filter paper SO <sub>2</sub> , NO <sub>2</sub> : 30 ml x 6 no. plastic bottle each NH <sub>3</sub> : 10 ml x 24 no. plastic bottle Ozone: 10 ml x 1 no. plastic bottle C <sub>6</sub> H <sub>6</sub> : 6 no. charcoal tubes CO: 1 no. bladder	Date - Receipt of Sample	08/10/2022
Sampling Procedure	As per Method Reference	Date - Start of Analysis	08/10/2022
(Order Reference	As per PO No. PNP/March/2021-2022/020 Dated 31.03.2022	Date - Completion of Analysis	12/10/2022

#### Meteorological Data / Environmental Conditions

Average Wind Velocity 9 km/h	Wind Direction N-W	Relative Humidity (Max./Min.): 78/66%	Temperature (Max./Min.): 30/25°C	Duration of Survey 24 h
Parameter	Result	NAAQS# 2009	Unit	Method

#### Chemical Testing; Group: Atmospheric Pollution

Sulphur Dioxide (SO <sub>2</sub> )	5.2	80	µg/m <sup>3</sup>	IS 5182 (Part 2): 2001
Nitrogen Dioxide (NO <sub>2</sub> )	21.8	80	µg/m <sup>3</sup>	IS 5182 (Part 6): 2006
Particulate Matter (size less than 10 µm) or PM <sub>10</sub>	244	100	µg/m <sup>3</sup>	IS 5182 (Part 23): 2006
Particulate Matter (size less than 2.5 µm) or PM <sub>2.5</sub>	65	60	µg/m <sup>3</sup>	CPCB Guideline, Volume I, 36/2012-13, Page No 15, 2013
Ozone (O <sub>3</sub> )	BLQ (LOQ:19.6)	180	µg/m <sup>3</sup>	Methods of Air Sampling and Analysis (AWMA), 3rd Ed. Method 411 Page no. 403, 1988
Lead (as Pb)	BLQ (LOQ:0.02)	1	µg/m <sup>3</sup>	EPA/625/R-96/010 a Compendium Method 10-31 & 3.2
Carbon Monoxide (CO)	1.08	4	mg/m <sup>3</sup>	CPCB Guidelines, Volume II, 37/2012-13, Page no 16: 2013
Ammonia (NH <sub>3</sub> )	BLQ (LOQ:20)	400	µg/m <sup>3</sup>	CPCB Guidelines, Volume I, 36/2012-13, Page No 35: 2013
Benzene (C <sub>6</sub> H <sub>6</sub> )	BLQ (LOQ:1)	5	µg/m <sup>3</sup>	IS 5182 (Part II): 2006
Benzo (a) pyrene (BaP) Particulate Phase only	BLQ (LOQ:0.2)	1	ng/m <sup>3</sup>	IS 5182 (Part 12): 2004
Arsenic (as As)	BLQ (LOQ:0.3)	6	ng/m <sup>3</sup>	EPA/625/R-96/010 a Compendium Method 10-31 & 3.4
Nickel (as Ni)	BLQ (LOQ:3)	20	ng/m <sup>3</sup>	EPA/625/R-96/010 a Compendium Method 10-31 & 3.2

BLQ: Below Limit of Quantification, LOQ: Limit of Quantification

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, PM<sub>10</sub>, PM<sub>2.5</sub>, Lead and Ammonia, 1 hour TWA in case of Carbon Monoxide and Ozone, Annual TWA in case of Benzene, Benzo (a) Pyrene, Arsenic and Nickel

  
Ninad Soundankar  
Technical Manager (Chemical)  
Reviewed & Authorised by

Sample ID : AA/10/22/5207	Report No. AA/10/22/5207	Report Date	13/10/2022
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*Ninad Soundankar*

Ninad Soundankar  
Technical Manager (Chemical)  
Reviewed & Authorised by



Note:

1. The result listed refer only to the tested sample(s) and applicable parameter(s).
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4. There are no additions to, deviations or exclusions from the method.





**AMBIENT AIR QUALITY MONITORING REPORT**

Sample ID : AA/10/22/5206	Report No. AA/10/22/5206	Report Date	13/10/2022
Name and address of Customer	<b>PNP Maritime Services Private Limited</b> 2nd Floor, Lansdowne House, Mahakavi Bhushan Road, Colaba, Mumbai - 400001, Maharashtra		
Sampling done by	Laboratory	Sample Description / Type	Ambient Air
Sampling Location	Near Lal Gate (PNP Port)	Date - Sampling	06/10/2022 to 07/10/2022
Sample Quantity / Packing	PM <sub>10</sub> , Bap, Metals: 1 x 3 no. filter paper PM <sub>2.5</sub> : 1 x 1 no. filter paper SO <sub>2</sub> , NO <sub>2</sub> : 30 ml x 6 no. plastic bottle each NH <sub>3</sub> : 10 ml x 24 no. plastic bottle Ozone: 10 ml x 1 no. plastic bottle C <sub>6</sub> H <sub>6</sub> : 6 no. charcoal tubes CO: 1 no. bladder	Date - Receipt of Sample	08/10/2022
Sampling Procedure	As per Method Reference	Date - Start of Analysis	08/10/2022
Order Reference	As per PO No. PNP/March/2021-2022/020 Dated 31.03.2022	Date - Completion of Analysis	12/10/2022

**Meteorological Data / Environmental Conditions**

Average Wind Velocity 9 km/h	Wind Direction N-W	Relative Humidity (Max./Min.): 78/66%	Temperature (Max./Min.): 30/25°C	Duration of Survey 24 h
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Parameter	Result	NAAQS# 2009	Unit	Method
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**Chemical Testing; Group: Atmospheric Pollution**

Sulphur Dioxide (SO <sub>2</sub> )	12.6	80	µg/m <sup>3</sup>	IS 5182 (Part 2): 2001
Nitrogen Dioxide (NO <sub>2</sub> )	23.5	80	µg/m <sup>3</sup>	IS 5182 (Part 6): 2006
Particulate Matter (size less than 10 µm) or PM <sub>10</sub>	290	100	µg/m <sup>3</sup>	IS 5182 (Part 23): 2006
Particulate Matter (size less than 2.5µm) or PM <sub>2.5</sub>	92	60	µg/m <sup>3</sup>	CPCB Guideline, Volume 1.36/2012-13, Page No 15 2013
Ozone (O <sub>3</sub> )	BLQ (LOQ:19.6)	180	µg/m <sup>3</sup>	Methods of Air Sampling and Analysis (AWMA), 3rd Ed., Method 411 Page no. 403-1988
Lead (as Pb)	BLQ (LOQ:0.02)	1	µg/m <sup>3</sup>	EPA/625/R-96/D10 a Compendium Method 10-316 3 2
Carbon Monoxide (CO)	1.28	4	mg/m <sup>3</sup>	CPCB Guidelines Volume II, 37/2012-13, Page no 16 2013
Ammonia (NH <sub>3</sub> )	BLQ (LOQ:20)	400	µg/m <sup>3</sup>	CPCB Guidelines Volume 1.36/2012-13, Page No 35 2013
Benzene (C <sub>6</sub> H <sub>6</sub> )	1.05	5	µg/m <sup>3</sup>	IS 5182 (Part II): 2006
Benzo (a) pyrene (BaP) Particulate Phase only	BLQ (LOQ:0.2)	1	ng/m <sup>3</sup>	IS 5182 (Part 12): 2004
Arsenic (as As)	BLQ (LOQ:0.3)	6	ng/m <sup>3</sup>	EPA/625/R-96/D10 a Compendium Method 10-316 3 4
Nickel (as Ni)	BLQ (LOQ:3)	20	ng/m <sup>3</sup>	EPA/625/R-96/D10 a Compendium Method 10-316 3 2

BLQ: Below Limit of Quantification, LOQ: Limit of Quantification

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, PM<sub>10</sub>, PM<sub>2.5</sub>, Lead and Ammonia, 1 hour TWA in case of Carbon Monoxide and Ozone, Annual TWA in case of Benzene, Benzo (a) Pyrene, Arsenic and Nickel

*M.S.P.*  
**Ninal Soundankar**  
Technical Manager (Chemical)  
Reviewed & Authorised by

Sample ID : AA/10/22/5206

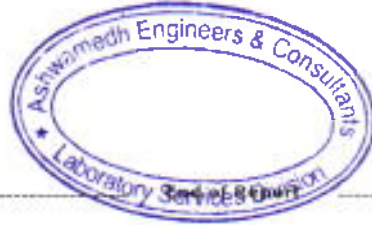
Report No. AA/10/22/5206

Report Date

13/10/2022



Ninad Soundankar  
Technical Manager (Chemical)  
Reviewed & Authorised by



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**AMBIENT AIR QUALITY MONITORING REPORT**

Sample ID : AA/10/22/5205	Report No. AA/10/22/5205	Report Date	13/10/2022
Name and address of Customer	<b>PNP Maritime Services Private Limited</b> 2nd Floor, Lansdowne House, Mahakavi Bhushan Road, Colaba, Mumbai - 400001, Maharashtra		
Sampling done by	Laboratory	Sample Description / Type	Ambient Air
Sampling Location	Near Custom Building (PNP Port)	Date - Sampling	06/10/2022 to 07/10/2022
Sample Quantity / Packing	PM <sub>10</sub> : Bap, Metals: 1 x 3 no. filter paper PM <sub>2.5</sub> : 1 x 1 no. filter paper SO <sub>2</sub> , NO <sub>2</sub> : 30 ml x 6 no. plastic bottle each NH <sub>3</sub> : 10 ml x 24 no. plastic bottle Ozone: 10 ml x 1 no. plastic bottle C <sub>6</sub> H <sub>6</sub> : 6 no. charcoal tubes CO: 1 no. bladder	Date - Receipt of Sample	08/10/2022
Sampling Procedure	As per Method Reference	Date - Start of Analysis	08/10/2022
Order Reference	As per PO No. PNP/March/2021-2022/020 Dated 31.03.2022	Date - Completion of Analysis	12/10/2022

**Meteorological Data / Environmental Conditions**

Average Wind Velocity 9 km/h	Wind Direction N-W	Relative Humidity (Max./Min.): 78/66%	Temperature (Max./Min.): 30/25°C	Duration of Survey 24 h
Parameter	Result	NAAQS# 2009	Unit	Method

**Chemical Testing; Group: Atmospheric Pollution**

Sulphur Dioxide (SO <sub>2</sub> )	<b>11.5</b>	80	µg/m <sup>3</sup>	IS 5182 (Part 2) 2001
Nitrogen Dioxide (NO <sub>2</sub> )	<b>18.5</b>	80	µg/m <sup>3</sup>	IS 5182 (Part 6) 2006
Particulate Matter (size less than 10 µm) or PM <sub>10</sub>	<b>250</b>	100	µg/m <sup>3</sup>	IS 5182 (Part 23) 2006
Particulate Matter (size less than 2.5µm) or PM <sub>2.5</sub>	<b>64</b>	60	µg/m <sup>3</sup>	CPCB Guideline, Volume I 36/2012-13, Page No 15 2013
Ozone (O <sub>3</sub> )	<b>BLQ</b> (LOQ:19.6)	180	µg/m <sup>3</sup>	Methods of Air Sampling and Analysis (AWMA), 3rd Ed., Method 411 Page no. 403 1988
Lead (as Pb)	<b>BLQ</b> (LOQ:0.02)	1	µg/m <sup>3</sup>	EPA/625/R-96/010 a Compendium Method 10-31 6 3 2
Carbon Monoxide (CO)	<b>0.75</b>	4	mg/m <sup>3</sup>	CPCB Guidelines, Volume II, 37/2012-13, Page no 16 2013
Ammonia (NH <sub>3</sub> )	<b>BLQ</b> (LOQ:20)	400	µg/m <sup>3</sup>	CPCB Guidelines, Volume I 36/2012-13, Page No 35 2013
Benzene (C <sub>6</sub> H <sub>6</sub> )	<b>BLQ</b> (LOQ:1)	5	µg/m <sup>3</sup>	IS 5182 (Part II) : 2006
Benzo (a) pyrene (BaP) Particulate Phase only	<b>BLQ</b> (LOQ:0.2)	1	ng/m <sup>3</sup>	IS 5182 (Part 12) 2004
Arsenic (as As)	<b>BLQ</b> (LOQ:0.3)	6	ng/m <sup>3</sup>	EPA/625/R-96/010 a Compendium Method 10-31 6 3 4
Nickel (as Ni)	<b>BLQ</b> (LOQ:3)	20	ng/m <sup>3</sup>	EPA/625/R-96/010 a Compendium Method 10-31 6 3 2

BLQ: Below Limit of Quantification, LOQ: Limit of Quantification

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, PM<sub>10</sub>, PM<sub>2.5</sub>, 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

Sample ID : AA/10/22/5205

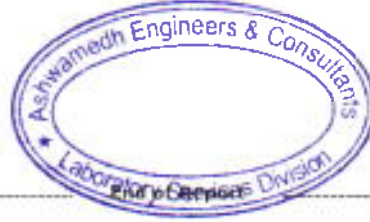
Report No. AA/10/22/5205

Report Date

13/10/2022



Ninad Soundankar  
Technical Manager (Chemical)  
Reviewed & Authorised by



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



### AMBIENT AIR QUALITY MONITORING REPORT

Sample ID : AA/10/22/5204	Report No. AA/10/22/5204	Report Date	13/10/2022
Name and address of Customer	<b>PNP Maritime Services Private Limited</b> 2nd Floor, Lansdowne House, Mahakavi Bhushan Road, Colaba, Mumbai - 400001, Maharashtra		
Sampling done by	Laboratory	Sample Description / Type	Ambient Air
Sampling Location	Near Weigh Bridge (PNP Port)	Date - Sampling	06/10/2022 to 07/10/2022
Sample Quantity / Packing	PM <sub>10</sub> : Bap, Metals: 1 x 3 no. filter paper PM <sub>2.5</sub> : 1 x 1 no. filter paper SO <sub>2</sub> , NO <sub>2</sub> : 30 ml x 6 no. plastic bottle each NH <sub>3</sub> : 10 ml x 24 no. plastic bottle Ozone: 10 ml x 1 no. plastic bottle C <sub>6</sub> H <sub>6</sub> : 6 no. charcoal tubes CO: 1 no. bladder	Date - Receipt of Sample	08/10/2022
Sampling Procedure	As per Method Reference	Date - Start of Analysis	08/10/2022
Order Reference	As per PO No., PNP/March/2021-2022/020 Dated 31.03.2022	Date - Completion of Analysis	12/10/2022

#### Meteorological Data / Environmental Conditions

Average Wind Velocity 9 km/h	Wind Direction N-W	Relative Humidity (Max./Min.): 78/66%	Temperature (Max./Min.): 30/25°C	Duration of Survey 24 h
Parameter	Result	NAAQS# 2009	Unit	Method

#### Chemical Testing; Group: Atmospheric Pollution

Sulphur Dioxide (SO <sub>2</sub> )	7.3	80	µg/m <sup>3</sup>	IS 5182 (Part 2) 2001
Nitrogen Dioxide (NO <sub>2</sub> )	23.8	80	µg/m <sup>3</sup>	IS 5182 (Part 6) 2006
Particulate Matter (size less than 10 µm) or PM <sub>10</sub>	280	100	µg/m <sup>3</sup>	IS 5182 (Part 23) 2006
Particulate Matter (size less than 2.5µm) or PM <sub>2.5</sub>	70	60	µg/m <sup>3</sup>	CPCB Guideline, Volume I 36/2012-13, Page No 15 2013
Ozone (O <sub>3</sub> )	BLQ (LOQ:19.6)	180	µg/m <sup>3</sup>	Methods of Air Sampling and Analysis (AWMA), 3rd Ed., Method 411, Page no. 403 1988
Lead (as Pb)	BLQ (LOQ:0.02)	1	µg/m <sup>3</sup>	EPA/625/R-96/010 a Compendium Method 10-31 & 32
Carbon Monoxide (CO)	1.14	4	mg/m <sup>3</sup>	CPCB Guidelines, Volume II, 37/2012-13, Page no 16 2013
Ammonia (NH <sub>3</sub> )	BLQ (LOQ:20)	400	µg/m <sup>3</sup>	CPCB Guidelines, Volume I 36/2012-13, Page No 35 2013
Benzene (C <sub>6</sub> H <sub>6</sub> )	1.03	5	µg/m <sup>3</sup>	IS 5182 (Part 11) 2006
Benzo (a) pyrene (BaP)	BLQ (LOQ:0.2)	1	ng/m <sup>3</sup>	IS 5182 (Part 12) 2004
Particulate Phase only	BLQ (LOQ:0.3)	6	ng/m <sup>3</sup>	EPA/625/R-96/010 a Compendium Method 10-31 & 34
Arsenic (as As)	BLQ (LOQ:0.3)	20	ng/m <sup>3</sup>	EPA/625/R-96/010 a Compendium Method 10-31 & 32
Nickel (as Ni)	BLQ (LOQ:3)			

BLQ: Below Limit of Quantification, LOQ: Limit of Quantification

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, PM<sub>10</sub>, PM<sub>2.5</sub>, Lead and Ammonia, 1 hour TWA in case of Carbon Monoxide and Ozone, Annual TWA in case of Benzene, Benzo (a) Pyrene, Arsenic and Nickel

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

Sample ID : AA/10/22/5204

Report No. AA/10/22/5204

Report Date

13/10/2022



Ninad Soundankar  
Technical Manager (Chemical)  
Reviewed & Authorised by



Note:

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





### AMBIENT AIR QUALITY MONITORING REPORT

Sample ID : AA/10/22/5203	Report No. AA/10/22/5203	Report Date	13/10/2022
Name and address of Customer	<b>PNP Maritime Services Private Limited</b> 2nd Floor, Lansdowne House, Mahakavi Bhushan Road, Colaba, Mumbai - 400001, Maharashtra		
Sampling done by	Laboratory	Sample Description / Type	Ambient Air
Sampling Location	Near PNP Jetty No.5 (PNP Port)	Date - Sampling	06/10/2022 to 07/10/2022
Sample Quantity / Packing	PM <sub>10</sub> , Bap, Metals: 1 x 3 no. filter paper PM <sub>2.5</sub> : 1 x 1 no. filter paper SO <sub>2</sub> , NO <sub>2</sub> : 30 ml x 6 no. plastic bottle each NH <sub>3</sub> : 10 ml x 24 no. plastic bottle Ozone: 10 ml x 1 no. plastic bottle C <sub>6</sub> H <sub>6</sub> : 6 no. charcoal tubes CO: 1 no. bladder	Date - Receipt of Sample	08/10/2022
Sampling Procedure	As per Method Reference	Date - Start of Analysis	08/10/2022
Order Reference	As per PO No. PNP/March/2021-2022/020 Dated 31.03.2022	Date - Completion of Analysis	12/10/2022

#### Meteorological Data / Environmental Conditions

Average Wind Velocity 9 km/h	Wind Direction N-W	Relative Humidity (Max./Min.): 78/66%	Temperature (Max./Min.): 30/25°C	Duration of Survey 24 h
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Parameter	Result	NAAQS# 2009	Unit	Method
<b>Chemical Testing; Group: Atmospheric Pollution</b>				
Sulphur Dioxide (SO <sub>2</sub> )	6.3	80	µg/m <sup>3</sup>	IS 5182 (Part 2): 2001
Nitrogen Dioxide (NO <sub>2</sub> )	19.7	80	µg/m <sup>3</sup>	IS 5182 (Part 6): 2006
Particulate Matter (size less than 10 µm) or PM <sub>10</sub>	261	100	µg/m <sup>3</sup>	IS 5182 (Part 23): 2006
Particulate Matter (size less than 2.5µm) or PM <sub>2.5</sub>	68	60	µg/m <sup>3</sup>	CPCB Guideline, Volume I 36/2012-13, Page No 15: 2013
Ozone (O <sub>3</sub> )	BLQ (LOQ:19.6)	180	µg/m <sup>3</sup>	Methods of Air Sampling and Analysis (AWMA), 3rd Ed., Method 411, Page no. 403, 1988
Lead (as Pb)	BLQ (LOQ:0.02)	1	µg/m <sup>3</sup>	EPA/625/R-96/010 a Compendium Method 10-3.1 & 3.2
Carbon Monoxide (CO)	1.08	4	mg/m <sup>3</sup>	CPCB Guidelines, Volume II, 37/2012-13, Page no 16: 2013
Ammonia (NH <sub>3</sub> )	BLQ (LOQ:20)	400	µg/m <sup>3</sup>	CPCB Guidelines, Volume I 36/2012-13, Page No 35: 2013
Benzene (C <sub>6</sub> H <sub>6</sub> )	BLQ (LOQ:1)	5	µg/m <sup>3</sup>	IS 5182 (Part 11): 2006
Benzo (a) pyrene (BaP) Particulate Phase only	BLQ (LOQ:0.2)	1	ng/m <sup>3</sup>	IS 5182 (Part 12): 2004
Arsenic (as As)	BLQ (LOQ:0.3)	6	ng/m <sup>3</sup>	EPA/625/R-96/010 a Compendium Method 10-3.1 & 3.4
Nickel (as Ni)	BLQ (LOQ:3)	20	ng/m <sup>3</sup>	EPA/625/R-96/010 a Compendium Method 10-3.1 & 3.2

BLQ: Below Limit of Quantification, LOQ: Limit of Quantification

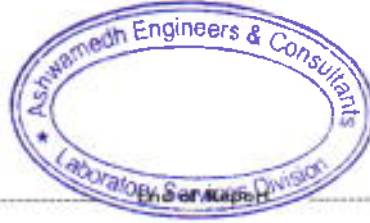
TWA Time Weighted Average

# NAAQS (National Ambient Air Quality Standards (Industrial, Residential, Rural and other Area) specified as: 24 hours TWA in case of Sulphur Dioxide, Nitrogen Dioxide, PM<sub>10</sub>, PM<sub>2.5</sub>, 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

Sample ID : AA/10/22/5203	Report No. AA/10/22/5203	Report Date	13/10/2022
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Ninad Soundankar  
Technical Manager (Chemical)  
Reviewed & Authorised by



Note:

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3. In case sampling is not done by laboratory, the results apply to the sample as received.
4. There are no additions to, deviations or exclusions from the method.



### AMBIENT AIR QUALITY MONITORING REPORT

Sample ID : AA/10/22/5202	Report No. AA/10/22/5202	Report Date	13/10/2022
Name and address of Customer	<b>PNP Maritime Services Private Limited</b> 2nd Floor, Lansdowne House, Mahakavi Bhushan Road, Colaba, Mumbai - 400001, Maharashtra		
Sampling done by	Laboratory	Sample Description / Type	Ambient Air
Sampling Location	Near PNP Jetty No. 3 (PNP Port)	Date - Sampling	06/10/2022 to 07/10/2022
Sample Quantity / Packing	PM <sub>10</sub> , Bap, Metals: 1 x 3 no. filter paper PM <sub>2.5</sub> : 1 x 1 no. filter paper SO <sub>2</sub> , NO <sub>2</sub> : 30 ml x 6 no. plastic bottle each NH <sub>3</sub> : 10 ml x 24 no. plastic bottle Ozone: 10 ml x 1 no. plastic bottle C <sub>6</sub> H <sub>6</sub> : 6 no. charcoal tubes CO: 1 no. bladder	Date - Receipt of Sample	08/10/2022
Sampling Procedure	As per Method Reference	Date - Start of Analysis	08/10/2022
Order Reference	As per PO No. PNP/March/2021-2022/020 Dated 31.03.2022	Date - Completion of Analysis	12/10/2022

#### Meteorological Data / Environmental Conditions

Average Wind Velocity 9 km/h	Wind Direction N-W	Relative Humidity (Max./Min.): 78/66%	Temperature (Max./Min.): 30/25°C	Duration of Survey 24 h
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Parameter	Result	NAAQS# 2009	Unit	Method
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#### Chemical Testing; Group: Atmospheric Pollution

Sulphur Dioxide (SO <sub>2</sub> )	10.5	80	µg/m <sup>3</sup>	IS 5182 (Part 2): 2001
Nitrogen Dioxide (NO <sub>2</sub> )	26.5	80	µg/m <sup>3</sup>	IS 5182 (Part 6): 2006
Particulate Matter (size less than 10 µm) or PM <sub>10</sub>	321	100	µg/m <sup>3</sup>	IS 5182 (Part 23): 2006
Particulate Matter (size less than 2.5 µm) or PM <sub>2.5</sub>	120	60	µg/m <sup>3</sup>	CPCB Guideline, Volume I, 36/2012-13, Page No 15, 2013
Ozone (O <sub>3</sub> )	BLQ (LOQ:19.6)	180	µg/m <sup>3</sup>	Methods of Air Sampling and Analysis (AWMA), 3rd Ed. Method 411, Page no. 403, 1988
Lead (as Pb)	BLQ (LOQ:0.02)	1	µg/m <sup>3</sup>	EPA/625/R-96/D10 a Compendium Method 10-31 & 32
Carbon Monoxide (CO)	1.21	4	mg/m <sup>3</sup>	CPCB Guidelines, Volume II, 37/2012-13, Page no 16, 2013
Ammonia (NH <sub>3</sub> )	BLQ (LOQ:20)	400	µg/m <sup>3</sup>	CPCB Guidelines, Volume I, 36/2012-13, Page No 35, 2013
Benzene (C <sub>6</sub> H <sub>6</sub> )	1.42	5	µg/m <sup>3</sup>	IS 5182 (Part II): 2006
Benzo (a) pyrene (BaP) Particulate Phase only	BLQ (LOQ:0.2)	1	ng/m <sup>3</sup>	IS 5182 (Part 12): 2004
Arsenic (as As)	BLQ (LOQ:0.3)	6	ng/m <sup>3</sup>	EPA/625/R-96/D10 a Compendium Method 10-31 & 34
Nickel (as Ni)	BLQ (LOQ:3)	20	ng/m <sup>3</sup>	EPA/625/R-96/D10 a Compendium Method 10-31 & 32

BLQ: Below Limit of Quantification, LOQ: Limit of Quantification

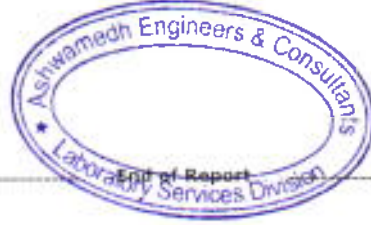
TWA Time Weighted Average

# NAAQS (National Ambient Air Quality Standards (Industrial, Residential, Rural and other Area) specified as: 24 hours TWA in case of Sulphur Dioxide, Nitrogen Dioxide, PM<sub>10</sub>, PM<sub>2.5</sub>, 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

Sample ID : AA/10/22/5202	Report No. AA/10/22/5202	Report Date	13/10/2022
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Ninad Soundankar  
Technical Manager (Chemical)  
Reviewed & Authorised by



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### AMBIENT AIR QUALITY MONITORING REPORT

Sample ID : AA/10/22/5201	Report No. AA/10/22/5201	Report Date	13/10/2022
Name and address of Customer	<b>PNP Maritime Services Private Limited</b> 2nd Floor, Lansdowne House, Mahakavi Bhushan Road, Colaba, Mumbai - 400001, Maharashtra		
Sampling done by	Laboratory	Sample Description / Type	Ambient Air
Sampling Location	Near PNP Jetty No. 2 (PNP Port)	Date - Sampling	06/10/2022 to 07/10/2022
Sample Quantity / Packing	PM <sub>10</sub> , Bap, Metals: 1 x 3 no. filter paper PM <sub>2.5</sub> : 1 x 1 no. filter paper SO <sub>2</sub> , NO <sub>2</sub> : 30 ml x 6 no. plastic bottle each NH <sub>3</sub> : 10 ml x 24 no. plastic bottle Ozone: 10 ml x 1 no. plastic bottle C <sub>6</sub> H <sub>6</sub> : 6 no. charcoal tubes CO: 1 no. bladder	Date - Receipt of Sample	08/10/2022
Sampling Procedure	As per Method Reference	Date - Start of Analysis	08/10/2022
Order Reference	As per PO No. PNP/March/2021-2022/020 Dated 31.03.2022	Date - Completion of Analysis	12/10/2022

#### Meteorological Data / Environmental Conditions

Average Wind Velocity 9 km/h	Wind Direction N-W	Relative Humidity (Max./Min.): 78/66%	Temperature (Max./Min.): 30/25°C	Duration of Survey 24 h
Parameter	Result	NAAQS# 2009	Unit	Method

#### Chemical Testing; Group: Atmospheric Pollution

Sulphur Dioxide (SO <sub>2</sub> )	7.3	80	µg/m <sup>3</sup>	IS 5182 (Part 2): 2001
Nitrogen Dioxide (NO <sub>2</sub> )	25.6	80	µg/m <sup>3</sup>	IS 5182 (Part 6): 2006
Particulate Matter (size less than 10 µm) or PM <sub>10</sub>	352	100	µg/m <sup>3</sup>	IS 5182 (Part 23): 2006
Particulate Matter (size less than 2.5 µm) or PM <sub>2.5</sub>	144	60	µg/m <sup>3</sup>	CPCB Guideline, Volume I, 36/2012-13, Page No 15: 2013
Ozone (O <sub>3</sub> )	BLQ (LOQ:19.6)	180	µg/m <sup>3</sup>	Methods of Air Sampling and Analysis (AWMA), 3rd Ed. Method 4H, Page no. 403: 1988
Lead (as Pb)	BLQ (LOQ:0.02)	1	µg/m <sup>3</sup>	EPA/625/R-96/010 a Compendium Method 10-31632
Carbon Monoxide (CO)	1.18	4	mg/m <sup>3</sup>	CPCB Guidelines, Volume II, 37/2012-13, Page no 16: 2013
Ammonia (NH <sub>3</sub> )	BLQ (LOQ:20)	400	µg/m <sup>3</sup>	CPCB Guidelines, Volume I, 36/2012-13, Page No 35: 2013
Benzene (C <sub>6</sub> H <sub>6</sub> )	1.27	5	µg/m <sup>3</sup>	IS 5182 (Part 11): 2006
Benzo (a) pyrene (BaP) Particulate Phase only	BLQ (LOQ:0.2)	1	ng/m <sup>3</sup>	IS 5182 (Part 12): 2004
Arsenic (as As)	BLQ (LOQ:0.3)	6	ng/m <sup>3</sup>	EPA/625/R-96/010 a Compendium Method 10-31634
Nickel (as Ni)	BLQ (LOQ:3)	20	ng/m <sup>3</sup>	EPA/625/R-96/010 a Compendium Method 10-31632

BLQ: Below Limit of Quantification, LOQ: Limit of Quantification

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, PM<sub>10</sub>, PM<sub>2.5</sub>, Lead and Ammonia, 1 hour TWA in case of Carbon Monoxide and Ozone, Annual TWA in case of Benzene, Benzo (a) Pyrene, Arsenic and Nickel

  
Ninad Soundankar  
Technical Manager (Chemical)  
Reviewed & Authorised by

Sample ID : AA/10/22/5201	Report No. AA/10/22/5201	Report Date	13/10/2022
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Technical Manager (Chemical)  
Reviewed & Authorised by



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**AMBIENT AIR QUALITY MONITORING REPORT**

Sample ID : AA/10/22/5200	Report No. AA/10/22/5200	Report Date	13/10/2022
Name and address of Customer	<b>PNP Maritime Services Private Limited</b> 2nd Floor, Lansdowne House, Mahakavi Bhushan Road, Colaba, Mumbai - 400001, Maharashtra		
Sampling done by	Laboratory	Sample Description / Type	Ambient Air
Sampling Location	Near PNP Jetty No. 1 (PNP Port)	Date - Sampling	06/10/2022 to 07/10/2022
Sample Quantity / Packing	PM <sub>10</sub> , Bap, Metals: 1 x 3 no. filter paper PM <sub>2.5</sub> : 1 x 1 no. filter paper SO <sub>2</sub> , NO <sub>2</sub> : 30 ml x 6 no. plastic bottle each NH <sub>3</sub> : 10 ml x 24 no. plastic bottle Ozone: 10 ml x 1 no. plastic bottle C <sub>6</sub> H <sub>6</sub> : 6 no. charcoal tubes CO: 1 no. bladder	Date - Receipt of Sample	08/10/2022
Sampling Procedure	As per Method Reference	Date - Start of Analysis	08/10/2022
Order Reference	As per PO No. PNP/March/2021-2022/020 Dated 31.03.2022	Date - Completion of Analysis	12/10/2022

**Meteorological Data / Environmental Conditions**

Average Wind Velocity 9 km/h	Wind Direction N-W	Relative Humidity (Max./Min.): 78/66%	Temperature (Max./Min.): 30/25°C	Duration of Survey 24 h
Parameter	Result	NAAQS# 2009	Unit	Method

**Chemical Testing; Group: Atmospheric Pollution**

Sulphur Dioxide (SO <sub>2</sub> )	9.4	80	µg/m <sup>3</sup>	IS 5182 (Part 2): 2001
Nitrogen Dioxide (NO <sub>2</sub> )	22.7	80	µg/m <sup>3</sup>	IS 5182 (Part 6): 2006
Particulate Matter (size less than 10 µm) or PM <sub>10</sub>	336	100	µg/m <sup>3</sup>	IS 5182 (Part 23): 2006
Particulate Matter (size less than 2.5µm) or PM <sub>2.5</sub>	102	60	µg/m <sup>3</sup>	CPCB Guideline, Volume I, 36/2012-13, Page No.15/2013
Ozone (O <sub>3</sub> )	BLQ (LOQ:19.6)	180	µg/m <sup>3</sup>	Methods of Air Sampling and Analysis (AWMA), 3rd Ed., Method 411 Page no. 403-1988
Lead (as Pb)	BLQ (LOQ:0.02)	1	µg/m <sup>3</sup>	EPA/625/R-96/010 a Compendium Method 10-31 & 32
Carbon Monoxide (CO)	1.14	4	mg/m <sup>3</sup>	CPCB Guidelines, Volume II, 37/2012-13, Page no.16/2013
Ammonia (NH <sub>3</sub> )	BLQ (LOQ:20)	400	µg/m <sup>3</sup>	CPCB Guidelines, Volume I, 36/2012-13, Page No.35/2013
Benzene (C <sub>6</sub> H <sub>6</sub> )	1.64	5	µg/m <sup>3</sup>	IS 5182 (Part II): 2006
Benzo (a) pyrene (BaP) Particulate Phase only	BLQ (LOQ:0.2)	1	ng/m <sup>3</sup>	IS 5182 (Part 12): 2004
Arsenic (as As)	BLQ (LOQ:0.3)	6	ng/m <sup>3</sup>	EPA/625/R-96/010 a Compendium Method 10-31 & 34
Nickel (as Ni)	BLQ (LOQ:3)	20	ng/m <sup>3</sup>	EPA/625/R-96/010 a Compendium Method 10-31 & 32

BLQ: Below Limit of Quantification, LOQ: Limit of Quantification

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, PM<sub>10</sub>, PM<sub>2.5</sub>, 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

  
**Ninal Soundanker**  
Technical Manager (Chemical)  
Reviewed & Authorised by

Sample ID : AA/10/22/5200

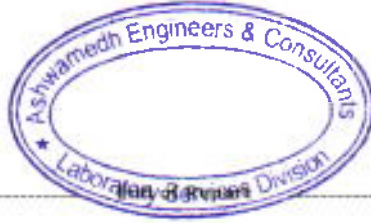
Report No, AA/10/22/5200

Report Date

13/10/2022



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Technical Manager (Chemical)  
Reviewed & Authorised by



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### AMBIENT AIR QUALITY MONITORING REPORT

Sample ID : AA/10/22/5199	Report No. AA/10/22/5199	Report Date	13/10/2022
Name and address of Customer	<b>PNP Maritime Services Private Limited</b> 2nd Floor, Lansdowne House, Mahakavi Bhushan Road, Colaba, Mumbai - 400001, Maharashtra		
Sampling done by	Laboratory	Sample Description / Type	Ambient Air
Sampling Location	Near PNP Main Gate (PNP Port)	Date - Sampling	06/10/2022 to 07/10/2022
Sample Quantity / Packing	PM <sub>10</sub> , Bap, Metals: 1 x 3 no. filter paper PM <sub>2.5</sub> : 1 x 1 no. filter paper SO <sub>2</sub> , NO <sub>2</sub> : 30 ml x 6 no. plastic bottle each NH <sub>3</sub> : 10 ml x 24 no. plastic bottle Ozone: 10 ml x 1 no. plastic bottle C <sub>6</sub> H <sub>6</sub> : 6 no. charcoal tubes CO: 1 no. bladder	Date - Receipt of Sample	08/10/2022
Sampling Procedure	As per Method Reference	Date - Start of Analysis	08/10/2022
Order Reference	As per PO No. PNP/March/2021-2022/020 Dated 31.03.2022	Date - Completion of Analysis	12/10/2022

#### Meteorological Data / Environmental Conditions

Average Wind Velocity 9 km/h	Wind Direction N-W	Relative Humidity (Max./Min.): 78/66%	Temperature (Max./Min.): 30/25°C	Duration of Survey 24 h
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Parameter	Result	NAAQS# 2009	Unit	Method
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#### Chemical Testing; Group: Atmospheric Pollution

Sulphur Dioxide (SO <sub>2</sub> )	8.4	80	µg/m <sup>3</sup>	IS 5182 (Part 2): 2001
Nitrogen Dioxide (NO <sub>2</sub> )	26.2	80	µg/m <sup>3</sup>	IS 5182 (Part 6): 2006
Particulate Matter (size less than 10 µm) or PM <sub>10</sub>	328	100	µg/m <sup>3</sup>	IS 5182 (Part 23): 2006
Particulate Matter (size less than 2.5 µm) or PM <sub>2.5</sub>	122	60	µg/m <sup>3</sup>	CPCB Guideline, Volume I, 36/2012-13, Page No 15, 2013
Ozone (O <sub>3</sub> )	BLQ (LOQ:19.6)	180	µg/m <sup>3</sup>	Methods of Air Sampling and Analysis (AWMA), 3rd Ed., Method 411, Page no. 403, 1988
Lead (as Pb)	BLQ (LOQ:0.02)	1	µg/m <sup>3</sup>	EPA/625/R-96/D10 a Compendium Method 10-31 & 3.2
Carbon Monoxide (CO)	1.18	4	mg/m <sup>3</sup>	CPCB Guidelines, Volume II, 37/2012-13, Page no 16, 2013
Ammonia (NH <sub>3</sub> )	BLQ (LOQ:20)	400	µg/m <sup>3</sup>	CPCB Guidelines, Volume I, 36/2012-13, Page No 35, 2013
Benzene (C <sub>6</sub> H <sub>6</sub> )	1.06	5	µg/m <sup>3</sup>	IS 5182 (Part II): 2006
Benzo (a) pyrene (BaP) Particulate Phase only	BLQ (LOQ:0.2)	1	ng/m <sup>3</sup>	IS 5182 (Part 12): 2004
Arsenic (as As)	BLQ (LOQ:0.3)	6	ng/m <sup>3</sup>	EPA/625/R-96/D10 a Compendium Method 10-31 & 3.4
Nickel (as Ni)	BLQ (LOQ:3)	20	ng/m <sup>3</sup>	EPA/625/R-96/D10 a Compendium Method 10-31 & 3.2

BLQ: Below Limit of Quantification, LOQ: Limit of Quantification

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, PM<sub>10</sub>, PM<sub>2.5</sub>, Lead and Ammonia, 1 hour TWA in case of Carbon Monoxide and Ozone, Annual TWA in case of Benzene, Benzo (a) Pyrene, Arsenic and Nickel

  
Ninad Soundankar  
Technical Manager (Chemical)  
Reviewed & Authorised by

Sample ID : AA/10/22/5199	Report No. AA/10/22/5199	Report Date	13/10/2022
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*Ninad Soundankar*

Ninad Soundankar  
Technical Manager (Chemical)  
Reviewed & Authorised by



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### NOISE LEVEL MEASUREMENT REPORT

Sample ID: N/10/22/6131	Report No: N/10/22/6131	Report Date	10/10/2022
Name and Address of Customer	<b>PNP Maritime Services Private Limited</b> 2nd Floor, Lansdowne House, Mahakavi Bhushan Road, Colaba, Mumbai - 400 001		
Monitoring Done By	Laboratory	Sample Description /Type	Ambient Noise
Order Reference	As per PO No. PNP/March/2021- 2022/020 Dated 31.03.2022	Date-Monitoring	06/10/2022

#### Chemical Testing; Group: Atmospheric Pollution

Location	Time (h)	Results Noise Level dB (A) Fast Response	Results Noise Level dB (A) Slow Response	Method
A. Near Main Gate (PNP Port)	09:00	72.8	71.6	CPCB Protocol for Ambient Level Noise Monitoring July AEC/C/SAP/SAM/35B 36, Issue no 4, Issue date 01/04/2018
	21:00	66.6	65.7	
B. Near Jetty No. 1 (PNP Port)	09:10	71.4	70.5	
	21:10	65.6	64.3	
C. Near Jetty No. 2 (PNP Port)	09:20	73.7	72.4	
	21:20	67.4	66.6	
D. Near Jetty No. 3 (PNP Port)	09:30	73.5	72.4	
	21:30	67.4	66.3	
E. Near Jetty No. 5 (PNP Port)	09:40	71.4	70.5	
	21:40	65.5	64.2	
F. Near Weight Bridge (PNP Port)	09:50	72.6	71.3	
	21:50	66.3	65.5	
G. Near Custom Building (PNP Port)	10:00	73.4	72.2	
	22:00	67.3	66.3	
H. Near Lal Gate (PNP Port)	10:10	72.6	71.2	
	22:10	66.3	65.4	
I. Near DIL Main Gate (PNP Port)	10:20	73.4	72.1	
	22:20	67.2	66.2	
J. DIL Godown Back Side (PNP Port)	11:30	71.3	70.4	
	23:30	65.4	64.2	

#### Limit s

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

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

  
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Technical Manager (Chemical)  
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End of Report

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### AMBIENT AIR QUALITY MONITORING REPORT

Sample ID : AA/10/22/5335	Report No. AA/10/22/5335	Report Date	18/10/2022
Name and address of Customer	<b>PNP Maritime Services Private Limited</b> 2nd Floor, Lansdowne House, Mahakavi Bhushan Road, Colaba, Mumbai - 400001, Maharashtra		
Sampling done by	Laboratory	Sample Description / Type	Ambient Air
Sampling Location	Near DIL Godown Back Side (PNP Port)	Date - Sampling	10/10/2022 to 11/10/2022
Sample Quantity / Packing	PM <sub>10</sub> , Bap, Metals: 1 x 3 no. filter paper PM <sub>2.5</sub> : 1 x 1 no. filter paper SO <sub>2</sub> , NO <sub>2</sub> : 30 ml x 6 no. plastic bottle each NH <sub>3</sub> : 10 ml x 24 no. plastic bottle Ozone: 10 ml x 1 no. plastic bottle C <sub>6</sub> H <sub>6</sub> : 6 no. charcoal tubes CO: 1 no. bladder	Date - Receipt of Sample	12/10/2022
Sampling Procedure	As per Method reference	Date - Start of Analysis	12/10/2022
Order Reference	As per PO No. PNP/March/2021-2022/020 Dated 31.03.2022	Date - Completion of Analysis	17/10/2022

#### Meteorological Data / Environmental Conditions

Average Wind Velocity 2 km/h	Wind Direction N	Relative Humidity (Max./Min.): 76/64%	Temperature (Max./Min.): 31/24°C	Duration of Survey 24 h
Parameter	Result	NAAQS# 2009	Unit	Method

#### Chemical Testing; Group: Atmospheric Pollution

Sulphur Dioxide (SO <sub>2</sub> )	5.2	80	µg/m <sup>3</sup>	IS 5182 (Part 2) 2001
Nitrogen Dioxide (NO <sub>2</sub> )	20.9	80	µg/m <sup>3</sup>	IS 5182 (Part 6) 2006
Particulate Matter (size less than 10 µm) or PM <sub>10</sub>	229	100	µg/m <sup>3</sup>	IS 5182 (Part 23) 2006
Particulate Matter (size less than 2.5µm) or PM <sub>2.5</sub>	58	60	µg/m <sup>3</sup>	CPCB Guideline, Volume I.36/2012-13, Page No 15 2013
Ozone (O <sub>3</sub> )	BLQ (LOQ:19.6)	180	µg/m <sup>3</sup>	Methods of Air Sampling and Analysis (AWMA), 3rd Ed., Method 411, Page no. 403 1988
Lead (as Pb)	BLQ (LOQ:0.02)	1	µg/m <sup>3</sup>	EPA/625/R-96/D10 a Compendium Method 10-316 3 2
Carbon Monoxide (CO)	0.93	4	mg/m <sup>3</sup>	CPCB Guidelines, Volume II, 37/2012-13, Page no 16, 2013
Ammonia (NH <sub>3</sub> )	BLQ (LOQ:20)	400	µg/m <sup>3</sup>	CPCB Guidelines, Volume I.36/2012-13, Page No 35, 2013
Benzene (C <sub>6</sub> H <sub>6</sub> )	BLQ (LOQ:1)	5	µg/m <sup>3</sup>	IS 5182 (Part 11) 2006
Benzo (a) pyrene (BaP) Particulate Phase only	BLQ (LOQ:0.2)	1	ng/m <sup>3</sup>	IS 5182 (Part 12) 2004
Arsenic (as As)	BLQ (LOQ:0.3)	6	ng/m <sup>3</sup>	EPA/625/R-96/D10 a Compendium Method 10-316 3 4
Nickel (as Ni)	BLQ (LOQ:3)	20	ng/m <sup>3</sup>	EPA/625/R-96/D10 a Compendium Method 10-316 3 2

BLQ: Below Limit of Quantification, LOQ: Limit of Quantification

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, PM<sub>10</sub>, PM<sub>2.5</sub>, Lead and Ammonia, 1 hour TWA in case of Carbon Monoxide and Ozone, Annual TWA in case of Benzene, Benzo (a) Pyrene, Arsenic and Nickel

  
Ninad Soundankar  
Technical Manager (Chemical)  
Reviewed & Authorised by



Sample ID : AA/10/22/5335	Report No. AA/10/22/5335	Report Date	18/10/2022
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Ninad Soundankar  
Technical Manager (Chemical)  
Reviewed & Authorised by



**Note:**

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### AMBIENT AIR QUALITY MONITORING REPORT

Sample ID : AA/10/22/5334	Report No. AA/10/22/5334	Report Date	18/10/2022
Name and address of Customer	<b>PNP Maritime Services Private Limited</b> 2nd Floor, Lansdowne House, Mahakavi Bhushan Road, Colaba, Mumbai - 400001, Maharashtra		
Sampling done by	Laboratory	Sample Description / Type	Ambient Air
Sampling Location	Near DIL Main Gate (PNP Port)	Date - Sampling	10/10/2022 to 11/10/2022
Sample Quantity / Packing	PM <sub>10</sub> , Bap, Metals: 1 x 3 no. filter paper PM <sub>2.5</sub> : 1 x 1 no. filter paper SO <sub>2</sub> , NO <sub>2</sub> : 30 ml x 6 no. plastic bottle each NH <sub>3</sub> : 10 ml x 24 no. plastic bottle Ozone: 10 ml x 1 no. plastic bottle C <sub>6</sub> H <sub>6</sub> : 6 no. charcoal tubes CO: 1 no. bladder	Date - Receipt of Sample	12/10/2022
Sampling Procedure	As per Method reference	Date - Start of Analysis	12/10/2022
Order Reference	As per PO No. PNP/March/2021-2022/020 Dated 31.03.2022	Date - Completion of Analysis	17/10/2022

#### Meteorological Data / Environmental Conditions

Average Wind Velocity 2 km/h	Wind Direction N	Relative Humidity (Max./Min.): 76/64%	Temperature (Max./Min.): 31/24°C	Duration of Survey 24 h
Parameter	Result	NAAQS# 2009	Unit	Method

#### Chemical Testing; Group: Atmospheric Pollution

Sulphur Dioxide (SO <sub>2</sub> )	9.4	80	µg/m <sup>3</sup>	IS 5182 (Part 2): 2001
Nitrogen Dioxide (NO <sub>2</sub> )	24.7	80	µg/m <sup>3</sup>	IS 5182 (Part 6): 2006
Particulate Matter (size less than 10 µm) or PM <sub>10</sub>	320	100	µg/m <sup>3</sup>	IS 5182 (Part 23): 2006
Particulate Matter (size less than 2.5 µm) or PM <sub>2.5</sub>	122	60	µg/m <sup>3</sup>	CPCB Guideline, Volume I, 36/2012-13, Page No 15 2013
Ozone (O <sub>3</sub> )	BLQ (LOQ:19.6)	180	µg/m <sup>3</sup>	Methods of Air Sampling and Analysis (AWMA), 3rd Ed., Method 411, Page no. 403, 1988
Lead (as Pb)	BLQ (LOQ:0.02)	1	µg/m <sup>3</sup>	EPA/625/R-96/010 a Compendium Method 10-31 & 32
Carbon Monoxide (CO)	1.05	4	mg/m <sup>3</sup>	CPCB Guidelines, Volume II, 37/2012-13, Page no 16: 2013
Ammonia (NH <sub>3</sub> )	BLQ (LOQ:20)	400	µg/m <sup>3</sup>	CPCB Guidelines, Volume I, 36/2012-13, Page No 35: 2013
Benzene (C <sub>6</sub> H <sub>6</sub> )	BLQ (LOQ:1)	5	µg/m <sup>3</sup>	IS 5182 (Part II): 2006
Benzo (a) pyrene (BaP) Particulate Phase only	BLQ (LOQ:0.2)	1	ng/m <sup>3</sup>	IS 5182 (Part II): 2004
Arsenic (as As)	BLQ (LOQ:0.3)	6	ng/m <sup>3</sup>	EPA/625/R-96/010 a Compendium Method 10-31 & 34
Nickel (as Ni)	BLQ (LOQ:3)	20	ng/m <sup>3</sup>	EPA/625/R-96/010 a Compendium Method 10-31 & 32

BLQ: Below Limit of Quantification, LOQ: Limit of Quantification

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, PM<sub>10</sub>, PM<sub>2.5</sub>, 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 Scundankar  
Technical Manager (Chemical)  
Reviewed & Authorised by

Sample ID - AA/10/22/5334	Report No. AA/10/22/5334	Report Date	18/10/2022
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Ninad Soundankar

Technical Manager (Chemical)  
Reviewed & Authorised by



Note:

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



**AMBIENT AIR QUALITY MONITORING REPORT**

Sample ID : AA/10/22/5333	Report No. AA/10/22/5333	Report Date	18/10/2022
Name and address of Customer	<b>PNP Maritime Services Private Limited</b> 2nd Floor, Lansdowne House, Mahakavi Bhushan Road, Colaba, Mumbai - 400001, Maharashtra		
Sampling done by	Laboratory	Sample Description / Type	Ambient Air
Sampling Location	Near Lal Gate (PNP Port)	Date - Sampling	10/10/2022 to 11/10/2022
Sample Quantity / Packing	PM <sub>10</sub> , Bap, Metals: 1 x 3 no. filter paper PM <sub>2.5</sub> : 1 x 1 no. filter paper SO <sub>2</sub> , NO <sub>2</sub> : 30 ml x 6 no. plastic bottle each NH <sub>3</sub> : 10 ml x 24 no. plastic bottle Ozone: 10 ml x 1 no. plastic bottle C <sub>6</sub> H <sub>6</sub> : 6 no. charcoal tubes CO: 1 no. bladder	Date - Receipt of Sample	12/10/2022
Sampling Procedure	As per Method reference	Date - Start of Analysis	12/10/2022
Order Reference	As per PO No. PNP/March/2021-2022/020 Dated 31.03.2022	Date - Completion of Analysis	17/10/2022

**Meteorological Data / Environmental Conditions**

Average Wind Velocity 2 km/h	Wind Direction N	Relative Humidity (Max./Min.): 76/64%	Temperature (Max./Min.): 31/24°C	Duration of Survey 24 h
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Parameter	Result	NAAQS# 2009	Unit	Method
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**Chemical Testing; Group: Atmospheric Pollution**

Sulphur Dioxide (SO <sub>2</sub> )	11.5	80	µg/m <sup>3</sup>	IS 5182 (Part 2) 2001
Nitrogen Dioxide (NO <sub>2</sub> )	25.3	80	µg/m <sup>3</sup>	IS 5182 (Part 6) 2006
Particulate Matter (size less than 10 µm) or PM <sub>10</sub>	312	100	µg/m <sup>3</sup>	IS 5182 (Part 23) 2006
Particulate Matter (size less than 2.5 µm) or PM <sub>2.5</sub>	127	60	µg/m <sup>3</sup>	CPCB Guideline, Volume I, 36/2012-13, Page No 15 2013
Ozone (O <sub>3</sub> )	BLQ (LOQ:19.6)	180	µg/m <sup>3</sup>	Methods of Air Sampling and Analysis (AWMA), 3rd Ed. Method 411 Page no. 403 :1988
Lead (as Pb)	BLQ (LOQ:0.02)	1	µg/m <sup>3</sup>	EPA/625/R-96/010 a Compendium Method 10-31 & 32
Carbon Monoxide (CO)	1.16	4	mg/m <sup>3</sup>	CPCB Guidelines, Volume II, 37/2012-13, Page no 16 2013
Ammonia (NH <sub>3</sub> )	BLQ (LOQ:20)	400	µg/m <sup>3</sup>	CPCB Guidelines, Volume I, 36/2012-13, Page No 35 2013
Benzene (C <sub>6</sub> H <sub>6</sub> )	1.06	5	µg/m <sup>3</sup>	IS 5182 (Part II) 2006
Benzo (a) pyrene (BaP) Particulate Phase only	BLQ (LOQ:0.2)	1	ng/m <sup>3</sup>	IS 5182 (Part 12) 2004
Arsenic (as As)	BLQ (LOQ:0.3)	6	ng/m <sup>3</sup>	EPA/625/R-96/010 a Compendium Method 10-31 & 34
Nickel (as Ni)	BLQ (LOQ:3)	20	ng/m <sup>3</sup>	EPA/625/R-96/010 a Compendium Method 10-31 & 32

BLQ: Below Limit of Quantification, LOQ: Limit of Quantification  
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, PM<sub>10</sub>, PM<sub>2.5</sub>, 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

Sample ID : AA/10/22/5333	Report No. AA/10/22/5333	Report Date	18/10/2022
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Ninad Soundankar  
Technical Manager (Chemical)  
Reviewed & Authorised by



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### AMBIENT AIR QUALITY MONITORING REPORT

Sample ID : AA/10/22/5332	Report No. AA/10/22/5332	Report Date	18/10/2022
Name and address of Customer	<b>PNP Maritime Services Private Limited</b> 2nd Floor, Lansdowne House, Mahakavi Bhushan Road, Colaba, Mumbai - 400001, Maharashtra		
Sampling done by	Laboratory	Sample Description / Type	Ambient Air
Sampling Location	Near Custom Building (PNP Port)	Date - Sampling	10/10/2022 to 11/10/2022
Sample Quantity / Packing	PM <sub>10</sub> , Bap, Metals: 1 x 3 no. filter paper PM <sub>2.5</sub> : 1 x 1 no. filter paper SO <sub>2</sub> , NO <sub>2</sub> : 30 ml x 6 no. plastic bottle each NH <sub>3</sub> : 10 ml x 24 no. plastic bottle Ozone: 10 ml x 1 no. plastic bottle C <sub>6</sub> H <sub>6</sub> : 6 no. charcoal tubes CO: 1 no. bladder	Date - Receipt of Sample	12/10/2022
Sampling Procedure	As per Method reference	Date - Start of Analysis	12/10/2022
Order Reference	As per PO No. PNP/March/2021-2022/020 Dated 31.03.2022	Date - Completion of Analysis	17/10/2022

#### Meteorological Data / Environmental Conditions

Average Wind Velocity 2 km/h	Wind Direction N	Relative Humidity (Max./Min.): 76/64%	Temperature (Max./Min.): 31/24°C	Duration of Survey 24 h
Parameter	Result	NAAQS# 2009	Unit	Method

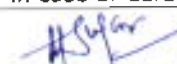
#### Chemical Testing; Group: Atmospheric Pollution

Sulphur Dioxide (SO <sub>2</sub> )	6.3	80	µg/m <sup>3</sup>	IS 5182 (Part 2) 2001
Nitrogen Dioxide (NO <sub>2</sub> )	22.4	80	µg/m <sup>3</sup>	IS 5182 (Part 6) 2006
Particulate Matter (size less than 10 µm) or PM <sub>10</sub>	248	100	µg/m <sup>3</sup>	IS 5182 (Part 23) 2006
Particulate Matter (size less than 2.5 µm) or PM <sub>2.5</sub>	68	60	µg/m <sup>3</sup>	CPCB Guideline, Volume 1, 36/2012-13, Page No 15:2013
Ozone (O <sub>3</sub> )	BLQ (LOQ:19.6)	180	µg/m <sup>3</sup>	Methods of Air Sampling and Analysis (AWMA), 3rd Ed. Method 411 Page no 403 1988
Lead (as Pb)	BLQ (LOQ:0.02)	1	µg/m <sup>3</sup>	EPA/625/R-96/010 a Compendium Method 10-31 & 32
Carbon Monoxide (CO)	0.98	4	mg/m <sup>3</sup>	CPCB Guidelines, Volume II, 37/2012-13, Page no 16 2013
Ammonia (NH <sub>3</sub> )	BLQ (LOQ:20)	400	µg/m <sup>3</sup>	CPCB Guidelines, Volume 1, 36/2012-13, Page No 35 2013
Benzene (C <sub>6</sub> H <sub>6</sub> )	BLQ (LOQ:1)	5	µg/m <sup>3</sup>	IS 5182 (Part 10): 2006
Benzo (a) pyrene (BaP) Particulate Phase only	BLQ (LOQ:0.2)	1	ng/m <sup>3</sup>	IS 5182 (Part 12) 2004
Arsenic (as As)	BLQ (LOQ:0.3)	6	ng/m <sup>3</sup>	EPA/625/R-96/010 a Compendium Method 10-31 & 34
Nickel (as Ni)	BLQ (LOQ:3)	20	ng/m <sup>3</sup>	EPA/625/R-96/010 a Compendium Method 10-31 & 32

BLQ: Below Limit of Quantification, LOQ: Limit of Quantification

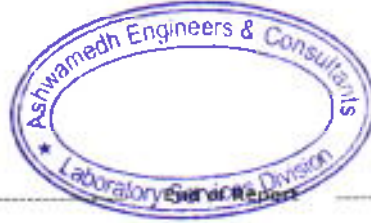
TWA Time Weighted Average

# NAAQS (National Ambient Air Quality Standards (Industrial, Residential, Rural and other Area) specified as: 24 hours TWA in case of Sulphur Dioxide, Nitrogen Dioxide, PM<sub>10</sub>, PM<sub>2.5</sub>, Lead and Ammonia, 1 hour TWA in case of Carbon Monoxide and Ozone, Annual TWA in case of Benzene, Benzo (a) Pyrene, Arsenic and Nickel

  
Ninad Soundankar  
Technical Manager (Chemical)  
Reviewed & Authorised by

Sample ID : AA/10/22/5332	Report No. AA/10/22/5332	Report Date	18/10/2022
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Ninad Soundankar  
Technical Manager (Chemical)  
Reviewed & Authorised by



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### AMBIENT AIR QUALITY MONITORING REPORT

Sample ID : AA/10/22/5331	Report No. AA/10/22/5331	Report Date	18/10/2022
Name and address of Customer	<b>PNP Maritime Services Private Limited</b> 2nd Floor, Lansdowne House, Mahakavi Bhushan Road, Colaba, Mumbai - 400001, Maharashtra		
Sampling done by	Laboratory	Sample Description / Type	Ambient Air
Sampling Location	Near Weigh Bridge (PNP Port)	Date - Sampling	10/10/2022 to 11/10/2022
Sample Quantity / Packing	PM <sub>10</sub> , Bap, Metals: 1 x 3 no. filter paper PM <sub>2.5</sub> : 1 x 1 no. filter paper SO <sub>2</sub> , NO <sub>2</sub> : 30 ml x 6 no. plastic bottle each NH <sub>3</sub> : 10 ml x 24 no. plastic bottle Ozone: 10 ml x 1 no. plastic bottle C <sub>6</sub> H <sub>6</sub> : 6 no. charcoal tubes CO: 1 no. bladder	Date - Receipt of Sample	12/10/2022
Sampling Procedure	As per Method reference	Date - Start of Analysis	12/10/2022
Order Reference	As per PO No. PNP/March/2021-2022/020 Dated 31.03.2022	Date - Completion of Analysis	17/10/2022

#### Meteorological Data / Environmental Conditions

Average Wind Velocity 2 km/h	Wind Direction N	Relative Humidity (Max./Min.): 76/64%	Temperature (Max./Min.): 31/24°C	Duration of Survey 24 h
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Parameter	Result	NAAQS# 2009	Unit	Method
<b>Chemical Testing; Group: Atmospheric Pollution</b>				
Sulphur Dioxide (SO <sub>2</sub> )	9.4	80	µg/m <sup>3</sup>	IS 5182 (Part 2): 2001
Nitrogen Dioxide (NO <sub>2</sub> )	25.9	80	µg/m <sup>3</sup>	IS 5182 (Part 6): 2006
Particulate Matter (size less than 10 µm) or PM <sub>10</sub>	310	100	µg/m <sup>3</sup>	IS 5182 (Part 23): 2006
Particulate Matter (size less than 2.5 µm) or PM <sub>2.5</sub>	116	60	µg/m <sup>3</sup>	CPCB Guideline, Volume I, 36/2012-13, Page No 15, 2013
Ozone (O <sub>3</sub> )	BLQ (LOQ:19.6)	180	µg/m <sup>3</sup>	Methods of Air Sampling and Analysis (AWMA), 3rd Ed., Method 4H, Page no. 403, 1988
Lead (as Pb)	BLQ (LOQ:0.02)	1	µg/m <sup>3</sup>	EPA/625/R-96/010 a Compendium Method 10-31 & 32
Carbon Monoxide (CO)	1.23	4	mg/m <sup>3</sup>	CPCB Guidelines, Volume II, 37/2012-13, Page no 16, 2013
Ammonia (NH <sub>3</sub> )	BLQ (LOQ:20)	400	µg/m <sup>3</sup>	CPCB Guidelines, Volume I, 36/2012-13, Page No 35, 2013
Benzene (C <sub>6</sub> H <sub>6</sub> )	1.11	5	µg/m <sup>3</sup>	IS 5182 (Part II): 2006
Benzo (a) pyrene (BaP) Particulate Phase only	BLQ (LOQ:0.2)	1	ng/m <sup>3</sup>	IS 5182 (Part 12): 2004
Arsenic (as As)	BLQ (LOQ:0.3)	6	ng/m <sup>3</sup>	EPA/625/R-96/010 a Compendium Method 10-31 & 34
Nickel (as Ni)	BLQ (LOQ:3)	20	ng/m <sup>3</sup>	EPA/625/R-96/010 a Compendium Method 10-31 & 32

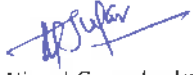
BLQ: Below Limit of Quantification, LOQ: Limit of Quantification

TWA Time Weighted Average

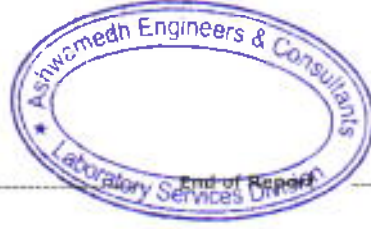
# NAAQS (National Ambient Air Quality Standards (Industrial, Residential, Rural and other Area) specified as: 24 hours TWA in case of Sulphur Dioxide, Nitrogen Dioxide, PM<sub>10</sub>, PM<sub>2.5</sub>, Lead and Ammonia, 1 hour TWA in case of Carbon Monoxide and Ozone, Annual TWA in case of Benzene, Benzo (a) Pyrene, Arsenic and Nickel

  
Ninad Soundankar  
Technical Manager (Chemical)  
Reviewed & Authorised by

Sample ID : AA/10/22/5331	Report No. AA/10/22/5331	Report Date	18/10/2022
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Ninad Soundankar  
Technical Manager (Chemical)  
Reviewed & Authorised by



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### AMBIENT AIR QUALITY MONITORING REPORT

Sample ID : AA/10/22/5330	Report No. AA/10/22/5330	Report Date	18/10/2022
Name and address of Customer	<b>PNP Maritime Services Private Limited</b> 2nd Floor, Lansdowne House, Mahakavi Bhushan Road, Colaba, Mumbai - 400001, Maharashtra		
Sampling done by	Laboratory	Sample Description / Type	Ambient Air
Sampling Location	Near PNP Jetty No.5 (PNP Port)	Date - Sampling	10/10/2022 to 11/10/2022
Sample Quantity / Packing	PM <sub>10</sub> : Bag, Metals: 1 x 3 no. filter paper PM <sub>2.5</sub> : 1 x 1 no. filter paper SO <sub>2</sub> , NO <sub>2</sub> : 30 ml x 6 no. plastic bottle each NH <sub>3</sub> : 10 ml x 24 no. plastic bottle Ozone: 10 ml x 1 no. plastic bottle C <sub>6</sub> H <sub>6</sub> : 6 no. charcoal tubes CO: 1 no. bladder	Date - Receipt of Sample	12/10/2022
Sampling Procedure	As per Method reference	Date - Start of Analysis	12/10/2022
Order Reference	As per PO No. PNP/March/2021-2022/020 Dated 31.03.2022	Date - Completion of Analysis	17/10/2022

#### Meteorological Data / Environmental Conditions

Average Wind Velocity 2 km/h	Wind Direction N	Relative Humidity (Max./Min.): 76/64%	Temperature (Max./Min.): 31/24°C	Duration of Survey 24 h
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Parameter	Result	NAAQS# 2009	Unit	Method
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#### Chemical Testing; Group: Atmospheric Pollution

Sulphur Dioxide (SO <sub>2</sub> )	7.3	80	µg/m <sup>3</sup>	IS 5182 (Part 2): 2001
Nitrogen Dioxide (NO <sub>2</sub> )	23.8	80	µg/m <sup>3</sup>	IS 5182 (Part 6): 2006
Particulate Matter (size less than 10 µm) or PM <sub>10</sub>	266	100	µg/m <sup>3</sup>	IS 5182 (Part 23): 2006
Particulate Matter (size less than 2.5 µm) or PM <sub>2.5</sub>	79	60	µg/m <sup>3</sup>	CPCB Guideline, Volume I, 36/2012-13, Page No 15: 2013
Ozone (O <sub>3</sub> )	BLQ (LOQ:19.6)	180	µg/m <sup>3</sup>	Methods of Air Sampling and Analysis (AWMA), 3rd Ed., Method 411, Page no. 403, 1988
Lead (as Pb)	BLQ (LOQ:0.02)	1	µg/m <sup>3</sup>	EPA/625/R-96/010 a Compendium Method 10-31 & 3-2
Carbon Monoxide (CO)	1.0	4	mg/m <sup>3</sup>	CPCB Guidelines, Volume II, 37/2012-13, Page no 16: 2013
Ammonia (NH <sub>3</sub> )	BLQ (LOQ:20)	400	µg/m <sup>3</sup>	CPCB Guidelines, Volume I, 36/2012-13, Page No 35: 2013
Benzene (C <sub>6</sub> H <sub>6</sub> )	BLQ (LOQ:1)	5	µg/m <sup>3</sup>	IS 5182 (Part II): 2006
Benzo (a) pyrene (BaP) Particulate Phase only	BLQ (LOQ:0.2)	1	ng/m <sup>3</sup>	IS 5182 (Part 12): 2004
Arsenic (as As)	BLQ (LOQ:0.3)	6	ng/m <sup>3</sup>	EPA/625/R-96/010 a Compendium Method 10-31 & 3-4
Nickel (as Ni)	BLQ (LOQ:3)	20	ng/m <sup>3</sup>	EPA/625/R-96/010 a Compendium Method 10-31 & 3-2

BLQ: Below Limit of Quantification, LOQ: Limit of Quantification

TWA Time Weighted Average

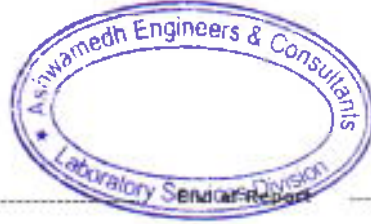
# NAAQS (National Ambient Air Quality Standards (Industrial, Residential, Rural and other Area) specified as: 24 hours TWA in case of Sulphur Dioxide, Nitrogen Dioxide, PM<sub>10</sub>, PM<sub>2.5</sub>, Lead and Ammonia, 1 hour TWA in case of Carbon Monoxide and Ozone, Annual TWA in case of Benzene, Benzo (a) Pyrene, Arsenic and Nickel

  
Ninad Soundankar  
Technical Manager (Chemical)  
Reviewed & Authorised by



Sample ID : AA/10/22/5330	Report No. AA/10/22/5330	Report Date	18/10/2022
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Ninad Soundankar  
Technical Manager (Chemical)  
Reviewed & Authorised by



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**AMBIENT AIR QUALITY MONITORING REPORT**

Sample ID : AA/10/22/5329	Report No. AA/10/22/5329	Report Date	18/10/2022
Name and address of Customer	<b>PNP Maritime Services Private Limited</b> 2nd Floor, Lansdowne House, Mahakavi Bhushan Road, Colaba, Mumbai - 400001, Maharashtra		
Sampling done by	Laboratory	Sample Description / Type	Ambient Air
Sampling Location	Near PNP Jetty No. 3 (PNP Port)	Date - Sampling	10/10/2022 to 11/10/2022
Sample Quantity / Packing	PM <sub>10</sub> , Bap, Metals: 1 x 3 no. filter paper PM <sub>2.5</sub> : 1 x 1 no. filter paper SO <sub>2</sub> , NO <sub>2</sub> : 30 ml x 6 no. plastic bottle each NH <sub>3</sub> : 10 ml x 24 no. plastic bottle Ozone: 10 ml x 1 no. plastic bottle C <sub>6</sub> H <sub>6</sub> : 6 no. charcoal tubes CO: 1 no. bladder	Date - Receipt of Sample	12/10/2022
Sampling Procedure	As per Method reference	Date - Start of Analysis	12/10/2022
Order Reference	As per PO No. PNP/March/2021-2022/020 Dated 31.03.2022	Date - Completion of Analysis	17/10/2022

**Meteorological Data / Environmental Conditions**

Average Wind Velocity 2 km/h	Wind Direction N	Relative Humidity (Max./Min.): 76/64%	Temperature (Max./Min.): 31/24°C	Duration of Survey 24 h
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Parameter	Result	NAAQS# 2009	Unit	Method
<b>Chemical Testing; Group: Atmospheric Pollution</b>				
Sulphur Dioxide (SO <sub>2</sub> )	10.5	80	µg/m <sup>3</sup>	IS 5182 (Part 2): 2001
Nitrogen Dioxide (NO <sub>2</sub> )	27.1	80	µg/m <sup>3</sup>	IS 5182 (Part 6): 2006
Particulate Matter (size less than 10 µm) or PM <sub>10</sub>	358	100	µg/m <sup>3</sup>	IS 5182 (Part 23): 2006
Particulate Matter (size less than 2.5 µm) or PM <sub>2.5</sub>	147	60	µg/m <sup>3</sup>	CPCB Guideline, Volume I, 36/2012-13, Page No 15 2013
Ozone (O <sub>3</sub> )	BLQ (LOQ:19.6)	180	µg/m <sup>3</sup>	Methods of Air Sampling and Analysis (AWMA), 3rd Ed., Method 411 Page no. 403 1988
Lead (as Pb)	BLQ (LOQ:0.02)	1	µg/m <sup>3</sup>	EPA/625/R-96/D10 a Compendium Method 10-3   6 3 2
Carbon Monoxide (CO)	1.39	4	mg/m <sup>3</sup>	CPCB Guidelines, Volume II, 37/2012-13, Page no 16 2013
Ammonia (NH <sub>3</sub> )	BLQ (LOQ:20)	400	µg/m <sup>3</sup>	CPCB Guidelines, Volume I, 36/2012-13, Page No 35: 2013
Benzene (C <sub>6</sub> H <sub>6</sub> )	1.31	5	µg/m <sup>3</sup>	IS 5182 (Part 11): 2006
Benzo (a) pyrene (BaP) Particulate Phase only	BLQ (LOQ:0.2)	1	ng/m <sup>3</sup>	IS 5182 (Part 12): 2004
Arsenic (as As)	BLQ (LOQ:0.3)	6	ng/m <sup>3</sup>	EPA/625/R-96/D10 a Compendium Method 10-3   6 3 4
Nickel (as Ni)	BLQ (LOQ:3)	20	ng/m <sup>3</sup>	EPA/625/R-96/D10 a Compendium Method 10-3   6 3 2

BLQ: Below Limit of Quantification, LOQ: Limit of Quantification

TWA Time Weighted Average

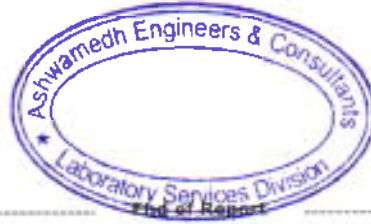
# NAAQS (National Ambient Air Quality Standards (Industrial, Residential, Rural and other Area) specified as: 24 hours TWA in case of Sulphur Dioxide, Nitrogen Dioxide, PM<sub>10</sub>, PM<sub>2.5</sub>, Lead and Ammonia, 1 hour TWA in case of Carbon Monoxide and Ozone, Annual TWA in case of Benzene, Benzo (a) Pyrene, Arsenic and Nickel

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

Sample ID : AA/10/22/5329	Report No. AA/10/22/5329	Report Date	18/10/2022
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Ninad Soundankar

Technical Manager (Chemical),  
Reviewed & Authorised by



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**AMBIENT AIR QUALITY MONITORING REPORT**

Sample ID : AA/10/22/5328	Report No. AA/10/22/5328	Report Date	18/10/2022
Name and address of Customer	<b>PNP Maritime Services Private Limited</b> 2nd Floor, Lansdowne House, Mahakavi Bhushan Road, Colaba, Mumbai - 400001, Maharashtra		
Sampling done by	Laboratory	Sample Description / Type	Ambient Air
Sampling Location	Near PNP Jetty No. 2 (PNP Port)	Date - Sampling	10/10/2022 to 11/10/2022
Sample Quantity / Packing	PM <sub>10</sub> : Bap, Metals: 1 x 3 no. filter paper PM <sub>2.5</sub> : 1 x 1 no. filter paper SO <sub>2</sub> , NO <sub>2</sub> : 30 ml x 6 no. plastic bottle each NH <sub>3</sub> : 10 ml x 24 no. plastic bottle Ozone: 10 ml x 1 no. plastic bottle C <sub>6</sub> H <sub>6</sub> : 6 no. charcoal tubes CO: 1 no. bladder	Date - Receipt of Sample	12/10/2022
Sampling Procedure	As per Method reference	Date - Start of Analysis	12/10/2022
Order Reference	As per PO No. PNP/March/2021-2022/020 Dated 31.03.2022	Date - Completion of Analysis	17/10/2022

**Meteorological Data / Environmental Conditions**

Average Wind Velocity 2 km/h	Wind Direction N	Relative Humidity (Max./Min.): 76/64%	Temperature (Max./Min.): 31/24°C	Duration of Survey 24 h
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Parameter	Result	NAAQS# 2009	Unit	Method
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**Chemical Testing; Group: Atmospheric Pollution**

Sulphur Dioxide (SO <sub>2</sub> )	8.4	80	µg/m <sup>3</sup>	IS 5182 (Part 2) 2001
Nitrogen Dioxide (NO <sub>2</sub> )	26.5	80	µg/m <sup>3</sup>	IS 5182 (Part 6) 2006
Particulate Matter (size less than 10 µm) or PM <sub>10</sub>	327	100	µg/m <sup>3</sup>	IS 5182 (Part 23) 2006
Particulate Matter (size less than 2.5µm) or PM <sub>2.5</sub>	139	60	µg/m <sup>3</sup>	CPCB Guideline, Volume I, 36/2012-13, Page No 15, 2013
Ozone (O <sub>3</sub> )	BLQ (LOQ:19.6)	180	µg/m <sup>3</sup>	Methods of Air Sampling and Analysis (AWMA), 3rd Ed., Method 411 Page no. 403, 1988
Lead (as Pb)	BLQ (LOQ:0.02)	1	µg/m <sup>3</sup>	EPA/625/R-96/D10 a Compendium Method 10-31 6 3 2
Carbon Monoxide (CO)	1.10	4	mg/m <sup>3</sup>	CPCB Guidelines, Volume II, 37/2012-13, Page no 16, 2013
Ammonia (NH <sub>3</sub> )	BLQ (LOQ:20)	400	µg/m <sup>3</sup>	CPCB Guidelines, Volume I, 36/2012-13, Page No. 35, 2013
Benzene (C <sub>6</sub> H <sub>6</sub> )	1.15	5	µg/m <sup>3</sup>	IS 5182 (Part II) 2006
Benzo (a) pyrene (BaP) Particulate Phase only	BLQ (LOQ:0.2)	1	ng/m <sup>3</sup>	IS 5182 (Part 12) 2004
Arsenic (as As)	BLQ (LOQ:0.3)	6	ng/m <sup>3</sup>	EPA/625/R-96/D10 a Compendium Method 10-31 6 3 4
Nickel (as Ni)	BLQ (LOQ:3)	20	ng/m <sup>3</sup>	EPA/625/R-96/D10 a Compendium Method 10-31 6 3 2

BLQ: Below Limit of Quantification, LOQ: Limit of Quantification

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, PM<sub>10</sub>, PM<sub>2.5</sub>, Lead and Ammonia, 1 hour TWA in case of Carbon Monoxide and Ozone, Annual TWA in case of Benzene, Benzo (a) Pyrene, Arsenic and Nickel



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



Sample ID : AA/10/22/5328	Report No. AA/10/22/5328	Report Date	18/10/2022
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Ninad Soundankar  
Technical Manager (Chemical)  
Reviewed & Authorised by



Note:

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



### AMBIENT AIR QUALITY MONITORING REPORT

Sample ID : AA/10/22/5327	Report No. AA/10/22/5327	Report Date	18/10/2022
Name and address of Customer	<b>PNP Maritime Services Private Limited</b> 2nd Floor, Lansdowne House, Mahakavi Bhushan Road, Colaba, Mumbai - 400001, Maharashtra		
Sampling done by	Laboratory	Sample Description / Type	Ambient Air
Sampling Location	Near PNP Jetty No. 1 (PNP Port)	Date - Sampling	10/10/2022 to 11/10/2022
Sample Quantity / Packing	PM <sub>10</sub> : Bap, Metals: 1 x 3 no. filter paper PM <sub>2.5</sub> : 1 x 1 no. filter paper SO <sub>2</sub> , NO <sub>2</sub> : 30 ml x 6 no. plastic bottle each NH <sub>3</sub> : 10 ml x 24 no. plastic bottle Ozone: 10 ml x 1 no. plastic bottle C <sub>6</sub> H <sub>6</sub> : 6 no. charcoal tubes CO: 1 no. bladder	Date - Receipt of Sample	12/10/2022
Sampling Procedure	As per Method reference	Date - Start of Analysis	12/10/2022
Order Reference	As per PO No. PNP/March/2021-2022/020 Dated 31.03.2022	Date - Completion of Analysis	17/10/2022

#### Meteorological Data / Environmental Conditions

Average Wind Velocity 2 km/h	Wind Direction N	Relative Humidity (Max./Min.): 76/64%	Temperature (Max./Min.): 31/24°C	Duration of Survey 24 h
Parameter	Result	NAAQS# 2009	Unit	Method

#### Chemical Testing; Group: Atmospheric Pollution

Sulphur Dioxide (SO <sub>2</sub> )	6.3	80	µg/m <sup>3</sup>	IS 5182 (Part 2): 2001
Nitrogen Dioxide (NO <sub>2</sub> )	26.8	80	µg/m <sup>3</sup>	IS 5182 (Part 6): 2006
Particulate Matter (size less than 10 µm) or PM <sub>10</sub>	326	100	µg/m <sup>3</sup>	IS 5182 (Part 23): 2006
Particulate Matter (size less than 2.5µm) or PM <sub>2.5</sub>	118	60	µg/m <sup>3</sup>	CPCB Guideline, Volume 1,36/2012-13, Page No 15: 2013
Ozone (O <sub>3</sub> )	BLQ (LOQ:19.6)	180	µg/m <sup>3</sup>	Methods of Air Sampling and Analysis (AWMA), 3rd Ed. Method 411, Page no. 403: 1998
Lead (as Pb)	BLQ (LOQ:0.02)	1	µg/m <sup>3</sup>	EPA/625/R-96/D10 a Compendium Method 10-31 6 3 2
Carbon Monoxide (CO)	1.33	4	mg/m <sup>3</sup>	CPCB Guidelines, Volume II, 37/2012-13, Page no.16: 2013
Ammonia (NH <sub>3</sub> )	BLQ (LOQ:20)	400	µg/m <sup>3</sup>	CPCB Guidelines, Volume 1,36/2012-13, Page No 35: 2013
Benzene (C <sub>6</sub> H <sub>6</sub> )	1.26	5	µg/m <sup>3</sup>	IS 5182 (Part II): 2006
Benzo (a) pyrene (BaP) Particulate Phase only	BLQ (LOQ:0.2)	1	ng/m <sup>3</sup>	IS 5182 (Part 12): 2004
Arsenic (as As)	BLQ (LOQ:0.3)	6	ng/m <sup>3</sup>	EPA/625/R-96/D10 a Compendium Method 10-31 6 3 4
Nickel (as Ni)	BLQ (LOQ:3)	20	ng/m <sup>3</sup>	EPA/625/R-96/D10 a Compendium Method 10-31 6 3 2

BLQ: Below Limit of Quantification, LOQ: Limit of Quantification

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, PM<sub>10</sub>, PM<sub>2.5</sub>, Lead and Ammonia, 1 hour TWA in case of Carbon Monoxide and Ozone, Annual TWA in case of Benzene, Benzo (a) Pyrene, Arsenic and Nickel

  
Ninad Soundankar  
Technical Manager (Chemical)  
Reviewed & Authorised by

Sample ID : AA/10/22/5327	Report No. AA/10/22/5327	Report Date	18/10/2022
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Ninad Soundankar  
Technical Manager (Chemical)  
Reviewed & Authorised by



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**AMBIENT AIR QUALITY MONITORING REPORT**

Sample ID : AA/10/22/5326	Report No. AA/10/22/5326	Report Date	18/10/2022
Name and address of Customer	<b>PNP Maritime Services Private Limited</b> 2nd Floor, Lansdowne House, Mahakavi Bhushan Road, Colaba, Mumbai - 400001, Maharashtra		
Sampling done by	Laboratory	Sample Description / Type	Ambient Air
Sampling Location	Near PNP Main Gate (PNP Port)	Date - Sampling	10/10/2022 to 11/10/2022
Sample Quantity / Packing	PM <sub>10</sub> , Bap, Metals: 1 x 3 no. filter paper PM <sub>2.5</sub> : 1 x 1 no. filter paper SO <sub>2</sub> , NO <sub>2</sub> : 30 ml x 6 no. plastic bottle each NH <sub>3</sub> : 10 ml x 24 no. plastic bottle Ozone: 10 ml x 1 no. plastic bottle C <sub>6</sub> H <sub>6</sub> : 6 no. charcoal tubes CO: 1 no. bladder	Date - Receipt of Sample	12/10/2022
Sampling Procedure	As per Method reference	Date - Start of Analysis	12/10/2022
Order Reference	As per PO No. PNP/March/2021-2022/020 Dated 31.03.2022	Date - Completion of Analysis	17/10/2022

**Meteorological Data / Environmental Conditions**

Average Wind Velocity 2 km/h	Wind Direction N	Relative Humidity (Max./Min.): 76/64%	Temperature (Max./Min.): 31/24°C	Duration of Survey 24 h
Parameter	Result	NAAQS# 2009	Unit	Method

**Chemical Testing; Group: Atmospheric Pollution**

Sulphur Dioxide (SO <sub>2</sub> )	<b>11.5</b>	80	µg/m <sup>3</sup>	IS 5182 (Part 2): 2001
Nitrogen Dioxide (NO <sub>2</sub> )	<b>25.6</b>	80	µg/m <sup>3</sup>	IS 5182 (Part 6): 2006
Particulate Matter (size less than 10 µm) or PM <sub>10</sub>	<b>344</b>	100	µg/m <sup>3</sup>	IS 5182 (Part 23): 2006
Particulate Matter (size less than 2.5µm) or PM <sub>2.5</sub>	<b>128</b>	60	µg/m <sup>3</sup>	CPCB Guideline, Volume I, 36/2012-13, Page No 15: 2013
Ozone (O <sub>3</sub> )	<b>BLQ</b> (LOQ:19.6)	180	µg/m <sup>3</sup>	Methods of Air Sampling and Analysis (AWMA) 3rd Ed. Method 411 Page no. 403: 1988
Lead (as Pb)	<b>BLQ</b> (LOQ:0.02)	1	µg/m <sup>3</sup>	EPA/625/R-96/D10 a Compendium Method 10-31 6 3 2
Carbon Monoxide (CO)	<b>1.28</b>	4	mg/m <sup>3</sup>	CPCB Guidelines, Volume II, 37/2012-13, Page no 16: 2013
Ammonia (NH <sub>3</sub> )	<b>BLQ</b> (LOQ:20)	400	µg/m <sup>3</sup>	CPCB Guidelines, Volume I, 36/2012-13, Page No 35: 2013
Benzene (C <sub>6</sub> H <sub>6</sub> )	<b>1.17</b>	5	µg/m <sup>3</sup>	IS 5182 (Part II): 2006
Benzo (a) pyrene (BaP) Particulate Phase only	<b>BLQ</b> (LOQ:0.2)	1	ng/m <sup>3</sup>	IS 5182 (Part 12): 2004
Arsenic (as As)	<b>BLQ</b> (LOQ:0.3)	6	ng/m <sup>3</sup>	EPA/625/R-96/D10 a Compendium Method 10-31 6 3 4
Nickel (as Ni)	<b>BLQ</b> (LOQ:3)	20	ng/m <sup>3</sup>	EPA/625/R-96/D10 a Compendium Method 10-31 6 3 2

BLQ: Below Limit of Quantification, LOQ: Limit of Quantification

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, PM<sub>10</sub>, PM<sub>2.5</sub>, Lead and Ammonia, 1 hour TWA in case of Carbon Monoxide and Ozone, Annual TWA in case of Benzene, Benzo (a) Pyrene, Arsenic and Nickel

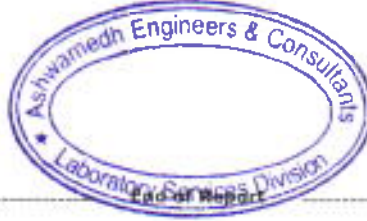
  
Ninad Soundankar  
Technical Manager (Chemical)  
Reviewed & Authorised by



Sample ID : AA/10/22/5326	Report No. AA/10/22/5326	Report Date	18/10/2022
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Ninad Soundankar  
Technical Manager (Chemical)  
Reviewed & Authorised by



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### NOISE LEVEL MEASUREMENT REPORT

Sample ID: N/10/22/5358	Report No: N/10/22/5358	Report Date	16/10/2022
Name and Address of Customer	<b>PNP Maritime Services Private Limited</b> 2nd Floor, Lansdowne House, Mahakavi Bhushan Road, Colaba, Mumbai - 400 001		
Monitoring Done By	Laboratory	Sample Description /Type	Ambient Noise
Order Reference	As per PO No. PNP/March/2021- 2022/020 Dated 31.03.2022	Date-Monitoring	10/10/2022

#### Chemical Testing; Group: Atmospheric Pollution

Location	Time (h)	Results Noise Level dB (A) Fast Response	Results Noise Level dB (A) Slow Response	Method
A. Near Main Gate (PNP Port)	09:00	73.3	72.7	CPCB Protocol for Ambient Level Noise Monitoring July AEC/C/SAP/SAM/358 36 Issue no.4. Issue date 01/04/2018
	21:00	67.6	66.5	
B. Near Jetty No. 1 (PNP Port)	09:10	72.5	71.4	
	21:10	66.4	65.3	
C. Near Jetty No. 2 (PNP Port)	09:20	71.3	70.6	
	21:20	65.6	64.4	
D. Near Jetty No. 3 (PNP Port)	09:30	73.3	72.5	
	21:30	67.5	66.4	
E. Near Jetty No. 5 (PNP Port)	09:40	72.4	71.3	
	21:40	66.2	65.2	
F. Near Weight Bridge (PNP Port)	09:50	73.2	72.4	
	21:50	67.5	66.2	
G. Near Custom Building (PNP Port)	10:00	71.3	70.3	
	22:00	65.4	64.3	
H. Near Lal Gate (PNP Port)	10:10	73.0	72.4	
	22:10	67.4	66.2	
I. Near DIL Main Gate (PNP Port)	10:20	72.4	71.3	
	22:20	66.1	65.1	
J. DIL Godown Back Side (PNP Port)	11:30	71.2	70.2	
	23:30	65.3	64.2	

#### Limit s

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

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

  
Ninad Soundankar  
Technical Manager (Chemical)  
Reviewed & Authorised by



End of Report

#### Note:

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**AMBIENT AIR QUALITY MONITORING REPORT**

Sample ID : AA/10/22/5524	Report No. AA/10/22/5524	Report Date	21/10/2022
Name and address of Customer	<b>PNP Maritime Services Private Limited</b> 2nd Floor, Lansdowne House, Mahakavi Bhushan Road, Colaba, Mumbai - 400001, Maharashtra		
Sampling done by	Laboratory	Sample Description / Type	Ambient Air
Sampling Location	Near DIL Godown Back Side (PNP Port)	Date - Sampling	13/10/2022 to 14/10/2022
Sample Quantity / Packing	PM <sub>10</sub> : Bap, Metals: 1 x 3 no. filter paper PM <sub>2.5</sub> : 1 x 1 no. filter paper SO <sub>2</sub> , NO <sub>2</sub> : 30 ml x 6 no. plastic bottle each NH <sub>3</sub> : 10 ml x 24 no. plastic bottle Ozone: 10 ml x 1 no. plastic bottle C <sub>6</sub> H <sub>6</sub> : 6 no. charcoal tubes CO: 1 no. bladder	Date - Receipt of Sample	15/10/2022
Sampling Procedure	As per method reference	Date - Start of Analysis	15/10/2022
Order Reference	As per PO No. PNP/March/2021-2022/020 Dated 31.03.2022	Date - Completion of Analysis	20/10/2022

**Meteorological Data / Environmental Conditions**

Average Wind Velocity 3 km/h	Wind Direction E-N-E	Relative Humidity (Max./Min.): 80/68%	Temperature (Max./Min.): 30/24°C	Duration of Survey 24 h
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Parameter	Result	NAAQS# 2009	Unit	Method
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**Chemical Testing; Group: Atmospheric Pollution**

Sulphur Dioxide (SO <sub>2</sub> )	<b>6.3</b>	80	µg/m <sup>3</sup>	IS 5182 (Part 2) 2001
Nitrogen Dioxide (NO <sub>2</sub> )	<b>20.9</b>	80	µg/m <sup>3</sup>	IS 5182 (Part 6) 2006
Particulate Matter (size less than 10 µm) or PM <sub>10</sub>	<b>227</b>	100	µg/m <sup>3</sup>	IS 5182 (Part 23) 2006
Particulate Matter (size less than 2.5µm) or PM <sub>2.5</sub>	<b>62</b>	60	µg/m <sup>3</sup>	CPCB Guideline, Volume 1 36/2012-13, Page No 15 2013
Ozone (O <sub>3</sub> )	<b>BLQ</b> (LOQ:19.6)	180	µg/m <sup>3</sup>	Methods of Air Sampling and Analysis (AWMA) 3rd Ed., Method 411, Page no. 403 :1988
Lead (as Pb)	<b>BLQ</b> (LOQ:0.02)	1	µg/m <sup>3</sup>	EPA/625/R-96/D10 a Compendium Method 10-316 3 2
Carbon Monoxide (CO)	<b>0.8</b>	4	mg/m <sup>3</sup>	CPCB Guidelines, Volume 11, 37/2012-13, Page no 16 2013
Ammonia (NH <sub>3</sub> )	<b>BLQ</b> (LOQ:20)	400	µg/m <sup>3</sup>	CPCB Guidelines, Volume 1 36/2012-13, Page No 35: 2013
Benzene (C <sub>6</sub> H <sub>6</sub> )	<b>BLQ</b> (LOQ:1)	5	µg/m <sup>3</sup>	IS 5182 (Part 11) 2006
Benzo (a) pyrene (BaP) Particulate Phase only	<b>BLQ</b> (LOQ:0.2)	1	ng/m <sup>3</sup>	IS 5182 (Part 12): 2004
Arsenic (as As)	<b>BLQ</b> (LOQ:0.3)	6	ng/m <sup>3</sup>	EPA/625/R-96/D10 a Compendium Method 10-316 3 4
Nickel (as Ni)	<b>BLQ</b> (LOQ:3)	20	ng/m <sup>3</sup>	EPA/625/R-96/D10 a Compendium Method 10-316 3 2

BLQ: Below Limit of Quantification, LOQ: Limit of Quantification

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, PM<sub>10</sub>, PM<sub>2.5</sub>, Lead and Ammonia, 1 hour TWA in case of Carbon Monoxide and Ozone, Annual TWA in case of Benzene, Benzo (a) Pyrene, Arsenic and Nickel

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



Sample ID : AA/10/22/5524	Report No. AA/10/22/5524	Report Date	21/10/2022
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Ninad Soundankar  
Technical Manager (Chemical)  
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### AMBIENT AIR QUALITY MONITORING REPORT

Sample ID : AA/10/22/5523	Report No. AA/10/22/5523	Report Date	21/10/2022
Name and address of Customer	<b>PNP Maritime Services Private Limited</b> 2nd Floor, Lansdowne House, Mahakavi Bhushan Road, Colaba, Mumbai - 400001, Maharashtra		
Sampling done by	Laboratory	Sample Description / Type	Ambient Air
Sampling Location	Near DIL Main Gate (PNP Port)	Date - Sampling	13/10/2022 to 14/10/2022
Sample Quantity / Packing	PM <sub>10</sub> , Bap, Metals: 1 x 3 no. filter paper PM <sub>2.5</sub> : 1 x 1 no. filter paper SO <sub>2</sub> , NO <sub>2</sub> : 30 ml x 6 no. plastic bottle each NH <sub>3</sub> : 10 ml x 24 no. plastic bottle Ozone: 10 ml x 1 no. plastic bottle C <sub>6</sub> H <sub>6</sub> : 6 no. charcoal tubes CO: 1 no. bladder	Date - Receipt of Sample	15/10/2022
Sampling Procedure	As per method reference	Date - Start of Analysis	15/10/2022
Order Reference	As per PO No. PNP/March/2021-2022/020 Dated 31.03.2022	Date - Completion of Analysis	20/10/2022

#### Meteorological Data / Environmental Conditions

Average Wind Velocity 3 km/h	Wind Direction E-NE	Relative Humidity (Max./Min.): 80/68%	Temperature (Max./Min.): 30/24°C	Duration of Survey 24 h
Parameter	Result	NAAQS# 2009	Unit	Method

#### Chemical Testing; Group: Atmospheric Pollution

Sulphur Dioxide (SO <sub>2</sub> )	7.3	80	µg/m <sup>3</sup>	IS 5182 (Part 2): 2001
Nitrogen Dioxide (NO <sub>2</sub> )	22.7	80	µg/m <sup>3</sup>	IS 5182 (Part 6): 2006
Particulate Matter (size less than 10 µm) or PM <sub>10</sub>	303	100	µg/m <sup>3</sup>	IS 5182 (Part 23): 2006
Particulate Matter (size less than 2.5 µm) or PM <sub>2.5</sub>	93	60	µg/m <sup>3</sup>	CPCB Guideline, Volume I 36/2012-13, Page No 15: 2013
Ozone (O <sub>3</sub> )	BLQ (LOQ:19.6)	180	µg/m <sup>3</sup>	Methods of Air Sampling and Analysis (AWMA), 3rd Ed. Method 40, Page no. 403: 1988
Lead (as Pb)	BLQ (LOQ:0.02)	1	µg/m <sup>3</sup>	EPA/625/R-96/D10 a Compendium Method 10-3   6 3 2
Carbon Monoxide (CO)	0.88	4	mg/m <sup>3</sup>	CPCB Guidelines, Volume II, 37/2012-13, Page no 16: 2013
Ammonia (NH <sub>3</sub> )	BLQ (LOQ:20)	400	µg/m <sup>3</sup>	CPCB Guidelines, Volume I 36/2012-13, Page No 35: 2013
Benzene (C <sub>6</sub> H <sub>6</sub> )	BLQ (LOQ:1)	5	µg/m <sup>3</sup>	IS 5182 (Part 11): 2006
Benzo (a) pyrene (BaP) Particulate Phase only	BLQ (LOQ:0.2)	1	ng/m <sup>3</sup>	IS 5182 (Part 12): 2004
Arsenic (as As)	BLQ (LOQ:0.3)	6	ng/m <sup>3</sup>	EPA/625/R-96/D10 a Compendium Method 10-3   6 3 4
Nickel (as Ni)	BLQ (LOQ:3)	20	ng/m <sup>3</sup>	EPA/625/R-96/D10 a Compendium Method 10-3   6 3 2

BLQ: Below Limit of Quantification, LOQ: Limit of Quantification  
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, PM<sub>10</sub>, PM<sub>2.5</sub>, 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 Scundankar  
Technical Manager (Chemical)  
Reviewed & Authorised by



Sample ID : AA/10/22/5523

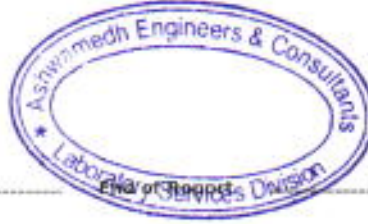
Report No. AA/10/22/5523

Report Date

21/10/2022



Ninad Soundankar  
Technical Manager (Chemical)  
Reviewed & Authorised by



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





### AMBIENT AIR QUALITY MONITORING REPORT

Sample ID : AA/10/22/5522	Report No. AA/10/22/5522	Report Date	21/10/2022
Name and address of Customer	<b>PNP Maritime Services Private Limited</b> 2nd Floor, Lansdowne House, Mahakavi Bhushan Road, Colaba, Mumbai - 400001, Maharashtra		
Sampling done by	Laboratory	Sample Description / Type	Ambient Air
Sampling Location	Near Lal Gate (PNP Port)	Date - Sampling	13/10/2022 to 14/10/2022
Sample Quantity / Packing	PM <sub>10</sub> , Bap, Metals: 1 x 3 no. filter paper PM <sub>2.5</sub> : 1 x 1 no. filter paper SO <sub>2</sub> , NO <sub>2</sub> : 30 ml x 6 no. plastic bottle each NH <sub>3</sub> : 10 ml x 24 no. plastic bottle Ozone: 10 ml x 1 no. plastic bottle C <sub>6</sub> H <sub>6</sub> : 6 no. charcoal tubes CO: 1 no. bladder	Date - Receipt of Sample	15/10/2022
Sampling Procedure	As per method reference	Date - Start of Analysis	15/10/2022
Order Reference	As per PO No. PNP/March/2021-2022/020 Dated 31.03.2022	Date - Completion of Analysis	20/10/2022

#### Meteorological Data / Environmental Conditions

Average Wind Velocity 3 km/h	Wind Direction E-NE	Relative Humidity (Max./Min.): 80/68%	Temperature (Max./Min.): 30/24°C	Duration of Survey 24 h
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Parameter	Result	NAAQS# 2009	Unit	Method
<b>Chemical Testing; Group: Atmospheric Pollution</b>				
Sulphur Dioxide (SO <sub>2</sub> )	8.4	80	µg/m <sup>3</sup>	IS 5182 (Part 2) 2001
Nitrogen Dioxide (NO <sub>2</sub> )	26.2	80	µg/m <sup>3</sup>	IS 5182 (Part 6) 2006
Particulate Matter (size less than 10 µm) or PM <sub>10</sub>	298	100	µg/m <sup>3</sup>	IS 5182 (Part 23) 2006
Particulate Matter (size less than 2.5µm) or PM <sub>2.5</sub>	89	60	µg/m <sup>3</sup>	CPCB Guideline, Volume I, 36/2012-13, Page No 15 2013
Ozone (O <sub>3</sub> )	BLQ (LOQ:19.6)	180	µg/m <sup>3</sup>	Methods of Air Sampling and Analysis (AWMA), 3rd Ed., Method 411, Page no. 403 1988
Lead (as Pb)	BLQ (LOQ:0.02)	1	µg/m <sup>3</sup>	EPA/625/R-96/010 a Compendium Method 10-31 B 3 2
Carbon Monoxide (CO)	1.08	4	mg/m <sup>3</sup>	CPCB Guidelines, Volume II, 37/2012-13, Page no 16 2013
Ammonia (NH <sub>3</sub> )	BLQ (LOQ:20)	400	µg/m <sup>3</sup>	CPCB Guidelines, Volume I, 36/2012-13, Page No 35 2013
Benzene (C <sub>6</sub> H <sub>6</sub> )	BLQ (LOQ:1)	5	µg/m <sup>3</sup>	IS 5182 (Part II) 2006
Benzo (a) pyrene (BaP) Particulate Phase only	BLQ (LOQ:0.2)	1	ng/m <sup>3</sup>	IS 5182 (Part 12) 2004
Arsenic (as As)	BLQ (LOQ:0.3)	6	ng/m <sup>3</sup>	EPA/625/R-96/010 a Compendium Method 10-31 B 3 4
Nickel (as Ni)	BLQ (LOQ:3)	20	ng/m <sup>3</sup>	EPA/625/R-96/010 a Compendium Method 10-31 B 3 2

BLQ: Below Limit of Quantification, LOQ: Limit of Quantification

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, PM<sub>10</sub>, PM<sub>2.5</sub>, Lead and Ammonia, 1 hour TWA in case of Carbon Monoxide and Ozone, Annual TWA in case of Benzene, Benzo (a) Pyrene, Arsenic and Nickel

Ninad Soundankar  
Technical Manager (Chemical)  
Reviewed & Authorised by

Sample ID : AA/10/22/5522	Report No. AA/10/22/5522	Report Date	21/10/2022
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Ninad Soundankar

Technical Manager (Chemical)  
Reviewed & Authorised by



Note:

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3. In case sampling is not done by laboratory, the results apply to the sample as received.
4. There are no additions to, deviations or exclusions from the method.



### AMBIENT AIR QUALITY MONITORING REPORT

Sample ID : AA/10/22/5521	Report No. AA/10/22/5521	Report Date	21/10/2022
Name and address of Customer	<b>PNP Maritime Services Private Limited</b> 2nd Floor, Lansdowne House, Mahakavi Bhushan Road, Colaba, Mumbai - 400001, Maharashtra		
Sampling done by	Laboratory	Sample Description / Type	Ambient Air
Sampling Location	Near Custom Building (PNP Port)	Date - Sampling	13/10/2022 to 14/10/2022
Sample Quantity / Packing	PM <sub>10</sub> , Bap, Metals: 1 x 3 no. filter paper PM <sub>2.5</sub> : 1 x 1 no. filter paper SO <sub>2</sub> , NO <sub>2</sub> : 30 ml x 6 no. plastic bottle each NH <sub>3</sub> : 10 ml x 24 no. plastic bottle Ozone: 10 ml x 1 no. plastic bottle C <sub>6</sub> H <sub>6</sub> : 6 no. charcoal tubes CO: 1 no. bladder	Date - Receipt of Sample	15/10/2022
Sampling Procedure	As per method reference	Date - Start of Analysis	15/10/2022
Order Reference	As per PO No. PNP/March/2021-2022/020 Dated 31.03.2022	Date - Completion of Analysis	20/10/2022

#### Meteorological Data / Environmental Conditions

Average Wind Velocity 3 km/h	Wind Direction E-NE	Relative Humidity (Max./Min.): 80/68%	Temperature (Max./Min.): 30/24°C	Duration of Survey 24 h
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Parameter	Result	NAAQS# 2009	Unit	Method
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#### Chemical Testing; Group: Atmospheric Pollution

Sulphur Dioxide (SO <sub>2</sub> )	10.5	80	µg/m <sup>3</sup>	IS 5182 (Part 2) 2001
Nitrogen Dioxide (NO <sub>2</sub> )	22.7	80	µg/m <sup>3</sup>	IS 5182 (Part 6) 2006
Particulate Matter (size less than 10 µm) or PM <sub>10</sub>	274	100	µg/m <sup>3</sup>	IS 5182 (Part 28) 2006
Particulate Matter (size less than 2.5µm) or PM <sub>2.5</sub>	72	60	µg/m <sup>3</sup>	CPCB Guideline, Volume 1,36/2012-13, Page No.15 2013
Ozone (O <sub>3</sub> )	BLQ (LOQ:19.6)	180	µg/m <sup>3</sup>	Methods of Air Sampling and Analysis (AWMA), 3rd Ed., Method 411 Page no. 403 1988
Lead (as Pb)	BLQ (LOQ:0.02)	1	µg/m <sup>3</sup>	EPA/625/R-96/010 a Compendium Method 10-31 & 32
Carbon Monoxide (CO)	0.94	4	mg/m <sup>3</sup>	CPCB Guidelines, Volume II, 37/2012-13, Page no.16 2013
Ammonia (NH <sub>3</sub> )	BLQ (LOQ:20)	400	µg/m <sup>3</sup>	CPCB Guidelines, Volume 1,36/2012-13, Page No.35 2013
Benzene (C <sub>6</sub> H <sub>6</sub> )	BLQ (LOQ:1)	5	µg/m <sup>3</sup>	IS 5182 (Part 11) 2006
Benzo (a) pyrene (BaP) Particulate Phase only	BLQ (LOQ:0.2)	1	ng/m <sup>3</sup>	IS 5182 (Part 12) 2004
Arsenic (as As)	BLQ (LOQ:0.3)	6	ng/m <sup>3</sup>	EPA/625/R-96/010 a Compendium Method 10-31 & 34
Nickel (as Ni)	BLQ (LOQ:3)	20	ng/m <sup>3</sup>	EPA/625/R-96/010 a Compendium Method 10-31 & 32

BLQ: Below Limit of Quantification, LOQ: Limit of Quantification

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, PM<sub>10</sub>, PM<sub>2.5</sub>, 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 Soudankar  
Technical Manager (Chemical)  
Reviewed & Authorised by



Sample ID : AA/10/22/5521	Report No. AA/10/22/5521	Report Date	21/10/2022
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Ninad Soundankar  
Technical Manager (Chemical)  
Reviewed & Authorised by



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



### AMBIENT AIR QUALITY MONITORING REPORT

Sample ID : AA/10/22/5520	Report No. AA/10/22/5520	Report Date	21/10/2022
Name and address of Customer	<b>PNP Maritime Services Private Limited</b> 2nd Floor, Lansdowne House, Mahakavi Bhushan Road, Colaba, Mumbai - 400001, Maharashtra		
Sampling done by	Laboratory	Sample Description / Type	Ambient Air
Sampling Location	Near Weigh Bridge (PNP Port)	Date - Sampling	13/10/2022 to 14/10/2022
Sample Quantity / Packing	PM <sub>10</sub> , Bap, Metals: 1 x 3 no. filter paper PM <sub>2.5</sub> : 1 x 1 no. filter paper SO <sub>2</sub> , NO <sub>2</sub> : 30 ml x 6 no. plastic bottle each NH <sub>3</sub> : 10 ml x 24 no. plastic bottle Ozone: 10 ml x 1 no. plastic bottle C <sub>6</sub> H <sub>6</sub> : 6 no. charcoal tubes CO: 1 no. bladder	Date - Receipt of Sample	15/10/2022
Sampling Procedure	As per method reference	Date - Start of Analysis	15/10/2022
Order Reference	As per PO No. PNP/March/2021-2022/020 Dated 31.03.2022	Date - Completion of Analysis	20/10/2022

#### Meteorological Data / Environmental Conditions

Average Wind Velocity 3 km/h	Wind Direction E-NE	Relative Humidity (Max./Min.): 80/68%	Temperature (Max./Min.): 30/24°C	Duration of Survey 24 h
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Parameter	Result	NAAQS# 2009	Unit	Method
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#### Chemical Testing; Group: Atmospheric Pollution

Sulphur Dioxide (SO <sub>2</sub> )	12.6	80	µg/m <sup>3</sup>	IS 5182 (Part 2): 2001
Nitrogen Dioxide (NO <sub>2</sub> )	25.6	80	µg/m <sup>3</sup>	IS 5182 (Part 6): 2006
Particulate Matter (size less than 10 µm) or PM <sub>10</sub>	301	100	µg/m <sup>3</sup>	IS 5182 (Part 23): 2006
Particulate Matter (size less than 2.5µm) or PM <sub>2.5</sub>	98	60	µg/m <sup>3</sup>	CPCB Guideline, Volume I, 36/2012-13, Page No 15:2013
Ozone (O <sub>3</sub> )	BLQ (LOQ:19.6)	180	µg/m <sup>3</sup>	Methods of Air Sampling and Analysis (AWMA), 3rd Ed., Method 411 Page no. 403:1988
Lead (as Pb)	BLQ (LOQ:0.02)	1	µg/m <sup>3</sup>	EPA/625/R-96/010 a Compendium Method 10-31 & 32
Carbon Monoxide (CO)	1.1	4	mg/m <sup>3</sup>	CPCB Guidelines, Volume II, 37/2012-13, Page no 16: 2013
Ammonia (NH <sub>3</sub> )	BLQ (LOQ:20)	400	µg/m <sup>3</sup>	CPCB Guidelines, Volume I, 36/2012-13, Page No 35: 2013
Benzene (C <sub>6</sub> H <sub>6</sub> )	1.03	5	µg/m <sup>3</sup>	IS 5182 (Part II): 2006
Benzo (a) pyrene (BaP) Particulate Phase only	BLQ (LOQ:0.2)	1	ng/m <sup>3</sup>	IS 5182 (Part 12): 2004
Arsenic (as As)	BLQ (LOQ:0.3)	6	ng/m <sup>3</sup>	EPA/625/R-96/010 a Compendium Method 10-31 & 34
Nickel (as Ni)	BLQ (LOQ:3)	20	ng/m <sup>3</sup>	EPA/625/R-96/010 a Compendium Method 10-31 & 32

BLQ: Below Limit of Quantification, LOQ: Limit of Quantification

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, PM<sub>10</sub>, PM<sub>2.5</sub>, 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

Sample ID : AA/10/22/5520

Report No. AA/10/22/5520

Report Date

21/10/2022



Ninad Soundankar  
Technical Manager (Chemical)  
Reviewed & Authorised by



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### AMBIENT AIR QUALITY MONITORING REPORT

Sample ID : AA/10/22/5519	Report No. AA/10/22/5519	Report Date	21/10/2022
Name and address of Customer	<b>PNP Maritime Services Private Limited</b> 2nd Floor, Lansdowne House, Mahakavi Bhushan Road, Colaba, Mumbai - 400001, Maharashtra		
Sampling done by	Laboratory	Sample Description / Type	Ambient Air
Sampling Location	Near PNP Jetty No.5 (PNP Port)	Date - Sampling	13/10/2022 to 14/10/2022
Sample Quantity / Packing	PM <sub>10</sub> , Bap, Metals: 1 x 3 no. filter paper PM <sub>2.5</sub> : 1 x 1 no. filter paper SO <sub>2</sub> , NO <sub>2</sub> : 30 ml x 6 no. plastic bottle each NH <sub>3</sub> : 10 ml x 24 no. plastic bottle Ozone: 10 ml x 1 no. plastic bottle C <sub>6</sub> H <sub>6</sub> : 6 no. charcoal tubes CO: 1 no. bladder	Date - Receipt of Sample	15/10/2022
Sampling Procedure	As per method reference	Date - Start of Analysis	15/10/2022
Order Reference	As per PO No. PNP/March/2021-2022/020 Dated 31.03.2022	Date - Completion of Analysis	20/10/2022

#### Meteorological Data / Environmental Conditions

Average Wind Velocity 3 km/h	Wind Direction E-NE	Relative Humidity (Max./Min.): 80/68%	Temperature (Max./Min.): 30/24°C	Duration of Survey 24 h
Parameter	Result	NAAQS# 2009	Unit	Method

#### Chemical Testing; Group: Atmospheric Pollution

Sulphur Dioxide (SO <sub>2</sub> )	11.5	80	µg/m <sup>3</sup>	IS 5182 (Part 2): 2001
Nitrogen Dioxide (NO <sub>2</sub> )	24.1	80	µg/m <sup>3</sup>	IS 5182 (Part 6): 2006
Particulate Matter (size less than 10 µm) or PM <sub>10</sub>	239	100	µg/m <sup>3</sup>	IS 5182 (Part 23) 2006
Particulate Matter (size less than 2.5µm) or PM <sub>2.5</sub>	77	60	µg/m <sup>3</sup>	CPCB Guideline, Volume I,36/2012-13, Page No 15 2013
Ozone (O <sub>3</sub> )	BLQ (LOQ:19.6)	180	µg/m <sup>3</sup>	Methods of Air Sampling and Analysis (AWMA), 3rd Ed., Method 411, Page no. 403 :1988
Lead (as Pb)	BLQ (LOQ:0.02)	1	µg/m <sup>3</sup>	EPA/625/R-96/D10 a Compendium Method 10-31 & 32
Carbon Monoxide (CO)	0.95	4	mg/m <sup>3</sup>	CPCB Guidelines, Volume II, 37/2012-13, Page no 16 2013
Ammonia (NH <sub>3</sub> )	BLQ (LOQ:20)	400	µg/m <sup>3</sup>	CPCB Guidelines, Volume I,36/2012-13, Page No 35 2013
Benzene (C <sub>6</sub> H <sub>6</sub> )	BLQ (LOQ:1)	5	µg/m <sup>3</sup>	IS 5182 (Part II) : 2006
Benzo (a) pyrene (BaP) Particulate Phase only	BLQ (LOQ:0.2)	1	ng/m <sup>3</sup>	IS 5182 (Part 12): 2004
Arsenic (as As)	BLQ (LOQ:0.3)	6	ng/m <sup>3</sup>	EPA/625/R-96/D10 a Compendium Method 10-31 & 34
Nickel (as Ni)	BLQ (LOQ:3)	20	ng/m <sup>3</sup>	EPA/625/R-96/D10 a Compendium Method 10-31 & 32

BLQ: Below Limit of Quantification, LOQ: Limit of Quantification

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, PM<sub>10</sub>, PM<sub>2.5</sub>, Lead and Ammonia, 1 hour TWA in case of Carbon Monoxide and Ozone, Annual TWA in case of Benzene, Benzo (a) Pyrene, Arsenic and Nickel

  
Ninad Soundankar  
Technical Manager (Chemical)  
Reviewed & Authorised by



Sample ID : AA/10/22/5519	Report No, AA/10/22/5519	Report Date	21/10/2022
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Ninad Soundankar

Technical Manager (Chemical)  
Reviewed & Authorised by



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### AMBIENT AIR QUALITY MONITORING REPORT

Sample ID : AA/10/22/5518	Report No. AA/10/22/5518	Report Date	21/10/2022
Name and address of Customer	<b>PNP Maritime Services Private Limited</b> 2nd Floor, Lansdowne House, Mahakavi Bhushan Road, Colaba, Mumbai - 400001, Maharashtra		
Sampling done by	Laboratory	Sample Description / Type	Ambient Air
Sampling Location	Near PNP Jetty No. 3 (PNP Port)	Date - Sampling	13/10/2022 to 14/10/2022
Sample Quantity / Packing	PM <sub>10</sub> , Bap, Metals: 1 x 3 no. filter paper PM <sub>2.5</sub> : 1 x 1 no. filter paper SO <sub>2</sub> , NO <sub>2</sub> : 30 ml x 6 no. plastic bottle each NH <sub>3</sub> : 10 ml x 24 no. plastic bottle Ozone: 10 ml x 1 no. plastic bottle C <sub>6</sub> H <sub>6</sub> : 6 no. charcoal tubes CO: 1 no. bladder	Date - Receipt of Sample	15/10/2022
Sampling Procedure	As per method reference	Date - Start of Analysis	15/10/2022
Order Reference	As per PO No. PNP/March/2021-2022/020 Dated 31.03.2022	Date - Completion of Analysis	20/10/2022

#### Meteorological Data / Environmental Conditions

Average Wind Velocity 3 km/h	Wind Direction E-NE	Relative Humidity (Max./Min.): 80/68%	Temperature (Max./Min.): 30/24°C	Duration of Survey 24 h
Parameter	Result	NAAQS# 2009	Unit	Method

#### Chemical Testing; Group: Atmospheric Pollution

Sulphur Dioxide (SO <sub>2</sub> )	9.4	80	µg/m <sup>3</sup>	IS 5182 (Part 2): 2001
Nitrogen Dioxide (NO <sub>2</sub> )	28.2	80	µg/m <sup>3</sup>	IS 5182 (Part 6): 2006
Particulate Matter (size less than 10 µm) or PM <sub>10</sub>	366	100	µg/m <sup>3</sup>	IS 5182 (Part 23): 2006
Particulate Matter (size less than 2.5µm) or PM <sub>2.5</sub>	151	60	µg/m <sup>3</sup>	CPCB Guideline, Volume I 36/2012-13, Page No 15 2013
Ozone (O <sub>3</sub> )	BLQ (LOQ:19.6)	180	µg/m <sup>3</sup>	Methods of Air Sampling and Analysis (AWMA), 3rd Ed. Method 411, Page no. 403, 1988
Lead (as Pb)	BLQ (LOQ:0.02)	1	µg/m <sup>3</sup>	EPA/625/R-96/010 a Compendium Method 10-31 & 32
Carbon Monoxide (CO)	1.35	4	mg/m <sup>3</sup>	CPCB Guidelines, Volume II, 37/2012-13, Page no 16, 2013
Ammonia (NH <sub>3</sub> )	BLQ (LOQ:20)	400	µg/m <sup>3</sup>	CPCB Guidelines, Volume I 36/2012-13, Page No 35, 2013
Benzene (C <sub>6</sub> H <sub>6</sub> )	1.30	5	µg/m <sup>3</sup>	IS 5182 (Part 11): 2006
Benzo (a) pyrene (BaP) Particulate Phase only	BLQ (LOQ:0.2)	1	ng/m <sup>3</sup>	IS 5182 (Part 12): 2004
Arsenic (as As)	BLQ (LOQ:0.3)	6	ng/m <sup>3</sup>	EPA/625/R-96/010 a Compendium Method 10-31 & 34
Nickel (as Ni)	BLQ (LOQ:3)	20	ng/m <sup>3</sup>	EPA/625/R-96/010 a Compendium Method 10-31 & 32

BLQ: Below Limit of Quantification, LOQ: Limit of Quantification

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, PM<sub>10</sub>, PM<sub>2.5</sub>, Lead and Ammonia, 1 hour TWA in case of Carbon Monoxide and Ozone, Annual TWA in case of Benzene, Benzo (a) Pyrene, Arsenic and Nickel

  
Ninad Soundankar  
Technical Manager (Chemical)  
Reviewed & Authorised by

Sample ID : AA/10/22/5518	Report No. AA/10/22/5518	Report Date	21/10/2022
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Ninad Soundankar  
Technical Manager (Chemical)  
Reviewed & Authorised by



Note:

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



**AMBIENT AIR QUALITY MONITORING REPORT**

Sample ID : AA/10/22/5517	Report No. AA/10/22/5517	Report Date	21/10/2022
Name and address of Customer	<b>PNP Maritime Services Private Limited</b> 2nd Floor, Lansdowne House, Mahakavi Bhushan Road, Colaba, Mumbai - 400001, Maharashtra		
Sampling done by	Laboratory	Sample Description / Type	Ambient Air
Sampling Location	Near PNP Jetty No. 2 (PNP Port)	Date - Sampling	13/10/2022 to 14/10/2022
Sample Quantity / Packing	PM <sub>10</sub> , Bap, Metals: 1 x 3 no. filter paper PM <sub>2.5</sub> : 1 x 1 no. filter paper SO <sub>2</sub> , NO <sub>2</sub> : 30 ml x 6 no. plastic bottle each NH <sub>3</sub> : 10 ml x 24 no. plastic bottle Ozone: 10 ml x 1 no. plastic bottle C <sub>6</sub> H <sub>6</sub> : 6 no. charcoal tubes CO: 1 no. bladder	Date - Receipt of Sample	15/10/2022
Sampling Procedure	As per method reference	Date - Start of Analysis	15/10/2022
Order Reference	As per PO No. PNP/March/2021-2022/020 Dated 31.03.2022	Date - Completion of Analysis	20/10/2022

**Meteorological Data / Environmental Conditions**

Average Wind Velocity 3 km/h	Wind Direction E-NE	Relative Humidity (Max./Min.): 80/68%	Temperature (Max./Min.): 30/24°C	Duration of Survey 24 h
Parameter	Result	NAAQS# 2009	Unit	Method

**Chemical Testing; Group: Atmospheric Pollution**

Sulphur Dioxide (SO <sub>2</sub> )	<b>6.3</b>	80	µg/m <sup>3</sup>	IS 5182 (Part 2): 2001
Nitrogen Dioxide (NO <sub>2</sub> )	<b>25.3</b>	80	µg/m <sup>3</sup>	IS 5182 (Part 6): 2006
Particulate Matter (size less than 10 µm) or PM <sub>10</sub>	<b>308</b>	100	µg/m <sup>3</sup>	IS 5182 (Part 23): 2006
Particulate Matter (size less than 2.5µm) or PM <sub>2.5</sub>	<b>101</b>	60	µg/m <sup>3</sup>	CPCB Guideline, Volume 1:36/2012-13 Page No 15: 2013
Ozone (O <sub>3</sub> )	<b>BLQ</b> (LOQ:19.6)	180	µg/m <sup>3</sup>	Methods of Air Sampling and Analysis (AWMA), 3rd Ed., Method 411, Page no. 403:1988
Lead (as Pb)	<b>BLQ</b> (LOQ:0.02)	1	µg/m <sup>3</sup>	EPA/625/R-96/010 a Compendium Method 10-31 & 32
Carbon Monoxide (CO)	<b>1.18</b>	4	mg/m <sup>3</sup>	CPCB Guidelines, Volume II, 37/2012-13, Page no 16: 2013
Ammonia (NH <sub>3</sub> )	<b>BLQ</b> (LOQ:20)	400	µg/m <sup>3</sup>	CPCB Guidelines, Volume 1:36/2012-13, Page No 35: 2013
Benzene (C <sub>6</sub> H <sub>6</sub> )	<b>1.08</b>	5	µg/m <sup>3</sup>	IS 5182 (Part 11): 2006
Benzo (a) pyrene (BaP) Particulate Phase only	<b>BLQ</b> (LOQ:0.2)	1	ng/m <sup>3</sup>	IS 5182 (Part 12): 2004
Arsenic (as As)	<b>BLQ</b> (LOQ:0.3)	6	ng/m <sup>3</sup>	EPA/625/R-96/010 a Compendium Method 10-31 & 34
Nickel (as Ni)	<b>BLQ</b> (LOQ:3)	20	ng/m <sup>3</sup>	EPA/625/R-96/010 a Compendium Method 10-31 & 32

BLQ: Below Limit of Quantification, LOQ: Limit of Quantification

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, PM<sub>10</sub>, PM<sub>2.5</sub>, Lead and Ammonia, 1 hour TWA in case of Carbon Monoxide and Ozone, Annual TWA in case of Benzene, Benzo (a) Pyrene, Arsenic and Nickel

  
Ninad Soundankar  
Technical Manager (Chemical)  
Reviewed & Authorised by



Sample ID : AA/10/22/5517	Report No. AA/10/22/5517	Report Date	21/10/2022
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Ninad Soundankar  
Technical Manager (Chemical)  
Reviewed & Authorised by



Note:

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





### AMBIENT AIR QUALITY MONITORING REPORT

Sample ID : AA/10/22/5516	Report No. AA/10/22/5516	Report Date	21/10/2022
Name and address of Customer	<b>PNP Maritime Services Private Limited</b> 2nd Floor, Lansdowne House, Mahakavi Bhushan Road, Colaba, Mumbai - 400001, Maharashtra		
Sampling done by	Laboratory	Sample Description / Type	Ambient Air
Sampling Location	Near PNP Jetty No. 1 (PNP Port)	Date - Sampling	13/10/2022 to 14/10/2022
Sample Quantity / Packing	PM <sub>10</sub> : Bap, Metals: 1 x 3 no. filter paper PM <sub>2.5</sub> : 1 x 1 no. filter paper SO <sub>2</sub> , NO <sub>2</sub> : 30 ml x 6 no. plastic bottle each NH <sub>3</sub> : 10 ml x 24 no. plastic bottle Ozone: 10 ml x 1 no. plastic bottle C <sub>6</sub> H <sub>6</sub> : 6 no. charcoal tubes CO: 1 no. bladder	Date - Receipt of Sample	15/10/2022
Sampling Procedure	As per method reference	Date - Start of Analysis	15/10/2022
Order Reference	As per PO No. PNP/March/2021-2022/020 Dated 31.03.2022	Date - Completion of Analysis	20/10/2022

#### Meteorological Data / Environmental Conditions

Average Wind Velocity 3 km/h	Wind Direction E-NE	Relative Humidity (Max./Min.): 80/68%	Temperature (Max./Min.): 30/24°C	Duration of Survey 24 h
Parameter	Result	NAAQS# 2009	Unit	Method

#### Chemical Testing; Group: Atmospheric Pollution

Sulphur Dioxide (SO <sub>2</sub> )	7.3	80	µg/m <sup>3</sup>	IS 5182 (Part 2) 2001
Nitrogen Dioxide (NO <sub>2</sub> )	26.2	80	µg/m <sup>3</sup>	IS 5182 (Part 6) 2006
Particulate Matter (size less than 10 µm) or PM <sub>10</sub>	318	100	µg/m <sup>3</sup>	IS 5182 (Part 23) 2006
Particulate Matter (size less than 2.5 µm) or PM <sub>2.5</sub>	108	60	µg/m <sup>3</sup>	CPCB Guidelines, Volume I, 36/2012-13, Page No 15 2013
Ozone (O <sub>3</sub> )	BLQ (LOQ:19.6)	180	µg/m <sup>3</sup>	Methods of Air Sampling and Analysis (AWMA), 3rd Ed. Method 411 Page no. 403, 1988
Lead (as Pb)	BLQ (LOQ:0.02)	1	µg/m <sup>3</sup>	EPA/625/R-96/D10 a Compendium Method 10-31 & 32
Carbon Monoxide (CO)	1.6	4	mg/m <sup>3</sup>	CPCB Guidelines, Volume II, 37/2012-13, Page no 16 2013
Ammonia (NH <sub>3</sub> )	BLQ (LOQ:20)	400	µg/m <sup>3</sup>	CPCB Guidelines, Volume I, 36/2012-13, Page No 35 2013
Benzene (C <sub>6</sub> H <sub>6</sub> )	BLQ (LOQ:1)	5	µg/m <sup>3</sup>	IS 5182 (Part 11) 2006
Benzo (a) pyrene (BaP) Particulate Phase only	BLQ (LOQ:0.2)	1	ng/m <sup>3</sup>	IS 5182 (Part 12) 2004
Arsenic (as As)	BLQ (LOQ:0.3)	6	ng/m <sup>3</sup>	EPA/625/R-96/D10 a Compendium Method 10-31 & 34
Nickel (as Ni)	BLQ (LOQ:3)	20	ng/m <sup>3</sup>	EPA/625/R-96/D10 a Compendium Method 10-31 & 32

BLQ: Below Limit of Quantification, LOQ: Limit of Quantification

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, PM<sub>10</sub>, PM<sub>2.5</sub>, 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

  
Nisha Scundankar  
Technical Manager (Chemical)  
Reviewed & Authorised by

Sample ID : AA/10/22/5516	Report No. AA/10/22/5516	Report Date	21/10/2022
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Ninad Soundankar  
Technical Manager (Chemical)  
Reviewed & Authorised by



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



### AMBIENT AIR QUALITY MONITORING REPORT

Sample ID : AA/10/22/5515	Report No. AA/10/22/5515	Report Date	21/10/2022
Name and address of Customer	<b>PNP Maritime Services Private Limited</b> 2nd Floor, Lansdowne House, Mahakavi Bhushan Road, Colaba, Mumbai - 400001, Maharashtra		
Sampling done by	Laboratory	Sample Description / Type	Ambient Air
Sampling Location	Near PNP Main Gate (PNP Port)	Date - Sampling	13/10/2022 to 14/10/2022
Sample Quantity / Packing	PM <sub>10</sub> , Bap, Metals: 1 x 3 no. filter paper PM <sub>2.5</sub> : 1 x 1 no. filter paper SO <sub>2</sub> , NO <sub>2</sub> : 30 ml x 6 no. plastic bottle each NH <sub>3</sub> : 10 ml x 24 no. plastic bottle Ozone: 10 ml x 1 no. plastic bottle C <sub>6</sub> H <sub>6</sub> : 6 no. charcoal tubes CO: 1 no. bladder	Date - Receipt of Sample	15/10/2022
Sampling Procedure	As per method reference	Date - Start of Analysis	15/10/2022
Order Reference	As per PO No. PNP/March/2021-2022/020 Dated 31.03.2022	Date - Completion of Analysis	20/10/2022

#### Meteorological Data / Environmental Conditions

Average Wind Velocity 3 km/h	Wind Direction E-NE	Relative Humidity (Max./Min.): 80/68%	Temperature (Max./Min.): 30/24°C	Duration of Survey 24 h
Parameter	Result	NAAQS# 2009	Unit	Method

#### Chemical Testing; Group: Atmospheric Pollution

Sulphur Dioxide (SO <sub>2</sub> )	8.4	80	µg/m <sup>3</sup>	IS 5182 (Part 2) 2001
Nitrogen Dioxide (NO <sub>2</sub> )	27.1	80	µg/m <sup>3</sup>	IS 5182 (Part 6) 2006
Particulate Matter (size less than 10 µm) or PM <sub>10</sub>	355	100	µg/m <sup>3</sup>	IS 5182 (Part 23) 2006
Particulate Matter (size less than 2.5µm) or PM <sub>2.5</sub>	138	60	µg/m <sup>3</sup>	CPCB Guideline, Volume I 36/2012-13, Page No 15 2013
Ozone (O <sub>3</sub> )	BLQ (LOQ:19.6)	180	µg/m <sup>3</sup>	Methods of Air Sampling and Analysis (AWMA), 3rd Ed., Method 411 Page no. 403 :1988
Lead (as Pb)	BLQ (LOQ:0.02)	1	µg/m <sup>3</sup>	EPA/625/R-96/D10 a Compendium Method 10-316 3 2
Carbon Monoxide (CO)	1.23	4	mg/m <sup>3</sup>	CPCB Guidelines, Volume II 37/2012-13, Page no 16 2013
Ammonia (NH <sub>3</sub> )	BLQ (LOQ:20)	400	µg/m <sup>3</sup>	CPCB Guidelines, Volume I 36/2012-13, Page No 35 2013
Benzene (C <sub>6</sub> H <sub>6</sub> )	1.59	5	µg/m <sup>3</sup>	IS 5182 (Part 11) : 2006
Benzo (a) pyrene (BaP) Particulate Phase only	BLQ (LOQ:0.2)	1	ng/m <sup>3</sup>	IS 5182 (Part 12) 2004
Arsenic (as As)	BLQ (LOQ:0.3)	6	ng/m <sup>3</sup>	EPA/625/R-96/D10 a Compendium Method 10-316 3 4
Nickel (as Ni)	BLQ (LOQ:3)	20	ng/m <sup>3</sup>	EPA/625/R-96/D10 a Compendium Method 10-316 3 2


BLQ: Below Limit of Quantification, LOQ: Limit of Quantification

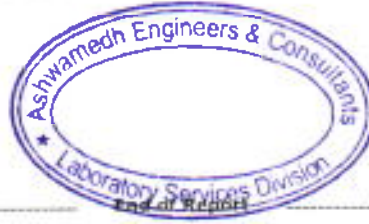
TWA Time Weighted Average

# NAAQS (National Ambient Air Quality Standards (Industrial, Residential, Rural and other Area) specified as: 24 hours TWA in case of Sulphur Dioxide, Nitrogen Dioxide, PM<sub>10</sub>, PM<sub>2.5</sub>, Lead and Ammonia, 1 hour TWA in case of Carbon Monoxide and Ozone, Annual TWA in case of Benzene, Benzo (a) Pyrene, Arsenic and Nickel

  
Ninad Soundankar  
Technical Manager (Chemical)  
Reviewed & Authorised by

Sample ID : AA/10/22/5515	Report No. AA/10/22/5515	Report Date	21/10/2022
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Ninad Soundankar  
Technical Manager (Chemical)  
Reviewed & Authorised by



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### NOISE LEVEL MEASUREMENT REPORT

Sample ID N/10/22/5545	Report No N/10/22/5545	Report Date	18/10/2022
Name and Address of Customer	<b>PNP Maritime Services Private Limited</b> 2nd Floor, Lansdowne House, Mahakavi Bhushan Road, Colaba, Mumbai - 400 001		
Monitoring Done By	Laboratory	Sample Description /Type	Ambient Noise
Order Reference	As per PO No. PNP/March/2021- 2022/020 Dated 31.03.2022	Date-Monitoring	13/10/2022

#### Chemical Testing; Group: Atmospheric Pollution

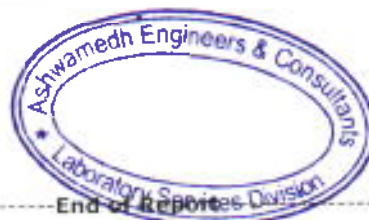
Location	Time (h)	Results	Results	Method
		Noise Level dB (A) Fast Response	Noise Level dB (A) Slow Response	
A. Near Main Gate (PNP Port)	09:00	72.4	71.5	CPCB Protocol for Ambient Level Noise Monitoring, July AEC/C/SAP/SAM/358 38 Issue no. 4, Issue date 01.04.2018
	21:00	66.3	65.4	
B. Near Jetty No. 1 (PNP Port)	09:10	71.6	70.6	
	21:10	65.7	64.3	
C. Near Jetty No. 2 (PNP Port)	09:20	73.4	72.7	
	21:20	67.6	66.4	
D. Near Jetty No. 3 (PNP Port)	09:30	72.3	71.5	
	21:30	66.3	64.5	
E. Near Jetty No. 5 (PNP Port)	09:40	73.4	72.6	
	21:40	67.5	66.3	
F. Near Weigh Bridge (PNP Port)	09:50	73.2	72.3	
	21:50	67.4	66.2	
G. Near Custom Building (PNP Port)	10:00	72.3	71.4	
	22:00	66.2	65.4	
H. Near Lal Gate (PNP Port)	10:10	73.2	72.2	
	22:10	67.3	66.1	
I. Near DIL Main Gate (PNP Port)	10:20	72.2	71.3	
	22:20	66.1	65.3	
J. DIL Godown Back Side (PNP Port)	11:30	71.5	70.4	
	23:30	65.4	64.2	

#### Limit s

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

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

  
Ninad Soundankar  
Technical Manager (Chemical)  
Reviewed & Authorised by



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**AMBIENT AIR QUALITY MONITORING REPORT**

Sample ID : AA/10/22/5663	Report No. AA/10/22/5663	Report Date	22/10/2022
Name and address of Customer	<b>PNP Maritime Services Private Limited</b> 2nd Floor, Lansdowne House, Mahakavi Bhushan Road, Colaba, Mumbai - 400001, Maharashtra		
Sampling done by	Laboratory	Sample Description / Type	Ambient Air
Sampling Location	Near PNP Main Gate (PNP Port)	Date - Sampling	17/10/2022 to 18/10/2022
Sample Quantity / Packing	PM <sub>10</sub> , Bap, Metals: 1 x 3 no. filter paper PM <sub>2.5</sub> : 1 x 1 no. filter paper SO <sub>2</sub> , NO <sub>2</sub> : 30 ml x 6 no. plastic bottle each NH <sub>3</sub> : 10 ml x 24 no. plastic bottle Ozone: 10 ml x 1 no. plastic bottle C <sub>6</sub> H <sub>6</sub> : 6 no. charcoal tubes CO: 1 no. bladder	Date - Receipt of Sample	19/10/2022
Sampling Procedure	As per method reference	Date - Start of Analysis	19/10/2022
Order Reference	As per PO No. PNP/March/2021-2022/020 Dated 31.03.2022	Date - Completion of Analysis	22/10/2022

**Meteorological Data / Environmental Conditions**

Average Wind Velocity 7 km/h	Wind Direction E	Relative Humidity (Max./Min.): 78/66%	Temperature (Max./Min.): 31/24°C	Duration of Survey 24 h
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Parameter	Result	NAAQS# 2009	Unit	Method
<b>Chemical Testing; Group: Atmospheric Pollution</b>				
Sulphur Dioxide (SO <sub>2</sub> )	8.4	80	µg/m <sup>3</sup>	IS 5182 (Part 2): 2001
Nitrogen Dioxide (NO <sub>2</sub> )	28.2	80	µg/m <sup>3</sup>	IS 5182 (Part 6): 2006
Particulate Matter (size less than 10 µm) or PM <sub>10</sub>	182	100	µg/m <sup>3</sup>	IS 5182 (Part 23): 2006
Particulate Matter (size less than 2.5 µm) or PM <sub>2.5</sub>	62	60	µg/m <sup>3</sup>	GPCB Guideline, Volume I 36/2012-13, Page No 15, 2013
Ozone (O <sub>3</sub> )	BLQ (LOQ:19.6)	180	µg/m <sup>3</sup>	Methods of Air Sampling and Analysis (AWMA), 3rd Ed. Method 411, Page no. 403, 1988
Lead (as Pb)	BLQ (LOQ:0.02)	1	µg/m <sup>3</sup>	EPA/625/R-96/010 a Compendium Method 10-316.3.2
Carbon Monoxide (CO)	1.15	4	mg/m <sup>3</sup>	GPCB Guidelines, Volume II, 37/2012-13, Page no 16, 2013
Ammonia (NH <sub>3</sub> )	BLQ (LOQ:20)	400	µg/m <sup>3</sup>	GPCB Guidelines, Volume I 36/2012-13, Page No 35, 2013
Benzene (C <sub>6</sub> H <sub>6</sub> )	BLQ (LOQ:1)	5	µg/m <sup>3</sup>	IS 5182 (Part 11): 2006
Benzo (a) pyrene (BaP) Particulate Phase only	BLQ (LOQ:0.2)	1	ng/m <sup>3</sup>	IS 5182 (Part 12): 2004
Arsenic (as As)	BLQ (LOQ:0.3)	6	ng/m <sup>3</sup>	EPA/625/R-96/010 a Compendium Method 10-316.3.4
Nickel (as Ni)	BLQ (LOQ:3)	20	ng/m <sup>3</sup>	EPA/625/R-96/010 a Compendium Method 10-316.3.2

BLQ: Below Limit of Quantification, LOQ: Limit of Quantification

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, PM<sub>10</sub>, PM<sub>2.5</sub>, Lead and Ammonia, 1 hour TWA in case of Carbon Monoxide and Ozone, Annual TWA in case of Benzene, Benzo (a) Pyrene, Arsenic and Nickel.

Ninad Soundankar  
Technical Manager (Chemical)  
Reviewed & Authorised by

Sample ID : AA/10/22/5663	Report No. AA/10/22/5663	Report Date	22/10/2022
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Ninad Soundankar  
Technical Manager (Chemical)  
Reviewed & Authorised by



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### AMBIENT AIR QUALITY MONITORING REPORT

Sample ID : AA/10/22/5664	Report No. AA/10/22/5664	Report Date	22/10/2022
Name and address of Customer	<b>PNP Maritime Services Private Limited</b> 2nd Floor, Lansdowne House, Mahakavi Bhushan Road, Colaba, Mumbai - 400001, Maharashtra		
Sampling done by	Laboratory	Sample Description / Type	Ambient Air
Sampling Location	Near PNP Jetty No. 1 (PNP Port)	Date - Sampling	17/10/2022 to 18/10/2022
Sample Quantity / Packing	PM <sub>10</sub> , Bap, Metals: 1 x 3 no. filter paper PM <sub>2.5</sub> : 1 x 1 no. filter paper SO <sub>2</sub> , NO <sub>2</sub> : 30 ml x 6 no. plastic bottle each NH <sub>3</sub> : 10 ml x 24 no. plastic bottle Ozone: 10 ml x 1 no. plastic bottle C <sub>6</sub> H <sub>6</sub> : 6 no. charcoal tubes CO: 1 no. bladder	Date - Receipt of Sample	19/10/2022
Sampling Procedure	As per method reference	Date - Start of Analysis	19/10/2022
Order Reference	As per PO No. PNP/March/2021-2022/020 Dated 31.03.2022	Date - Completion of Analysis	22/10/2022

#### Meteorological Data / Environmental Conditions

Average Wind Velocity 7 km/h	Wind Direction E	Relative Humidity (Max./Min.): 78/66%	Temperature (Max./Min.): 31/24°C	Duration of Survey 24 h
Parameter	Result	NAAQS# 2009	Unit	Method

#### Chemical Testing; Group: Atmospheric Pollution

Parameter	Result	NAAQS# 2009	Unit	Method
Sulphur Dioxide (SO <sub>2</sub> )	9.4	80	µg/m <sup>3</sup>	IS 5182 (Part 2) 2001
Nitrogen Dioxide (NO <sub>2</sub> )	19.1	80	µg/m <sup>3</sup>	IS 5182 (Part 6) 2006
Particulate Matter (size less than 10 µm) or PM <sub>10</sub>	172	100	µg/m <sup>3</sup>	IS 5182 (Part 23) 2006
Particulate Matter (size less than 2.5µm) or PM <sub>2.5</sub>	48	60	µg/m <sup>3</sup>	CPCB Guidelines, Volume I, 36/2012-13, Page No 15, 2013
Ozone (O <sub>3</sub> )	BLQ (LOQ:19.6)	180	µg/m <sup>3</sup>	Methods of Air Sampling and Analysis (AWMA), 3rd Ed., Method 411, Page no. 403, 1988
Lead (as Pb)	BLQ (LOQ:0.02)	1	µg/m <sup>3</sup>	EPA/625/R-96/010 a Compendium Method 10-31 & 32
Carbon Monoxide (CO)	1.23	4	mg/m <sup>3</sup>	CPCB Guidelines, Volume II, 37/2012-13, Page no.16, 2013
Ammonia (NH <sub>3</sub> )	BLQ (LOQ:20)	400	µg/m <sup>3</sup>	CPCB Guidelines, Volume I, 36/2012-13, Page No 35, 2013
Benzene (C <sub>6</sub> H <sub>6</sub> )	BLQ (LOQ:1)	5	µg/m <sup>3</sup>	IS 5182 (Part 10) : 2006
Benzo (a) pyrene (BaP) Particulate Phase only	BLQ (LOQ:0.2)	1	ng/m <sup>3</sup>	IS 5182 (Part 12) : 2004
Arsenic (as As)	BLQ (LOQ:0.3)	6	ng/m <sup>3</sup>	EPA/625/R-96/010 a Compendium Method 10-31 & 34
Nickel (as Ni)	BLQ (LOQ:3)	20	ng/m <sup>3</sup>	EPA/625/R-96/010 a Compendium Method 10-31 & 32

BLQ: Below Limit of Quantification, LOQ: Limit of Quantification

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, PM<sub>10</sub>, PM<sub>2.5</sub>, Lead and Ammonia, 1 hour TWA in case of Carbon Monoxide and Ozone, Annual TWA in case of Benzene, Benzo (a) Pyrene, Arsenic and Nickel.

  
Ninad Soundankar  
Technical Manager (Chemical)  
Reviewed & Authorised by

Sample ID : AA/10/22/5664	Report No. AA/10/22/5664	Report Date	22/10/2022
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Ninad Soundankar  
Technical Manager (Chemical)  
Reviewed & Authorised by



**Note:**

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





### AMBIENT AIR QUALITY MONITORING REPORT

Sample ID : AA/10/22/5665	Report No. AA/10/22/5665	Report Date	22/10/2022
Name and address of Customer	<b>PNP Maritime Services Private Limited</b> 2nd Floor, Lansdowne House, Mahakavi Bhushan Road, Colaba, Mumbai - 400001, Maharashtra		
Sampling done by	Laboratory	Sample Description / Type	Ambient Air
Sampling Location	Near PNP Jetty No. 2 (PNP Port)	Date - Sampling	17/10/2022 to 18/10/2022
Sample Quantity / Packing	PM <sub>10</sub> , Bap, Metals: 1 x 3 no. filter paper PM <sub>2.5</sub> : 1 x 1 no. filter paper SO <sub>2</sub> , NO <sub>2</sub> : 30 ml x 6 no. plastic bottle each NH <sub>3</sub> : 10 ml x 24 no. plastic bottle Ozone: 10 ml x 1 no. plastic bottle C <sub>6</sub> H <sub>6</sub> : 6 no. charcoal tubes CO: 1 no. bladder	Date - Receipt of Sample	19/10/2022
Sampling Procedure	As per method reference	Date - Start of Analysis	19/10/2022
Order Reference	As per PO No. PNP/March/2021-2022/020 Dated 31.03.2022	Date - Completion of Analysis	22/10/2022

#### Meteorological Data / Environmental Conditions

Average Wind Velocity 7 km/h	Wind Direction E	Relative Humidity (Max./Min.): 78/66%	Temperature (Max./Min.): 31/24°C	Duration of Survey 24 h
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Parameter	Result	NAAQS# 2009	Unit	Method
<b>Chemical Testing; Group: Atmospheric Pollution</b>				
Sulphur Dioxide (SO <sub>2</sub> )	6.3	80	µg/m <sup>3</sup>	IS 5182 (Part 2): 2001
Nitrogen Dioxide (NO <sub>2</sub> )	30.3	80	µg/m <sup>3</sup>	IS 5182 (Part 6): 2006
Particulate Matter (size less than 10 µm) or PM <sub>10</sub>	198	100	µg/m <sup>3</sup>	IS 5182 (Part 23): 2006
Particulate Matter (size less than 2.5µm) or PM <sub>2.5</sub>	69	60	µg/m <sup>3</sup>	CPCB Guideline: Volume I 36/2012-13, Page No 15 2013
Ozone (O <sub>3</sub> )	BLQ (LOQ:19.6)	180	µg/m <sup>3</sup>	Methods of Air Sampling and Analysis (AWMA), 3rd Ed. Method 411 Page no. 403-1988
Lead (as Pb)	BLQ (LOQ:0.02)	1	µg/m <sup>3</sup>	EPA/625/R-96/010 a Compendium Method 10-31 & 32
Carbon Monoxide (CO)	1.11	4	mg/m <sup>3</sup>	CPCB Guidelines, Volume II, 37/2012-13, Page no.16: 2013
Ammonia (NH <sub>3</sub> )	BLQ (LOQ:20)	400	µg/m <sup>3</sup>	CPCB Guidelines: Volume I 36/2012-13, Page No 35 2013
Benzene (C <sub>6</sub> H <sub>6</sub> )	BLQ (LOQ:1)	5	µg/m <sup>3</sup>	IS 5182 (Part II): 2006
Benzo (a) pyrene (BaP) Particulate Phase only	BLQ (LOQ:0.2)	1	ng/m <sup>3</sup>	IS 5182 (Part 12): 2004
Arsenic (as As)	BLQ (LOQ:0.3)	6	ng/m <sup>3</sup>	EPA/625/R-96/010 a Compendium Method 10-31 & 34
Nickel (as Ni)	BLQ (LOQ:3)	20	ng/m <sup>3</sup>	EPA/625/R-96/010 a Compendium Method 10-31 & 32

BLQ: Below Limit of Quantification, LOQ: Limit of Quantification

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, PM<sub>10</sub>, PM<sub>2.5</sub>, Lead and Ammonia, 1 hour TWA in case of Carbon Monoxide and Ozone, Annual TWA in case of Benzene, Benzo (a) Pyrene, Arsenic and Nickel.

  
Ninad Soundankar  
Technical Manager (Chemical)  
Reviewed & Authorised by





Sample ID : AA/10/22/5665	Report No. AA/10/22/5665	Report Date	22/10/2022
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*Ninad Soundankar*

Ninad Soundankar  
Technical Manager (Chemical)  
Reviewed & Authorised by



**Note:**

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



### AMBIENT AIR QUALITY MONITORING REPORT

Sample ID : AA/10/22/5666	Report No. AA/10/22/5666	Report Date	22/10/2022
Name and address of Customer	<b>PNP Maritime Services Private Limited</b> 2nd Floor, Lansdowne House, Mahakavi Bhushan Road, Colaba, Mumbai - 400001, Maharashtra		
Sampling done by	Laboratory	Sample Description / Type	Ambient Air
Sampling Location	Near PNP Jetty No. 3 (PNP Port)	Date - Sampling	17/10/2022 to 18/10/2022
Sample Quantity / Packing	PM <sub>10</sub> , Bap, Metals: 1 x 3 no. filter paper PM <sub>2.5</sub> : 1 x 1 no. filter paper SO <sub>2</sub> , NO <sub>2</sub> : 30 ml x 6 no. plastic bottle each NH <sub>3</sub> : 10 ml x 24 no. plastic bottle Ozone: 10 ml x 1 no. plastic bottle C <sub>6</sub> H <sub>6</sub> : 6 no. charcoal tubes CO: 1 no. bladder	Date - Receipt of Sample	19/10/2022
Sampling Procedure	As per method reference	Date - Start of Analysis	19/10/2022
Order Reference	As per PO No. PNP/March/2021-2022/020 Dated 31.03.2022	Date - Completion of Analysis	22/10/2022

#### Meteorological Data / Environmental Conditions

Average Wind Velocity 7 km/h	Wind Direction E	Relative Humidity (Max./Min.): 78/66%	Temperature (Max./Min.): 31/24°C	Duration of Survey 24 h
Parameter	Result	NAAQS# 2009	Unit	Method

#### Chemical Testing; Group: Atmospheric Pollution


Parameter	Result	NAAQS# 2009	Unit	Method
Sulphur Dioxide (SO <sub>2</sub> )	7.3	80	µg/m <sup>3</sup>	IS 5182 (Part 2): 2001
Nitrogen Dioxide (NO <sub>2</sub> )	20.3	80	µg/m <sup>3</sup>	IS 5182 (Part 6): 2006
Particulate Matter (size less than 10 µm) or PM <sub>10</sub>	161	100	µg/m <sup>3</sup>	IS 5182 (Part 23): 2006
Particulate Matter (size less than 2.5 µm) or PM <sub>2.5</sub>	50	60	µg/m <sup>3</sup>	CPCB Guideline, Volume I, 36/2012-13, Page No 15: 2013
Ozone (O <sub>3</sub> )	BLQ (LOQ:19.6)	180	µg/m <sup>3</sup>	Methods of Air Sampling and Analysis (AWMA), 3rd Ed. Method 411 Page no. 403: 1988
Lead (as Pb)	BLQ (LOQ:0.02)	1	µg/m <sup>3</sup>	EPA/625/R-96/010 a Compendium Method 10-316: 3: 2
Carbon Monoxide (CO)	1.09	4	mg/m <sup>3</sup>	CPCB Guidelines, Volume II, 37/2012-13, Page no 16: 2013
Ammonia (NH <sub>3</sub> )	BLQ (LOQ:20)	400	µg/m <sup>3</sup>	CPCB Guidelines, Volume I, 36/2012-13, Page No 35: 2013
Benzene (C <sub>6</sub> H <sub>6</sub> )	BLQ (LOQ:1)	5	µg/m <sup>3</sup>	IS 5182 (Part 11): 2006
Benzo (a) pyrene (BaP) Particulate Phase only	BLQ (LOQ:0.2)	1	ng/m <sup>3</sup>	IS 5182 (Part 12): 2004
Arsenic (as As)	BLQ (LOQ:0.3)	6	ng/m <sup>3</sup>	EPA/625/R-96/010 a Compendium Method 10-316: 3: 4
Nickel (as Ni)	BLQ (LOQ:3)	20	ng/m <sup>3</sup>	EPA/625/R-96/010 a Compendium Method 10-316: 3: 2

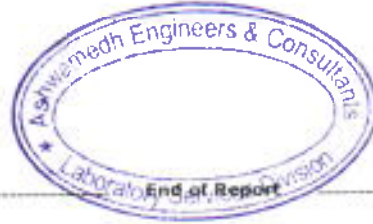
BLQ: Below Limit of Quantification, LOQ: Limit of Quantification

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, PM<sub>10</sub>, PM<sub>2.5</sub>, 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.

Sample ID : AA/10/22/5666	Report No. AA/10/22/5666	Report Date	22/10/2022
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Ninad Soundankar  
Technical Manager (Chemical)  
Reviewed & Authorised by



Note:

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



### AMBIENT AIR QUALITY MONITORING REPORT

Sample ID : AA/10/22/5667	Report No. AA/10/22/5667	Report Date	22/10/2022
Name and address of Customer	<b>PNP Maritime Services Private Limited</b> 2nd Floor, Lansdowne House, Mahakavi Bhushan Road, Colaba, Mumbai - 400001, Maharashtra		
Sampling done by	Laboratory	Sample Description / Type	Ambient Air
Sampling Location	Near PNP Jetty No.5 (PNP Port)	Date - Sampling	17/10/2022 to 18/10/2022
Sample Quantity / Packing	PM <sub>10</sub> , Bap, Metals: 1 x 3 no. filter paper PM <sub>2.5</sub> : 1 x 1 no. filter paper SO <sub>2</sub> , NO <sub>2</sub> : 30 ml x 6 no. plastic bottle each NH <sub>3</sub> : 10 ml x 24 no. plastic bottle Ozone: 10 ml x 1 no. plastic bottle C <sub>6</sub> H <sub>6</sub> : 6 no. charcoal tubes CO: 1 no. bladder	Date - Receipt of Sample	19/10/2022
Sampling Procedure	As per method reference	Date - Start of Analysis	19/10/2022
Order Reference	As per PO No. PNP/March/2021-2022/020 Dated 31.03.2022	Date - Completion of Analysis	22/10/2022

#### Meteorological Data / Environmental Conditions

Average Wind Velocity 7 km/h	Wind Direction E	Relative Humidity (Max./Min.): 78/66%	Temperature (Max./Min.): 31/24°C	Duration of Survey 24 h
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Parameter	Result	NAAQS# 2009	Unit	Method
<b>Chemical Testing; Group: Atmospheric Pollution</b>				
Sulphur Dioxide (SO <sub>2</sub> )	10.5	80	µg/m <sup>3</sup>	IS 5182 (Part 2) 2001
Nitrogen Dioxide (NO <sub>2</sub> )	24.7	80	µg/m <sup>3</sup>	IS 5182 (Part 6) 2006
Particulate Matter (size less than 10 µm) or PM <sub>10</sub>	184	100	µg/m <sup>3</sup>	IS 5182 (Part 23) 2006
Particulate Matter (size less than 2.5 µm) or PM <sub>2.5</sub>	40	60	µg/m <sup>3</sup>	CPCB Guideline, Volume I, 36/2012-13, Page No 15 2013
Ozone (O <sub>3</sub> )	BLQ (LOQ:19.6)	180	µg/m <sup>3</sup>	Methods of Air Sampling and Analysis (AWMA), 3rd Ed. Method 41, Page no. 403-1988
Lead (as Pb)	BLQ (LOQ:0.02)	1	µg/m <sup>3</sup>	EPA/625/R-96/D10 a Compendium Method 10-31 & 32
Carbon Monoxide (CO)	1.33	4	mg/m <sup>3</sup>	CPCB Guidelines, Volume II, 37/2012-13, Page no 16 2013
Ammonia (NH <sub>3</sub> )	BLQ (LOQ:20)	400	µg/m <sup>3</sup>	CPCB Guidelines, Volume I, 36/2012-13, Page No 35 2013
Benzene (C <sub>6</sub> H <sub>6</sub> )	BLQ (LOQ:1)	5	µg/m <sup>3</sup>	IS 5182 (Part 11) : 2006
Benzo (a) pyrene (BaP) Particulate Phase only	BLQ (LOQ:0.2)	1	ng/m <sup>3</sup>	IS 5182 (Part 12) 2004
Arsenic (as As)	BLQ (LOQ:0.3)	6	ng/m <sup>3</sup>	EPA/625/R-96/D10 a Compendium Method 10-31 & 34
Nickel (as Ni)	BLQ (LOQ:3)	20	ng/m <sup>3</sup>	EPA/625/R-96/D10 a Compendium Method 10-31 & 32


BLQ: Below Limit of Quantification, LOQ: Limit of Quantification

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, PM<sub>10</sub>, PM<sub>2.5</sub>, Lead and Ammonia, 1 hour TWA in case of Carbon Monoxide and Ozone, Annual TWA in case of Benzene, Benzo (a) Pyrene, Arsenic and Nickel.

  
Ninad Soundankar  
Technical Manager (Chemical)  
Reviewed & Authorised by

Sample ID : AA/10/22/5667	Report No. AA/10/22/5667	Report Date	22/10/2022
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Ninad Soundankar  
Technical Manager (Chemical)  
Reviewed & Authorised by



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**AMBIENT AIR QUALITY MONITORING REPORT**

Sample ID : AA/10/22/5668	Report No. AA/10/22/5668	Report Date	22/10/2022
Name and address of Customer	<b>PNP Maritime Services Private Limited</b> 2nd Floor, Lansdowne House, Mahakavi Bhushan Road, Colaba, Mumbai - 400001, Maharashtra		
Sampling done by	Laboratory	Sample Description / Type	Ambient Air
Sampling Location	Near Weigh Bridge (PNP Port)	Date - Sampling	17/10/2022 to 18/10/2022
Sample Quantity / Packing	PM <sub>10</sub> , Bap, Metals: 1 x 3 no. filter paper PM <sub>2.5</sub> : 1 x 1 no. filter paper SO <sub>2</sub> , NO <sub>2</sub> : 30 ml x 6 no. plastic bottle each NH <sub>3</sub> : 10 ml x 24 no. plastic bottle Ozone: 10 ml x 1 no. plastic bottle C <sub>6</sub> H <sub>6</sub> : 6 no. charcoal tubes CO: 1 no. bladder	Date - Receipt of Sample	19/10/2022
Sampling Procedure	As per method reference	Date - Start of Analysis	19/10/2022
Order Reference	As per PO No. PNP/March/2021-2022/020 Dated 31.03.2022	Date - Completion of Analysis	22/10/2022

**Meteorological Data / Environmental Conditions**

Average Wind Velocity 7 km/h	Wind Direction E	Relative Humidity (Max./Min.): 78/66%	Temperature (Max./Min.): 31/24°C	Duration of Survey 24 h
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Parameter	Result	NAAQS# 2009	Unit	Method
<b>Chemical Testing; Group: Atmospheric Pollution</b>				
Sulphur Dioxide (SO <sub>2</sub> )	9.4	80	µg/m <sup>3</sup>	IS 5182 (Part 2): 2001
Nitrogen Dioxide (NO <sub>2</sub> )	20.6	80	µg/m <sup>3</sup>	IS 5182 (Part 6): 2006
Particulate Matter (size less than 10 µm) or PM <sub>10</sub>	196	100	µg/m <sup>3</sup>	IS 5182 (Part 23): 2006
Particulate Matter (size less than 2.5µm) or PM <sub>2.5</sub>	57	60	µg/m <sup>3</sup>	CPCB Guideline, Volume 136/2012-13, Page No 15: 2013
Ozone (O <sub>3</sub> )	BLQ (LOQ:19.6)	180	µg/m <sup>3</sup>	Methods of Air Sampling and Analysis (AWMA), 3rd Ed. Method 411, Page no. 403: 1988
Lead (as Pb)	BLQ (LOQ:0.02)	1	µg/m <sup>3</sup>	EPA/625/R-96/010 a Compendium Method 10-316-32
Carbon Monoxide (CO)	1.73	4	mg/m <sup>3</sup>	CPCB Guidelines, Volume II, 37/2012-13, Page no 16: 2013
Ammonia (NH <sub>3</sub> )	BLQ (LOQ:20)	400	µg/m <sup>3</sup>	CPCB Guidelines, Volume 136/2012-13, Page No 35: 2013
Benzene (C <sub>6</sub> H <sub>6</sub> )	BLQ (LOQ:1)	5	µg/m <sup>3</sup>	IS 5182 (Part II): 2006
Benzo (a) pyrene (BaP) Particulate Phase only	BLQ (LOQ:0.2)	1	ng/m <sup>3</sup>	IS 5182 (Part 12): 2004
Arsenic (as As)	BLQ (LOQ:0.3)	6	ng/m <sup>3</sup>	EPA/625/R-96/010 a Compendium Method 10-316-34
Nickel (as Ni)	BLQ (LOQ:3)	20	ng/m <sup>3</sup>	EPA/625/R-96/010 a Compendium Method 10-316-32

BLQ: Below Limit of Quantification, LOQ: Limit of Quantification

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, PM<sub>10</sub>, PM<sub>2.5</sub>, Lead and Ammonia, 1 hour TWA in case of Carbon Monoxide and Ozone, Annual TWA in case of Benzene, Benzo (a) Pyrene, Arsenic and Nickel.

Ninad Soundankar  
Technical Manager (Chemical)  
Reviewed & Authorised by

Sample ID : AA/10/22/5668	Report No. AA/10/22/5668	Report Date	22/10/2022
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Ninad Soundankar  
Technical Manager (Chemical)  
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4. There are no additions to, deviations or exclusions from the method.



### AMBIENT AIR QUALITY MONITORING REPORT

Sample ID : AA/10/22/5669	Report No. AA/10/22/5669	Report Date	22/10/2022
Name and address of Customer	<b>PNP Maritime Services Private Limited</b> 2nd Floor, Lansdowne House, Mahakavi Bhushan Road, Colaba, Mumbai - 400001, Maharashtra		
Sampling done by	Laboratory	Sample Description / Type	Ambient Air
Sampling Location	Near Custom Building (PNP Port)	Date - Sampling	17/10/2022 to 18/10/2022
Sample Quantity / Packing	PM <sub>10</sub> , Bap, Metals: 1 x 3 no. filter paper PM <sub>2.5</sub> : 1 x 1 no. filter paper SO <sub>2</sub> , NO <sub>2</sub> : 30 ml x 6 no. plastic bottle each NH <sub>3</sub> : 10 ml x 24 no. plastic bottle Ozone: 10 ml x 1 no. plastic bottle C <sub>6</sub> H <sub>6</sub> : 6 no. charcoal tubes CO: 1 no. bladder	Date - Receipt of Sample	19/10/2022
Sampling Procedure	As per method reference	Date - Start of Analysis	19/10/2022
Order Reference	As per PO No. PNP/March/2021-2022/020 Dated 31.03.2022	Date - Completion of Analysis	22/10/2022

#### Meteorological Data / Environmental Conditions

Average Wind Velocity 7 km/h	Wind Direction E	Relative Humidity (Max./Min.): 78/66%	Temperature (Max./Min.): 31/24°C	Duration of Survey 24 h
Parameter	Result	NAAQS# 2009	Unit	Method

#### Chemical Testing; Group: Atmospheric Pollution

Sulphur Dioxide (SO <sub>2</sub> )	8.4	80	µg/m <sup>3</sup>	IS 5182 (Part 2): 2001
Nitrogen Dioxide (NO <sub>2</sub> )	13.2	80	µg/m <sup>3</sup>	IS 5182 (Part 6): 2006
Particulate Matter (size less than 10 µm) or PM <sub>10</sub>	149	100	µg/m <sup>3</sup>	IS 5182 (Part 23): 2006
Particulate Matter (size less than 2.5 µm) or PM <sub>2.5</sub>	50	60	µg/m <sup>3</sup>	CPCB Guidelines, Volume I, 36/2012-13, Page No. 15: 2013
Ozone (O <sub>3</sub> )	BLQ (LOQ:19.6)	180	µg/m <sup>3</sup>	Methods of Air Sampling and Analysis (AWMA), 3rd Ed. Method 411, Page no. 403: 1988
Lead (as Pb)	BLQ (LOQ:0.02)	1	µg/m <sup>3</sup>	EPA/625/R-96/010 a Compendium Method 10-31 & 32
Carbon Monoxide (CO)	BLQ (LOQ:0.5)	4	mg/m <sup>3</sup>	CPCB Guidelines, Volume II, 37/2012-13, Page no.16: 2013
Ammonia (NH <sub>3</sub> )	BLQ (LOQ:20)	400	µg/m <sup>3</sup>	CPCB Guidelines, Volume I, 36/2012-13, Page No. 35: 2013
Benzene (C <sub>6</sub> H <sub>6</sub> )	BLQ (LOQ:1)	5	µg/m <sup>3</sup>	IS 5182 (Part 11): 2006
Benzo (a) pyrene (BaP) Particulate Phase only	BLQ (LOQ:0.2)	1	ng/m <sup>3</sup>	IS 5182 (Part 12): 2004
Arsenic (as As)	BLQ (LOQ:0.3)	6	ng/m <sup>3</sup>	EPA/625/R-96/010 a Compendium Method 10-31 & 34
Nickel (as Ni)	BLQ (LOQ:3)	20	ng/m <sup>3</sup>	EPA/625/R-96/010 a Compendium Method 10-31 & 32

BLQ: Below Limit of Quantification, LOQ: Limit of Quantification

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, PM<sub>10</sub>, PM<sub>2.5</sub>, 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 Sundankar*  
Ninad Sundankar  
Technical Manager (Chemical)  
Reviewed & Authorised by

Sample ID : AA/10/22/5669	Report No. AA/10/22/5669	Report Date	22/10/2022
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Ninad Soundankar  
Technical Manager (Chemical)  
Reviewed & Authorised by



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







**AMBIENT AIR QUALITY MONITORING REPORT**

Sample ID : AA/10/22/5670	Report No. AA/10/22/5670	Report Date	22/10/2022
Name and address of Customer	<b>PNP Maritime Services Private Limited</b> 2nd Floor, Lansdowne House, Mahakavi Bhushan Road, Colaba, Mumbai - 400001, Maharashtra		
Sampling done by	Laboratory	Sample Description / Type	Ambient Air
Sampling Location	Near Lal Gate (PNP Port)	Date - Sampling	17/10/2022 to 18/10/2022
Sample Quantity / Packing	PM <sub>10</sub> , Bap, Metals: 1 x 3 no. filter paper PM <sub>2.5</sub> : 1 x 1 no. filter paper SO <sub>2</sub> , NO <sub>2</sub> : 30 ml x 6 no. plastic bottle each NH <sub>3</sub> : 10 ml x 24 no. plastic bottle Ozone: 10 ml x 1 no. plastic bottle C <sub>6</sub> H <sub>6</sub> : 6 no. charcoal tubes CO: 1 no. bladder	Date - Receipt of Sample	19/10/2022
Sampling Procedure	As per method reference	Date - Start of Analysis	19/10/2022
Order Reference	As per PO No. PNP/March/2021-2022/020 Dated 31.03.2022	Date - Completion of Analysis	22/10/2022

**Meteorological Data / Environmental Conditions**

Average Wind Velocity 7 km/h	Wind Direction E	Relative Humidity (Max./Min.): 78/66%	Temperature (Max./Min.): 31/24°C	Duration of Survey 24 h
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Parameter	Result	NAAQS# 2009	Unit	Method
<b>Chemical Testing; Group: Atmospheric Pollution</b>				
Sulphur Dioxide (SO <sub>2</sub> )	7.3	80	µg/m <sup>3</sup>	IS 5182 (Part 2): 2001
Nitrogen Dioxide (NO <sub>2</sub> )	25.9	80	µg/m <sup>3</sup>	IS 5182 (Part 6): 2006
Particulate Matter (size less than 10 µm) or PM <sub>10</sub>	228	100	µg/m <sup>3</sup>	IS 5182 (Part 23): 2006
Particulate Matter (size less than 2.5 µm) or PM <sub>2.5</sub>	56	60	µg/m <sup>3</sup>	CPCB Guideline, Volume I 36/2012-13, Page No 15:2013
Ozone (O <sub>3</sub> )	BLQ (LOQ:19.6)	180	µg/m <sup>3</sup>	Methods of Air Sampling and Analysis (AWMA), 3rd Ed, Method 4H, Page no. 403: 1988
Lead (as Pb)	BLQ (LOQ:0.02)	1	µg/m <sup>3</sup>	EPA/625/R-96/010 a Compendium Method ID-31632
Carbon Monoxide (CO)	1.13	4	mg/m <sup>3</sup>	CPCB Guidelines, Volume II, 37/2012-13, Page no.16: 2013
Ammonia (NH <sub>3</sub> )	BLQ (LOQ:20)	400	µg/m <sup>3</sup>	CPCB Guidelines, Volume I 36/2012-13, Page No 35: 2013
Benzene (C <sub>6</sub> H <sub>6</sub> )	BLQ (LOQ:1)	5	µg/m <sup>3</sup>	IS 5182 (Part II): 2006
Benzo (a) pyrene (BaP) Particulate Phase only	BLQ (LOQ:0.2)	1	ng/m <sup>3</sup>	IS 5182 (Part 12): 2004
Arsenic (as As)	BLQ (LOQ:0.3)	6	ng/m <sup>3</sup>	EPA/625/R-96/010 a Compendium Method ID-31634
Nickel (as Ni)	BLQ (LOQ:3)	20	ng/m <sup>3</sup>	EPA/625/R-96/010 a Compendium Method ID-31632

BLQ: Below Limit of Quantification, LOQ: Limit of Quantification

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, PM<sub>10</sub>, PM<sub>2.5</sub>, 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

Sample ID : AA/10/22/5670	Report No. AA/10/22/5670	Report Date	22/10/2022
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Ninad Soundankar  
Technical Manager (Chemical)  
Reviewed & Authorised by



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**AMBIENT AIR QUALITY MONITORING REPORT**

Sample ID : AA/10/22/5671	Report No. AA/10/22/5671	Report Date	22/10/2022
Name and address of Customer	<b>PNP Maritime Services Private Limited</b> 2nd Floor, Lansdowne House, Mahakavi Bhushan Road, Colaba, Mumbai - 400001, Maharashtra		
Sampling done by	Laboratory	Sample Description / Type	Ambient Air
Sampling Location	Near DIL Main Gate (PNP Port)	Date - Sampling	17/10/2022 to 18/10/2022
Sample Quantity / Packing	PM <sub>10</sub> : Bap, Metals: 1 x 3 no. filter paper PM <sub>2.5</sub> : 1 x 1 no. filter paper SO <sub>2</sub> , NO <sub>2</sub> : 30 ml x 6 no. plastic bottle each NH <sub>3</sub> : 10 ml x 24 no. plastic bottle Ozone: 10 ml x 1 no. plastic bottle C <sub>6</sub> H <sub>6</sub> : 6 no. charcoal tubes CO: 1 no. bladder	Date - Receipt of Sample	19/10/2022
Sampling Procedure	As per method reference	Date - Start of Analysis	19/10/2022
Order Reference	As per PO No. PNP/March/2021-2022/020 Dated 31.03.2022	Date - Completion of Analysis	22/10/2022

**Meteorological Data / Environmental Conditions**

Average Wind Velocity 7 km/h	Wind Direction E	Relative Humidity (Max./Min.): 78/66%	Temperature (Max./Min.): 31/24°C	Duration of Survey 24 h
Parameter	Result	NAAQS# 2009	Unit	Method

**Chemical Testing; Group: Atmospheric Pollution**

Sulphur Dioxide (SO <sub>2</sub> )	6.3	80	µg/m <sup>3</sup>	IS 5182 (Part 2) 2001
Nitrogen Dioxide (NO <sub>2</sub> )	24.7	80	µg/m <sup>3</sup>	IS 5182 (Part 6) 2006
Particulate Matter (size less than 10 µm) or PM <sub>10</sub>	190	100	µg/m <sup>3</sup>	IS 5182 (Part 23) 2006
Particulate Matter (size less than 2.5µm) or PM <sub>2.5</sub>	53	60	µg/m <sup>3</sup>	CPCB Guideline, Volume I 36/2012-13, Page No 15 2013
Ozone (O <sub>3</sub> )	BLQ (LOQ:19.6)	180	µg/m <sup>3</sup>	Methods of Air Sampling and Analysis (AWMA), 3rd Ed, Method 411 Page no. 403, 1988
Lead (as Pb)	BLQ (LOQ:0.02)	1	µg/m <sup>3</sup>	EPA/625/R-96/010 a Compendium Method 10-31 & 3.2
Carbon Monoxide (CO)	1.26	4	mg/m <sup>3</sup>	CPCB Guidelines, Volume II, 37/2012-13, Page no 16, 2013
Ammonia (NH <sub>3</sub> )	BLQ (LOQ:20)	400	µg/m <sup>3</sup>	CPCB Guidelines, Volume I 36/2012-13, Page No 35, 2013
Benzene (C <sub>6</sub> H <sub>6</sub> )	BLQ (LOQ:1)	5	µg/m <sup>3</sup>	IS 5182 (Part II), 2006
Benzo (a) pyrene (BaP) Particulate Phase only	BLQ (LOQ:0.2)	1	ng/m <sup>3</sup>	IS 5182 (Part 12) 2004
Arsenic (as As)	BLQ (LOQ:0.3)	6	ng/m <sup>3</sup>	EPA/625/R-96/010 a Compendium Method 10-31 & 3.4
Nickel (as Ni)	BLQ (LOQ:3)	20	ng/m <sup>3</sup>	EPA/625/R-96/010 a Compendium Method 10-31 & 3.2

BLQ: Below Limit of Quantification, LOQ: Limit of Quantification

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, PM<sub>10</sub>, PM<sub>2.5</sub>, 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.

Sample ID : AA/10/22/5671	Report No. AA/10/22/5671	Report Date	22/10/2022
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Ninad Soundankar  
Technical Manager (Chemical)  
Reviewed & Authorised by



**Note:**

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





### AMBIENT AIR QUALITY MONITORING REPORT

Sample ID : AA/10/22/5672	Report No. AA/10/22/5672	Report Date	22/10/2022
Name and address of Customer	<b>PNP Maritime Services Private Limited</b> 2nd Floor, Lansdowne House, Mahakavi Bhushan Road, Colaba, Mumbai - 400001, Maharashtra		
Sampling done by	Laboratory	Sample Description / Type	Ambient Air
Sampling Location	Near DIL Godown Back Side (PNP Port)	Date - Sampling	17/10/2022 to 18/10/2022
Sample Quantity / Packing	PM <sub>10</sub> , Bap, Metals: 1 x 3 no. filter paper PM <sub>2.5</sub> : 1 x 1 no. filter paper SO <sub>2</sub> , NO <sub>2</sub> : 30 ml x 6 no. plastic bottle each NH <sub>3</sub> : 10 ml x 24 no. plastic bottle Ozone: 10 ml x 1 no. plastic bottle C <sub>6</sub> H <sub>6</sub> : 6 no. charcoal tubes CO: 1 no. bladder	Date - Receipt of Sample	19/10/2022
Sampling Procedure	As per method reference	Date - Start of Analysis	19/10/2022
Order Reference	As per PO No. PNP/March/2021-2022/020 Dated 31.03.2022	Date - Completion of Analysis	22/10/2022

#### Meteorological Data / Environmental Conditions

Average Wind Velocity 7 km/h	Wind Direction E	Relative Humidity (Max./Min.): 78/66%	Temperature (Max./Min.): 31/24°C	Duration of Survey 24 h
Parameter	Result	NAAQS# 2009	Unit	Method

#### Chemical Testing; Group: Atmospheric Pollution

Parameter	Result	NAAQS# 2009	Unit	Method
Sulphur Dioxide (SO <sub>2</sub> )	5.2	80	µg/m <sup>3</sup>	IS 5182 (Part 2): 2001
Nitrogen Dioxide (NO <sub>2</sub> )	12.9	80	µg/m <sup>3</sup>	IS 5182 (Part 6): 2006
Particulate Matter (size less than 10 µm) or PM <sub>10</sub>	146	100	µg/m <sup>3</sup>	IS 5182 (Part 23): 2006
Particulate Matter (size less than 2.5 µm) or PM <sub>2.5</sub>	38	60	µg/m <sup>3</sup>	CPCB Guideline, Volume I, 36/2012-13, Page No 15 2013
Ozone (O <sub>3</sub> )	BLQ (LOQ:19.6)	180	µg/m <sup>3</sup>	Methods of Air Sampling and Analysis (AWMA), 3rd Ed., Method 411, Page no. 403-1988
Lead (as Pb)	BLQ (LOQ:0.02)	1	µg/m <sup>3</sup>	EPA/625/R-96/D10 a Compendium Method 10-318-3-2
Carbon Monoxide (CO)	0.53	4	mg/m <sup>3</sup>	CPCB Guidelines, Volume II, 37/2012-13, Page no 16, 2013
Ammonia (NH <sub>3</sub> )	BLQ (LOQ:20)	400	µg/m <sup>3</sup>	CPCB Guidelines, Volume I, 36/2012-13, Page No 35, 2013
Benzene (C <sub>6</sub> H <sub>6</sub> )	BLQ (LOQ:1)	5	µg/m <sup>3</sup>	IS 5182 (Part II): 2006
Benzo (a) pyrene (BaP) Particulate Phase only	BLQ (LOQ:0.2)	1	ng/m <sup>3</sup>	IS 5182 (Part 12): 2004
Arsenic (as As)	BLQ (LOQ:0.3)	6	ng/m <sup>3</sup>	EPA/625/R-96/D10 a Compendium Method 10-318-3-4
Nickel (as Ni)	BLQ (LOQ:3)	20	ng/m <sup>3</sup>	EPA/625/R-96/D10 a Compendium Method 10-318-3-2

BLQ: Below Limit of Quantification, LOQ: Limit of Quantification

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, PM<sub>10</sub>, PM<sub>2.5</sub>, 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)  
Reviewed & Authorised by

Sample ID : AA/10/22/5672	Report No. AA/10/22/5672	Report Date	22/10/2022
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Technical Manager (Chemical)  
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### NOISE LEVEL MEASUREMENT REPORT

Sample ID: N/10/22/5673	Report No: N/10/22/5673	Report Date	25/10/2022
Name and Address of Customer	<b>PNP Maritime Services Private Limited</b> 2nd Floor, Lansdowne House, Mahakavi Bhushan Road, Colaba, Mumbai - 400 001		
Monitoring Done By	Laboratory	Sample Description /Type	Ambient Noise
Order Reference	As per PO No. PNP/March/2021- 2022/020 Dated 31.03.2022	Date-Monitoring	17/10/2022

#### Chemical Testing; Group: Atmospheric Pollution

Location	Time (h)	Results		Method
		Noise Level dB (A) Fast Response	Noise Level dB (A) Slow Response	
A. Near Main Gate (PNP Port)	09:00	73.8	72.6	CPCB Protocol for Ambient Level Noise Monitoring, July AEC/C/SAP/SAM/356 36 Issue no. 4, Issue date 01/04/2018
	21:00	67.4	66.7	
B. Near Jetty No. 1 (PNP Port)	09:10	72.6	71.5	
	21:10	66.7	65.6	
C. Near Jetty No. 2 (PNP Port)	09:20	72.4	71.3	
	21:20	66.3	65.6	
D. Near Jetty No. 3 (PNP Port)	09:30	73.6	72.5	
	21:30	67.3	66.4	
E. Near Jetty No. 5 (PNP Port)	09:40	71.3	70.4	
	21:40	65.3	64.3	
F. Near Weight Bridge (PNP Port)	09:50	73.4	72.5	
	21:50	67.2	66.3	
G. Near Custom Building (PNP Port)	10:00	73.3	72.3	
	22:00	67.1	66.2	
H. Near Lal Gate (PNP Port)	10:10	72.4	71.4	
	22:10	66.3	65.5	
I. Near DIL Main Gate (PNP Port)	10:20	73.2	72.2	
	22:20	67.0	66.1	
J. DIL Godown Back Side (PNP Port)	11:30	71.3	70.3	
	23:30	65.2	64.2	

#### Limit s

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

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

  
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-----End of Report-----

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### AMBIENT AIR QUALITY MONITORING REPORT

Sample ID : AA/10/22/5822	Report No. AA/10/22/5822	Report Date	31/10/2022
Name and address of Customer	<b>PNP Maritime Services Private Limited</b> 2nd Floor, Lansdowne House, Mahakavi Bhushan Road, Colaba, Mumbai - 400001, Maharashtra		
Sampling done by	Laboratory	Sample Description / Type	Ambient Air
Sampling Location	Near PNP Main Gate (PNP Port)	Date - Sampling	20/10/2022 to 21/10/2022
Sample Quantity / Packing	PM <sub>10</sub> , Bap, Metals: 1 x 3 no. filter paper PM <sub>2.5</sub> : 1 x 1 no. filter paper SO <sub>2</sub> , NO <sub>2</sub> : 30 ml x 6 no. plastic bottle each NH <sub>3</sub> : 10 ml x 24 no. plastic bottle Ozone: 10 ml x 1 no. plastic bottle C <sub>6</sub> H <sub>6</sub> : 6 no. charcoal tubes CO: 1 no. bladder	Date - Receipt of Sample	22/10/2022
Sampling Procedure	As per Method reference	Date - Start of Analysis	22/10/2022
Order Reference	As per PO No. PNP/March/2021-2022/020 Dated 31.03.2022	Date - Completion of Analysis	30/10/2022

#### Meteorological Data / Environmental Conditions

Average Wind Velocity 6 km/h	Wind Direction N-W	Relative Humidity (Max./Min.): 85/73%	Temperature (Max./Min.): 31/24°C	Duration of Survey 24 h
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Parameter	Result	NAAQS# 2009	Unit	Method
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#### Chemical Testing; Group: Atmospheric Pollution

Sulphur Dioxide (SO <sub>2</sub> )	7.3	80	µg/m <sup>3</sup>	IS 5182 (Part 2): 2001
Nitrogen Dioxide (NO <sub>2</sub> )	22.1	80	µg/m <sup>3</sup>	IS 5182 (Part 6): 2006
Particulate Matter (size less than 10 µm) or PM <sub>10</sub>	310	100	µg/m <sup>3</sup>	IS 5182 (Part 23) 2006
Particulate Matter (size less than 2.5 µm) or PM <sub>2.5</sub>	95	60	µg/m <sup>3</sup>	CPCB Guideline, Volume I, 36/2012-13, Page No 15 2013
Ozone (O <sub>3</sub> )	BLQ (LOQ:19.6)	180	µg/m <sup>3</sup>	Methods of Air Sampling and Analysis (AWMA), 3rd Ed., Method 411, Page no. 403-4988
Lead (as Pb)	BLQ (LOQ:0.02)	1	µg/m <sup>3</sup>	EPA/625/R-96/010 a Compendium Method 10-318 3.2
Carbon Monoxide (CO)	1.12	4	mg/m <sup>3</sup>	CPCB Guidelines, Volume II, 37/2012-13, Page no 16 2013
Ammonia (NH <sub>3</sub> )	BLQ (LOQ:20)	400	µg/m <sup>3</sup>	CPCB Guidelines, Volume I, 36/2012-13, Page No 35 2013
Benzene (C <sub>6</sub> H <sub>6</sub> )	1.47	5	µg/m <sup>3</sup>	IS 5182 (Part II): 2006
Benzo (a) pyrene (BaP) Particulate Phase only	BLQ (LOQ:0.2)	1	ng/m <sup>3</sup>	IS 5182 (Part 12): 2004
Arsenic (as As)	BLQ (LOQ:0.3)	6	ng/m <sup>3</sup>	EPA/625/R-96/010 a Compendium Method 10-318 3.2
Nickel (as Ni)	BLQ (LOQ:3)	20	ng/m <sup>3</sup>	EPA/625/R-96/010 a Compendium Method 10-318 3.2

BLQ: Below Limit of Quantification, LOQ: Limit of Quantification

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, PM<sub>10</sub>, PM<sub>2.5</sub>, 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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Technical Manager (Chemical)  
Reviewed & Authorised by



Sample ID : AA/10/22/5822	Report No. AA/10/22/5822	Report Date	31/10/2022
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Technical Manager (Chemical)  
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### AMBIENT AIR QUALITY MONITORING REPORT

Sample ID : AA/10/22/5823	Report No. AA/10/22/5823	Report Date	31/10/2022
Name and address of Customer	<b>PNP Maritime Services Private Limited</b> 2nd Floor, Lansdowne House, Mahakavi Bhushan Road, Colaba, Mumbai - 400001, Maharashtra		
Sampling done by	Laboratory	Sample Description / Type	Ambient Air
Sampling Location	Near PNP Jetty No. 1 (PNP Port)	Date - Sampling	20/10/2022 to 21/10/2022
Sample Quantity / Packing	PM <sub>10</sub> , Bap, Metals: 1 x 3 no. filter paper PM <sub>2.5</sub> : 1 x 1 no. filter paper SO <sub>2</sub> , NO <sub>2</sub> : 30 ml x 6 no. plastic bottle each NH <sub>3</sub> : 10 ml x 24 no. plastic bottle Ozone: 10 ml x 1 no. plastic bottle C <sub>6</sub> H <sub>6</sub> : 6 no. charcoal tubes CO: 1 no. bladder	Date - Receipt of Sample	22/10/2022
Sampling Procedure	As per Method reference	Date - Start of Analysis	22/10/2022
Order Reference	As per PO No. PNP/March/2021-2022/020 Dated 31.03.2022	Date - Completion of Analysis	30/10/2022

#### Meteorological Data / Environmental Conditions

Average Wind Velocity 6 km/h	Wind Direction N-W	Relative Humidity (Max./Min.): 85/73%	Temperature (Max./Min.): 31/24°C	Duration of Survey 24 h
Parameter	Result	NAAQS# 2009	Unit	Method

#### Chemical Testing; Group: Atmospheric Pollution

Sulphur Dioxide (SO <sub>2</sub> )	6.3	80	µg/m <sup>3</sup>	IS 5182 (Part 2): 2001
Nitrogen Dioxide (NO <sub>2</sub> )	20.6	80	µg/m <sup>3</sup>	IS 5182 (Part 6): 2006
Particulate Matter (size less than 10 µm) or PM <sub>10</sub>	270	100	µg/m <sup>3</sup>	IS 5182 (Part 23): 2006
Particulate Matter (size less than 2.5 µm) or PM <sub>2.5</sub>	83	60	µg/m <sup>3</sup>	CPCB Guideline, Volume 1, 36/2012-13, Page No 15 2013
Ozone (O <sub>3</sub> )	BLQ (LOQ:19.6)	180	µg/m <sup>3</sup>	Methods of Air Sampling and Analysis (AWMA), 3rd Ed., Method 411 Page no. 403 :1988
Lead (as Pb)	BLQ (LOQ:0.02)	1	µg/m <sup>3</sup>	EPA/625/R-96/010 a Compendium Method 10-31 & 32
Carbon Monoxide (CO)	1.21	4	mg/m <sup>3</sup>	CPCB Guidelines, Volume II, 37/2012-13, Page no 16: 2013
Ammonia (NH <sub>3</sub> )	BLQ (LOQ:20)	400	µg/m <sup>3</sup>	CPCB Guidelines, Volume 1, 36/2012-13, Page No 35 2013
Benzene (C <sub>6</sub> H <sub>6</sub> )	1.14	5	µg/m <sup>3</sup>	IS 5182 (Part II): 2006
Benzo (a) pyrene (BaP) Particulate Phase only	BLQ (LOQ:0.2)	1	ng/m <sup>3</sup>	IS 5182 (Part 12): 2004
Arsenic (as As)	BLQ (LOQ:0.3)	6	ng/m <sup>3</sup>	EPA/625/R-96/010 a Compendium Method 10-31 & 32
Nickel (as Ni)	BLQ (LOQ:3)	20	ng/m <sup>3</sup>	EPA/625/R-96/010 a Compendium Method 10-31 & 32

BLQ: Below Limit of Quantification, LOQ: Limit of Quantification

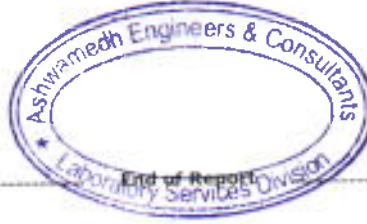
TWA Time Weighted Average

# NAAQS (National Ambient Air Quality Standards (Industrial, Residential, Rural and other Area) specified as: 24 hours TWA in case of Sulphur Dioxide, Nitrogen Dioxide, PM<sub>10</sub>, PM<sub>2.5</sub>, 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.

Sample ID : AA/10/22/5823	Report No. AA/10/22/5823	Report Date	31/10/2022
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Technical Manager (Chemical)  
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### AMBIENT AIR QUALITY MONITORING REPORT

Sample ID : AA/10/22/5824	Report No. AA/10/22/5824	Report Date	31/10/2022
Name and address of Customer	<b>PNP Maritime Services Private Limited</b> 2nd Floor, Lansdowne House, Mahakavi Bhushan Road, Colaba, Mumbai - 400001, Maharashtra		
Sampling done by	Laboratory	Sample Description / Type	Ambient Air
Sampling Location	Near PNP Jetty No. 2 (PNP Port)	Date - Sampling	20/10/2022 to 21/10/2022
Sample Quantity / Packing	PM <sub>10</sub> , Bap, Metals: 1 x 3 no. filter paper PM <sub>2.5</sub> : 1 x 1 no. filter paper SO <sub>2</sub> , NO <sub>2</sub> : 30 ml x 6 no. plastic bottle each NH <sub>3</sub> : 10 ml x 24 no. plastic bottle Ozone: 10 ml x 1 no. plastic bottle C <sub>6</sub> H <sub>6</sub> : 6 no. charcoal tubes CO: 1 no. bladder	Date - Receipt of Sample	22/10/2022
Sampling Procedure	As per Method reference	Date - Start of Analysis	22/10/2022
Order Reference	As per PO No. PNP/March/2021-2022/020 Dated 31.03.2022	Date - Completion of Analysis	30/10/2022

#### Meteorological Data / Environmental Conditions

Average Wind Velocity 6 km/h	Wind Direction N-W	Relative Humidity (Max./Min.): 85/73%	Temperature (Max./Min.): 31/24°C	Duration of Survey 24 h
Parameter	Result	NAAQS# 2009	Unit	Method

#### Chemical Testing; Group: Atmospheric Pollution

Sulphur Dioxide (SO <sub>2</sub> )	8.4	80	µg/m <sup>3</sup>	IS 5182 (Part 2): 2001
Nitrogen Dioxide (NO <sub>2</sub> )	25.3	80	µg/m <sup>3</sup>	IS 5182 (Part 6): 2006
Particulate Matter (size less than 10 µm) or PM <sub>10</sub>	325	100	µg/m <sup>3</sup>	IS 5182 (Part 23): 2006
Particulate Matter (size less than 2.5 µm) or PM <sub>2.5</sub>	108	60	µg/m <sup>3</sup>	CPCB Guideline, Volume 1:36/2012-13, Page No 15: 2013
Ozone (O <sub>3</sub> )	BLQ (LOQ:19.6)	180	µg/m <sup>3</sup>	Methods of Air Sampling and Analysis (AWMA), 3rd Ed., Method 411 Page no. 403: 1988
Lead (as Pb)	BLQ (LOQ:0.02)	1	µg/m <sup>3</sup>	EPA/625/R-96/010 a Compendium Method 10-31: 6: 3: 2
Carbon Monoxide (CO)	1.9	4	mg/m <sup>3</sup>	CPCB Guidelines, Volume II: 37/2012-13, Page no 16: 2013
Ammonia (NH <sub>3</sub> )	BLQ (LOQ:20)	400	µg/m <sup>3</sup>	CPCB Guidelines, Volume 1:36/2012-13, Page No 35: 2013
Benzene (C <sub>6</sub> H <sub>6</sub> )	1.23	5	µg/m <sup>3</sup>	IS 5182 (Part II): 2006
Benzo (a) pyrene (BaP) Particulate Phase only	BLQ (LOQ:0.2)	1	ng/m <sup>3</sup>	IS 5182 (Part 12): 2004
Arsenic (as As)	BLQ (LOQ:0.3)	6	ng/m <sup>3</sup>	EPA/625/R-96/010 a Compendium Method 10-31: 6: 3: 2
Nickel (as Ni)	BLQ (LOQ:3)	20	ng/m <sup>3</sup>	EPA/625/R-96/010 a Compendium Method 10-31: 6: 3: 2

BLQ: Below Limit of Quantification, LOQ: Limit of Quantification

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, PM<sub>10</sub>, PM<sub>2.5</sub>, 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)  
Reviewed & Authorised by



Sample ID : AA/10/22/5824	Report No, AA/10/22/5824	Report Date	31/10/2022
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4. There are no additions to, deviations or exclusions from the method.



### AMBIENT AIR QUALITY MONITORING REPORT

Sample ID : AA/10/22/5825	Report No. AA/10/22/5825	Report Date	31/10/2022
Name and address of Customer	<b>PNP Maritime Services Private Limited</b> 2nd Floor, Lansdowne House, Mahakavi Bhushan Road, Colaba, Mumbai - 400001, Maharashtra		
Sampling done by	Laboratory	Sample Description / Type	Ambient Air
Sampling Location	Near PNP Jetty No. 3 (PNP Port)	Date - Sampling	20/10/2022 to 21/10/2022
Sample Quantity / Packing	PM <sub>10</sub> , Bap, Metals: 1 x 3 no. filter paper PM <sub>2.5</sub> : 1 x 1 no. filter paper SO <sub>2</sub> , NO <sub>2</sub> : 30 ml x 6 no. plastic bottle each NH <sub>3</sub> : 10 ml x 24 no. plastic bottle Ozone: 10 ml x 1 no. plastic bottle C <sub>6</sub> H <sub>6</sub> : 6 no. charcoal tubes CO: 1 no. bladder	Date - Receipt of Sample	22/10/2022
Sampling Procedure	As per Method reference	Date - Start of Analysis	22/10/2022
Order Reference	As per PO No. PNP/March/2021-2022/020 Dated 31.03.2022	Date - Completion of Analysis	30/10/2022

#### Meteorological Data / Environmental Conditions


Average Wind Velocity 6 km/h	Wind Direction N-W	Relative Humidity (Max./Min.): 85/73%	Temperature (Max./Min.): 31/24°C	Duration of Survey 24 h
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Parameter	Result	NAAQS# 2009	Unit	Method
<b>Chemical Testing; Group: Atmospheric Pollution</b>				
Sulphur Dioxide (SO <sub>2</sub> )	9.4	80	µg/m <sup>3</sup>	IS 5182 (Part 2): 2001
Nitrogen Dioxide (NO <sub>2</sub> )	21.8	80	µg/m <sup>3</sup>	IS 5182 (Part 6): 2006
Particulate Matter (size less than 10 µm) or PM <sub>10</sub>	308	100	µg/m <sup>3</sup>	IS 5182 (Part 23): 2006
Particulate Matter (size less than 2.5 µm) or PM <sub>2.5</sub>	111	60	µg/m <sup>3</sup>	CPCB Guideline, Volume I, 36/2012-13, Page No 15: 2013
Ozone (O <sub>3</sub> )	BLQ (LOQ:19.6)	180	µg/m <sup>3</sup>	Methods of Air Sampling and Analysis (AWMA), 3rd Ed., Method 411, Page no. 403, 1988
Lead (as Pb)	BLQ (LOQ:0.02)	1	µg/m <sup>3</sup>	EPA/625/R-96/010 a Compendium Method 10-31 & 32
Carbon Monoxide (CO)	1.25	4	mg/m <sup>3</sup>	CPCB Guidelines, Volume II, 37/2012-13, Page no 16: 2013
Ammonia (NH <sub>3</sub> )	BLQ (LOQ:20)	400	µg/m <sup>3</sup>	CPCB Guidelines, Volume I, 36/2012-13, Page No 35: 2013
Benzene (C <sub>6</sub> H <sub>6</sub> )	1.02	5	µg/m <sup>3</sup>	IS 5182 (Part II): 2006
Benzo (a) pyrene (BaP) Particulate Phase only	BLQ (LOQ:0.2)	1	ng/m <sup>3</sup>	IS 5182 (Part 12): 2004
Arsenic (as As)	BLQ (LOQ:0.3)	6	ng/m <sup>3</sup>	EPA/625/R-96/010 a Compendium Method 10-31 & 32
Nickel (as Ni)	BLQ (LOQ:3)	20	ng/m <sup>3</sup>	EPA/625/R-96/010 a Compendium Method 10-31 & 32

BLQ: Below Limit of Quantification, LOQ: Limit of Quantification

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, PM<sub>10</sub>, PM<sub>2.5</sub>, Lead and Ammonia, 1 hour TWA in case of Carbon Monoxide and Ozone, Annual TWA in case of Benzene, Benzo (a) Pyrene, Arsenic and Nickel.

  
Ninad Soundankar  
Technical Manager (Chemical)  
Reviewed & Authorised by

Sample ID : AA/10/22/5825	Report No. AA/10/22/5825	Report Date	31/10/2022
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Technical Manager (Chemical)  
Reviewed & Authorised by



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



### AMBIENT AIR QUALITY MONITORING REPORT

Sample ID : AA/10/22/5826	Report No. AA/10/22/5826	Report Date	31/10/2022
Name and address of Customer	<b>PNP Maritime Services Private Limited</b> 2nd Floor, Lansdowne House, Mahakavi Bhushan Road, Colaba, Mumbai - 400001, Maharashtra		
Sampling done by	Laboratory	Sample Description / Type	Ambient Air
Sampling Location	Near PNP Jetty No.5 (PNP Port)	Date - Sampling	20/10/2022 to 21/10/2022
Sample Quantity / Packing	PM <sub>10</sub> , Bap, Metals: 1 x 3 no. filter paper PM <sub>2.5</sub> : 1 x 1 no. filter paper SO <sub>2</sub> , NO <sub>2</sub> : 30 ml x 6 no. plastic bottle each NH <sub>3</sub> : 10 ml x 24 no. plastic bottle Ozone: 10 ml x 1 no. plastic bottle C <sub>6</sub> H <sub>6</sub> : 6 no. charcoal tubes CO: 1 no. bladder	Date - Receipt of Sample	22/10/2022
Sampling Procedure	As per Method reference	Date - Start of Analysis	22/10/2022
Order Reference	As per PO No. PNP/March/2021-2022/020 Dated 31.03.2022	Date - Completion of Analysis	30/10/2022

#### Meteorological Data / Environmental Conditions

Average Wind Velocity 6 km/h	Wind Direction N-W	Relative Humidity (Max./Min.): 85/73%	Temperature (Max./Min.): 31/24°C	Duration of Survey 24 h
Parameter	Result	NAAQS# 2009	Unit	Method

#### Chemical Testing; Group: Atmospheric Pollution

Sulphur Dioxide (SO <sub>2</sub> )	10.5	80	µg/m <sup>3</sup>	IS 5182 (Part 2): 2001
Nitrogen Dioxide (NO <sub>2</sub> )	13.8	80	µg/m <sup>3</sup>	IS 5182 (Part 6): 2006
Particulate Matter (size less than 10 µm) or PM <sub>10</sub>	239	100	µg/m <sup>3</sup>	IS 5182 (Part 23): 2006
Particulate Matter (size less than 2.5 µm) or PM <sub>2.5</sub>	79	60	µg/m <sup>3</sup>	CPCB Guideline Volume 1:36/2012-13, Page No 15:2013
Ozone (O <sub>3</sub> )	BLQ (LOQ:19.6)	180	µg/m <sup>3</sup>	Methods of Air Sampling and Analysis (AWMA), 3rd Ed. Method 411, Page no. 403:1988
Lead (as Pb)	BLQ (LOQ:0.02)	1	µg/m <sup>3</sup>	EPA/625/R-96/010 a Compendium Method 10-316:3:2
Carbon Monoxide (CO)	1.28	4	mg/m <sup>3</sup>	CPCB Guidelines, Volume II, 37/2012-13, Page no 16: 2013
Ammonia (NH <sub>3</sub> )	BLQ (LOQ:20)	400	µg/m <sup>3</sup>	CPCB Guidelines, Volume 1:36/2012-13, Page No 35: 2013
Benzene (C <sub>6</sub> H <sub>6</sub> )	BLQ (LOQ:1)	5	µg/m <sup>3</sup>	IS 5182 (Part II): 2006
Benzo (a) pyrene (BaP) Particulate Phase only	BLQ (LOQ:0.2)	1	ng/m <sup>3</sup>	IS 5182 (Part 12): 2004
Arsenic (as As)	BLQ (LOQ:0.3)	6	ng/m <sup>3</sup>	EPA/625/R-96/010 a Compendium Method 10-316:3:2
Nickel (as Ni)	BLQ (LOQ:3)	20	ng/m <sup>3</sup>	EPA/625/R-96/010 a Compendium Method 10-316:3:2

BLQ: Below Limit of Quantification, LOQ: Limit of Quantification

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, PM<sub>10</sub>, PM<sub>2.5</sub>, 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





Sample ID : AA/10/22/5826	Report No. AA/10/22/5826	Report Date	31/10/2022
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Ninad Soundankar  
Technical Manager (Chemical)  
Reviewed & Authorised by



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



### AMBIENT AIR QUALITY MONITORING REPORT

Sample ID - AA/10/22/5827	Report No. AA/10/22/5827	Report Date	31/10/2022
Name and address of Customer	<b>PNP Maritime Services Private Limited</b> 2nd Floor, Lansdowne House, Mahakavi Bhushan Road, Colaba, Mumbai - 400001, Maharashtra		
Sampling done by	Laboratory	Sample Description / Type	Ambient Air
Sampling Location	Near Weigh Bridge (PNP Port)	Date - Sampling	20/10/2022 to 21/10/2022
Sample Quantity / Packing	PM <sub>10</sub> : Bap, Metals: 1 x 3 no. filter paper PM <sub>2.5</sub> : 1 x 1 no. filter paper SO <sub>2</sub> , NO <sub>2</sub> : 30 ml x 6 no. plastic bottle each NH <sub>3</sub> : 10 ml x 24 no. plastic bottle Ozone: 10 ml x 1 no. plastic bottle C <sub>6</sub> H <sub>6</sub> : 6 no. charcoal tubes CO: 1 no. bladder	Date - Receipt of Sample	22/10/2022
Sampling Procedure	As per Method reference	Date - Start of Analysis	22/10/2022
Order Reference	As per PO No. PNP/March/2021-2022/020 Dated 31.03.2022	Date - Completion of Analysis	30/10/2022

#### Meteorological Data / Environmental Conditions

Average Wind Velocity 6 km/h	Wind Direction N-W	Relative Humidity (Max./Min.): 85/73%	Temperature (Max./Min.): 31/24°C	Duration of Survey 24 h
Parameter	Result	NAAQS# 2009	Unit	Method

#### Chemical Testing; Group: Atmospheric Pollution

Sulphur Dioxide (SO <sub>2</sub> )	11.5	80	µg/m <sup>3</sup>	IS 5182 (Part 2): 2001
Nitrogen Dioxide (NO <sub>2</sub> )	20.9	80	µg/m <sup>3</sup>	IS 5182 (Part 6): 2006
Particulate Matter (size less than 10 µm) or PM <sub>10</sub>	252	100	µg/m <sup>3</sup>	IS 5182 (Part 23): 2006
Particulate Matter (size less than 2.5 µm) or PM <sub>2.5</sub>	82	60	µg/m <sup>3</sup>	CPCB Guideline, Volume I: 36/2012-13, Page No 15: 2013
Ozone (O <sub>3</sub> )	BLQ (LOQ: 19.6)	180	µg/m <sup>3</sup>	Methods of Air Sampling and Analysis (AWMA), 3rd Ed., Method 41, Page no. 403: 1988
Lead (as Pb)	BLQ (LOQ: 0.02)	1	µg/m <sup>3</sup>	EPA/625/R-96/010 a Compendium Method 10-31 6 3 2
Carbon Monoxide (CO)	1.10	4	mg/m <sup>3</sup>	CPCB Guidelines, Volume II, 37/2012-13, Page no 16: 2013
Ammonia (NH <sub>3</sub> )	BLQ (LOQ: 20)	400	µg/m <sup>3</sup>	CPCB Guidelines, Volume I: 36/2012-13, Page No 35: 2013
Benzene (C <sub>6</sub> H <sub>6</sub> )	1.63	5	µg/m <sup>3</sup>	IS 5182 (Part II): 2006
Benzo (a) pyrene (BaP) Particulate Phase only	BLQ (LOQ: 0.2)	1	ng/m <sup>3</sup>	IS 5182 (Part 12): 2004
Arsenic (as As)	BLQ (LOQ: 0.3)	6	ng/m <sup>3</sup>	EPA/625/R-96/010 a Compendium Method 10-31 6 3 2
Nickel (as Ni)	BLQ (LOQ: 3)	20	ng/m <sup>3</sup>	EPA/625/R-96/010 a Compendium Method 10-31 6 3 2

BLQ: Below Limit of Quantification, LOQ: Limit of Quantification

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, PM<sub>10</sub>, PM<sub>2.5</sub>, Lead and Ammonia, 1 hour TWA in case of Carbon Monoxide and Ozone, Annual TWA in case of Benzene, Benzo (a) Pyrene, Arsenic and Nickel.

  
Ninad Soundankar  
Technical Manager (Chemical)  
Reviewed & Authorised by



Sample ID : AA/10/22/5827	Report No. AA/10/22/5827	Report Date	31/10/2022
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*Ninad Soundankar*

Ninad Soundankar  
Technical Manager (Chemical)  
Reviewed & Authorised by



**Note:**

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### AMBIENT AIR QUALITY MONITORING REPORT

Sample ID : AA/10/22/5828	Report No. AA/10/22/5828	Report Date	31/10/2022
Name and address of Customer	<b>PNP Maritime Services Private Limited</b> 2nd Floor, Lansdowne House, Mahakavi Bhushan Road, Colaba, Mumbai - 400001, Maharashtra		
Sampling done by	Laboratory	Sample Description / Type	Ambient Air
Sampling Location	Near Custom Building (PNP Port)	Date - Sampling	20/10/2022 to 21/10/2022
Sample Quantity / Packing	PM <sub>10</sub> , Bap, Metals: 1 x 3 no. filter paper PM <sub>2.5</sub> : 1 x 1 no. filter paper SO <sub>2</sub> , NO <sub>2</sub> : 30 ml x 6 no. plastic bottle each NH <sub>3</sub> : 10 ml x 24 no. plastic bottle Ozone: 10 ml x 1 no. plastic bottle C <sub>6</sub> H <sub>6</sub> : 6 no. charcoal tubes CO: 1 no. bladder	Date - Receipt of Sample	22/10/2022
Sampling Procedure	As per Method reference	Date - Start of Analysis	22/10/2022
Order Reference	As per PO No. PNP/March/2021-2022/020 Dated 31.03 2022	Date - Completion of Analysis	30/10/2022

#### Meteorological Data / Environmental Conditions

Average Wind Velocity 6 km/h	Wind Direction N-W	Relative Humidity (Max./Min.): 85/73%	Temperature (Max./Min.): 31/24°C	Duration of Survey 24 h
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Parameter	Result	NAAQS# 2009	Unit	Method
<b>Chemical Testing; Group: Atmospheric Pollution</b>				
Sulphur Dioxide (SO <sub>2</sub> )	7.3	80	µg/m <sup>3</sup>	IS 5182 (Part 2): 2001
Nitrogen Dioxide (NO <sub>2</sub> )	26.8	80	µg/m <sup>3</sup>	IS 5182 (Part 6): 2006
Particulate Matter (size less than 10 µm) or PM <sub>10</sub>	269	100	µg/m <sup>3</sup>	IS 5182 (Part 23): 2006
Particulate Matter (size less than 2.5 µm) or PM <sub>2.5</sub>	88	60	µg/m <sup>3</sup>	CPCB Guideline, Volume I, 36/2012-13, Page No 15 2013
Ozone (O <sub>3</sub> )	BLQ (LOQ:19.6)	180	µg/m <sup>3</sup>	Methods of Air Sampling and Analysis (AWMA) 3rd Ed., Method 411, Page no 403 1988
Lead (as Pb)	BLQ (LOQ:0.02)	1	µg/m <sup>3</sup>	EPA/625/R-96/D10 a Compendium Method 10-31 6 3 2
Carbon Monoxide (CO)	BLQ (LOQ:0.5)	4	mg/m <sup>3</sup>	CPCB Guidelines, Volume II, 37/2012-13, Page no 16 2013
Ammonia (NH <sub>3</sub> )	BLQ (LOQ:20)	400	µg/m <sup>3</sup>	CPCB Guidelines, Volume I, 36/2012-13, Page No 35 2013
Benzene (C <sub>6</sub> H <sub>6</sub> )	1.63	5	µg/m <sup>3</sup>	IS 5182 (Part 11): 2006
Benzo (a) pyrene (BaP) Particulate Phase only	BLQ (LOQ:0.2)	1	ng/m <sup>3</sup>	IS 5182 (Part 12): 2004
Arsenic (as As)	BLQ (LOQ:0.3)	6	ng/m <sup>3</sup>	EPA/625/R-96/D10 a Compendium Method 10-31 6 3 2
Nickel (as Ni)	BLQ (LOQ:3)	20	ng/m <sup>3</sup>	EPA/625/R-96/D10 a Compendium Method 10-31 6 3 2

BLQ: Below Limit of Quantification, LOQ: Limit of Quantification

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, PM<sub>10</sub>, PM<sub>2.5</sub>, 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.



Sample ID : AA/10/22/5828

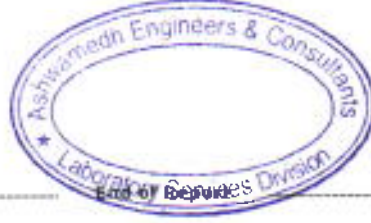
Report No. AA/10/22/5828

Report Date

31/10/2022



Ninad Soundankar  
Technical Manager (Chemical)  
Reviewed & Authorised by



End of Report

Note:

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### AMBIENT AIR QUALITY MONITORING REPORT

Sample ID : AA/10/22/5829	Report No. AA/10/22/5829	Report Date	31/10/2022
Name and address of Customer	<b>PNP Maritime Services Private Limited</b> 2nd Floor, Lansdowne House, Mahakavi Bhushan Road, Colaba, Mumbai - 400001, Maharashtra		
Sampling done by	Laboratory	Sample Description / Type	Ambient Air
Sampling Location	Near Lal Gate (PNP Port)	Date - Sampling	20/10/2022 to 21/10/2022
Sample Quantity / Packing	PM <sub>10</sub> : Bap, Metals: 1 x 3 no. filter paper PM <sub>2.5</sub> : 1 x 1 no. filter paper SO <sub>2</sub> , NO <sub>2</sub> : 30 ml x 6 no. plastic bottle each NH <sub>3</sub> : 10 ml x 24 no. plastic bottle Ozone: 10 ml x 1 no. plastic bottle C <sub>6</sub> H <sub>6</sub> : 6 no. charcoal tubes CO: 1 no. bladder	Date - Receipt of Sample	22/10/2022
Sampling Procedure	As per Method reference	Date - Start of Analysis	22/10/2022
Order Reference	As per PO No. PNP/March/2021-2022/020 Dated 31.03.2022	Date - Completion of Analysis	30/10/2022

#### Meteorological Data / Environmental Conditions

Average Wind Velocity 6 km/h	Wind Direction N-W	Relative Humidity (Max./Min.): 85/73%	Temperature (Max./Min.): 31/24°C	Duration of Survey 24 h
Parameter	Result	NAAQS# 2009	Unit	Method

#### Chemical Testing; Group: Atmospheric Pollution

Sulphur Dioxide (SO <sub>2</sub> )	13.6	80	µg/m <sup>3</sup>	IS 5182 (Part 2) 2001
Nitrogen Dioxide (NO <sub>2</sub> )	32.7	80	µg/m <sup>3</sup>	IS 5182 (Part 6) 2006
Particulate Matter (size less than 10 µm) or PM <sub>10</sub>	298	100	µg/m <sup>3</sup>	IS 5182 (Part 23):2006
Particulate Matter (size less than 2.5µm) or PM <sub>2.5</sub>	70	60	µg/m <sup>3</sup>	CPCB Guideline, Volume I,36/2012-13, Page No.15,2013
Ozone (O <sub>3</sub> )	BLQ (LOQ:19.6)	180	µg/m <sup>3</sup>	Methods of Air Sampling and Analysis (AWMA), 3rd Ed., Method 411 Page no. 403, 1988
Lead (as Pb)	BLQ (LOQ:0.02)	1	µg/m <sup>3</sup>	EPA/625/R-96/D10 a Compendium Method 10-31 & 32
Carbon Monoxide (CO)	1.63	4	mg/m <sup>3</sup>	CPCB Guidelines, Volume II, 37/2012-13, Page no.16: 2013
Ammonia (NH <sub>3</sub> )	BLQ (LOQ:20)	400	µg/m <sup>3</sup>	CPCB Guidelines, Volume I,36/2012-13, Page No.35: 2013
Benzene (C <sub>6</sub> H <sub>6</sub> )	BLQ (LOQ:1)	5	µg/m <sup>3</sup>	IS 5182 (Part 11): 2006
Benzo (a) pyrene (BaP) Particulate Phase only	BLQ (LOQ:0.2)	1	ng/m <sup>3</sup>	IS 5182 (Part 12): 2004
Arsenic (as As)	BLQ (LOQ:0.3)	6	ng/m <sup>3</sup>	EPA/625/R-96/D10 a Compendium Method 10-31 & 32
Nickel (as Ni)	BLQ (LOQ:3)	20	ng/m <sup>3</sup>	EPA/625/R-96/D10 a Compendium Method 10-31 & 32

BLQ: Below Limit of Quantification, LOQ: Limit of Quantification

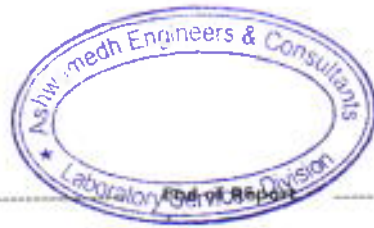
TWA Time Weighted Average

# NAAQS (National Ambient Air Quality Standards (Industrial, Residential, Rural and other Area) specified as: 24 hours TWA in case of Sulphur Dioxide, Nitrogen Dioxide, PM<sub>10</sub>, PM<sub>2.5</sub>, 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.

Sample ID : AA/10/22/5829	Report No. AA/10/22/5829	Report Date	31/10/2022
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Technical Manager (Chemical)  
Reviewed & Authorised by



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



### AMBIENT AIR QUALITY MONITORING REPORT

Sample ID : AA/10/22/5830	Report No. AA/10/22/5830	Report Date	31/10/2022
Name and address of Customer	<b>PNP Maritime Services Private Limited</b> 2nd Floor, Lansdowne House, Mahakavi Bhushan Road, Colaba, Mumbai - 400001, Maharashtra		
Sampling done by	Laboratory	Sample Description / Type	Ambient Air
Sampling Location	Near DIL Main Gate (PNP Port)	Date - Sampling	20/10/2022 to 21/10/2022
Sample Quantity / Packing	PM <sub>10</sub> , Bap, Metals: 1 x 3 no. filter paper PM <sub>2.5</sub> : 1 x 1 no. filter paper SO <sub>2</sub> , NO <sub>2</sub> : 30 ml x 6 no. plastic bottle each NH <sub>3</sub> : 10 ml x 24 no. plastic bottle Ozone: 10 ml x 1 no. plastic bottle C <sub>6</sub> H <sub>6</sub> : 6 no. charcoal tubes CO: 1 no. bladder	Date - Receipt of Sample	22/10/2022
Sampling Procedure	As per Method reference	Date - Start of Analysis	22/10/2022
Order Reference	As per PO No. PNP/March/2021-2022/020 Dated 31.03.2022	Date - Completion of Analysis	30/10/2022

#### Meteorological Data / Environmental Conditions

Average Wind Velocity 6 km/h	Wind Direction N-W	Relative Humidity (Max./Min.): 85/73%	Temperature (Max./Min.): 31/24°C	Duration of Survey 24 h
Parameter	Result	NAAQS# 2009	Unit	Method

#### Chemical Testing; Group: Atmospheric Pollution

Sulphur Dioxide (SO <sub>2</sub> )	12.6	80	µg/m <sup>3</sup>	IS 5182 (Part 2): 2001
Nitrogen Dioxide (NO <sub>2</sub> )	23.2	80	µg/m <sup>3</sup>	IS 5182 (Part 6): 2006
Particulate Matter (size less than 10 µm) or PM <sub>10</sub>	255	100	µg/m <sup>3</sup>	IS 5182 (Part 23): 2006
Particulate Matter (size less than 2.5 µm) or PM <sub>2.5</sub>	90	60	µg/m <sup>3</sup>	CPCB Guideline, Volume 1,36/2012-13, Page No 15 2013
Ozone (O <sub>3</sub> )	BLQ (LOQ:19.6)	180	µg/m <sup>3</sup>	Methods of Air Sampling and Analysis (AWMA), 3rd Ed, Method 4H Page no. 403 :1988
Lead (as Pb)	BLQ (LOQ:0.02)	1	µg/m <sup>3</sup>	EPA/625/R-96/D10 a Compendium Method 10-31 & 32
Carbon Monoxide (CO)	1.43	4	mg/m <sup>3</sup>	CPCB Guidelines, Volume 11, 37/2012-13, Page no 16 2013
Ammonia (NH <sub>3</sub> )	BLQ (LOQ:20)	400	µg/m <sup>3</sup>	CPCB Guidelines, Volume 1,36/2012-13, Page No 35 2013
Benzene (C <sub>6</sub> H <sub>6</sub> )	1.32	5	µg/m <sup>3</sup>	IS 5182 (Part 1): 2006
Benzo (a) pyrene (BaP) Particulate Phase only	BLQ (LOQ:0.2)	1	ng/m <sup>3</sup>	IS 5182 (Part 12): 2004
Arsenic (as As)	BLQ (LOQ:0.3)	6	ng/m <sup>3</sup>	EPA/625/R-96/D10 a Compendium Method 10-31 & 32
Nickel (as Ni)	BLQ (LOQ:3)	20	ng/m <sup>3</sup>	EPA/625/R-96/D10 a Compendium Method 10-31 & 32

BLQ: Below Limit of Quantification, LOQ: Limit of Quantification

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, PM<sub>10</sub>, PM<sub>2.5</sub>, Lead and Ammonia, 1 hour TWA in case of Carbon Monoxide and Ozone, Annual TWA in case of Benzene, Benzo (a) Pyrene, Arsenic and Nickel.

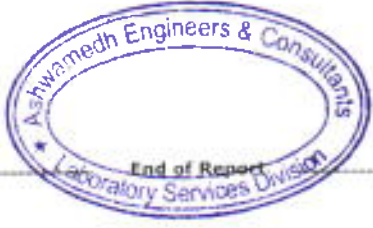
  
Ninad Soundankar  
Technical Manager (Chemical)  
Reviewed & Authorised by



Sample ID : AA/10/22/5830	Report No. AA/10/22/5830	Report Date	31/10/2022
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Technical Manager (Chemical)  
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  4. There are no additions to, deviations or exclusions from the method.



### AMBIENT AIR QUALITY MONITORING REPORT

Sample ID : AA/10/22/5831	Report No. AA/10/22/5831	Report Date	31/10/2022
Name and address of Customer	<b>PNP Maritime Services Private Limited</b> 2nd Floor, Lansdowne House, Mahakavi Bhushan Road, Colaba, Mumbai - 400001, Maharashtra		
Sampling done by	Laboratory	Sample Description / Type	Ambient Air
Sampling Location	Near DIL Godown Back Side (PNP Port)	Date - Sampling	20/10/2022 to 21/10/2022
Sample Quantity / Packing	PM <sub>10</sub> , Bap, Metals: 1 x 3 no. filter paper PM <sub>2.5</sub> : 1 x 1 no. filter paper SO <sub>2</sub> , NO <sub>2</sub> : 30 ml x 6 no. plastic bottle each NH <sub>3</sub> : 10 ml x 24 no. plastic bottle Ozone: 10 ml x 1 no. plastic bottle C <sub>6</sub> H <sub>6</sub> : 6 no. charcoal tubes CO: 1 no. bladder	Date - Receipt of Sample	22/10/2022
Sampling Procedure	As per Method reference	Date - Start of Analysis	22/10/2022
Order Reference	As per PO No. PNP/March/2021-2022/020 Dated 31.03.2022	Date - Completion of Analysis	30/10/2022

#### Meteorological Data / Environmental Conditions

Average Wind Velocity 6 km/h	Wind Direction N-W	Relative Humidity (Max./Min.): 85/73%	Temperature (Max./Min.): 31/24°C	Duration of Survey 24 h
Parameter	Result	NAAQS# 2009	Unit	Method

#### Chemical Testing; Group: Atmospheric Pollution

Sulphur Dioxide (SO <sub>2</sub> )	6.3	80	µg/m <sup>3</sup>	IS 5182 (Part 2) 2001
Nitrogen Dioxide (NO <sub>2</sub> )	18.2	80	µg/m <sup>3</sup>	IS 5182 (Part 6) 2006
Particulate Matter (size less than 10 µm) or PM <sub>10</sub>	248	100	µg/m <sup>3</sup>	IS 5182 (Part 23) 2006
Particulate Matter (size less than 2.5 µm) or PM <sub>2.5</sub>	86	60	µg/m <sup>3</sup>	CPCB Guideline, Volume I, 36/2012-13, Page No 15 2013
Ozone (O <sub>3</sub> )	BLQ (LOQ:19.6)	180	µg/m <sup>3</sup>	Methods of Air Sampling and Analysis (AWMA), 3rd Ed. Method 411, Page no. 403-1988
Lead (as Pb)	BLQ (LOQ:0.02)	1	µg/m <sup>3</sup>	EPA/625/R-96/D10 a Compendium Method 10-31 6-3-2
Carbon Monoxide (CO)	0.6	4	mg/m <sup>3</sup>	CPCB Guidelines, Volume II, 37/2012-13, Page no 16 2013
Ammonia (NH <sub>3</sub> )	BLQ (LOQ:20)	400	µg/m <sup>3</sup>	CPCB Guidelines, Volume I, 36/2012-13, Page No 35 2013
Benzene (C <sub>6</sub> H <sub>6</sub> )	BLQ (LOQ:1)	5	µg/m <sup>3</sup>	IS 5182 (Part 11) 2006
Benzo (a) pyrene (BaP) Particulate Phase only	BLQ (LOQ:0.2)	1	ng/m <sup>3</sup>	IS 5182 (Part 12): 2004
Arsenic (as As)	BLQ (LOQ:0.3)	6	ng/m <sup>3</sup>	EPA/625/R-96/D10 a Compendium Method 10-31 6-3-2
Nickel (as Ni)	BLQ (LOQ:3)	20	ng/m <sup>3</sup>	EPA/625/R-96/D10 a Compendium Method 10-31 6-3-2

BLQ: Below Limit of Quantification, LOQ: Limit of Quantification

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, PM<sub>10</sub>, PM<sub>2.5</sub>, 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.

Sample ID : AA/10/22/5831	Report No. AA/10/22/5831	Report Date	31/10/2022
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Ninad Soundankar  
Technical Manager (Chemical)  
Reviewed & Authorised by



Note:

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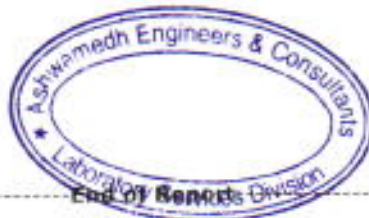
### NOISE LEVEL MEASUREMENT REPORT

Sample ID: N/10/22/5839	Report No: N/10/22/5839	Report Date	24/10/2022
Name and Address of Customer	<b>PNP Maritime Services Private Limited</b> 2nd Floor, Lansdowne House, Mahakavi Bhushan Road, Colaba, Mumbai - 400 001		
Monitoring Done By	Laboratory	Sample Description /Type	Ambient Noise
Order Reference	As per PO No. PNP/March/2021- 2022/020 Dated 31.03 2022	Date-Monitoring	20/10/2022

#### Chemical Testing; Group: Atmospheric Pollution

Location	Time (h)	Results Noise Level dB (A) Fast Response	Results Noise Level dB (A) Slow Response	Method
A. Near Main Gate (PNP Port)	09:00	71.6	70.7	CPCB Protocol for Ambient Level Noise Monitoring July AEC/C/SAP/SAM/356/36, Issue no. 4, Issue date 01/04/2018
	21:00	65.4	64.5	
B. Near Jetty No. 1 (PNP Port)	09:10	73.7	72.8	
	21:10	77.5	76.5	
C. Near Jetty No. 2 (PNP Port)	09:20	73.4	72.3	
	21:20	67.4	66.4	
D. Near Jetty No. 3 (PNP Port)	09:30	72.5	71.6	
	21:30	66.7	65.4	
E. Near Jetty No. 5 (PNP Port)	09:40	73.2	72.2	
	21:40	67.3	66.5	
F. Near Weight Bridge (PNP Port)	09:50	71.4	70.6	
	21:50	65.3	64.3	
G. Near Custom Building (PNP Port)	10:00	72.5	71.4	
	22:00	66.4	65.6	
H. Near Lal Gate (PNP Port)	10:10	73.3	72.2	
	22:10	67.1	66.4	
I. Near DIL Main Gate (PNP Port)	10:20	72.4	71.3	
	22:20	66.2	65.4	
J. DIL Godown Back Side (PNP Port)	11:30	71.3	70.2	
	23:30	65.2	64.3	
<b>Limit s</b>				
<b>As Per the Noise Pollution (Regulation &amp; Control) Rules, 2000 (Rules 3 (1) and 4(1))</b>				
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  
Technical Manager (Chemical)  
Reviewed & Authorised by



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### AMBIENT AIR QUALITY MONITORING REPORT

Sample ID : AA/10/22/5956	Report No. AA/10/22/5956	Report Date	03/11/2022
Name and address of Customer	<b>PNP Maritime Services Private Limited</b> 2nd Floor, Lansdowne House, Mahakavi Bhushan Road, Colaba, Mumbai - 400001, Maharashtra		
Sampling done by	Laboratory	Sample Description / Type	Ambient Air
Sampling Location	Near Main Gate (PNP Port)	Date - Sampling	24/10/2022 to 25/10/2022
Sample Quantity / Packing	PM <sub>10</sub> , Bap, Metals: 1 x 3 no. filter paper PM <sub>2.5</sub> : 1 x 1 no. filter paper SO <sub>2</sub> , NO <sub>2</sub> : 30 ml x 6 no. plastic bottle each NH <sub>3</sub> : 10 ml x 24 no. plastic bottle Ozone: 10 ml x 1 no. plastic bottle C <sub>6</sub> H <sub>6</sub> : 6 no. charcoal tubes CO: 1 no. bladder	Date - Receipt of Sample	28/10/2022
Sampling Procedure	As per method reference	Date - Start of Analysis	28/10/2022
Order Reference	As per PO No. PNP/March/2021-2022/020 Dated 31.03.2022	Date - Completion of Analysis	02/11/2022

#### Meteorological Data / Environmental Conditions

Average Wind Velocity 2 km/h	Wind Direction E-N-E	Relative Humidity (Max./Min.): 65/53%	Temperature (Max./Min.): 30/22°C	Duration of Survey 24 h
Parameter	Result	NAAQS# 2009	Unit	Method


#### Chemical Testing; Group: Atmospheric Pollution

Sulphur Dioxide (SO <sub>2</sub> )	8.4	80	µg/m <sup>3</sup>	IS 5182 (Part 2): 2001
Nitrogen Dioxide (NO <sub>2</sub> )	22.4	80	µg/m <sup>3</sup>	IS 5182 (Part 6): 2006
Particulate Matter (size less than 10 µm) or PM <sub>10</sub>	362	100	µg/m <sup>3</sup>	IS 5182 (Part 23): 2006
Particulate Matter (size less than 2.5 µm) or PM <sub>2.5</sub>	156	60	µg/m <sup>3</sup>	CPCB Guideline, Volume I 36/2012-13, Page No 15 2013
Ozone (O <sub>3</sub> )	BLQ (LOQ:19.6)	180	µg/m <sup>3</sup>	Methods of Air Sampling and Analysis (AWMA), 3rd Ed. Method 44, Page no. 403 1988
Lead (as Pb)	BLQ (LOQ:0.02)	1	µg/m <sup>3</sup>	EPA/625/R-96/D10 a Compendium Method 10-31 B 3.2
Carbon Monoxide (CO)	1.21	4	mg/m <sup>3</sup>	CPCB Guidelines, Volume II, 37/2012-13, Page no.16: 2013
Ammonia (NH <sub>3</sub> )	BLQ (LOQ:20)	400	µg/m <sup>3</sup>	CPCB Guidelines, Volume I 36/2012-13, Page No 35 2013
Benzene (C <sub>6</sub> H <sub>6</sub> )	1.12	5	µg/m <sup>3</sup>	IS 5182 (Part 10): 2006
Benzo (a) pyrene (BaP) Particulate Phase only	BLQ (LOQ:0.2)	1	ng/m <sup>3</sup>	IS 5182 (Part 12): 2004
Arsenic (as As)	BLQ (LOQ:0.3)	6	ng/m <sup>3</sup>	EPA/625/R-96/D10 a Compendium Method 10-31 B 3.2
Nickel (as Ni)	BLQ (LOQ:3)	20	ng/m <sup>3</sup>	EPA/625/R-96/D10 a Compendium Method 10-31 B 3.2

BLQ: Below Limit of Quantification, LOQ: Limit of Quantification

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, PM<sub>10</sub>, PM<sub>2.5</sub>, Lead and Ammonia, 1 hour TWA in case of Carbon Monoxide and Ozone, Annual TWA in case of Benzene, Benzo (a) Pyrene, Arsenic and Nickel.

  
Ninad Soundankar  
Technical Manager (Chemical)  
Reviewed & Authorised by

Sample ID : AA/10/22/5956	Report No. AA/10/22/5956	Report Date	03/11/2022
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Technical Manager (Chemical)  
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### AMBIENT AIR QUALITY MONITORING REPORT

Sample ID : AA/10/22/5957	Report No. AA/10/22/5957	Report Date	03/11/2022
Name and address of Customer	<b>PNP Maritime Services Private Limited</b> 2nd Floor, Lansdowne House, Mahakavi Bhushan Road, Colaba, Mumbai - 400001, Maharashtra		
Sampling done by	Laboratory	Sample Description / Type	Ambient Air
Sampling Location	Near PNP Jetty No. 1 (PNP Port)	Date - Sampling	24/10/2022 to 25/10/2022
Sample Quantity / Packing	PM <sub>10</sub> , Bap, Metals: 1 x 3 no. filter paper PM <sub>2.5</sub> : 1 x 1 no. filter paper SO <sub>2</sub> , NO <sub>2</sub> : 30 ml x 6 no. plastic bottle each NH <sub>3</sub> : 10 ml x 24 no. plastic bottle Ozone: 10 ml x 1 no. plastic bottle C <sub>6</sub> H <sub>6</sub> : 6 no. charcoal tubes CO: 1 no. bladder	Date - Receipt of Sample	28/10/2022
Sampling Procedure	As per method reference	Date - Start of Analysis	28/10/2022
Order Reference	As per PO No. PNP/March/2021-2022/020 Dated 31.03.2022	Date - Completion of Analysis	02/11/2022

#### Meteorological Data / Environmental Conditions

Average Wind Velocity 2 km/h	Wind Direction E-N-E	Relative Humidity (Max./Min.): 65/53%	Temperature (Max./Min.): 30/22°C	Duration of Survey 24 h
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Parameter	Result	NAAQS# 2009	Unit	Method
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#### Chemical Testing; Group: Atmospheric Pollution

Sulphur Dioxide (SO <sub>2</sub> )	7.3	80	µg/m <sup>3</sup>	IS 5182 (Part 2) 2001
Nitrogen Dioxide (NO <sub>2</sub> )	20.6	80	µg/m <sup>3</sup>	IS 5182 (Part 6) 2006
Particulate Matter (size less than 10 µm) or PM <sub>10</sub>	349	100	µg/m <sup>3</sup>	IS 5182 (Part 23) 2006
Particulate Matter (size less than 2.5µm) or PM <sub>2.5</sub>	140	60	µg/m <sup>3</sup>	CPCB Guideline, Volume 1, 36/2012-13, Page No 15 2013
Ozone (O <sub>3</sub> )	BLQ (LOQ:19.6)	180	µg/m <sup>3</sup>	Methods of Air Sampling and Analysis (AWMA), 3rd Ed., Method 411, Page no. 403, 1988
Lead (as Pb)	BLQ (LOQ:0.02)	1	µg/m <sup>3</sup>	EPA/625/R-96/D10 a Compendium Method 10-31 & 32
Carbon Monoxide (CO)	1.14	4	mg/m <sup>3</sup>	CPCB Guidelines, Volume II, 37/2012-13, Page no 16, 2013
Ammonia (NH <sub>3</sub> )	BLQ (LOQ:20)	400	µg/m <sup>3</sup>	CPCB Guidelines, Volume I, 36/2012-13, Page No 35, 2013
Benzene (C <sub>6</sub> H <sub>6</sub> )	1.05	5	µg/m <sup>3</sup>	IS 5182 (Part II), 2006
Benzo (a) pyrene (BaP) Particulate Phase only	BLQ (LOQ:0.2)	1	ng/m <sup>3</sup>	IS 5182 (Part 12), 2004
Arsenic (as As)	BLQ (LOQ:0.3)	6	ng/m <sup>3</sup>	EPA/625/R-96/D10 a Compendium Method 10-31 & 32
Nickel (as Ni)	BLQ (LOQ:3)	20	ng/m <sup>3</sup>	EPA/625/R-96/D10 a Compendium Method 10-31 & 32

BLQ: Below Limit of Quantification, LOQ: Limit of Quantification

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, PM<sub>10</sub>, PM<sub>2.5</sub>, 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.

Sample ID : AA/10/22/5957

Report No. AA/10/22/5957

Report Date

03/11/2022



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

Sample ID : AA/10/22/5958	Report No. AA/10/22/5958	Report Date	03/11/2022
Name and address of Customer	<b>PNP Maritime Services Private Limited</b> 2nd Floor, Lansdowne House, Mahakavi Bhushan Road, Colaba, Mumbai - 400001, Maharashtra		
Sampling done by	Laboratory	Sample Description / Type	Ambient Air
Sampling Location	Near PNP Jetty No. 2 (PNP Port)	Date - Sampling	24/10/2022 to 25/10/2022
Sample Quantity / Packing	PM <sub>10</sub> : Bap, Metals: 1 x 3 no. filter paper PM <sub>2.5</sub> : 1 x 1 no. filter paper SO <sub>2</sub> , NO <sub>2</sub> : 30 ml x 6 no. plastic bottle each NH <sub>3</sub> : 10 ml x 24 no. plastic bottle Ozone: 10 ml x 1 no. plastic bottle C <sub>6</sub> H <sub>6</sub> : 6 no. charcoal tubes CO: 1 no. bladder	Date - Receipt of Sample	28/10/2022
Sampling Procedure	As per method reference	Date - Start of Analysis	28/10/2022
Order Reference	As per PO No. PNP/March/2021-2022/020 Dated 31.03.2022	Date - Completion of Analysis	02/11/2022

#### Meteorological Data / Environmental Conditions

Average Wind Velocity 2 km/h	Wind Direction E-N-E	Relative Humidity (Max./Min.): 65/53%	Temperature (Max./Min.): 30/22°C	Duration of Survey 24 h
Parameter	Result	NAAQS# 2009	Unit	Method

#### Chemical Testing; Group: Atmospheric Pollution

Sulphur Dioxide (SO <sub>2</sub> )	6.3	80	µg/m <sup>3</sup>	IS 5182 (Part 2): 2001
Nitrogen Dioxide (NO <sub>2</sub> )	21.8	80	µg/m <sup>3</sup>	IS 5182 (Part 6): 2006
Particulate Matter (size less than 10 µm) or PM <sub>10</sub>	351	100	µg/m <sup>3</sup>	IS 5182 (Part 23): 2006
Particulate Matter (size less than 2.5 µm) or PM <sub>2.5</sub>	148	60	µg/m <sup>3</sup>	CPCB Guideline, Volume I, 36/2012-13, Page No 15 2013
Ozone (O <sub>3</sub> )	BLQ (LOQ:19.6)	180	µg/m <sup>3</sup>	Methods of Air Sampling and Analysis (AWMA), 3rd Ed., Method 411, Page no. 403 :1988
Lead (as Pb)	BLQ (LOQ:0.02)	1	µg/m <sup>3</sup>	EPA/625/R-96/010 a Compendium Method 10-31 B 3 2
Carbon Monoxide (CO)	1.18	4	mg/m <sup>3</sup>	CPCB Guidelines, Volume II, 37/2012-13, Page no 16 2013
Ammonia (NH <sub>3</sub> )	BLQ (LOQ:20)	400	µg/m <sup>3</sup>	CPCB Guidelines, Volume I, 36/2012-13, Page No 35 2013
Benzene (C <sub>6</sub> H <sub>6</sub> )	1.05	5	µg/m <sup>3</sup>	IS 5182 (Part 11): 2006
Benzo (a) pyrene (BaP) Particulate Phase only	BLQ (LOQ:0.2)	1	ng/m <sup>3</sup>	IS 5182 (Part 12): 2004
Arsenic (as As)	BLQ (LOQ:0.3)	6	ng/m <sup>3</sup>	EPA/625/R-96/010 a Compendium Method 10-31 B 3 2
Nickel (as Ni)	BLQ (LOQ:3)	20	ng/m <sup>3</sup>	EPA/625/R-96/010 a Compendium Method 10-31 B 3 2

BLQ: Below Limit of Quantification, LOQ: Limit of Quantification

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, PM<sub>10</sub>, PM<sub>2.5</sub>, Lead and Ammonia, 1 hour TWA in case of Carbon Monoxide and Ozone, Annual TWA in case of Benzene, Benzo (a) Pyrene, Arsenic and Nickel.

  
Ninad Soundankar  
Technical Manager (Chemical)  
Reviewed & Authorised by



Sample ID : AA/10/22/5958	Report No. AA/10/22/5958	Report Date	03/11/2022
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Ninad Soundankar  
Technical Manager (Chemical)  
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### AMBIENT AIR QUALITY MONITORING REPORT

Sample ID : AA/10/22/5959	Report No. AA/10/22/5959	Report Date	03/11/2022
Name and address of Customer	<b>PNP Maritime Services Private Limited</b> 2nd Floor, Lansdowne House, Mahakavi Bhushan Road, Colaba, Mumbai - 400001, Maharashtra		
Sampling done by	Laboratory	Sample Description / Type	Ambient Air
Sampling Location	Near PNP Jetty No. 3 (PNP Port)	Date - Sampling	24/10/2022 to 25/10/2022
Sample Quantity / Packing	PM <sub>10</sub> , Bap, Metals: 1 x 3 no. filter paper PM <sub>2.5</sub> : 1 x 1 no. filter paper SO <sub>2</sub> , NO <sub>2</sub> : 30 ml x 6 no. plastic bottle each NH <sub>3</sub> : 10 ml x 24 no. plastic bottle Ozone: 10 ml x 1 no. plastic bottle C <sub>6</sub> H <sub>6</sub> : 6 no. charcoal tubes CO: 1 no. bladder	Date - Receipt of Sample	28/10/2022
Sampling Procedure	As per method reference	Date - Start of Analysis	28/10/2022
Order Reference	As per PO No. PNP/March/2021-2022/020 Dated 31.03.2022	Date - Completion of Analysis	02/11/2022

#### Meteorological Data / Environmental Conditions

Average Wind Velocity 2 km/h	Wind Direction E-N-E	Relative Humidity (Max./Min.): 65/53%	Temperature (Max./Min.): 30/22°C	Duration of Survey 24 h
Parameter	Result	NAAQS# 2009	Unit	Method

#### Chemical Testing; Group: Atmospheric Pollution

Sulphur Dioxide (SO <sub>2</sub> )	9.4	80	µg/m <sup>3</sup>	IS 5182 (Part 2): 2001
Nitrogen Dioxide (NO <sub>2</sub> )	25.3	80	µg/m <sup>3</sup>	IS 5182 (Part 6): 2006
Particulate Matter (size less than 10 µm) or PM <sub>10</sub>	378	100	µg/m <sup>3</sup>	IS 5182 (Part 23): 2006
Particulate Matter (size less than 2.5µm) or PM <sub>2.5</sub>	169	60	µg/m <sup>3</sup>	CPCB Guideline, Volume 1, 36/2012-13, Page No 15 2013
Ozone (O <sub>3</sub> )	BLQ (LOQ:19.6)	180	µg/m <sup>3</sup>	Methods of Air Sampling and Analysis (AWMA), 3rd Ed., Method 41, Page no. 403 :1988
Lead (as Pb)	BLQ (LOQ:0.02)	1	µg/m <sup>3</sup>	EPA/625/R-96/010 a Compendium Method 10-31 & 32
Carbon Monoxide (CO)	1.44	4	mg/m <sup>3</sup>	CPCB Guidelines, Volume 1, 37/2012-13, Page no.16: 2013
Ammonia (NH <sub>3</sub> )	BLQ (LOQ:20)	400	µg/m <sup>3</sup>	CPCB Guidelines, Volume 1, 36/2012-13, Page No 35: 2013
Benzene (C <sub>6</sub> H <sub>6</sub> )	1.33	5	µg/m <sup>3</sup>	IS 5182 (Part 11): 2006
Benzo (a) pyrene (BaP) Particulate Phase only	BLQ (LOQ:0.2)	1	ng/m <sup>3</sup>	IS 5182 (Part 12): 2004
Arsenic (as As)	BLQ (LOQ:0.3)	6	ng/m <sup>3</sup>	EPA/625/R-96/010 a Compendium Method 10-31 & 32
Nickel (as Ni)	BLQ (LOQ:3)	20	ng/m <sup>3</sup>	EPA/625/R-96/010 a Compendium Method 10-31 & 32

BLQ: Below Limit of Quantification, LOQ: Limit of Quantification

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, PM<sub>10</sub>, PM<sub>2.5</sub>, Lead and Ammonia, 1 hour TWA in case of Carbon Monoxide and Ozone, Annual TWA in case of Benzene, Benzo (a) Pyrene, Arsenic and Nickel.

  
Ninad Soundankar  
Technical Manager (Chemical)  
Reviewed & Authorised by



Sample ID : AA/10/22/5959	Report No. AA/10/22/5959	Report Date	03/11/2022
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*N. Soundankar*

Ninad Soundankar  
Technical Manager (Chemical)  
Reviewed & Authorised by



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**AMBIENT AIR QUALITY MONITORING REPORT**

Sample ID : AA/10/22/5960	Report No. AA/10/22/5960	Report Date	03/11/2022
Name and address of Customer	<b>PNP Maritime Services Private Limited</b> 2nd Floor, Lansdowne House, Mahakavi Bhushan Road, Colaba, Mumbai - 400001, Maharashtra		
Sampling done by	Laboratory	Sample Description / Type	Ambient Air
Sampling Location	Near PNP Jetty No.5 (PNP Port)	Date - Sampling	24/10/2022 to 25/10/2022
Sample Quantity / Packing	PM <sub>10</sub> , Bap, Metals: 1 x 3 no. filter paper PM <sub>2.5</sub> : 1 x 1 no. filter paper SO <sub>2</sub> , NO <sub>2</sub> : 30 ml x 6 no. plastic bottle each NH <sub>3</sub> : 10 ml x 24 no. plastic bottle Ozone: 10 ml x 1 no. plastic bottle C <sub>6</sub> H <sub>6</sub> : 6 no. charcoal tubes CO: 1 no. bladder	Date - Receipt of Sample	28/10/2022
Sampling Procedure	As per method reference	Date - Start of Analysis	28/10/2022
Order Reference	As per PO No. PNP/March/2021-2022/020 Dated 31.03.2022	Date - Completion of Analysis	02/11/2022

**Meteorological Data / Environmental Conditions**

Average Wind Velocity 2 km/h	Wind Direction E-N-E	Relative Humidity (Max./Min.): 65/53%	Temperature (Max./Min.): 30/22°C	Duration of Survey 24 h
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Parameter	Result	NAAQS# 2009	Unit	Method
<b>Chemical Testing; Group: Atmospheric Pollution</b>				
Sulphur Dioxide (SO <sub>2</sub> )	5.2	80	µg/m <sup>3</sup>	IS 5182 (Part 2): 2001
Nitrogen Dioxide (NO <sub>2</sub> )	20.9	80	µg/m <sup>3</sup>	IS 5182 (Part 5): 2006
Particulate Matter (size less than 10 µm) or PM <sub>10</sub>	251	100	µg/m <sup>3</sup>	IS 5182 (Part 23): 2006
Particulate Matter (size less than 2.5µm) or PM <sub>2.5</sub>	96	60	µg/m <sup>3</sup>	CPCB Guideline, Volume 1,36/2012-13, Page No 15 2013
Ozone (O <sub>3</sub> )	BLQ (LOQ:19.6)	180	µg/m <sup>3</sup>	Methods of Air Sampling and Analysis (AWMA), 3rd Ed., Method 41, Page no. 403 1988
Lead (as Pb)	BLQ (LOQ:0.02)	1	µg/m <sup>3</sup>	EPA/625/R-96/D10 a Compendium Method 10-316 3 2
Carbon Monoxide (CO)	0.9	4	mg/m <sup>3</sup>	CPCB Guidelines, Volume II, 37/2012-13, Page no 16: 2013
Ammonia (NH <sub>3</sub> )	BLQ (LOQ:20)	400	µg/m <sup>3</sup>	CPCB Guidelines, Volume 1,36/2012-13, Page No 35 2013
Benzene (C <sub>6</sub> H <sub>6</sub> )	BLQ (LOQ:1)	5	µg/m <sup>3</sup>	IS 5182 (Part II): 2006
Benzo (a) pyrene (BaP) Particulate Phase only	BLQ (LOQ:0.2)	1	ng/m <sup>3</sup>	IS 5182 (Part 12): 2004
Arsenic (as As)	BLQ (LOQ:0.3)	6	ng/m <sup>3</sup>	EPA/625/R-96/D10 a Compendium Method 10-316 3 2
Nickel (as Ni)	BLQ (LOQ:3)	20	ng/m <sup>3</sup>	EPA/625/R-96/D10 a Compendium Method 10-316 3 2

BLQ: Below Limit of Quantification, LOQ: Limit of Quantification

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, PM<sub>10</sub>, PM<sub>2.5</sub>, Lead and Ammonia, 1 hour TWA in case of Carbon Monoxide and Ozone, Annual TWA in case of Benzene, Benzo (a) Pyrene, Arsenic and Nickel.

  
 Ninad Soundankar  
 Technical Manager (Chemical)  
 Reviewed & Authorised by

Sample ID : AA/10/22/5960	Report No. AA/10/22/5960	Report Date	03/11/2022
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Technical Manager (Chemical)  
Reviewed & Authorised by



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



### AMBIENT AIR QUALITY MONITORING REPORT

Sample ID : AA/10/22/5961	Report No. AA/10/22/5961	Report Date	03/11/2022
Name and address of Customer	<b>PNP Maritime Services Private Limited</b> 2nd Floor, Lansdowne House, Mahakavi Bhushan Road, Colaba, Mumbai - 400001, Maharashtra		
Sampling done by	Laboratory	Sample Description / Type	Ambient Air
Sampling Location	Near Weigh Bridge (PNP Port)	Date - Sampling	24/10/2022 to 25/10/2022
Sample Quantity / Packing	PM <sub>10</sub> , Bap, Metals: 1 x 3 no. filter paper PM <sub>2.5</sub> : 1 x 1 no. filter paper SO <sub>2</sub> , NO <sub>2</sub> : 30 ml x 6 no. plastic bottle each NH <sub>3</sub> : 10 ml x 24 no. plastic bottle Ozone: 10 ml x 1 no. plastic bottle C <sub>6</sub> H <sub>6</sub> : 6 no. charcoal tubes CO: 1 no. bladder	Date - Receipt of Sample	28/10/2022
Sampling Procedure	As per method reference	Date - Start of Analysis	28/10/2022
Order Reference	As per PO No. PNP/March/2021-2022/020 Dated 31.03.2022	Date - Completion of Analysis	02/11/2022

#### Meteorological Data / Environmental Conditions

Average Wind Velocity 2 km/h	Wind Direction E-N-E	Relative Humidity (Max./Min.): 65/53%	Temperature (Max./Min.): 30/22°C	Duration of Survey 24 h
Parameter	Result	NAAQS# 2009	Unit	Method

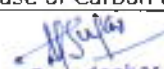
#### Chemical Testing; Group: Atmospheric Pollution

Sulphur Dioxide (SO <sub>2</sub> )	6.3	80	µg/m <sup>3</sup>	IS 5182 (Part 2): 2001
Nitrogen Dioxide (NO <sub>2</sub> )	22.7	80	µg/m <sup>3</sup>	IS 5182 (Part 6): 2006
Particulate Matter (size less than 10 µm) or PM <sub>10</sub>	318	100	µg/m <sup>3</sup>	IS 5182 (Part 23): 2006
Particulate Matter (size less than 2.5 µm) or PM <sub>2.5</sub>	122	60	µg/m <sup>3</sup>	CPCB Guideline, Volume I, 36/2012-13, Page No 15: 2013
Ozone (O <sub>3</sub> )	BLQ (LOQ:19.6)	180	µg/m <sup>3</sup>	Methods of Air Sampling and Analysis (AWMA) 3rd Ed. Method 411 Page no. 403: 1988
Lead (as Pb)	BLQ (LOQ:0.02)	1	µg/m <sup>3</sup>	EPA/625/R-96/D10 a Compendium Method 10-31 B 3.2
Carbon Monoxide (CO)	1.10	4	mg/m <sup>3</sup>	CPCB Guidelines, Volume II, 37/2012-13, Page no 16: 2013
Ammonia (NH <sub>3</sub> )	BLQ (LOQ:20)	400	µg/m <sup>3</sup>	CPCB Guidelines, Volume I, 36/2012-13, Page No 35: 2013
Benzene (C <sub>6</sub> H <sub>6</sub> )	1.03	5	µg/m <sup>3</sup>	IS 5182 (Part II): 2006
Benzo (a) pyrene (BaP) Particulate Phase only	BLQ (LOQ:0.2)	1	ng/m <sup>3</sup>	IS 5182 (Part 12): 2004
Arsenic (as As)	BLQ (LOQ:0.3)	6	ng/m <sup>3</sup>	EPA/625/R-96/D10 a Compendium Method 10-31 B 3.2
Nickel (as Ni)	BLQ (LOQ:3)	20	ng/m <sup>3</sup>	EPA/625/R-96/D10 a Compendium Method 10-31 B 3.2

BLQ: Below Limit of Quantification, LOQ: Limit of Quantification

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, PM<sub>10</sub>, PM<sub>2.5</sub>, Lead and Ammonia, 1 hour TWA in case of Carbon Monoxide and Ozone, Annual TWA in case of Benzene, Benzo (a) Pyrene, Arsenic and Nickel.

  
Ninad Soundankar  
Technical Manager (Chemical)  
Reviewed & Authorised by

Sample ID : AA/10/22/5961	Report No. AA/10/22/5961	Report Date	03/11/2022
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Ninad Soundankar

Technical Manager (Chemical)  
Reviewed & Authorised by



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





**AMBIENT AIR QUALITY MONITORING REPORT**

Sample ID : AA/10/22/5962	Report No. AA/10/22/5962	Report Date	03/11/2022
Name and address of Customer	<b>PNP Maritime Services Private Limited</b> 2nd Floor, Lansdowne House, Mahakavi Bhushan Road, Colaba, Mumbai - 400001, Maharashtra		
Sampling done by	Laboratory	Sample Description / Type	Ambient Air
Sampling Location	Near Custom Building (PNP Port)	Date - Sampling	24/10/2022 to 25/10/2022
Sample Quantity / Packing	PM <sub>10</sub> , Bap, Metals: 1 x 3 no. filter paper PM <sub>2.5</sub> : 1 x 1 no. filter paper SO <sub>2</sub> , NO <sub>2</sub> : 30 ml x 6 no. plastic bottle each NH <sub>3</sub> : 10 ml x 24 no. plastic bottle Ozone: 10 ml x 1 no. plastic bottle C <sub>6</sub> H <sub>6</sub> : 6 no. charcoal tubes CO: 1 no. bladder	Date - Receipt of Sample	28/10/2022
Sampling Procedure	As per method reference	Date - Start of Analysis	28/10/2022
Order Reference	As per PO No. PNP/March/2021-2022/020 Dated 31.03.2022	Date - Completion of Analysis	02/11/2022

**Meteorological Data / Environmental Conditions**

Average Wind Velocity 2 km/h	Wind Direction E-N-E	Relative Humidity (Max./Min.): 65/53%	Temperature (Max./Min.): 30/22°C	Duration of Survey 24 h
Parameter	Result	NAAQS# 2009	Unit	Method

**Chemical Testing; Group: Atmospheric Pollution**

Sulphur Dioxide (SO <sub>2</sub> )	<b>8.4</b>	80	µg/m <sup>3</sup>	IS 5182 (Part 2): 2001
Nitrogen Dioxide (NO <sub>2</sub> )	<b>19.7</b>	80	µg/m <sup>3</sup>	IS 5182 (Part 6): 2006
Particulate Matter (size less than 10 µm) or PM <sub>10</sub>	<b>279</b>	100	µg/m <sup>3</sup>	IS 5182 (Part 23): 2006
Particulate Matter (size less than 2.5 µm) or PM <sub>2.5</sub>	<b>114</b>	60	µg/m <sup>3</sup>	CPCB Guidelines, Volume I, 36/2012-13, Page No 15, 2013
Ozone (O <sub>3</sub> )	<b>BLQ</b> (LOQ: 19.6)	180	µg/m <sup>3</sup>	Methods of Air Sampling and Analysis (AWMA), 3rd Ed. Method 411 Page no 403, 1988
Lead (as Pb)	<b>BLQ</b> (LOQ: 0.02)	1	µg/m <sup>3</sup>	EPA/625/R-96/D10 a Compendium Method 10-316-3.2
Carbon Monoxide (CO)	<b>1.0</b>	4	mg/m <sup>3</sup>	CPCB Guidelines, Volume II, 37/2012-13, Page no 16, 2013
Ammonia (NH <sub>3</sub> )	<b>BLQ</b> (LOQ: 20)	400	µg/m <sup>3</sup>	CPCB Guidelines, Volume I, 36/2012-13, Page No 35, 2013
Benzene (C <sub>6</sub> H <sub>6</sub> )	<b>1.09</b>	5	µg/m <sup>3</sup>	IS 5182 (Part II): 2006
Benzo (a) pyrene (BaP) Particulate Phase only	<b>BLQ</b> (LOQ: 0.2)	1	ng/m <sup>3</sup>	IS 5182 (Part 12): 2004
Arsenic (as As)	<b>BLQ</b> (LOQ: 0.3)	6	ng/m <sup>3</sup>	EPA/625/R-96/D10 a Compendium Method 10-316-3.2
Nickel (as Ni)	<b>BLQ</b> (LOQ: 3)	20	ng/m <sup>3</sup>	EPA/625/R-96/D10 a Compendium Method 10-316-3.2

BLQ: Below Limit of Quantification, LOQ: Limit of Quantification

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, PM<sub>10</sub>, PM<sub>2.5</sub>, 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

Sample ID : AA/10/22/5962	Report No. AA/10/22/5962	Report Date	03/11/2022
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Ninad Soundankar  
Technical Manager (Chemical)  
Reviewed & Authorised by



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**AMBIENT AIR QUALITY MONITORING REPORT**

Sample ID : AA/10/22/5963	Report No. AA/10/22/5963	Report Date	03/11/2022
Name and address of Customer	<b>PNP Maritime Services Private Limited</b> 2nd Floor, Lansdowne House, Mahakavi Bhushan Road, Colaba, Mumbai - 400001, Maharashtra		
Sampling done by	Laboratory	Sample Description / Type	Ambient Air
Sampling Location	Near Lal Gate (PNP Port)	Date - Sampling	24/10/2022 to 25/10/2022
Sample Quantity / Packing	PM <sub>10</sub> : Bap, Metals: 1 x 3 no. filter paper PM <sub>2.5</sub> : 1 x 1 no. filter paper SO <sub>2</sub> , NO <sub>2</sub> : 30 ml x 6 no. plastic bottle each NH <sub>3</sub> : 10 ml x 24 no. plastic bottle Ozone: 10 ml x 1 no. plastic bottle C <sub>6</sub> H <sub>6</sub> : 6 no. charcoal tubes CO: 1 no. bladder	Date - Receipt of Sample	28/10/2022
Sampling Procedure	As per method reference	Date - Start of Analysis	28/10/2022
Order Reference	As per PO No. PNP/March/2021-2022/020 Dated 31.03.2022	Date - Completion of Analysis	02/11/2022

**Meteorological Data / Environmental Conditions**

Average Wind Velocity 2 km/h	Wind Direction E-N-E	Relative Humidity (Max./Min.): 65/53%	Temperature (Max./Min.): 30/22°C	Duration of Survey 24 h
Parameter	Result	NAAQS# 2009	Unit	Method

**Chemical Testing; Group: Atmospheric Pollution**

Sulphur Dioxide (SO <sub>2</sub> )	<b>7.3</b>	80	µg/m <sup>3</sup>	IS 5182 (Part 2): 2001
Nitrogen Dioxide (NO <sub>2</sub> )	<b>26.5</b>	80	µg/m <sup>3</sup>	IS 5182 (Part 6): 2006
Particulate Matter (size less than 10 µm) or PM <sub>10</sub>	<b>338</b>	100	µg/m <sup>3</sup>	IS 5182 (Part 23): 2006
Particulate Matter (size less than 2.5 µm) or PM <sub>2.5</sub>	<b>121</b>	60	µg/m <sup>3</sup>	CPCB Guideline, Volume 1,36/2012-13, Page No 15, 2013
Ozone (O <sub>3</sub> )	<b>BLQ</b> (LOQ:19.6)	180	µg/m <sup>3</sup>	Methods of Air Sampling and Analysis (AWMA), 3rd Ed., Method 411, Page no. 403, 1988
Lead (as Pb)	<b>BLQ</b> (LOQ:0.02)	1	µg/m <sup>3</sup>	EPA/625/R-96/010 a Compendium Method 10-316 3-2
Carbon Monoxide (CO)	<b>1.31</b>	4	mg/m <sup>3</sup>	CPCB Guidelines, Volume II, 37/2012-13, Page no 16, 2013
Ammonia (NH <sub>3</sub> )	<b>BLQ</b> (LOQ:20)	400	µg/m <sup>3</sup>	CPCB Guidelines, Volume 1,36/2012-13, Page No 35, 2013
Benzene (C <sub>6</sub> H <sub>6</sub> )	<b>1.18</b>	5	µg/m <sup>3</sup>	IS 5182 (Part II): 2006
Benzo (a) pyrene (BaP) Particulate Phase only	<b>BLQ</b> (LOQ:0.2)	1	ng/m <sup>3</sup>	IS 5182 (Part 12): 2004
Arsenic (as As)	<b>BLQ</b> (LOQ:0.3)	6	ng/m <sup>3</sup>	EPA/625/R-96/010 a Compendium Method 10-316 3-2
Nickel (as Ni)	<b>BLQ</b> (LOQ:3)	20	ng/m <sup>3</sup>	EPA/625/R-96/010 a Compendium Method 10-316 3-2

BLQ: Below Limit of Quantification, LOQ: Limit of Quantification

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, PM<sub>10</sub>, PM<sub>2.5</sub>, 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

Sample ID : AA/10/22/5963	Report No. AA/10/22/5963	Report Date	03/11/2022
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Ninad Soundankar  
Technical Manager (Chemical)  
Reviewed & Authorised by



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### AMBIENT AIR QUALITY MONITORING REPORT

Sample ID : AA/10/22/5964	Report No. AA/10/22/5964	Report Date	03/11/2022
Name and address of Customer	<b>PNP Maritime Services Private Limited</b> 2nd Floor, Lansdowne House, Mahakavi Bhushan Road, Colaba, Mumbai - 400001, Maharashtra		
Sampling done by	Laboratory	Sample Description / Type	Ambient Air
Sampling Location	Near DIL Main Gate (PNP Port)	Date - Sampling	24/10/2022 to 25/10/2022
Sample Quantity / Packing	PM <sub>10</sub> , Bap, Metals: 1 x 3 no. filter paper PM <sub>2.5</sub> : 1 x 1 no. filter paper SO <sub>2</sub> , NO <sub>2</sub> : 30 ml x 6 no. plastic bottle each NH <sub>3</sub> : 10 ml x 24 no. plastic bottle Ozone: 10 ml x 1 no. plastic bottle C <sub>6</sub> H <sub>6</sub> : 6 no. charcoal tubes CO: 1 no. bladder	Date - Receipt of Sample	28/10/2022
Sampling Procedure	As per method reference	Date - Start of Analysis	28/10/2022
Order Reference	As per PO No. PNP/March/2021-2022/020 Dated 31.03.2022	Date - Completion of Analysis	02/11/2022

#### Meteorological Data / Environmental Conditions

Average Wind Velocity 2 km/h	Wind Direction E-N-E	Relative Humidity (Max./Min.): 65/53%	Temperature (Max./Min.): 30/22°C	Duration of Survey 24 h
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Parameter	Result	NAAQS# 2009	Unit	Method
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#### Chemical Testing; Group: Atmospheric Pollution

Sulphur Dioxide (SO <sub>2</sub> )	9.4	80	µg/m <sup>3</sup>	IS 5182 (Part 2) 2001
Nitrogen Dioxide (NO <sub>2</sub> )	25.6	80	µg/m <sup>3</sup>	IS 5182 (Part 6) 2006
Particulate Matter (size less than 10 µm) or PM <sub>10</sub>	320	100	µg/m <sup>3</sup>	IS 5182 (Part 23) 2006
Particulate Matter (size less than 2.5 µm) or PM <sub>2.5</sub>	112	60	µg/m <sup>3</sup>	CPCB Guidelines, Volume I, 36/2012-13, Page No 15 2013
Ozone (O <sub>3</sub> )	BLQ (LOQ:19.6)	180	µg/m <sup>3</sup>	Methods of Air Sampling and Analysis (AWMA), 3rd Ed., Method 411, Page no. 403-1988
Lead (as Pb)	BLQ (LOQ:0.02)	1	µg/m <sup>3</sup>	EPA/625/R-96/010 a Compendium Method 10-316-32
Carbon Monoxide (CO)	1.0	4	mg/m <sup>3</sup>	CPCB Guidelines, Volume II, 37/2012-13, Page no 16 2013
Ammonia (NH <sub>3</sub> )	BLQ (LOQ:20)	400	µg/m <sup>3</sup>	CPCB Guidelines, Volume I, 36/2012-13, Page No 35 2013
Benzene (C <sub>6</sub> H <sub>6</sub> )	BLQ (LOQ:1)	5	µg/m <sup>3</sup>	IS 5182 (Part 11) 2006
Benzo (a) pyrene (BaP) Particulate Phase only	BLQ (LOQ:0.2)	1	ng/m <sup>3</sup>	IS 5182 (Part 12) 2004
Arsenic (as As)	BLQ (LOQ:0.3)	6	ng/m <sup>3</sup>	EPA/625/R-96/010 a Compendium Method 10-316-32
Nickel (as Ni)	BLQ (LOQ:3)	20	ng/m <sup>3</sup>	EPA/625/R-96/010 a Compendium Method 10-316-32

BLQ: Below Limit of Quantification, LOQ: Limit of Quantification

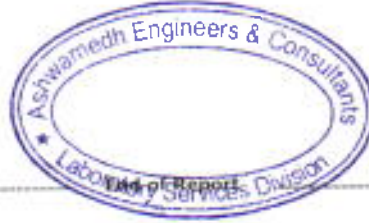
TWA Time Weighted Average

# NAAQS (National Ambient Air Quality Standards (Industrial, Residential, Rural and other Area) specified as: 24 hours TWA in case of Sulphur Dioxide, Nitrogen Dioxide, PM<sub>10</sub>, PM<sub>2.5</sub>, 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.

Sample ID : AA/10/22/5964	Report No. AA/10/22/5964	Report Date	03/11/2022
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Ninad Soundankar  
Technical Manager (Chemical)  
Reviewed & Authorised by



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



### AMBIENT AIR QUALITY MONITORING REPORT

Sample ID : AA/10/22/5965	Report No. AA/10/22/5965	Report Date	03/11/2022
Name and address of Customer	<b>PNP Maritime Services Private Limited</b> 2nd Floor, Lansdowne House, Mahakavi Bhushan Road, Colaba, Mumbai - 400001, Maharashtra		
Sampling done by	Laboratory	Sample Description / Type	Ambient Air
Sampling Location	Near DIL Godown Back Side (PNP Port)	Date - Sampling	24/10/2022 to 25/10/2022
Sample Quantity / Packing	PM <sub>10</sub> : Bap, Metals: 1 x 3 no. filter paper PM <sub>2.5</sub> : 1 x 1 no. filter paper SO <sub>2</sub> , NO <sub>2</sub> : 30 ml x 6 no. plastic bottle each NH <sub>3</sub> : 10 ml x 24 no. plastic bottle Ozone: 10 ml x 1 no. plastic bottle C <sub>6</sub> H <sub>6</sub> : 6 no. charcoal tubes CO: 1 no. bladder	Date - Receipt of Sample	28/10/2022
Sampling Procedure	As per method reference	Date - Start of Analysis	28/10/2022
Order Reference	As per PO No. PNP/March/2021-2022/020 Dated 31.03.2022	Date - Completion of Analysis	02/11/2022

#### Meteorological Data / Environmental Conditions

Average Wind Velocity 2 km/h	Wind Direction E-N-E	Relative Humidity (Max./Min.): 65/53%	Temperature (Max./Min.): 30/22°C	Duration of Survey 24 h
Parameter	Result	NAAQS# 2009	Unit	Method

#### Chemical Testing; Group: Atmospheric Pollution

Sulphur Dioxide (SO <sub>2</sub> )	5.2	80	µg/m <sup>3</sup>	IS 5182 (Part 2) 2001
Nitrogen Dioxide (NO <sub>2</sub> )	20	80	µg/m <sup>3</sup>	IS 5182 (Part 6) 2006
Particulate Matter (size less than 10 µm) or PM <sub>10</sub>	220	100	µg/m <sup>3</sup>	IS 5182 (Part 23) 2006
Particulate Matter (size less than 2.5µm) or PM <sub>2.5</sub>	86	60	µg/m <sup>3</sup>	CPCB Guideline, Volume I, 36/2012-13, Page No.15, 2013
Ozone (O <sub>3</sub> )	BLQ (LOQ:19.6)	180	µg/m <sup>3</sup>	Methods of Air Sampling and Analysis (AWMA), 3rd Ed., Method 411, Page no. 403, 1988
Lead (as Pb)	BLQ (LOQ:0.02)	1	µg/m <sup>3</sup>	EPA/625/R-96/D10 a Compendium Method 10-3.1 & 3.2
Carbon Monoxide (CO)	0.8	4	mg/m <sup>3</sup>	CPCB Guidelines, Volume II, 37/2012-13, Page no.16, 2013
Ammonia (NH <sub>3</sub> )	BLQ (LOQ:20)	400	µg/m <sup>3</sup>	CPCB Guidelines, Volume I, 36/2012-13, Page No.35, 2013
Benzene (C <sub>6</sub> H <sub>6</sub> )	BLQ (LOQ:1)	5	µg/m <sup>3</sup>	IS 5182 (Part 11): 2006
Benzo (a) pyrene (BaP) Particulate Phase only	BLQ (LOQ:0.2)	1	ng/m <sup>3</sup>	IS 5182 (Part 12) 2004
Arsenic (as As)	BLQ (LOQ:0.3)	6	ng/m <sup>3</sup>	EPA/625/R-96/D10 a Compendium Method 10-3.1 & 3.2
Nickel (as Ni)	BLQ (LOQ:3)	20	ng/m <sup>3</sup>	EPA/625/R-96/D10 a Compendium Method 10-3.1 & 3.2

BLQ: Below Limit of Quantification, LOQ: Limit of Quantification

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, PM<sub>10</sub>, PM<sub>2.5</sub>, Lead and Ammonia, 1 hour TWA in case of Carbon Monoxide and Ozone, Annual TWA in case of Benzene, Benzo (a) Pyrene, Arsenic and Nickel.

  
Ninad Soundankar  
Technical Manager (Chemical)  
Reviewed & Authorised by

Sample ID : AA/10/22/5965	Report No. AA/10/22/5965	Report Date	03/11/2022
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Technical Manager (Chemical)  
Reviewed & Authorised by



Note:

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





### NOISE LEVEL MEASUREMENT REPORT

Sample ID N/10/22/5978	Report No. N/10/22/5978	Report Date	31/10/2022
Name and Address of Customer	<b>PNP Maritime Services Private Limited</b> 2nd Floor, Lansdowne House, Mahakavi Bhushan Road, Colaba, Mumbai - 400 001		
Monitoring Done By	Laboratory	Sample Description /Type	Ambient Noise
Order Reference	As per PO No. PNP/March/2021 - 2022/020 Dated 31.03.2022	Date-Monitoring	24/10/2022

#### Chemical Testing; Group: Atmospheric Pollution

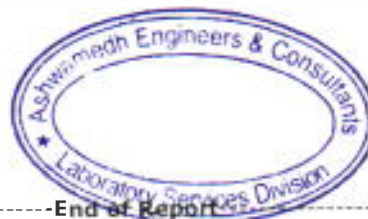
Location	Time (h)	Results Noise Level dB (A) Fast Response	Results Noise Level dB (A) Slow Response	Method
A. Near Main Gate (PNP Port)	09:00	73.4	72.6	CPCB Protocol for Ambient Level Noise Monitoring July AEC/C/SAP/SAM/356/36 Issue no:4, Issue date 01/04/2018
	21:00	67.6	66.5	
B. Near Jetty No. 1 (PNP Port)	09:10	72.7	71.4	
	21:10	66.4	65.7	
C. Near Jetty No. 2 (PNP Port)	09:20	72.5	71.2	
	21:20	66.3	65.6	
D. Near Jetty No. 3 (PNP Port)	09:30	73.4	72.4	
	21:30	67.5	66.5	
E. Near Jetty No. 5 (PNP Port)	09:40	73.3	72.3	
	21:40	67.5	66.3	
F. Near Weight Bridge (PNP Port)	09:50	71.4	70.5	
	21:50	65.6	64.4	
G. Near Custom Building (PNP Port)	10:00	72.4	71.2	
	22:00	66.2	65.5	
H. Near Lal Gate (PNP Port)	10:10	73.2	72.3	
	22:10	67.3	66.2	
I. Near DIL Main Gate (PNP Port)	10:20	72.3	71.1	
	22:20	66.1	65.5	
J. DIL Godown Back Side (PNP Port)	11:30	71.5	70.4	
	23:30	65.4	64.2	

#### Limit s

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

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

  
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Technical Manager (Chemical)  
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End of Report

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



### AMBIENT AIR QUALITY MONITORING REPORT

Sample ID : AA/10/22/6020	Report No. AA/10/22/6020	Report Date	03/11/2022
Name and address of Customer	<b>PNP Maritime Services Private Limited</b> 2nd Floor, Lansdowne House, Mahakavi Bhushan Road, Colaba, Mumbai - 400001, Maharashtra		
Sampling done by	Laboratory	Sample Description / Type	Ambient Air
Sampling Location	Near PNP Main Gate (PNP Port)	Date - Sampling	27/10/2022 to 28/10/2022
Sample Quantity / Packing	PM <sub>10</sub> , Bap, Metals: 1 x 3 no. filter paper PM <sub>2.5</sub> : 1 x 1 no. filter paper SO <sub>2</sub> , NO <sub>2</sub> : 30 ml x 6 no. plastic bottle each NH <sub>3</sub> : 10 ml x 24 no. plastic bottle Ozone: 10 ml x 1 no. plastic bottle C <sub>6</sub> H <sub>6</sub> : 6 no. charcoal tubes CO: 1 no. bladder	Date - Receipt of Sample	29/10/2022
Sampling Procedure	As per method reference	Date - Start of Analysis	29/10/2022
Order Reference	As per PO No. PNP/March/2021-2022/020 Dated 31.03.2022	Date - Completion of Analysis	02/11/2022

#### Meteorological Data / Environmental Conditions

Average Wind Velocity 6 km/h	Wind Direction E-N-E	Relative Humidity (Max./Min.): 62/50%	Temperature (Max./Min.): 33/22°C	Duration of Survey 24 h
Parameter	Result	NAAQS# 2009	Unit	Method

#### Chemical Testing; Group: Atmospheric Pollution

Sulphur Dioxide (SO <sub>2</sub> )	8.4	80	µg/m <sup>3</sup>	IS 5182 (Part 2) 2001
Nitrogen Dioxide (NO <sub>2</sub> )	24.7	80	µg/m <sup>3</sup>	IS 5182 (Part 6) 2006
Particulate Matter (size less than 10 µm) or PM <sub>10</sub>	379	100	µg/m <sup>3</sup>	IS 5182 (Part 23) 2006
Particulate Matter (size less than 2.5 µm) or PM <sub>2.5</sub>	168	60	µg/m <sup>3</sup>	CPCB Guideline, Volume 1 36/2012-13, Page No 15 2013
Ozone (O <sub>3</sub> )	BLQ (LOQ:19.6)	180	µg/m <sup>3</sup>	Methods of Air Sampling and Analysis (AWMA) 3rd Ed. Method 411, Page no. 403-1988
Lead (as Pb)	BLQ (LOQ:0.02)	1	µg/m <sup>3</sup>	EPA/625/R-96/010 a Compendium Method 10-31 & 32
Carbon Monoxide (CO)	1.28	4	mg/m <sup>3</sup>	CPCB Guidelines, Volume II, 37/2012-13, Page no 16 2013
Ammonia (NH <sub>3</sub> )	BLQ (LOQ:20)	400	µg/m <sup>3</sup>	CPCB Guidelines, Volume 1 36/2012-13, Page No 35 2013
Benzene (C <sub>6</sub> H <sub>6</sub> )	1.08	5	µg/m <sup>3</sup>	IS 5182 (Part II) 2006
Benzo (a) pyrene (BaP) Particulate Phase only	BLQ (LOQ:0.2)	1	ng/m <sup>3</sup>	IS 5182 (Part 12) 2004
Arsenic (as As)	BLQ (LOQ:0.3)	6	ng/m <sup>3</sup>	EPA/625/R-96/010 a Compendium Method 10-31 & 32
Nickel (as Ni)	BLQ (LOQ:3)	20	ng/m <sup>3</sup>	EPA/625/R-96/010 a Compendium Method 10-31 & 32

BLQ: Below Limit of Quantification, LOQ: Limit of Quantification

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, PM<sub>10</sub>, PM<sub>2.5</sub>, 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.

Sample ID : AA/10/22/6020	Report No. AA/10/22/6020	Report Date	03/11/2022
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Technical Manager (Chemical)  
Reviewed & Authorised by



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### AMBIENT AIR QUALITY MONITORING REPORT

Sample ID : AA/10/22/6021	Report No. AA/10/22/6021	Report Date	03/11/2022
Name and address of Customer	<b>PNP Maritime Services Private Limited</b> 2nd Floor, Lansdowne House, Mahakavi Bhushan Road, Colaba, Mumbai - 400001, Maharashtra		
Sampling done by	Laboratory	Sample Description / Type	Ambient Air
Sampling Location	Near PNP Jetty No. 1 (PNP Port)	Date - Sampling	27/10/2022 to 28/10/2022
Sample Quantity / Packing	PM <sub>10</sub> , Bap, Metals: 1 x 3 no. filter paper PM <sub>2.5</sub> : 1 x 1 no. filter paper SO <sub>2</sub> , NO <sub>2</sub> : 30 ml x 6 no. plastic bottle each NH <sub>3</sub> : 10 ml x 24 no. plastic bottle Ozone: 10 ml x 1 no. plastic bottle C <sub>6</sub> H <sub>6</sub> : 6 no. charcoal tubes CO: 1 no. bladder	Date - Receipt of Sample	29/10/2022
Sampling Procedure	As per method reference	Date - Start of Analysis	29/10/2022
Order Reference	As per PO No. PNP/March/2021-2022/020 Dated 31.03.2022	Date - Completion of Analysis	02/11/2022

#### Meteorological Data / Environmental Conditions

Average Wind Velocity 6 km/h	Wind Direction E-N-E	Relative Humidity (Max./Min.): 62/50%	Temperature (Max./Min.): 33/22°C	Duration of Survey 24 h
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Parameter	Result	NAAQS# 2009	Unit	Method
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#### Chemical Testing; Group: Atmospheric Pollution

Sulphur Dioxide (SO <sub>2</sub> )	7.3	80	µg/m <sup>3</sup>	IS 5182 (Part 2): 2001
Nitrogen Dioxide (NO <sub>2</sub> )	26.2	80	µg/m <sup>3</sup>	IS 5182 (Part 6): 2006
Particulate Matter (size less than 10 µm) or PM <sub>10</sub>	358	100	µg/m <sup>3</sup>	IS 5182 (Part 23): 2006
Particulate Matter (size less than 2.5 µm) or PM <sub>2.5</sub>	142	60	µg/m <sup>3</sup>	CPCB Guideline, Volume I, 36/2012-13, Page No 15, 2013
Ozone (O <sub>3</sub> )	BLQ (LOQ:19.6)	180	µg/m <sup>3</sup>	Methods of Air Sampling and Analysis (AWMA), 3rd Ed., Method 411 Page no. 403-4988
Lead (as Pb)	BLQ (LOQ:0.02)	1	µg/m <sup>3</sup>	EPA/625/R-96/010 a Compendium Method 10-316 3.2
Carbon Monoxide (CO)	1.31	4	mg/m <sup>3</sup>	CPCB Guidelines, Volume II, 37/2012-13, Page no 16, 2013
Ammonia (NH <sub>3</sub> )	BLQ (LOQ:20)	400	µg/m <sup>3</sup>	CPCB Guidelines, Volume I 36/2012-13, Page No 35, 2013
Benzene (C <sub>6</sub> H <sub>6</sub> )	1.20	5	µg/m <sup>3</sup>	IS 5182 (Part II): 2006
Benzo (a) pyrene (BaP) Particulate Phase only	BLQ (LOQ:0.2)	1	ng/m <sup>3</sup>	IS 5182 (Part 12): 2004
Arsenic (as As)	BLQ (LOQ:0.3)	6	ng/m <sup>3</sup>	EPA/625/R-96/010 a Compendium Method 10-316 3.2
Nickel (as Ni)	BLQ (LOQ:3)	20	ng/m <sup>3</sup>	EPA/625/R-96/010 a Compendium Method 10-316 3.2

BLQ: Below Limit of Quantification, LOQ: Limit of Quantification

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, PM<sub>10</sub>, PM<sub>2.5</sub>, 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.



Sample ID : AA/10/22/6021	Report No. AA/10/22/6021	Report Date	03/11/2022
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Ninad Soundankar

Technical Manager (Chemical)  
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**AMBIENT AIR QUALITY MONITORING REPORT**

Sample ID : AA/10/22/6022	Report No. AA/10/22/6022	Report Date	03/11/2022
Name and address of Customer	<b>PNP Maritime Services Private Limited</b> 2nd Floor, Lansdowne House, Mahakavi Bhushan Road, Colaba, Mumbai - 400001, Maharashtra		
Sampling done by	Laboratory	Sample Description / Type	Ambient Air
Sampling Location	Near PNP Jetty No. 2 (PNP Port)	Date - Sampling	27/10/2022 to 28/10/2022
Sample Quantity / Packing	PM <sub>10</sub> : Bap, Metals: 1 x 3 no. filter paper PM <sub>2.5</sub> : 1 x 1 no. filter paper SO <sub>2</sub> , NO <sub>2</sub> : 30 ml x 6 no. plastic bottle each NH <sub>3</sub> : 10 ml x 24 no. plastic bottle Ozone: 10 ml x 1 no. plastic bottle C <sub>6</sub> H <sub>6</sub> : 6 no. charcoal tubes CO: 1 no. bladder	Date - Receipt of Sample	29/10/2022
Sampling Procedure	As per method reference	Date - Start of Analysis	29/10/2022
Order Reference	As per PO No. PNP/March/2021-2022/020 Dated 31.03.2022	Date - Completion of Analysis	02/11/2022

**Meteorological Data / Environmental Conditions**

Average Wind Velocity 6 km/h	Wind Direction E-N-E	Relative Humidity (Max./Min.): 62/50%	Temperature (Max./Min.): 33/22°C	Duration of Survey 24 h
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Parameter	Result	NAAQS# 2009	Unit	Method
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**Chemical Testing; Group: Atmospheric Pollution**

Sulphur Dioxide (SO <sub>2</sub> )	9.4	80	µg/m <sup>3</sup>	IS 5182 (Part 2) 2001
Nitrogen Dioxide (NO <sub>2</sub> )	25.6	80	µg/m <sup>3</sup>	IS 5182 (Part 6): 2006
Particulate Matter (size less than 10 µm) or PM <sub>10</sub>	365	100	µg/m <sup>3</sup>	IS 5182 (Part 23):2006
Particulate Matter (size less than 2.5µm) or PM <sub>2.5</sub>	153	60	µg/m <sup>3</sup>	CPCB Guideline, Volume I 36/2012-13, Page No 15 2013
Ozone (O <sub>3</sub> )	BLQ (LOQ:19.6)	180	µg/m <sup>3</sup>	Methods of Air Sampling and Analysis (AWMA), 3rd Ed. Method 411, Page no 403-4988
Lead (as Pb)	BLQ (LOQ:0.02)	1	µg/m <sup>3</sup>	EPA/625/R-96/010 a Compendium Method 10-316 3 2
Carbon Monoxide (CO)	1.20	4	mg/m <sup>3</sup>	CPCB Guidelines, Volume II, 37/2012-13, Page no 16 2013
Ammonia (NH <sub>3</sub> )	BLQ (LOQ:20)	400	µg/m <sup>3</sup>	CPCB Guidelines, Volume I, 36/2012-13, Page No 35 2013
Benzene (C <sub>6</sub> H <sub>6</sub> )	1.02	5	µg/m <sup>3</sup>	IS 5182 (Part II) : 2006
Benzo (a) pyrene (BaP) Particulate Phase only	BLQ (LOQ:0.2)	1	ng/m <sup>3</sup>	IS 5182 (Part 12) : 2004
Arsenic (as As)	BLQ (LOQ:0.3)	6	ng/m <sup>3</sup>	EPA/625/R-96/010 a Compendium Method 10-316 3 2
Nickel (as Ni)	BLQ (LOQ:3)	20	ng/m <sup>3</sup>	EPA/625/R-96/010 a Compendium Method 10-316 3 2

BLQ: Below Limit of Quantification, LOQ: Limit of Quantification

TWA: Time Weighted Average

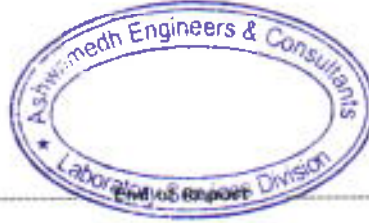
# NAAQS (National Ambient Air Quality Standards (Industrial, Residential, Rural and other Area) specified as:  
24 hours TWA in case of Sulphur Dioxide, Nitrogen Dioxide, PM<sub>10</sub>, PM<sub>2.5</sub>, Lead and Ammonia, 1 hour TWA in  
case of Carbon Monoxide and Ozone, Annual TWA in case of Benzene, Benzo (a) Pyrene, Arsenic and Nickel.

  
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Technical Manager (Chemical)  
Reviewed & Authorised by

Sample ID : AA/10/22/6022	Report No. AA/10/22/6022	Report Date	03/11/2022
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**AMBIENT AIR QUALITY MONITORING REPORT**

Sample ID : AA/10/22/6023	Report No. AA/10/22/6023	Report Date	03/11/2022
Name and address of Customer	<b>PNP Maritime Services Private Limited</b> 2nd Floor, Lansdowne House, Mahakavi Bhushan Road, Colaba, Mumbai - 400001, Maharashtra		
Sampling done by	Laboratory	Sample Description / Type	Ambient Air
Sampling Location	Near PNP Jetty No. 3 (PNP Port)	Date - Sampling	27/10/2022 to 28/10/2022
Sample Quantity / Packing	PM <sub>10</sub> : 8ap, Metals: 1 x 3 no. filter paper PM <sub>2.5</sub> : 1 x 1 no. filter paper SO <sub>2</sub> , NO <sub>2</sub> : 30 ml x 6 no. plastic bottle each NH <sub>3</sub> : 10 ml x 24 no. plastic bottle Ozone: 10 ml x 1 no. plastic bottle C <sub>6</sub> H <sub>6</sub> : 6 no. charcoal tubes CO: 1 no. bladder	Date - Receipt of Sample	29/10/2022
Sampling Procedure	As per method reference	Date - Start of Analysis	29/10/2022
Order Reference	As per PO No. PNP/March/2021-2022/020 Dated 31.03.2022	Date - Completion of Analysis	02/11/2022

**Meteorological Data / Environmental Conditions**

Average Wind Velocity 6 km/h	Wind Direction E-N-E	Relative Humidity (Max./Min.): 62/50%	Temperature (Max./Min.): 33/22°C	Duration of Survey 24 h
Parameter	Result	NAAQS# 2009	Unit	Method

**Chemical Testing; Group: Atmospheric Pollution**

Sulphur Dioxide (SO <sub>2</sub> )	<b>8.4</b>	80	µg/m <sup>3</sup>	IS 5182 (Part 2): 2001
Nitrogen Dioxide (NO <sub>2</sub> )	<b>26.5</b>	80	µg/m <sup>3</sup>	IS 5182 (Part 6): 2006
Particulate Matter (size less than 10 µm) or PM <sub>10</sub>	<b>381</b>	100	µg/m <sup>3</sup>	IS 5182 (Part 23): 2006
Particulate Matter (size less than 2.5µm) or PM <sub>2.5</sub>	<b>172</b>	60	µg/m <sup>3</sup>	CPCB Guideline, Volume I, 36/2012-13, Page No 15, 2013
Ozone (O <sub>3</sub> )	<b>BLQ</b> (LOQ:19.6)	180	µg/m <sup>3</sup>	Methods of Air Sampling and Analysis (AWMA), 3rd Ed., Method 411 Page no. 403, 1988
Lead (as Pb)	<b>BLQ</b> (LOQ:0.02)	1	µg/m <sup>3</sup>	EPA/625/R-96/D10 a Compendium Method 10-31 & 32
Carbon Monoxide (CO)	<b>1.54</b>	4	mg/m <sup>3</sup>	CPCB Guidelines, Volume II, 37/2012-13, Page no.16, 2013
Ammonia (NH <sub>3</sub> )	<b>BLQ</b> (LOQ:20)	400	µg/m <sup>3</sup>	CPCB Guidelines, Volume I, 36/2012-13, Page No 35, 2013
Benzene (C <sub>6</sub> H <sub>6</sub> )	<b>1.33</b>	5	µg/m <sup>3</sup>	IS 5182 (Part II): 2006
Benzo (a) pyrene (BaP) Particulate Phase only	<b>BLQ</b> (LOQ:0.2)	1	ng/m <sup>3</sup>	IS 5182 (Part 12): 2004
Arsenic (as As)	<b>BLQ</b> (LOQ:0.3)	6	ng/m <sup>3</sup>	EPA/625/R-96/D10 a Compendium Method 10-31 & 32
Nickel (as Ni)	<b>BLQ</b> (LOQ:3)	20	ng/m <sup>3</sup>	EPA/625/R-96/D10 a Compendium Method 10-31 & 32

BLQ: Below Limit of Quantification, LOQ: Limit of Quantification

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, PM<sub>10</sub>, PM<sub>2.5</sub>, 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



Sample ID : AA/10/22/6023	Report No. AA/10/22/6023	Report Date	03/11/2022
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Technical Manager (Chemical)  
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### AMBIENT AIR QUALITY MONITORING REPORT

Sample ID : AA/10/22/6024	Report No. AA/10/22/6024	Report Date	03/11/2022
Name and address of Customer	<b>PNP Maritime Services Private Limited</b> 2nd Floor, Lansdowne House, Mahakavi Bhushan Road, Colaba, Mumbai - 400001, Maharashtra		
Sampling done by	Laboratory	Sample Description / Type	Ambient Air
Sampling Location	Near PNP Jetty No.5 (PNP Port)	Date - Sampling	27/10/2022 to 28/10/2022
Sample Quantity / Packing	PM <sub>10</sub> : Bap, Metals: 1 x 3 no. filter paper PM <sub>2.5</sub> : 1 x 1 no. filter paper SO <sub>2</sub> , NO <sub>2</sub> : 30 ml x 6 no. plastic bottle each NH <sub>3</sub> : 10 ml x 24 no. plastic bottle Ozone: 10 ml x 1 no. plastic bottle C <sub>6</sub> H <sub>6</sub> : 6 no. charcoal tubes CO: 1 no. bladder	Date - Receipt of Sample	29/10/2022
Sampling Procedure	As per method reference	Date - Start of Analysis	29/10/2022
Order Reference	As per PO No. PNP/March/2021-2022/020 Dated 31.03.2022	Date - Completion of Analysis	02/11/2022

#### Meteorological Data / Environmental Conditions

Average Wind Velocity 6 km/h	Wind Direction E-N-E	Relative Humidity (Max./Min.): 62/50%	Temperature (Max./Min.): 33/22°C	Duration of Survey 24 h
Parameter	Result	NAAQS# 2009	Unit	Method

#### Chemical Testing; Group: Atmospheric Pollution

Sulphur Dioxide (SO <sub>2</sub> )	6.3	80	µg/m <sup>3</sup>	IS 5182 (Part 2) 2001
Nitrogen Dioxide (NO <sub>2</sub> )	21.8	80	µg/m <sup>3</sup>	IS 5182 (Part 6) 2006
Particulate Matter (size less than 10 µm) or PM <sub>10</sub>	281	100	µg/m <sup>3</sup>	IS 5182 (Part 23):2006
Particulate Matter (size less than 2.5µm) or PM <sub>2.5</sub>	88	60	µg/m <sup>3</sup>	CPCB Guideline, Volume 1.36/2012-13, Page No 15:2013
Ozone (O <sub>3</sub> )	BLQ (LOQ:19.6)	180	µg/m <sup>3</sup>	Methods of Air Sampling and Analysis (AWMA), 3rd Ed., Method 4H Page no. 403 :1988
Lead (as Pb)	BLQ (LOQ:0.02)	1	µg/m <sup>3</sup>	EPA/625/R-96/OID a Compendium Method 10-31 & 32
Carbon Monoxide (CO)	0.82	4	mg/m <sup>3</sup>	CPCB Guidelines, Volume 11. 37/2012-13, Page no 16: 2013
Ammonia (NH <sub>3</sub> )	BLQ (LOQ:20)	400	µg/m <sup>3</sup>	CPCB Guidelines, Volume 1.36/2012-13, Page No 35: 2013
Benzene (C <sub>6</sub> H <sub>6</sub> )	BLQ (LOQ:1)	5	µg/m <sup>3</sup>	IS 5182 (Part II) : 2006
Benzo (a) pyrene (BaP) Particulate Phase only	BLQ (LOQ:0.2)	1	ng/m <sup>3</sup>	IS 5182 (Part 12): 2004
Arsenic (as As)	BLQ (LOQ:0.3)	6	ng/m <sup>3</sup>	EPA/625/R-96/OID a Compendium Method 10-31 & 32
Nickel (as Ni)	BLQ (LOQ:3)	20	ng/m <sup>3</sup>	EPA/625/R-96/OID a Compendium Method 10-31 & 32

BLQ: Below Limit of Quantification, LOQ: Limit of Quantification

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, PM<sub>10</sub>, PM<sub>2.5</sub>, 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.



Sample ID : AA/10/22/6024

Report No. AA/10/22/6024

Report Date

03/11/2022

Ninad Soundankar  
Technical Manager (Chemical)  
Reviewed & Authorised by



Note:

1. The result listed refer only to the tested sample(s) and applicable parameter(s).
2. This report is not to be reproduced except in full, without written approval of the laboratory.
3. In case sampling is not done by laboratory, the results apply to the sample as received.
4. There are no additions to, deviations or exclusions from the method.



### AMBIENT AIR QUALITY MONITORING REPORT

Sample ID : AA/10/22/6025	Report No. AA/10/22/6025	Report Date	03/11/2022
Name and address of Customer	<b>PNP Maritime Services Private Limited</b> 2nd Floor, Lansdowne House, Mahakavi Bhushan Road, Colaba, Mumbai - 400001, Maharashtra		
Sampling done by	Laboratory	Sample Description / Type	Ambient Air
Sampling Location	Near Weigh Bridge (PNP Port)	Date - Sampling	27/10/2022 to 28/10/2022
Sample Quantity / Packing	PM <sub>10</sub> : Bap, Metals: 1 x 3 no. filter paper PM <sub>2.5</sub> : 1 x 1 no. filter paper SO <sub>2</sub> , NO <sub>2</sub> : 30 ml x 6 no. plastic bottle each NH <sub>3</sub> : 10 ml x 24 no. plastic bottle Ozone: 10 ml x 1 no. plastic bottle C <sub>6</sub> H <sub>6</sub> : 6 no. charcoal tubes CO: 1 no. bladder	Date - Receipt of Sample	29/10/2022
Sampling Procedure	As per method reference	Date - Start of Analysis	29/10/2022
Order Reference	As per PO No. PNP/March/2021-2022/020 Dated 31.03.2022	Date - Completion of Analysis	02/11/2022

#### Meteorological Data / Environmental Conditions

Average Wind Velocity 6 km/h	Wind Direction E-N-E	Relative Humidity (Max./Min.): 62/50%	Temperature (Max./Min.): 33/22°C	Duration of Survey 24 h
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Parameter	Result	NAAQS# 2009	Unit	Method
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#### Chemical Testing; Group: Atmospheric Pollution

Sulphur Dioxide (SO <sub>2</sub> )	7.3	80	µg/m <sup>3</sup>	IS 5182 (Part 2) 2001
Nitrogen Dioxide (NO <sub>2</sub> )	25	80	µg/m <sup>3</sup>	IS 5182 (Part 6) 2006
Particulate Matter (size less than 10 µm) or PM <sub>10</sub>	339	100	µg/m <sup>3</sup>	IS 5182 (Part 23) 2006
Particulate Matter (size less than 2.5 µm) or PM <sub>2.5</sub>	128	60	µg/m <sup>3</sup>	CPCB Guideline, Volume I, 36/2012-13, Page No 15 2013
Ozone (O <sub>3</sub> )	BLQ (LOQ:19.6)	180	µg/m <sup>3</sup>	Methods of Air Sampling and Analysis (AWMA), 3rd Ed., Method 41 Page no 403 1988
Lead (as Pb)	BLQ (LOQ:0.02)	1	µg/m <sup>3</sup>	EPA/625/R-96/D10 a Compendium Method 10-31 & 32
Carbon Monoxide (CO)	1.18	4	mg/m <sup>3</sup>	CPCB Guidelines, Volume II, 37/2012-13, Page no 16 2013
Ammonia (NH <sub>3</sub> )	BLQ (LOQ:20)	400	µg/m <sup>3</sup>	CPCB Guidelines, Volume I, 36/2012-13, Page No 35 2013
Benzene (C <sub>6</sub> H <sub>6</sub> )	1.13	5	µg/m <sup>3</sup>	IS 5182 (Part 11) : 2006
Benzo (a) pyrene (BaP) Particulate Phase only	BLQ (LOQ:0.2)	1	ng/m <sup>3</sup>	IS 5182 (Part 12): 2004
Arsenic (as As)	BLQ (LOQ:0.3)	6	ng/m <sup>3</sup>	EPA/625/R-96/D10 a Compendium Method 10-31 & 32
Nickel (as Ni)	BLQ (LOQ:3)	20	ng/m <sup>3</sup>	EPA/625/R-96/D10 a Compendium Method 10-31 & 32

BLQ: Below Limit of Quantification, LOQ: Limit of Quantification

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, PM<sub>10</sub>, PM<sub>2.5</sub>, Lead and Ammonia, 1 hour TWA in  
case of Carbon Monoxide and Ozone, Annual TWA in case of Benzene, Benzo (a) Pyrene, Arsenic and Nickel.

  
Ninad Soundankar  
Technical Manager (Chemical)  
Reviewed & Authorised by




Sample ID : AA/10/22/6025

Report No. AA/10/22/6025

Report Date

03/11/2022



Ninad Soundankar  
Technical Manager (Chemical)  
Reviewed & Authorised by



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



### AMBIENT AIR QUALITY MONITORING REPORT

Sample ID : AA/10/22/6026	Report No. AA/10/22/6026	Report Date	03/11/2022
Name and address of Customer	<b>PNP Maritime Services Private Limited</b> 2nd Floor, Lansdowne House, Mahakavi Bhushan Road, Colaba, Mumbai - 400001, Maharashtra		
Sampling done by	Laboratory	Sample Description / Type	Ambient Air
Sampling Location	Near Custom Building (PNP Port)	Date - Sampling	27/10/2022 to 28/10/2022
Sample Quantity / Packing	PM <sub>10</sub> : Bap, Metals: 1 x 3 no. filter paper PM <sub>2.5</sub> : 1 x 1 no. filter paper SO <sub>2</sub> , NO <sub>2</sub> : 30 ml x 6 no. plastic bottle each NH <sub>3</sub> : 10 ml x 24 no. plastic bottle Ozone: 10 ml x 1 no. plastic bottle C <sub>6</sub> H <sub>6</sub> : 6 no. charcoal tubes CO: 1 no. bladder	Date - Receipt of Sample	29/10/2022
Sampling Procedure	As per method reference	Date - Start of Analysis	29/10/2022
Order Reference	As per PO No., PNP/March/2021-2022/020 Dated 31.03.2022	Date - Completion of Analysis	02/11/2022

#### Meteorological Data / Environmental Conditions

Average Wind Velocity 6 km/h	Wind Direction E-N-E	Relative Humidity (Max./Min.): 62/50%	Temperature (Max./Min.): 33/22°C	Duration of Survey 24 h
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Parameter	Result	NAAQS# 2009	Unit	Method
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#### Chemical Testing; Group: Atmospheric Pollution

Sulphur Dioxide (SO <sub>2</sub> )	5.2	80	µg/m <sup>3</sup>	IS 5182 (Part 2) 2001
Nitrogen Dioxide (NO <sub>2</sub> )	23.8	80	µg/m <sup>3</sup>	IS 5182 (Part 6) 2006
Particulate Matter (size less than 10 µm) or PM <sub>10</sub>	264	100	µg/m <sup>3</sup>	IS 5182 (Part 23):2006
Particulate Matter (size less than 2.5µm) or PM <sub>2.5</sub>	108	60	µg/m <sup>3</sup>	CPCB Guideline, Volume 1,36/2012-13, Page No 15,2013
Ozone (O <sub>3</sub> )	BLQ (LOQ:19.6)	180	µg/m <sup>3</sup>	Methods of Air Sampling and Analysis (AWMA), 3rd Ed., Method 411, Page no. 403, 1988
Lead (as Pb)	BLQ (LOQ:0.02)	1	µg/m <sup>3</sup>	EPA/625/R-96/D10 a Compendium Method 10-31 & 32
Carbon Monoxide (CO)	0.70	4	mg/m <sup>3</sup>	CPCB Guidelines, Volume II, 37/2012-13, Page no 16, 2013
Ammonia (NH <sub>3</sub> )	BLQ (LOQ:20)	400	µg/m <sup>3</sup>	CPCB Guidelines, Volume I,36/2012-13, Page No 35, 2013
Benzene (C <sub>6</sub> H <sub>6</sub> )	BLQ (LOQ:1)	5	µg/m <sup>3</sup>	IS 5182 (Part II) 2006
Benzo (a) pyrene (BaP) Particulate Phase only	BLQ (LOQ:0.2)	1	ng/m <sup>3</sup>	IS 5182 (Part 12) 2004
Arsenic (as As)	BLQ (LOQ:0.3)	6	ng/m <sup>3</sup>	EPA/625/R-96/D10 a Compendium Method 10-31 & 32
Nickel (as Ni)	BLQ (LOQ:3)	20	ng/m <sup>3</sup>	EPA/625/R-96/D10 a Compendium Method 10-31 & 32

BLQ: Below Limit of Quantification, LOQ: Limit of Quantification

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, PM<sub>10</sub>, PM<sub>2.5</sub>, Lead and Ammonia, 1 hour TWA in case of Carbon Monoxide and Ozone, Annual TWA in case of Benzene, Benzo (a) Pyrene, Arsenic and Nickel.

  
Ninad Soundankar  
Technical Manager (Chemical)  
Reviewed & Authorised by

Sample ID : AA/10/22/6026	Report No. AA/10/22/6026	Report Date	03/11/2022
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Ninad Soundankar  
Technical Manager (Chemical)  
Reviewed & Authorised by



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



### AMBIENT AIR QUALITY MONITORING REPORT

Sample ID : AA/10/22/6027	Report No. AA/10/22/6027	Report Date	03/11/2022
Name and address of Customer	<b>PNP Maritime Services Private Limited</b> 2nd Floor, Lansdowne House, Mahakavi Bhushan Road, Colaba, Mumbai - 400001, Maharashtra		
Sampling done by	Laboratory	Sample Description / Type	Ambient Air
Sampling Location	Near Lal Gate (PNP Port)	Date - Sampling	27/10/2022 to 28/10/2022
Sample Quantity / Packing	PM <sub>10</sub> : Bap, Metals: 1 x 3 no. filter paper PM <sub>2.5</sub> : 1 x 1 no. filter paper SO <sub>2</sub> , NO <sub>2</sub> : 30 ml x 6 no. plastic bottle each NH <sub>3</sub> : 10 ml x 24 no. plastic bottle Ozone: 10 ml x 1 no. plastic bottle C <sub>6</sub> H <sub>6</sub> : 6 no. charcoal tubes CO: 1 no. bladder	Date - Receipt of Sample	29/10/2022
Sampling Procedure	As per method reference	Date - Start of Analysis	29/10/2022
Order Reference	As per PO No. PNP/March/2021-2022/020 Dated 31.03.2022	Date - Completion of Analysis	02/11/2022

#### Meteorological Data / Environmental Conditions

Average Wind Velocity 6 km/h	Wind Direction E-N-E	Relative Humidity (Max./Min.): 62/50%	Temperature (Max./Min.): 33/22°C	Duration of Survey 24 h
Parameter	Result	NAAQS# 2009	Unit	Method

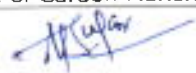
#### Chemical Testing; Group: Atmospheric Pollution

Sulphur Dioxide (SO <sub>2</sub> )	8.4	80	µg/m <sup>3</sup>	IS 5182 (Part 2): 2001
Nitrogen Dioxide (NO <sub>2</sub> )	22.7	80	µg/m <sup>3</sup>	IS 5182 (Part 6): 2006
Particulate Matter (size less than 10 µm) or PM <sub>10</sub>	328	100	µg/m <sup>3</sup>	IS 5182 (Part 23): 2006
Particulate Matter (size less than 2.5 µm) or PM <sub>2.5</sub>	127	60	µg/m <sup>3</sup>	CPCB Guideline: Volume I, 36/2012-13, Page No. 15/2013
Ozone (O <sub>3</sub> )	BLQ (LOQ: 19.6)	180	µg/m <sup>3</sup>	Methods of Air Sampling and Analysis (AWMA), 3rd Ed., Method 411, Page no. 403: 1988
Lead (as Pb)	BLQ (LOQ: 0.02)	1	µg/m <sup>3</sup>	EPA/625/R-96/D10 a Compendium Method 10-31 & 32
Carbon Monoxide (CO)	1.26	4	mg/m <sup>3</sup>	CPCB Guidelines: Volume II, 37/2012-13, Page no. 16: 2013
Ammonia (NH <sub>3</sub> )	BLQ (LOQ: 20)	400	µg/m <sup>3</sup>	CPCB Guidelines: Volume I, 36/2012-13, Page No. 35: 2013
Benzene (C <sub>6</sub> H <sub>6</sub> )	1.14	5	µg/m <sup>3</sup>	IS 5182 (Part II): 2006
Benzo (a) pyrene (BaP) Particulate Phase only	BLQ (LOQ: 0.2)	1	ng/m <sup>3</sup>	IS 5182 (Part 12): 2004
Arsenic (as As)	BLQ (LOQ: 0.3)	6	ng/m <sup>3</sup>	EPA/625/R-96/D10 a Compendium Method 10-31 & 32
Nickel (as Ni)	BLQ (LOQ: 3)	20	ng/m <sup>3</sup>	EPA/625/R-96/D10 a Compendium Method 10-31 & 32

BLQ: Below Limit of Quantification, LOQ: Limit of Quantification

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, PM<sub>10</sub>, PM<sub>2.5</sub>, Lead and Ammonia, 1 hour TWA in case of Carbon Monoxide and Ozone, Annual TWA in case of Benzene, Benzo (a) Pyrene, Arsenic and Nickel.



Ninad Soundankar  
Technical Manager (Chemical)  
Reviewed & Authorised by



Sample ID : AA/10/22/6027	Report No. AA/10/22/6027	Report Date	03/11/2022
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Technical Manager (Chemical)  
Reviewed & Authorised by



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



### AMBIENT AIR QUALITY MONITORING REPORT

Sample ID : AA/10/22/6028	Report No. AA/10/22/6028	Report Date	03/11/2022
Name and address of Customer	<b>PNP Maritime Services Private Limited</b> 2nd Floor, Lansdowne House, Mahakavi Bhushan Road, Colaba, Mumbai - 400001, Maharashtra		
Sampling done by	Laboratory	Sample Description / Type	Ambient Air
Sampling Location	Near DIL Main Gate (PNP Port)	Date - Sampling	27/10/2022 to 28/10/2022
Sample Quantity / Packing	PM <sub>10</sub> : Bap, Metals: 1 x 3 no. filter paper PM <sub>2.5</sub> : 1 x 1 no. filter paper SO <sub>2</sub> , NO <sub>2</sub> : 30 ml x 6 no. plastic bottle each NH <sub>3</sub> : 10 ml x 24 no. plastic bottle Ozone: 10 ml x 1 no. plastic bottle C <sub>6</sub> H <sub>6</sub> : 6 no. charcoal tubes CO: 1 no. bladder	Date - Receipt of Sample	29/10/2022
Sampling Procedure	As per method reference	Date - Start of Analysis	29/10/2022
Order Reference	As per PO No. PNP/March/2021-2022/020 Dated 31.03.2022	Date - Completion of Analysis	02/11/2022

#### Meteorological Data / Environmental Conditions

Average Wind Velocity 6 km/h	Wind Direction E-N-E	Relative Humidity (Max./Min.): 62/50%	Temperature (Max./Min.): 33/22°C	Duration of Survey 24 h
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Parameter	Result	NAAQS# 2009	Unit	Method
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#### Chemical Testing; Group: Atmospheric Pollution

Sulphur Dioxide (SO <sub>2</sub> )	9.4	80	µg/m <sup>3</sup>	IS 5182 (Part 2) 2001
Nitrogen Dioxide (NO <sub>2</sub> )	25.9	80	µg/m <sup>3</sup>	IS 5182 (Part 6) 2006
Particulate Matter (size less than 10 µm) or PM <sub>10</sub>	346	100	µg/m <sup>3</sup>	IS 5182 (Part 23) 2006
Particulate Matter (size less than 2.5µm) or PM <sub>2.5</sub>	139	60	µg/m <sup>3</sup>	CPCB Guideline, Volume 136/2012-13, Page No 15 2013
Ozone (O <sub>3</sub> )	BLQ (LOQ:19.6)	180	µg/m <sup>3</sup>	Methods of Air Sampling and Analysis (AWMA), 3rd Ed., Method 411, Page no. 403 1988
Lead (as Pb)	BLQ (LOQ:0.02)	1	µg/m <sup>3</sup>	EPA/625/R-96/010 a Compendium Method 10-31 & 32
Carbon Monoxide (CO)	1.28	4	mg/m <sup>3</sup>	CPCB Guidelines, Volume II, 37/2012-13, Page no 16 2013
Ammonia (NH <sub>3</sub> )	BLQ (LOQ:20)	400	µg/m <sup>3</sup>	CPCB Guidelines, Volume 136/2012-13, Page No 35 2013
Benzene (C <sub>6</sub> H <sub>6</sub> )	1.23	5	µg/m <sup>3</sup>	IS 5182 (Part 10) 2006
Benzo (a) pyrene (BaP) Particulate Phase only	BLQ (LOQ:0.2)	1	ng/m <sup>3</sup>	IS 5182 (Part 12) 2004
Arsenic (as As)	BLQ (LOQ:0.3)	6	ng/m <sup>3</sup>	EPA/625/R-96/010 a Compendium Method 10-31 & 32
Nickel (as Ni)	BLQ (LOQ:3)	20	ng/m <sup>3</sup>	EPA/625/R-96/010 a Compendium Method 10-31 & 32


BLQ: Below Limit of Quantification, LOQ: Limit of Quantification

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, PM<sub>10</sub>, PM<sub>2.5</sub>, Lead and Ammonia, 1 hour TWA in  
case of Carbon Monoxide and Ozone, Annual TWA in case of Benzene, Benzo (a) Pyrene, Arsenic and Nickel.

  
Ninad Soundankar  
Technical Manager (Chemical)  
Reviewed & Authorised by

Sample ID : AA/10/22/6028	Report No. AA/10/22/6028	Report Date	03/11/2022
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Technical Manager (Chemical)  
Reviewed & Authorised by



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### AMBIENT AIR QUALITY MONITORING REPORT

Sample ID : AA/10/22/6029	Report No. AA/10/22/6029	Report Date	03/11/2022
Name and address of Customer	<b>PNP Maritime Services Private Limited</b> 2nd Floor, Lansdowne House, Mahakavi Bhushan Road, Colaba, Mumbai - 400001, Maharashtra		
Sampling done by	Laboratory	Sample Description / Type	Ambient Air
Sampling Location	Near DIL Godown Back Side (PNP Port)	Date - Sampling	27/10/2022 to 28/10/2022
Sample Quantity / Packing	PM <sub>10</sub> , Bap, Metals: 1 x 3 no. filter paper PM <sub>2.5</sub> : 1 x 1 no. filter paper SO <sub>2</sub> , NO <sub>2</sub> : 30 ml x 6 no. plastic bottle each NH <sub>3</sub> : 10 ml x 24 no. plastic bottle Ozone: 10 ml x 1 no. plastic bottle C <sub>6</sub> H <sub>6</sub> : 6 no. charcoal tubes CO: 1 no. bladder	Date - Receipt of Sample	29/10/2022
Sampling Procedure	As per method reference	Date - Start of Analysis	29/10/2022
Order Reference	As per PO No. PNP/March/2021-2022/020 Dated 31.03.2022	Date - Completion of Analysis	02/11/2022

#### Meteorological Data / Environmental Conditions

Average Wind Velocity 6 km/h	Wind Direction E-N-E	Relative Humidity (Max./Min.): 62/50%	Temperature (Max./Min.): 33/22°C	Duration of Survey 24 h
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Parameter	Result	NAAQS# 2009	Unit	Method
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#### Chemical Testing; Group: Atmospheric Pollution

Sulphur Dioxide (SO <sub>2</sub> )	6.3	80	µg/m <sup>3</sup>	IS 5182 (Part 2): 2001
Nitrogen Dioxide (NO <sub>2</sub> )	21.5	80	µg/m <sup>3</sup>	IS 5182 (Part 6) 2006
Particulate Matter (size less than 10 µm) or PM <sub>10</sub>	259	100	µg/m <sup>3</sup>	IS 5182 (Part 23) 2006
Particulate Matter (size less than 2.5µm) or PM <sub>2.5</sub>	99	60	µg/m <sup>3</sup>	CPCB Guideline, Volume I 36/2012-13, Page No 15 2013
Ozone (O <sub>3</sub> )	BLQ (LOQ:19.6)	180	µg/m <sup>3</sup>	Methods of Air Sampling and Analysis (AWMA), 3rd Ed., Method 411 Page no. 403 1988
Lead (as Pb)	BLQ (LOQ:0.02)	1	µg/m <sup>3</sup>	EPA/625/R-96/D10 a Compendium Method 10-31 & 32
Carbon Monoxide (CO)	1.0	4	mg/m <sup>3</sup>	CPCB Guidelines, Volume II, 37/2012-13, Page no 16 2013
Ammonia (NH <sub>3</sub> )	BLQ (LOQ:20)	400	µg/m <sup>3</sup>	CPCB Guidelines, Volume I 36/2012-13, Page No 35 2013
Benzene (C <sub>6</sub> H <sub>6</sub> )	BLQ (LOQ:1)	5	µg/m <sup>3</sup>	IS 5182 (Part II) 2006
Benzo (a) pyrene (BaP) Particulate Phase only	BLQ (LOQ:0.2)	1	ng/m <sup>3</sup>	IS 5182 (Part 12) 2004
Arsenic (as As)	BLQ (LOQ:0.3)	6	ng/m <sup>3</sup>	EPA/625/R-96/D10 a Compendium Method 10-31 & 32
Nickel (as Ni)	BLQ (LOQ:3)	20	ng/m <sup>3</sup>	EPA/625/R-96/D10 a Compendium Method 10-31 & 32

BLQ: Below Limit of Quantification, LOQ: Limit of Quantification

TWA: Time Weighted Average

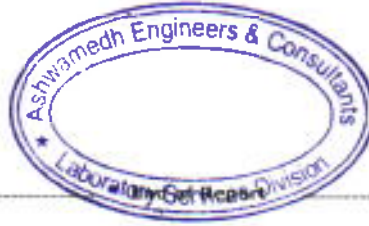
# NAAQS (National Ambient Air Quality Standards (Industrial, Residential, Rural and other Area) specified as:  
24 hours TWA in case of Sulphur Dioxide, Nitrogen Dioxide, PM<sub>10</sub>, PM<sub>2.5</sub>, Lead and Ammonia, 1 hour TWA in  
case of Carbon Monoxide and Ozone, Annual TWA in case of Benzene, Benzo (a) Pyrene, Arsenic and Nickel.

  
Ninad Soundankar  
Technical Manager (Chemical)  
Reviewed & Authorised by



Sample ID : AA/10/22/6029	Report No. AA/10/22/6029	Report Date	03/11/2022
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Ninad Soundankar  
Technical Manager (Chemical)  
Reviewed & Authorised by



Note:

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### NOISE LEVEL MEASUREMENT REPORT

Sample ID N/10/22/6035	Report No. N/10/22/6035	Report Date	03/11/2022
Name and Address of Customer	<b>PNP Maritime Services Private Limited</b> 2nd Floor, Lansdowne House, Mahakavi Bhushan Road, Colaba, Mumbai - 400 001		
Monitoring Done By	Laboratory	Sample Description /Type	Ambient Noise
Order Reference	As per PO No. PNP/March/2021- 2022/020 Dated 31.03.2022	Date-Monitoring	27/10/2022

#### Chemical Testing; Group: Atmospheric Pollution

Location	Time (h)	Results	Results	Method
		Noise Level dB (A) Fast Response	Noise Level dB (A) Slow Response	
A. Near Main Gate (PNP Port)	09:00	72.7	71.4	CPCB Protocol for Ambient Level Noise Monitoring July AEC/C/SAP/SAM/358 36, Issue no. 4, Issue date 04 2018
	21:00	66.6	65.6	
B. Near Jetty No. 1 (PNP Port)	09:10	71.6	70.3	
	21:10	65.3	64.2	
C. Near Jetty No. 2 (PNP Port)	09:20	73.6	72.5	
	21:20	67.8	66.7	
D. Near Jetty No. 3 (PNP Port)	09:30	72.5	71.3	
	21:30	66.3	65.6	
E. Near Jetty No. 5 (PNP Port)	09:40	73.4	72.4	
	21:40	67.7	66.5	
F. Near Weight Bridge (PNP Port)	09:50	72.5	71.2	
	21:50	66.3	65.4	
G. Near Custom Building (PNP Port)	10:00	72.3	71.2	
	22:00	66.2	65.3	
H. Near Lal Gate (PNP Port)	10:10	73.3	72.4	
	22:10	67.5	66.5	
I. Near DIL Main Gate (PNP Port)	10:20	73.2	72.2	
	22:20	67.4	66.3	
J. DIL Godown Back Side (PNP Port)	11:30	71.3	70.0	
	23:30	65.0	64.0	

#### Limit s

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

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

*[Signature]*

Ninad Soundankar  
Technical Manager (Chemical)  
Reviewed & Authorised by



End of Report

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### AMBIENT AIR QUALITY MONITORING REPORT

Sample ID : AA/11/22/5035	Report No. AA/11/22/5035	Report Date	08/11/2022
Name and address of Customer	<b>PNP Maritime Services Private Limited</b> 2nd Floor, Lansdowne House, Mahakavi Bhushan Road, Colaba, Mumbai - 400001, Maharashtra		
Sampling done by	Laboratory	Sample Description / Type	Ambient Air
Sampling Location	Near PNP Main Gate (PNP Port)	Date - Sampling	31/10/2022 to 01/11/2022
Sample Quantity / Packing	PM <sub>10</sub> : Bap, Metals: 1 x 3 no. filter paper PM <sub>2.5</sub> : 1 x 1 no. filter paper SO <sub>2</sub> , NO <sub>2</sub> : 30 ml x 6 no. plastic bottle each NH <sub>3</sub> : 10 ml x 24 no. plastic bottle Ozone: 10 ml x 1 no. plastic bottle C <sub>6</sub> H <sub>6</sub> : 6 no. charcoal tubes CO: 1 no. bladder	Date - Receipt of Sample	02/11/2022
Sampling Procedure	As per method reference	Date - Start of Analysis	02/11/2022
Order Reference	As per PO No. PNP/March/2021-2022/020 Dated 31.03.2022	Date - Completion of Analysis	07/11/2022

#### Meteorological Data / Environmental Conditions

Average Wind Velocity 9 km/h	Wind Direction E	Relative Humidity (Max./Min.): 65/53%	Temperature (Max./Min.): 31/22°C	Duration of Survey 24 h
Parameter	Result	NAAQS# 2009	Unit	Method

#### Chemical Testing; Group: Atmospheric Pollution

Sulphur Dioxide (SO <sub>2</sub> )	9.4	80	µg/m <sup>3</sup>	IS 5182 (Part 2): 2001
Nitrogen Dioxide (NO <sub>2</sub> )	22.7	80	µg/m <sup>3</sup>	IS 5182 (Part 6): 2006
Particulate Matter (size less than 10 µm) or PM <sub>10</sub>	358	100	µg/m <sup>3</sup>	IS 5182 (Part 23): 2006
Particulate Matter (size less than 2.5µm) or PM <sub>2.5</sub>	137	60	µg/m <sup>3</sup>	CPCB Guideline, Volume I 36/2012-13, Page No 15:2013
Ozone (O <sub>3</sub> )	BLQ (LOQ:19.6)	180	µg/m <sup>3</sup>	Methods of Air Sampling and Analysis (AWMA), 3rd Ed., Method 411, Page no. 403:1988
Lead (as Pb)	BLQ (LOQ:0.02)	1	µg/m <sup>3</sup>	EPA/625/R-96/D10 a Compendium Method 10-316:32
Carbon Monoxide (CO)	1.48	4	mg/m <sup>3</sup>	CPCB Guidelines, Volume II, 37/2012-13, Page no 16: 2013
Ammonia (NH <sub>3</sub> )	BLQ (LOQ:20)	400	µg/m <sup>3</sup>	CPCB Guidelines, Volume I 36/2012-13, Page No 35: 2013
Benzene (C <sub>6</sub> H <sub>6</sub> )	1.17	5	µg/m <sup>3</sup>	IS 5182 (Part 11): 2006
Benzo (a) pyrene (BaP) Particulate Phase only	BLQ (LOQ:0.2)	1	ng/m <sup>3</sup>	IS 5182 (Part 12): 2004
Arsenic (as As)	BLQ (LOQ:0.3)	6	ng/m <sup>3</sup>	EPA/625/R-96/D10 a Compendium Method 10-316:32
Nickel (as Ni)	BLQ (LOQ:3)	20	ng/m <sup>3</sup>	EPA/625/R-96/D10 a Compendium Method 10-316:32

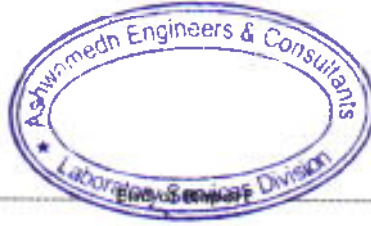
BLQ: Below Limit of Quantification, LOQ: Limit of Quantification  
TWA Time Weighted Average

# NAAQS (National Ambient Air Quality Standards (Industrial, Residential, Rural and other Area) specified as: 24 hours TWA in case of Sulphur Dioxide, Nitrogen Dioxide, PM<sub>10</sub>, PM<sub>2.5</sub>, Lead and Ammonia, 1 hour TWA in case of Carbon Monoxide and Ozone, Annual TWA in case of Benzene, Benzo (a) Pyrene, Arsenic and Nickel

  
Ninad Soundankar  
Technical Manager (Chemical)  
Reviewed & Authorised by

Sample ID : AA/11/22/5035	Report No. AA/11/22/5035	Report Date	08/11/2022
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Ninad Soundankar  
Technical Manager (Chemical)  
Reviewed & Authorised by



**Note:**

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





### AMBIENT AIR QUALITY MONITORING REPORT

Sample ID : AA/11/22/5036	Report No. AA/11/22/5036	Report Date	08/11/2022
Name and address of Customer	<b>PNP Maritime Services Private Limited</b> 2nd Floor, Lansdowne House, Mahakavi Bhushan Road, Colaba, Mumbai - 400001, Maharashtra		
Sampling done by	Laboratory	Sample Description / Type	Ambient Air
Sampling Location	Near PNP Jetty No. 1 (PNP Port)	Date - Sampling	31/10/2022 to 01/11/2022
Sample Quantity / Packing	PM <sub>10</sub> , Bap, Metals: 1 x 3 no. filter paper PM <sub>2.5</sub> : 1 x 1 no. filter paper SO <sub>2</sub> , NO <sub>2</sub> : 30 ml x 6 no. plastic bottle each NH <sub>3</sub> : 10 ml x 24 no. plastic bottle Ozone: 10 ml x 1 no. plastic bottle C <sub>6</sub> H <sub>6</sub> : 6 no. charcoal tubes CO: 1 no. bladder	Date - Receipt of Sample	02/11/2022
Sampling Procedure	As per method reference	Date - Start of Analysis	02/11/2022
Order Reference	As per PO No. PNP/March/2021-2022/020 Dated 31.03.2022	Date - Completion of Analysis	07/11/2022

#### Meteorological Data / Environmental Conditions

Average Wind Velocity 9 km/h	Wind Direction E	Relative Humidity (Max./Min.): 65/53%	Temperature (Max./Min.): 31/22°C	Duration of Survey 24 h
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Parameter	Result	NAAQS# 2009	Unit	Method
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#### Chemical Testing; Group: Atmospheric Pollution

Sulphur Dioxide (SO <sub>2</sub> )	10.5	80	µg/m <sup>3</sup>	IS 5182 (Part 2): 2001
Nitrogen Dioxide (NO <sub>2</sub> )	24.7	80	µg/m <sup>3</sup>	IS 5182 (Part 6): 2006
Particulate Matter (size less than 10 µm) or PM <sub>10</sub>	344	100	µg/m <sup>3</sup>	IS 5182 (Part 23): 2006
Particulate Matter (size less than 2.5 µm) or PM <sub>2.5</sub>	151	60	µg/m <sup>3</sup>	CPCB Guideline, Volume I, 36/2012-13, Page No 15: 2013
Ozone (O <sub>3</sub> )	BLQ (LOQ: 19.6)	180	µg/m <sup>3</sup>	Methods of Air Sampling and Analysis (AWMA), 3rd Ed., Method 411, Page no. 403, 1988
Lead (as Pb)	BLQ (LOQ: 0.02)	1	µg/m <sup>3</sup>	EPA/625/R-96/010 a Compendium Method 10-31 & 32
Carbon Monoxide (CO)	1.26	4	mg/m <sup>3</sup>	CPCB Guidelines, Volume II, 37/2012-13, Page no 16: 2013
Ammonia (NH <sub>3</sub> )	BLQ (LOQ: 20)	400	µg/m <sup>3</sup>	CPCB Guidelines, Volume I, 36/2012-13, Page No 35: 2013
Benzene (C <sub>6</sub> H <sub>6</sub> )	1.12	5	µg/m <sup>3</sup>	IS 5182 (Part 11): 2006
Benzo (a) pyrene (BaP) Particulate Phase only	BLQ (LOQ: 0.2)	1	ng/m <sup>3</sup>	IS 5182 (Part 12): 2004
Arsenic (as As)	BLQ (LOQ: 0.3)	6	ng/m <sup>3</sup>	EPA/625/R-96/010 a Compendium Method 10-31 & 32
Nickel (as Ni)	BLQ (LOQ: 3)	20	ng/m <sup>3</sup>	EPA/625/R-96/010 a Compendium Method 10-31 & 32

BLQ: Below Limit of Quantification, LOQ: Limit of Quantification

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, PM<sub>10</sub>, PM<sub>2.5</sub>, Lead and Ammonia, 1 hour TWA in case of Carbon Monoxide and Ozone, Annual TWA in case of Benzene, Benzo (a) Pyrene, Arsenic and Nickel

  
Ninad Soundankar  
Technical Manager (Chemical)  
Reviewed & Authorised by

Sample ID : AA/11/22/5036

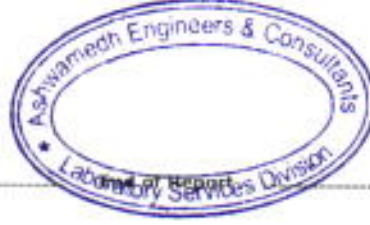
Report No. AA/11/22/5036

Report Date

08/11/2022



Ninad Soundankar  
Technical Manager (Chemical)  
Reviewed & Authorised by



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### AMBIENT AIR QUALITY MONITORING REPORT

Sample ID : AA/11/22/5037	Report No. AA/11/22/5037	Report Date	08/11/2022
Name and address of Customer	<b>PNP Maritime Services Private Limited</b> 2nd Floor, Lansdowne House, Mahakavi Bhushan Road, Colaba, Mumbai - 400001, Maharashtra		
Sampling done by	Laboratory	Sample Description / Type	Ambient Air
Sampling Location	Near PNP Jetty No. 2 (PNP Port)	Date - Sampling	31/10/2022 to 01/11/2022
Sample Quantity / Packing	PM <sub>10</sub> , Bap, Metals: 1 x 3 no. filter paper PM <sub>2.5</sub> : 1 x 1 no. filter paper SO <sub>2</sub> , NO <sub>2</sub> : 30 ml x 6 no. plastic bottle each NH <sub>3</sub> : 10 ml x 24 no. plastic bottle Ozone: 10 ml x 1 no. plastic bottle C <sub>6</sub> H <sub>6</sub> : 6 no. charcoal tubes CO: 1 no. bladder	Date - Receipt of Sample	02/11/2022
Sampling Procedure	As per method reference	Date - Start of Analysis	02/11/2022
Order Reference	As per PO No. PNP/March/2021-2022/020 Dated 31.03.2022	Date - Completion of Analysis	07/11/2022

#### Meteorological Data / Environmental Conditions

Average Wind Velocity 9 km/h	Wind Direction E	Relative Humidity (Max./Min.): 65/53%	Temperature (Max./Min.): 31/22°C	Duration of Survey 24 h
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Parameter	Result	NAAQS# 2009	Unit	Method
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#### Chemical Testing; Group: Atmospheric Pollution

Sulphur Dioxide (SO <sub>2</sub> )	8.4	80	µg/m <sup>3</sup>	IS 5182 (Part 2): 2001
Nitrogen Dioxide (NO <sub>2</sub> )	23.2	80	µg/m <sup>3</sup>	IS 5182 (Part 5): 2006
Particulate Matter (size less than 10 µm) or PM <sub>10</sub>	328	100	µg/m <sup>3</sup>	IS 5182 (Part 23): 2006
Particulate Matter (size less than 2.5µm) or PM <sub>2.5</sub>	126	60	µg/m <sup>3</sup>	CPCB Guideline, Volume 1,36/2012-13, Page No 15, 2013
Ozone (O <sub>3</sub> )	BLQ (LOQ:19.6)	180	µg/m <sup>3</sup>	Methods of Air Sampling and Analysis (AWMA), 3rd Ed., Method 411 Page no. 403, 1988
Lead (as Pb)	BLQ (LOQ:0.02)	1	µg/m <sup>3</sup>	EPA/625/R-96/D10 a Compendium Method 10-31 & 32
Carbon Monoxide (CO)	1.1	4	mg/m <sup>3</sup>	CPCB Guidelines, Volume II, 37/2012-13, Page no 16, 2013
Ammonia (NH <sub>3</sub> )	BLQ (LOQ:20)	400	µg/m <sup>3</sup>	CPCB Guidelines, Volume 1,36/2012-13, Page No.35, 2013
Benzene (C <sub>6</sub> H <sub>6</sub> )	1.04	5	µg/m <sup>3</sup>	IS 5182 (Part II): 2006
Benzo (a) pyrene (BaP) Particulate Phase only	BLQ (LOQ:0.2)	1	ng/m <sup>3</sup>	IS 5182 (Part 12): 2004
Arsenic (as As)	BLQ (LOQ:0.3)	6	ng/m <sup>3</sup>	EPA/625/R-96/D10 a Compendium Method 10-31 & 32
Nickel (as Ni)	BLQ (LOQ:3)	20	ng/m <sup>3</sup>	EPA/625/R-96/D10 a Compendium Method 10-31 & 32

BLQ: Below Limit of Quantification, LOQ: Limit of Quantification

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, PM<sub>10</sub>, PM<sub>2.5</sub>, Lead and Ammonia, 1 hour TWA in case of Carbon Monoxide and Ozone, Annual TWA in case of Benzene, Benzo (a) Pyrene, Arsenic and Nickel

  
Ninad Soundankar  
Technical Manager (Chemical)  
Reviewed & Authorised by



Sample ID : AA/11/22/5037	Report No. AA/11/22/5037	Report Date	08/11/2022
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*N. Soundankar*

Ninad Soundankar  
Technical Manager (Chemical)  
Reviewed & Authorised by



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### AMBIENT AIR QUALITY MONITORING REPORT

Sample ID : AA/11/22/5038	Report No. AA/11/22/5038	Report Date	08/11/2022
Name and address of Customer	<b>PNP Maritime Services Private Limited</b> 2nd Floor, Lansdowne House, Mahakavi Bhushan Road, Colaba, Mumbai - 400001, Maharashtra		
Sampling done by	Laboratory	Sample Description / Type	Ambient Air
Sampling Location	Near PNP Jetty No. 3 (PNP Port)	Date - Sampling	31/10/2022 to 01/11/2022
Sample Quantity / Packing	PM <sub>10</sub> , Bap, Metals: 1 x 3 no. filter paper PM <sub>2.5</sub> : 1 x 1 no. filter paper SO <sub>2</sub> , NO <sub>2</sub> : 30 ml x 6 no. plastic bottle each NH <sub>3</sub> : 10 ml x 24 no. plastic bottle Ozone: 10 ml x 1 no. plastic bottle C <sub>6</sub> H <sub>6</sub> : 6 no. charcoal tubes CO: 1 no. bladder	Date - Receipt of Sample	02/11/2022
Sampling Procedure	As per method reference	Date - Start of Analysis	02/11/2022
Order Reference	As per PO No. PNP/March/2021-2022/020 Dated 31.03.2022	Date - Completion of Analysis	07/11/2022

#### Meteorological Data / Environmental Conditions

Average Wind Velocity 9 km/h	Wind Direction E	Relative Humidity (Max./Min.): 65/53%	Temperature (Max./Min.): 31/22°C	Duration of Survey 24 h
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Parameter	Result	NAAQS# 2009	Unit	Method
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#### Chemical Testing; Group: Atmospheric Pollution

Sulphur Dioxide (SO <sub>2</sub> )	9.4	80	µg/m <sup>3</sup>	IS 5182 (Part 2): 2001
Nitrogen Dioxide (NO <sub>2</sub> )	25.3	80	µg/m <sup>3</sup>	IS 5182 (Part 6): 2006
Particulate Matter (size less than 10 µm) or PM <sub>10</sub>	376	100	µg/m <sup>3</sup>	IS 5182 (Part 23): 2006
Particulate Matter (size less than 2.5 µm) or PM <sub>2.5</sub>	167	60	µg/m <sup>3</sup>	CPCB Guideline, Volume 1: 36/2012-13, Page No 15: 2013
Ozone (O <sub>3</sub> )	BLQ (LOQ: 19.6)	180	µg/m <sup>3</sup>	Methods of Air Sampling and Analysis (AWMA), 3rd Ed., Method 411 (Page no. 403): 1988
Lead (as Pb)	BLQ (LOQ: 0.02)	1	µg/m <sup>3</sup>	EPA/625/R-96/010 a Compendium Method 10-316 3 2
Carbon Monoxide (CO)	1.53	4	mg/m <sup>3</sup>	CPCB Guidelines, Volume 11: 37/2012-13, Page no 16: 2013
Ammonia (NH <sub>3</sub> )	BLQ (LOQ: 20)	400	µg/m <sup>3</sup>	CPCB Guidelines, Volume 1: 36/2012-13, Page No 35: 2013
Benzene (C <sub>6</sub> H <sub>6</sub> )	1.63	5	µg/m <sup>3</sup>	IS 5182 (Part 11): 2006
Benzo (a) pyrene (BaP) Particulate Phase only	BLQ (LOQ: 0.2)	1	ng/m <sup>3</sup>	IS 5182 (Part 12): 2004
Arsenic (as As)	BLQ (LOQ: 0.3)	6	ng/m <sup>3</sup>	EPA/625/R-96/010 a Compendium Method 10-316 3 2
Nickel (as Ni)	BLQ (LOQ: 3)	20	ng/m <sup>3</sup>	EPA/625/R-96/010 a Compendium Method 10-316 3 2

BLQ: Below Limit of Quantification, LOQ: Limit of Quantification

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, PM<sub>10</sub>, PM<sub>2.5</sub>, Lead and Ammonia, 1 hour TWA in case of Carbon Monoxide and Ozone, Annual TWA in case of Benzene, Benzo (a) Pyrene, Arsenic and Nickel

  
Ninad Soundankar  
Technical Manager (Chemical)  
Reviewed & Authorised by



Sample ID : AA/11/22/5038

Report No. AA/11/22/5038

Report Date

08/11/2022

Ninad Soundankar  
Technical Manager (Chemical)  
Reviewed & Authorised by



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**AMBIENT AIR QUALITY MONITORING REPORT**

Sample ID : AA/11/22/5039	Report No AA/11/22/5039	Report Date	08/11/2022
Name and address of Customer	<b>PNP Maritime Services Private Limited</b> 2nd Floor, Lansdowne House, Mahakavi Bhushan Road, Colaba, Mumbai - 400001, Maharashtra		
Sampling done by	Laboratory	Sample Description / Type	Ambient Air
Sampling Location	Near PNP Jetty No 5 (PNP Port)	Date - Sampling	31/10/2022 to 01/11/2022
Sample Quantity / Packing	PM <sub>10</sub> , Bap, Metals: 1 x 3 no. filter paper PM <sub>2.5</sub> : 1 x 1 no. filter paper SO <sub>2</sub> , NO <sub>2</sub> : 30 ml x 6 no. plastic bottle each NH <sub>3</sub> : 10 ml x 24 no. plastic bottle Ozone: 10 ml x 1 no. plastic bottle C <sub>6</sub> H <sub>6</sub> : 6 no. charcoal tubes CO: 1 no. bladder	Date - Receipt of Sample	02/11/2022
Sampling Procedure	As per method reference	Date - Start of Analysis	02/11/2022
Order Reference	As per PO No. PNP/March/2021-2022/020 Dated 31.03.2022	Date - Completion of Analysis	07/11/2022

**Meteorological Data / Environmental Conditions**

Average Wind Velocity 9 km/h	Wind Direction E	Relative Humidity (Max./Min.): 65/53%	Temperature (Max./Min.): 31/22°C	Duration of Survey 24 h
Parameter	Result	NAAQS# 2009	Unit	Method

**Chemical Testing; Group: Atmospheric Pollution**

Sulphur Dioxide (SO <sub>2</sub> )	7.3	80	µg/m <sup>3</sup>	IS 5182 (Part 2): 2001
Nitrogen Dioxide (NO <sub>2</sub> )	20.6	80	µg/m <sup>3</sup>	IS 5182 (Part 6): 2006
Particulate Matter (size less than 10 µm) or PM <sub>10</sub>	258	100	µg/m <sup>3</sup>	IS 5182 (Part 23): 2006
Particulate Matter (size less than 2.5µm) or PM <sub>2.5</sub>	96	60	µg/m <sup>3</sup>	CPCB Guideline, Volume I 36/2012-13, Page No 15:2013
Ozone (O <sub>3</sub> )	BLQ (LOQ:19.6)	180	µg/m <sup>3</sup>	Methods of Air Sampling and Analysis (AWMA), 3rd Ed., Method 411, Page no 403 1988
Lead (as Pb)	BLQ (LOQ:0.02)	1	µg/m <sup>3</sup>	EPA/625/R-96/010 a Compendium Method 10-31 6 32
Carbon Monoxide (CO)	1.0	4	mg/m <sup>3</sup>	CPCB Guidelines, Volume II, 37/2012-13, Page no 16: 2013
Ammonia (NH <sub>3</sub> )	BLQ (LOQ:20)	400	µg/m <sup>3</sup>	CPCB Guidelines, Volume I 36/2012-13, Page No 35: 2013
Benzene (C <sub>6</sub> H <sub>6</sub> )	BLQ (LOQ:1)	5	µg/m <sup>3</sup>	IS 5182 (Part II): 2006
Benzo (a) pyrene (BaP) Particulate Phase only	BLQ (LOQ:0.2)	1	ng/m <sup>3</sup>	IS 5182 (Part 12): 2004
Arsenic (as As)	BLQ (LOQ:0.3)	6	ng/m <sup>3</sup>	EPA/625/R-96/010 a Compendium Method 10-31 6 32
Nickel (as Ni)	BLQ (LOQ:3)	20	ng/m <sup>3</sup>	EPA/625/R-96/010 a Compendium Method 10-31 6 32

BLQ: Below Limit of Quantification, LOQ: Limit of Quantification

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, PM<sub>10</sub>, PM<sub>2.5</sub>, 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

  
 Nind Soundankar  
 Technical Manager (Chemical)  
 Reviewed & Authorised by

Sample ID : AA/11/22/5039

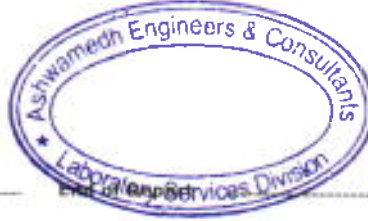
Report No. AA/11/22/5039

Report Date

08/11/2022



Ninad Soundankar  
Technical Manager (Chemical)  
Reviewed & Authorised by



Note:

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### AMBIENT AIR QUALITY MONITORING REPORT

Sample ID : AA/11/22/5040	Report No. AA/11/22/5040	Report Date	08/11/2022
Name and address of Customer	<b>PNP Maritime Services Private Limited</b> 2nd Floor, Lansdowne House, Mahakavi Bhushan Road, Colaba, Mumbai - 400001, Maharashtra		
Sampling done by	Laboratory	Sample Description / Type	Ambient Air
Sampling Location	Near Weigh Bridge (PNP Port)	Date - Sampling	31/10/2022 to 01/11/2022
Sample Quantity / Packing	PM <sub>10</sub> , Bap, Metals: 1 x 3 no. filter paper PM <sub>2.5</sub> : 1 x 1 no. filter paper SO <sub>2</sub> , NO <sub>2</sub> : 30 ml x 6 no. plastic bottle each NH <sub>3</sub> : 10 ml x 24 no. plastic bottle Ozone: 10 ml x 1 no. plastic bottle C <sub>6</sub> H <sub>6</sub> : 6 no. charcoal tubes CO: 1 no. bladder	Date - Receipt of Sample	02/11/2022
Sampling Procedure	As per method reference	Date - Start of Analysis	02/11/2022
Order Reference	As per PO No. PNP/March/2021-2022/020 Dated 31.03.2022	Date - Completion of Analysis	07/11/2022

#### Meteorological Data / Environmental Conditions

Average Wind Velocity 9 km/h	Wind Direction E	Relative Humidity (Max./Min.): 65/53%	Temperature (Max./Min.): 31/22°C	Duration of Survey 24 h
Parameter	Result	NAAQS# 2009	Unit	Method

#### Chemical Testing; Group: Atmospheric Pollution

Sulphur Dioxide (SO <sub>2</sub> )	6.3	80	µg/m <sup>3</sup>	IS 5182 (Part 2): 2001
Nitrogen Dioxide (NO <sub>2</sub> )	25	80	µg/m <sup>3</sup>	IS 5182 (Part 6): 2006
Particulate Matter (size less than 10 µm) or PM <sub>10</sub>	340	100	µg/m <sup>3</sup>	IS 5182 (Part 23): 2006
Particulate Matter (size less than 2.5µm) or PM <sub>2.5</sub>	132	60	µg/m <sup>3</sup>	CPCB Guideline, Volume I, 36/2012-13, Page No 15: 2013
Ozone (O <sub>3</sub> )	BLQ (LOQ:19.6)	180	µg/m <sup>3</sup>	Methods of Air Sampling and Analysis (AWMA), 3rd Ed., Method 411 Page no. 403: 1988
Lead (as Pb)	BLQ (LOQ:0.02)	1	µg/m <sup>3</sup>	EPA/625/R-96/010 a Compendium Method 10-31 & 32
Carbon Monoxide (CO)	1.21	4	mg/m <sup>3</sup>	CPCB Guidelines, Volume II, 37/2012-13, Page no 16: 2013
Ammonia (NH <sub>3</sub> )	BLQ (LOQ:20)	400	µg/m <sup>3</sup>	CPCB Guidelines, Volume I, 36/2012-13, Page No 35: 2013
Benzene (C <sub>6</sub> H <sub>6</sub> )	1.06	5	µg/m <sup>3</sup>	IS 5182 (Part 11): 2006
Benzo (a) pyrene (BaP) Particulate Phase only	BLQ (LOQ:0.2)	1	ng/m <sup>3</sup>	IS 5182 (Part 12): 2004
Arsenic (as As)	BLQ (LOQ:0.3)	6	ng/m <sup>3</sup>	EPA/625/R-96/010 a Compendium Method 10-31 & 32
Nickel (as Ni)	BLQ (LOQ:3)	20	ng/m <sup>3</sup>	EPA/625/R-96/010 a Compendium Method 10-31 & 32

BLQ: Below Limit of Quantification, LOQ: Limit of Quantification

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, PM<sub>10</sub>, PM<sub>2.5</sub>, Lead and Ammonia, 1 hour TWA in case of Carbon Monoxide and Ozone, Annual TWA in case of Benzene, Benzo (a) Pyrene, Arsenic and Nickel

  
Ninad Soundankar  
Technical Manager (Chemical)  
Reviewed & Authorised by

Sample ID : AA/11/22/5040	Report No. AA/11/22/5040	Report Date	08/11/2022
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Ninad Soundankar  
Technical Manager (Chemical)  
Reviewed & Authorised by



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



### AMBIENT AIR QUALITY MONITORING REPORT

Sample ID : AA/11/22/5041	Report No. AA/11/22/5041	Report Date	08/11/2022
Name and address of Customer	<b>PNP Maritime Services Private Limited</b> 2nd Floor, Lansdowne House, Mahakavi Bhushan Road, Colaba, Mumbai - 400001, Maharashtra		
Sampling done by	Laboratory	Sample Description / Type	Ambient Air
Sampling Location	Near Custom Building (PNP Port)	Date - Sampling	31/10/2022 to 01/11/2022
Sample Quantity / Packing	PM <sub>10</sub> , Bap, Metals: 1 x 3 no. filter paper PM <sub>2.5</sub> : 1 x 1 no. filter paper SO <sub>2</sub> , NO <sub>2</sub> : 30 ml x 6 no. plastic bottle each NH <sub>3</sub> : 10 ml x 24 no. plastic bottle Ozone: 10 ml x 1 no. plastic bottle C <sub>6</sub> H <sub>6</sub> : 6 no. charcoal tubes CO: 1 no. bladder	Date - Receipt of Sample	02/11/2022
Sampling Procedure	As per method reference	Date - Start of Analysis	02/11/2022
Order Reference	As per PO No. PNP/March/2021-2022/020 Dated 31.03.2022	Date - Completion of Analysis	07/11/2022

#### Meteorological Data / Environmental Conditions

Average Wind Velocity 9 km/h	Wind Direction E	Relative Humidity (Max./Min.): 65/53%	Temperature (Max./Min.): 31/22°C	Duration of Survey 24 h
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Parameter	Result	NAAQS# 2009	Unit	Method
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#### Chemical Testing; Group: Atmospheric Pollution

Sulphur Dioxide (SO <sub>2</sub> )	5.2	80	µg/m <sup>3</sup>	IS 5182 (Part 2) 2001
Nitrogen Dioxide (NO <sub>2</sub> )	21.2	80	µg/m <sup>3</sup>	IS 5182 (Part 6) 2006
Particulate Matter (size less than 10 µm) or PM <sub>10</sub>	241	100	µg/m <sup>3</sup>	IS 5182 (Part 23) 2006
Particulate Matter (size less than 2.5µm) or PM <sub>2.5</sub>	102	60	µg/m <sup>3</sup>	CPCB Guideline, Volume 1,36/2012-13, Page No 15 2013
Ozone (O <sub>3</sub> )	BLQ (LOQ:19.6)	180	µg/m <sup>3</sup>	Methods of Air Sampling and Analysis (AWMA), 3rd Ed., Method 411, Page no. 403 1988
Lead (as Pb)	BLQ (LOQ:0.02)	1	µg/m <sup>3</sup>	EPA/625/R-96/010 a Compendium Method 10-31 6 3 2
Carbon Monoxide (CO)	0.96	4	mg/m <sup>3</sup>	CPCB Guidelines, Volume 11, 37/2012-13, Page no 16 2013
Ammonia (NH <sub>3</sub> )	BLQ (LOQ:20)	400	µg/m <sup>3</sup>	CPCB Guidelines, Volume 1,36/2012-13, Page No 35 2013
Benzene (C <sub>6</sub> H <sub>6</sub> )	BLQ (LOQ:1)	5	µg/m <sup>3</sup>	IS 5182 (Part 11) 2006
Benzo (a) pyrene (BaP) Particulate Phase only	BLQ (LOQ:0.2)	1	ng/m <sup>3</sup>	IS 5182 (Part 12) 2004
Arsenic (as As)	BLQ (LOQ:0.3)	6	ng/m <sup>3</sup>	EPA/625/R-96/010 a Compendium Method 10-31 6 3 2
Nickel (as Ni)	BLQ (LOQ:3)	20	ng/m <sup>3</sup>	EPA/625/R-96/010 a Compendium Method 10-31 6 3 2

BLQ: Below Limit of Quantification, LOQ: Limit of Quantification

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, PM<sub>10</sub>, PM<sub>2.5</sub>, Lead and Ammonia, 1 hour TWA in case of Carbon Monoxide and Ozone, Annual TWA in case of Benzene, Benzo (a) Pyrene, Arsenic and Nickel

  
Ninad Soundankar  
Technical Manager (Chemical)  
Reviewed & Authorised by

Sample ID : AA/11/22/5041	Report No. AA/11/22/5041	Report Date	08/11/2022
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Ninad Soundankar  
Technical Manager (Chemical)  
Reviewed & Authorised by



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





### AMBIENT AIR QUALITY MONITORING REPORT

Sample ID : AA/11/22/5042	Report No. AA/11/22/5042	Report Date	08/11/2022
Name and address of Customer	<b>PNP Maritime Services Private Limited</b> 2nd Floor, Lansdowne House, Mahakavi Bhushan Road, Colaba, Mumbai - 400001, Maharashtra		
Sampling done by	Laboratory	Sample Description / Type	Ambient Air
Sampling Location	Near Lal Gate (PNP Port)	Date - Sampling	31/10/2022 to 01/11/2022
Sample Quantity / Packing	PM <sub>10</sub> : Bap, Metals: 1 x 3 no. filter paper PM <sub>2.5</sub> : 1 x 1 no. filter paper SO <sub>2</sub> , NO <sub>2</sub> : 30 ml x 6 no. plastic bottle each NH <sub>3</sub> : 10 ml x 24 no. plastic bottle Ozone: 10 ml x 1 no. plastic bottle C <sub>6</sub> H <sub>6</sub> : 6 no. charcoal tubes CO: 1 no. bladder	Date - Receipt of Sample	02/11/2022
Sampling Procedure	As per method reference	Date - Start of Analysis	02/11/2022
Order Reference	As per PO No. : PNP/March/2021-2022/020 Dated 31.03 2022	Date - Completion of Analysis	07/11/2022

#### Meteorological Data / Environmental Conditions

Average Wind Velocity 9 km/h	Wind Direction E	Relative Humidity (Max./Min.): 65/53%	Temperature (Max./Min.): 31/22°C	Duration of Survey 24 h
Parameter	Result	NAAQS# 2009	Unit	Method

#### Chemical Testing; Group: Atmospheric Pollution

Parameter	Result	NAAQS# 2009	Unit	Method
Sulphur Dioxide (SO <sub>2</sub> )	8.4	80	µg/m <sup>3</sup>	IS 5182 (Part 2): 2001
Nitrogen Dioxide (NO <sub>2</sub> )	25.6	80	µg/m <sup>3</sup>	IS 5182 (Part 6): 2006
Particulate Matter (size less than 10 µm) or PM <sub>10</sub>	321	100	µg/m <sup>3</sup>	IS 5182 (Part 23): 2006
Particulate Matter (size less than 2.5µm) or PM <sub>2.5</sub>	108	60	µg/m <sup>3</sup>	CPCB Guideline, Volume I, 36/2012-13, Page No 15: 2013
Ozone (O <sub>3</sub> )	BLQ (LOQ:19.6)	180	µg/m <sup>3</sup>	Methods of Air Sampling and Analysis (AWMA), 3rd Ed, Method 411 Page no. 403: 1988
Lead (as Pb)	BLQ (LOQ:0.02)	1	µg/m <sup>3</sup>	EPA/625/R-96/010 a Compendium Method 10-31 & 32
Carbon Monoxide (CO)	1.3	4	mg/m <sup>3</sup>	CPCB Guidelines, Volume II, 37/2012-13, Page no 16: 2013
Ammonia (NH <sub>3</sub> )	BLQ (LOQ:20)	400	µg/m <sup>3</sup>	CPCB Guidelines, Volume I, 36/2012-13, Page No 35: 2013
Benzene (C <sub>6</sub> H <sub>6</sub> )	1.23	5	µg/m <sup>3</sup>	IS 5182 (Part 11): 2006
Benzo (a) pyrene (BaP) Particulate Phase only	BLQ (LOQ:0.2)	1	ng/m <sup>3</sup>	IS 5182 (Part 12): 2004
Arsenic (as As)	BLQ (LOQ:0.3)	6	ng/m <sup>3</sup>	EPA/625/R-96/010 a Compendium Method 10-31 & 32
Nickel (as Ni)	BLQ (LOQ:3)	20	ng/m <sup>3</sup>	EPA/625/R-96/010 a Compendium Method 10-31 & 32

BLQ: Below Limit of Quantification, LOQ: Limit of Quantification  
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, PM<sub>10</sub>, PM<sub>2.5</sub>, Lead and Ammonia, 1 hour TWA in case of Carbon Monoxide and Ozone, Annual TWA in case of Benzene, Benzo (a) Pyrene, Arsenic and Nickel

  
Ninad Soundankar  
Technical Manager (Chemical)  
Reviewed & Authorised by

Sample ID : AA/11/22/5042	Report No. AA/11/22/5042	Report Date	08/11/2022
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Ninad Soundankar  
Technical Manager (Chemical)  
Reviewed & Authorised by



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### AMBIENT AIR QUALITY MONITORING REPORT

Sample ID : AA/11/22/5043	Report No. AA/11/22/5043	Report Date	08/11/2022
Name and address of Customer	<b>PNP Maritime Services Private Limited</b> 2nd Floor, Lansdowne House, Mahakavi Bhushan Road, Colaba, Mumbai - 400001, Maharashtra		
Sampling done by	Laboratory	Sample Description / Type	Ambient Air
Sampling Location	Near DIL Main Gate (PNP Port)	Date - Sampling	31/10/2022 to 01/11/2022
Sample Quantity / Packing	PM <sub>10</sub> , Bap, Metals: 1 x 3 no. filter paper PM <sub>2.5</sub> : 1 x 1 no. filter paper SO <sub>2</sub> , NO <sub>2</sub> : 30 ml x 6 no. plastic bottle each NH <sub>3</sub> : 10 ml x 24 no. plastic bottle Ozone: 10 ml x 1 no. plastic bottle C <sub>6</sub> H <sub>6</sub> : 6 no. charcoal tubes CO: 1 no. bladder	Date - Receipt of Sample	02/11/2022
Sampling Procedure	As per method reference	Date - Start of Analysis	02/11/2022
Order Reference	As per PO No. PNP/March/2021-2022/020 Dated 31.03.2022	Date - Completion of Analysis	07/11/2022

#### Meteorological Data / Environmental Conditions

Average Wind Velocity 9 km/h	Wind Direction E	Relative Humidity (Max./Min.): 65/53%	Temperature (Max./Min.): 31/22°C	Duration of Survey 24 h
Parameter	Result	NAAQS# 2009	Unit	Method

#### Chemical Testing; Group: Atmospheric Pollution

Sulphur Dioxide (SO <sub>2</sub> )	11.5	80	µg/m <sup>3</sup>	IS 5182 (Part 2): 2001
Nitrogen Dioxide (NO <sub>2</sub> )	23.5	80	µg/m <sup>3</sup>	IS 5182 (Part 6): 2006
Particulate Matter (size less than 10 µm) or PM <sub>10</sub>	318	100	µg/m <sup>3</sup>	IS 5182 (Part 23): 2006
Particulate Matter (size less than 2.5 µm) or PM <sub>2.5</sub>	114	60	µg/m <sup>3</sup>	CPCB Guidelines, Volume I, 36/2012-13, Page No.15/2013
Ozone (O <sub>3</sub> )	BLQ (LOQ:19.6)	180	µg/m <sup>3</sup>	Methods of Air Sampling and Analysis (AWMA), 3rd Ed., Method 411, Page no. 403, 1988
Lead (as Pb)	BLQ (LOQ:0.02)	1	µg/m <sup>3</sup>	EPA/625/R-96/010 a Compendium Method 10-3.1 & 3.2
Carbon Monoxide (CO)	1.16	4	mg/m <sup>3</sup>	CPCB Guidelines, Volume II, 37/2012-13, Page no.16, 2013
Ammonia (NH <sub>3</sub> )	BLQ (LOQ:20)	400	µg/m <sup>3</sup>	CPCB Guidelines, Volume I, 36/2012-13, Page No.35, 2013
Benzene (C <sub>6</sub> H <sub>6</sub> )	1.14	5	µg/m <sup>3</sup>	IS 5182 (Part II): 2006
Benzo (a) pyrene (BaP) Particulate Phase only	BLQ (LOQ:0.2)	1	ng/m <sup>3</sup>	IS 5182 (Part 12): 2004
Arsenic (as As)	BLQ (LOQ:0.3)	6	ng/m <sup>3</sup>	EPA/625/R-96/010 a Compendium Method 10-3.1 & 3.2
Nickel (as Ni)	BLQ (LOQ:3)	20	ng/m <sup>3</sup>	EPA/625/R-96/010 a Compendium Method 10-3.1 & 3.2

BLQ: Below Limit of Quantification, LOQ: Limit of Quantification

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, PM<sub>10</sub>, PM<sub>2.5</sub>, Lead and Ammonia, 1 hour TWA in case of Carbon Monoxide and Ozone, Annual TWA in case of Benzene, Benzo (a) Pyrene, Arsenic and Nickel

  
Ninad Soundankar  
Technical Manager (Chemical)  
Reviewed & Authorised by

Sample ID : AA/11/22/5043	Report No. AA/11/22/5043	Report Date	08/11/2022
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Ninad Soundankar  
Technical Manager (Chemical)  
Reviewed & Authorised by



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### AMBIENT AIR QUALITY MONITORING REPORT

Sample ID : AA/11/22/5044	Report No. AA/11/22/5044	Report Date	08/11/2022
Name and address of Customer	<b>PNP Maritime Services Private Limited</b> 2nd Floor, Lansdowne House, Mahakavi Bhushan Road, Colaba, Mumbai - 400001, Maharashtra		
Sampling done by	Laboratory	Sample Description / Type	Ambient Air
Sampling Location	Near DIL Godown Back Side (PNP Port)	Date - Sampling	31/10/2022 to 01/11/2022
Sample Quantity / Packing	PM <sub>10</sub> , Bap, Metals: 1 x 3 no. filter paper PM <sub>2.5</sub> : 1 x 1 no. filter paper SO <sub>2</sub> , NO <sub>2</sub> : 30 ml x 6 no. plastic bottle each NH <sub>3</sub> : 10 ml x 24 no. plastic bottle Ozone: 10 ml x 1 no. plastic bottle C <sub>6</sub> H <sub>6</sub> : 6 no. charcoal tubes CO: 1 no. bladder	Date - Receipt of Sample	02/11/2022
Sampling Procedure	As per method reference	Date - Start of Analysis	02/11/2022
Order Reference	As per PO No. PNP/March/2021-2022/020 Dated 31.03.2022	Date - Completion of Analysis	07/11/2022

#### Meteorological Data / Environmental Conditions

Average Wind Velocity 9 km/h	Wind Direction E	Relative Humidity (Max./Min.): 65/53%	Temperature (Max./Min.): 31/22°C	Duration of Survey 24 h
Parameter	Result	NAAQS# 2009	Unit	Method

#### Chemical Testing; Group: Atmospheric Pollution

Sulphur Dioxide (SO <sub>2</sub> )	5.2	80	µg/m <sup>3</sup>	IS 5182 (Part 2): 2001
Nitrogen Dioxide (NO <sub>2</sub> )	20.6	80	µg/m <sup>3</sup>	IS 5182 (Part 6): 2006
Particulate Matter (size less than 10 µm) or PM <sub>10</sub>	266	100	µg/m <sup>3</sup>	IS 5182 (Part 23): 2006
Particulate Matter (size less than 2.5µm) or PM <sub>2.5</sub>	83	60	µg/m <sup>3</sup>	CPCB Guideline, Volume I, 36/2012-13, Page No 15: 2013
Ozone (O <sub>3</sub> )	BLQ (LOQ:19.6)	180	µg/m <sup>3</sup>	Methods of Air Sampling and Analysis (AWMA), 3rd Ed., Method 411, Page no. 403: 1988
Lead (as Pb)	BLQ (LOQ:0.02)	1	µg/m <sup>3</sup>	EPA/625/R-96/010 a Compendium Method 10-31 & 32
Carbon Monoxide (CO)	0.83	4	mg/m <sup>3</sup>	CPCB Guidelines, Volume II, 37/2012-13, Page no 16: 2013
Ammonia (NH <sub>3</sub> )	BLQ (LOQ:20)	400	µg/m <sup>3</sup>	CPCB Guidelines, Volume I, 36/2012-13, Page No 35: 2013
Benzene (C <sub>6</sub> H <sub>6</sub> )	BLQ (LOQ:1)	5	µg/m <sup>3</sup>	IS 5182 (Part 11): 2006
Benzo (a) pyrene (BaP) Particulate Phase only	BLQ (LOQ:0.2)	1	ng/m <sup>3</sup>	IS 5182 (Part 12): 2004
Arsenic (as As)	BLQ (LOQ:0.3)	6	ng/m <sup>3</sup>	EPA/625/R-96/010 a Compendium Method 10-31 & 32
Nickel (as Ni)	BLQ (LOQ:3)	20	ng/m <sup>3</sup>	EPA/625/R-96/010 a Compendium Method 10-31 & 32

BLQ: Below Limit of Quantification, LOQ: Limit of Quantification

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, PM<sub>10</sub>, PM<sub>2.5</sub>, Lead and Ammonia, 1 hour TWA in case of Carbon Monoxide and Ozone, Annual TWA in case of Benzene, Benzo (a) Pyrene, Arsenic and Nickel

  
Ninad Soundankar  
Technical Manager (Chemical)  
Reviewed & Authorised by

Sample ID : AA/11/22/5044	Report No. AA/11/22/5044	Report Date	08/11/2022
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Ninad Soundankar

Technical Manager (Chemical)  
Reviewed & Authorised by



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### NOISE LEVEL MEASUREMENT REPORT

Sample ID N/11/22/5045	Report No N/11/22/5045	Report Date	05/11/2022
Name and Address of Customer	<b>PNP Maritime Services Private Limited</b> 2nd Floor, Lansdowne House, Mahakavi Bhushan Road, Colaba, Mumbai - 400 001		
Monitoring Done By	Laboratory	Sample Description /Type	Ambient Noise
Order Reference	As per PO No. PNP/March/2021- 2022/020 Dated 31.03.2022	Date-Monitoring	31/10/2022

#### Chemical Testing; Group: Atmospheric Pollution

Location	Time (h)	Results Noise Level dB (A) Fast Response	Results Noise Level dB (A) Slow Response	Method
A. Near Main Gate (PNP Port)	09:00	73.4	72.6	CPCB Protocol for Ambient Level Noise Monitoring July AEC/C/SAP/SAM/356 36 Issue no.4, Issue date 01.04.2018
	21:00	67.7	66.3	
B. Near Jetty No. 1 (PNP Port)	09:10	71.6	70.4	
	21:10	65.7	64.6	
C. Near Jetty No. 2 (PNP Port)	09:20	73.4	72.3	
	21:20	67.6	66.3	
D. Near Jetty No. 3 (PNP Port)	09:30	71.5	70.2	
	21:30	65.6	64.5	
E. Near Jetty No. 5 (PNP Port)	09:40	73.3	72.3	
	21:40	67.5	66.2	
F. Near Weight Bridge (PNP Port)	09:50	72.4	71.6	
	21:50	66.5	65.4	
G. Near Custom Building (PNP Port)	10:00	73.2	72.2	
	22:00	67.4	66.2	
H. Near Lal Gate (PNP Port)	10:10	72.3	71.5	
	22:10	66.4	65.3	
I. Near DIL Main Gate (PNP Port)	10:20	72.2	71.4	
	22:20	66.3	65.2	
J. DIL Godown Back Side (PNP Port)	11:30	71.2	70.2	
	23:30	65.4	64.3	

#### 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

  
Ninad Soundankar  
Technical Manager (Chemical)  
Reviewed & Authorised by



End of Report

#### Note:

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### TEST REPORT

Sample ID (1) AA/10/22/3368 (2) AA/10/22/3378 (3) AA/10/22/3388 (4) AA/10/22/3408	Report No. (1) AA/10/22/3368N (2) AA/10/22/3378N (3) AA/10/22/3388N (4) AA/10/22/3408N	Report Date: 10/11/2022
Name and Address of Customer	<b>PNP Maritime Services Private Limited</b> 2nd Floor, Lansdowne House, Mahakavi Bhushan road, Colaba, Mumbai - 400 001, Maharashtra	Order Reference As per PO No. PNP/March/2021- 2022/20 Dated 31/03/2022
Sample Description/Type	Particle Size (Group: Atmospheric Pollution)	
Sampling Location	Near Main Gate	
Sampling Procedure	By Particle Counter	
Duration of Survey	24 h	

Sr. No.	Parameter	Units	Results				Method Reference
			03.10.2022	06.10.2022	10.10.2022	13.10.2022	
	Date		03.10.2022	06.10.2022	10.10.2022	13.10.2022	
1.	Particles						
a.	0.3 $\mu$	Particle/m <sup>3</sup>	633620	646200	658282	663250	By Particle Counter
b.	0.5 $\mu$	Particle/m <sup>3</sup>	168711	177181	163200	172811	By Particle Counter
c.	1.0 $\mu$	Particle/m <sup>3</sup>	83588	84562	85692	86320	By Particle Counter
d.	2.5 $\mu$	Particle/m <sup>3</sup>	32505	32330	36820	35711	By Particle Counter
e.	5.0 $\mu$	Particle/m <sup>3</sup>	8663	8787	8663	8230	By Particle Counter
f.	10 $\mu$	Particle/m <sup>3</sup>	6378	6633	6877	6582	By Particle Counter



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### TEST REPORT

Sample ID: (1) AA/10/22/3418 (2) AA/10/22/3428 (3) AA/10/22/3438 (4) AA/10/22/3448 (2) AA/11/22/3134	Report No: (1) AA/10/22/3418N (2) AA/10/22/3428N (3) AA/10/22/3438N (4) AA/10/22/3448N (2) AA/11/22/3134N	Report Date: 10/11/2022
Name and Address of Customer	<b>PNP Maritime Services Private Limited</b> 2nd Floor, Lansdowne House, Mahakavi Bhushan road, Colaba, Mumbai - 400 001, Maharashtra	Order Reference: As per PO No. PNP/March/2021- 2022/20 Dated 31/03/2022
Sample Description/Type	Particle Size (Group: Atmospheric Pollution)	
Sampling Location	Near Main Gate	
Sampling Procedure	By Particle Counter	
Duration of Survey	24 h	

Sr. No.	Parameter	Units	Results					Method Reference
			17.10.2022	20.10.2022	24.10.2022	27.10.2022	31.10.2022	
	Date	-	17.10.2022	20.10.2022	24.10.2022	27.10.2022	31.10.2022	
i.	Particles	-						
a.	0.3 $\mu$	Particle/ $m^3$	656131	632489	819736	670259	741589	By Particle Counter
b.	0.5 $\mu$	Particle/ $m^3$	163020	144765	159760	174064	196587	By Particle Counter
c.	1.0 $\mu$	Particle/ $m^3$	87847	96583	75737	70321	69582	By Particle Counter
d.	2.5 $\mu$	Particle/ $m^3$	39920	59684	48105	46102	48642	By Particle Counter
e.	5.0 $\mu$	Particle/ $m^3$	8582	6582	8949	6596	3598	By Particle Counter
f.	10 $\mu$	Particle/ $m^3$	6888	5226	2543	2356	1745	By Particle Counter

  
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### TEST REPORT

Sample ID (1) AA/10/22/3369 (2) AA/10/22/3379 (3) AA/10/22/3389 (4) AA/10/22/3409	Report No. (1) AA/10/22/3369N (2) AA/10/22/3379N (3) AA/10/22/3389N (4) AA/10/22/3409N	Report Date: 10/11/2022
Name and Address of Customer	<b>PNP Maritime Services Private Limited</b> 2nd Floor, Lansdowne House, Mahakavi Bhushan road, Colaba, Mumbai - 400 001, Maharashtra	Order Reference As per PO No. PNP/March/2021- 2022/20 Dated 31/03/2022
Sample Description/Type	Particle Size (Group: Atmospheric Pollution)	
Sampling Location	Near Jetty No. 1	
Sampling Procedure	By Particle Counter	
Duration of Survey	24 h	

Sr. No.	Parameter	Units	Results				Method Reference
			03.10.2022	06.10.2022	10.10.2022	13.10.2022	
	Date	-	03.10.2022	06.10.2022	10.10.2022	13.10.2022	
1.	Particles	-					
a.	0.3 $\mu$	Particle/m <sup>3</sup>	646300	664663	655632	625050	By Particle Counter
b.	0.5 $\mu$	Particle/m <sup>3</sup>	156820	163200	152828	163200	By Particle Counter
c.	1.0 $\mu$	Particle/m <sup>3</sup>	85666	86787	87841	84672	By Particle Counter
d.	2.5 $\mu$	Particle/m <sup>3</sup>	49124	48814	46630	45520	By Particle Counter
e.	5.0 $\mu$	Particle/m <sup>3</sup>	8788	8836	8784	8630	By Particle Counter
f.	10 $\mu$	Particle/m <sup>3</sup>	4663	4782	4663	4572	By Particle Counter

  
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### TEST REPORT

Sample ID: (1) AA/10/22/3419 (2) AA/10/22/3429 (3) AA/10/22/3439 (4) AA/10/22/3449 (2) AA/11/22/3135	Report No. (1) AA/10/22/3419N (2) AA/10/22/3429N (3) AA/10/22/3439N (4) AA/10/22/3449N (2) AA/11/22/3135N	Report Date 10/11/2022
Name and Address of Customer	<b>PNP Maritime Services Private Limited</b> 2nd Floor, Lansdowne House, Mahakavi Bhushan road, Colaba, Mumbai - 400 001, Maharashtra	Order Reference As per PO No. PNP/March/2021- 2022/20 Dated 31/03/2022
Sample Description/Type	Particle Size (Group: Atmospheric Pollution)	
Sampling Location	Near Jetty No, 1	
Sampling Procedure	By Particle Counter	
Duration of Survey	24 h	

Sr. No.	Parameter	Units	Results					Method Reference
			17.10.2022	20.10.2022	24.10.2022	27.10.2022	31.10.2022	
	Date	-	17.10.2022	20.10.2022	24.10.2022	27.10.2022	31.10.2022	
1.	Particles	-						
a.	0.3 $\mu$	Particle/ $m^3$	646582	658692	742596	685429	700236	By Particle Counter
b.	0.5 $\mu$	Particle/ $m^3$	178852	196358	186491	198842	196321	By Particle Counter
c.	1.0 $\mu$	Particle/ $m^3$	88282	43659	76547	63598	58512	By Particle Counter
d.	2.5 $\mu$	Particle/ $m^3$	48779	23569	52756	24859	30245	By Particle Counter
e.	5.0 $\mu$	Particle/ $m^3$	8789	7459	7456	6638	2632	By Particle Counter
f.	10 $\mu$	Particle/ $m^3$	4666	5689	2359	3491	1987	By Particle Counter

  
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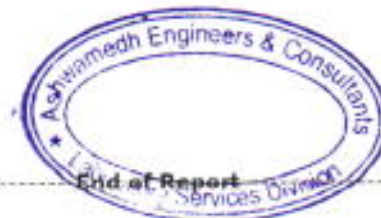


### TEST REPORT

Sample ID (1) AA/10/22/3370 (2) AA/10/22/3380 (3) AA/10/22/3390 (4) AA/10/22/3410	Report No (1) AA/10/22/3370N (2) AA/10/22/3380N (3) AA/10/22/3390N (4) AA/10/22/3410N	Report Date: 10/11/2022
Name and Address of Customer	<b>PNP Maritime Services Private Limited</b> 2nd Floor, Lansdowne House, Mahakavi Bhushan road, Colaba, Mumbai - 400 001, Maharashtra	Order Reference As per PO No. PNP/March/2021- 2022/20 Dated 31/03/2022
Sample Description/Type	Particle Size (Group: Atmospheric Pollution)	
Sampling Location	Near Jetty No. 2	
Sampling Procedure	By Particle Counter	
Duration of Survey	24 h	

Sr. No.	Parameter	Units	Results				Method Reference
			03.10.2022	06.10.2022	10.10.2022	13.10.2022	
	Date		03.10.2022	06.10.2022	10.10.2022	13.10.2022	
1.	Particles						
a.	0.3 $\mu$	Particle/m <sup>3</sup>	566301	578141	563663	555632	By Particle Counter
b.	0.5 $\mu$	Particle/m <sup>3</sup>	156280	163200	151010	163200	By Particle Counter
c.	1.0 $\mu$	Particle/m <sup>3</sup>	75111	78210	76632	75147	By Particle Counter
d.	2.5 $\mu$	Particle/m <sup>3</sup>	46328	45663	44572	45781	By Particle Counter
e.	5.0 $\mu$	Particle/m <sup>3</sup>	7556	7825	7663	7828	By Particle Counter
f.	10 $\mu$	Particle/m <sup>3</sup>	6258	6882	6789	6682	By Particle Counter

  
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End of Report

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### TEST REPORT

Sample ID: (1) AA/10/22/3420 (2) AA/10/22/3430 (3) AA/10/22/3440 (4) AA/10/22/3450 (2) AA/11/22/3136	Report No: (1) AA/10/22/3420N (2) AA/10/22/3430N (3) AA/10/22/3440N (4) AA/10/22/3450N (2) AA/11/22/3136N	Report Date: 10/11/2022
Name and Address of Customer	<b>PNP Maritime Services Private Limited</b> 2nd Floor, Lansdowne House, Mahakavi Bhushan road, Colaba, Mumbai – 400 001, Maharashtra	Order Reference: As per PO No. PNP/March/2021- 2022/20 Dated 31/03/2022
Sample Description/Type	Particle Size (Group: Atmospheric Pollution)	
Sampling Location	Near Jetty No. 2	
Sampling Procedure	By Particle Counter	
Duration of Survey	24 h	

Sr. No.	Parameter	Units	Results					Method Reference
			17.10.2022	20.10.2022	24.10.2022	27.10.2022	31.10.2022	
	Date	-	17.10.2022	20.10.2022	24.10.2022	27.10.2022	31.10.2022	
1.	Particles	-						
a.	0.3 μ	Particle/m <sup>3</sup>	574777	556983	632148	622175	874123	By Particle Counter
b.	0.5 μ	Particle/m <sup>3</sup>	144141	158659	198236	171657	125864	By Particle Counter
c.	1.0 μ	Particle/m <sup>3</sup>	76363	94563	84569	89503	72916	By Particle Counter
d.	2.5 μ	Particle/m <sup>3</sup>	46628	68459	75263	58963	43710	By Particle Counter
e.	5.0 μ	Particle/m <sup>3</sup>	7744	6859	2954	9497	2178	By Particle Counter
f.	10 μ	Particle/m <sup>3</sup>	6563	3596	1758	4643	1330	By Particle Counter

  
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### TEST REPORT

Sample ID: (1) AA/10/22/3371 (2) AA/10/22/3381 (3) AA/10/22/3391 (4) AA/10/22/3411	Report No: (1) AA/10/22/3371N (2) AA/10/22/3381N (3) AA/10/22/3391N (4) AA/10/22/3411N	Report Date: 10/11/2022
Name and Address of Customer	<b>PNP Maritime Services Private Limited</b> 2nd Floor, Lansdowne House, Mahakavi Bhushan road, Colaba, Mumbai - 400 001, Maharashtra	Order Reference: As per PO No. PNP/March/2021-2022/20 Dated 31/03/2022
Sample Description/Type	Particle Size (Group: Atmospheric Pollution)	
Sampling Location	Near Jetty No. 3	
Sampling Procedure	By Particle Counter	
Duration of Survey	24 h	

Sr. No.	Parameter	Units	Results				Method Reference
			03.10.2022	06.10.2022	10.10.2022	13.10.2022	
	Date	-	03.10.2022	06.10.2022	10.10.2022	13.10.2022	
1.	Particles	-					
a.	0.3 $\mu$	Particle/m <sup>3</sup>	658288	663002	656822	666320	By Particle Counter
b.	0.5 $\mu$	Particle/m <sup>3</sup>	163581	171471	182820	161711	By Particle Counter
c.	1.0 $\mu$	Particle/m <sup>3</sup>	76899	75546	76630	75250	By Particle Counter
d.	2.5 $\mu$	Particle/m <sup>3</sup>	56471	55633	54652	55563	By Particle Counter
e.	5.0 $\mu$	Particle/m <sup>3</sup>	8647	8787	8882	8632	By Particle Counter
f.	10 $\mu$	Particle/m <sup>3</sup>	4562	4662	4576	4678	By Particle Counter

  
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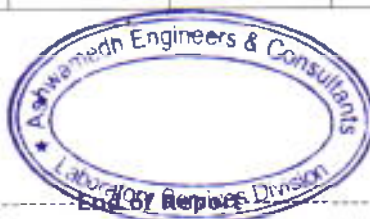


### TEST REPORT

Sample ID (1) AA/10/22/3421 (2) AA/10/22/3431 (3) AA/10/22/3441 (4) AA/10/22/3451 (2) AA/11/22/3137	Report No (1) AA/10/22/3421N (2) AA/10/22/3431N (3) AA/10/22/3441N (4) AA/10/22/3451N (2) AA/11/22/3137N	Report Date: 10/11/2022
Name and Address of Customer	<b>PNP Maritime Services Private Limited</b> 2nd Floor, Lansdowne House, Mahakavi Bhushan road, Colaba, Mumbai - 400 001, Maharashtra	Order Reference: As per PO No. PNP/March/2021-2022/20 Dated 31/03/2022
Sample Description/Type	Particle Size (Group: Atmospheric Pollution)	
Sampling Location	Near Jetty No. 3	
Sampling Procedure	By Particle Counter	
Duration of Survey	24 h	

Sr. No.	Parameter	Units	Results					Method Reference
			17.10.2022	20.10.2022	24.10.2022	27.10.2022	31.10.2022	
	Date	-	17.10.2022	20.10.2022	24.10.2022	27.10.2022	31.10.2022	
1.	Particles	-						
a.	0.3 $\mu$	Particle /m <sup>3</sup>	656303	688659	785423	896574	632145	By Particle Counter
b.	0.5 $\mu$	Particle /m <sup>3</sup>	156332	124856	194267	184100	100274	By Particle Counter
c.	1.0 $\mu$	Particle /m <sup>3</sup>	74782	69856	45869	78513	62316	By Particle Counter
d.	2.5 $\mu$	Particle /m <sup>3</sup>	54564	52369	34528	31859	40173	By Particle Counter
e.	5.0 $\mu$	Particle /m <sup>3</sup>	8785	9569	4526	7510	2764	By Particle Counter
f.	10 $\mu$	Particle /m <sup>3</sup>	4556	4589	1259	3678	1654	By Particle Counter

  
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### TEST REPORT

Sample ID (1) AA/10/22/3372 (2) AA/10/22/3382 (3) AA/10/22/3392 (4) AA/10/22/3412	Report No.: (1) AA/10/22/3372N (2) AA/10/22/3382N (3) AA/10/22/3392N (4) AA/10/22/3412N	Report Date 10/11/2022
Name and Address of Customer	<b>PNP Maritime Services Private Limited</b> 2nd Floor, Lansdowne House, Mahakavi Bhushan road, Colaba, Mumbai - 400 001, Maharashtra	Order Reference As per PO No. PNP/March/2021-2022/20 Dated 31/03/2022
Sample Description/Type	Particle Size (Group: Atmospheric Pollution)	
Sampling Location	Near Jetty No 5	
Sampling Procedure	By Particle Counter	
Duration of Survey	24 h	

Sr. No.	Parameter	Units	Results				Method Reference
			03.10.2022	06.10.2022	10.10.2022	13.10.2022	
	Date	-	03.10.2022	06.10.2022	10.10.2022	13.10.2022	
1.	Particles	-					
a.	0.3 $\mu$	Particle/m <sup>3</sup>	646111	656320	663200	656300	By Particle Counter
b.	0.5 $\mu$	Particle/m <sup>3</sup>	147841	156380	145620	156820	By Particle Counter
c.	1.0 $\mu$	Particle/m <sup>3</sup>	86630	85563	86320	86251	By Particle Counter
d.	2.5 $\mu$	Particle/m <sup>3</sup>	45631	46820	47785	48282	By Particle Counter
e.	5.0 $\mu$	Particle/m <sup>3</sup>	8787	8825	8632	8778	By Particle Counter
f.	10 $\mu$	Particle/m <sup>3</sup>	4814	4663	4778	4620	By Particle Counter

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### TEST REPORT

Sample ID (1) AA/10/22/3422 (2) AA/10/22/3432 (3) AA/10/22/3442 (4) AA/10/22/3452 (2) AA/11/22/3138	Report No (1) AA/10/22/3422N (2) AA/10/22/3432N (3) AA/10/22/3442N (4) AA/10/22/3452N (2) AA/11/22/3138N	Report Date: 10/11/2022
Name and Address of Customer	<b>PNP Maritime Services Private Limited</b> 2nd Floor, Lansdowne House, Mahakavi Bhushan road, Colaba, Mumbai - 400 001, Maharashtra	Order Reference As per PO No. PNP/March/2021-2022/20 Dated 31/03/2022
Sample Description/Type	Particle Size (Group: Atmospheric Pollution)	
Sampling Location	Near Jetty No 5	
Sampling Procedure	By Particle Counter	
Duration of Survey	24 h	

Sr. No.	Parameter	Units	Results					Method Reference
			17.10.2022	20.10.2022	24.10.2022	27.10.2022	31.10.2022	
	Date	-	17.10.2022	20.10.2022	24.10.2022	27.10.2022	31.10.2022	
1.	Particles	-						
a.	0.3 $\mu$	Particle/m <sup>3</sup>	662010	632654	619654	600452	708255	By Particle Counter
b.	0.5 $\mu$	Particle/m <sup>3</sup>	145682	565238	187546	107221	140773	By Particle Counter
c.	1.0 $\mu$	Particle/m <sup>3</sup>	85250	48596	34589	98407	75269	By Particle Counter
d.	2.5 $\mu$	Particle/m <sup>3</sup>	47710	25489	15896	49307	40058	By Particle Counter
e.	5.0 $\mu$	Particle/m <sup>3</sup>	8883	7758	9456	3598	2864	By Particle Counter
f.	10 $\mu$	Particle/m <sup>3</sup>	4879	5849	7453	1055	1880	By Particle Counter

  
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### TEST REPORT

Sample ID (1) AA/10/22/3373 (2) AA/10/22/3383 (3) AA/10/22/3393 (4) AA/10/22/3413	Report No (1) AA/10/22/3373N (2) AA/10/22/3383N (3) AA/10/22/3393N (4) AA/10/22/3413N	Report Date 10/11/2022
Name and Address of Customer	<b>PNP Maritime Services Private Limited</b> 2nd Floor, Lansdowne House, Mahakavi Bhushan road, Colaba, Mumbai - 400 001, Maharashtra	Order Reference As per PO No. PNP/March/2021- 2022/20 Dated 31/03/2022
Sample Description/Type	Particle Size (Group: Atmospheric Pollution)	
Sampling Location	Near Weigh Bridge	
Sampling Procedure	By Particle Counter	
Duration of Survey	24 h	

Sr. No.	Parameter	Units	Results				Method Reference
			03.10.2022	06.10.2022	10.10.2022	13.10.2022	
1.	Particles	-					
a.	0.3 $\mu$	Particle/m <sup>3</sup>	636122	645441	658282	663600	By Particle Counter
b.	0.5 $\mu$	Particle/m <sup>3</sup>	156456	163200	156330	145622	By Particle Counter
c.	1.0 $\mu$	Particle/m <sup>3</sup>	85788	88922	86472	85620	By Particle Counter
d.	2.5 $\mu$	Particle/m <sup>3</sup>	38282	39120	36320	37288	By Particle Counter
e.	5.0 $\mu$	Particle/m <sup>3</sup>	8777	8663	8789	8636	By Particle Counter
f.	10 $\mu$	Particle/m <sup>3</sup>	4630	4782	4663	4558	By Particle Counter

  
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### TEST REPORT

Sample ID: (1) AA/10/22/3423 (2) AA/10/22/3433 (3) AA/10/22/3443 (4) AA/10/22/3453 (2) AA/11/22/3139	Report No: (1) AA/10/22/3423N (2) AA/10/22/3433N (3) AA/10/22/3443N (4) AA/10/22/3453N (2) AA/11/22/3139N	Report Date 10/11/2022
Name and Address of Customer	<b>PNP Maritime Services Private Limited</b> 2nd Floor, Lansdowne House, Mahakavi Bhushan road, Colaba, Mumbai - 400 001, Maharashtra	Order Reference: As per PO No. PNP/March/2021- 2022/20 Dated 31/03/2022
Sample Description/Type	Particle Size (Group: Atmospheric Pollution)	
Sampling Location	Near Weigh Bridge	
Sampling Procedure	By Particle Counter	
Duration of Survey	24 h	

Sr. No.	Parameter	Units	Results					Method Reference
			17.10.2022	20.10.2022	24.10.2022	27.10.2022	31.10.2022	
	Date	-						
1.	Particles	-						
a.	0.3 $\mu$	Particle/m <sup>3</sup>	655632	685496	689532	891203	844567	By Particle Counter
b.	0.5 $\mu$	Particle/m <sup>3</sup>	156230	185963	123458	135490	177845	By Particle Counter
c.	1.0 $\mu$	Particle/m <sup>3</sup>	87872	85694	72593	74086	64856	By Particle Counter
d.	2.5 $\mu$	Particle/m <sup>3</sup>	36302	48561	44586	42596	48596	By Particle Counter
e.	5.0 $\mu$	Particle/m <sup>3</sup>	8782	8598	7458	8540	3596	By Particle Counter
f.	10 $\mu$	Particle/m <sup>3</sup>	4889	1258	5261	4503	1589	By Particle Counter

  
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### TEST REPORT

Sample ID (1) AA/10/22/3374 (2) AA/10/22/3384 (3) AA/10/22/3394 (4) AA/10/22/3414	Report No. (1) AA/10/22/3374N (2) AA/10/22/3384N (3) AA/10/22/3394N (4) AA/10/22/3414N	Report Date: 10/11/2022
Name and Address of Customer	<b>PNP Maritime Services Private Limited</b> 2nd Floor, Lansdowne House, Mahakavi Bhushan road, Colaba, Mumbai - 400 001, Maharashtra	Order Reference: As per PO No. PNP/March/2021-2022/20 Dated 31/03/2022
Sample Description/Type	Particle Size (Group: Atmospheric Pollution)	
Sampling Location	Near Custom Building	
Sampling Procedure	By Particle Counter	
Duration of Survey	24 h	

Sr. No.	Parameter	Units	Results				Method Reference
			03.10.2022	06.10.2022	10.10.2022	13.10.2022	
	Date	-	03.10.2022	06.10.2022	10.10.2022	13.10.2022	
1.	Particles	-					
a.	0.3 $\mu$	Particle/m <sup>3</sup>	562300	577200	564250	556230	By Particle Counter
b.	0.5 $\mu$	Particle/m <sup>3</sup>	163011	145633	133020	125250	By Particle Counter
c.	1.0 $\mu$	Particle/m <sup>3</sup>	76781	78788	76879	75682	By Particle Counter
d.	2.5 $\mu$	Particle/m <sup>3</sup>	48022	49923	46320	45630	By Particle Counter
e.	5.0 $\mu$	Particle/m <sup>3</sup>	8546	8632	8692	8582	By Particle Counter
f.	10 $\mu$	Particle/m <sup>3</sup>	6446	6788	1253	2536	By Particle Counter

  
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### TEST REPORT

Sample ID (1) AA/10/22/3424 (2) AA/10/22/3434 (3) AA/10/22/3444 (4) AA/10/22/3454 (2) AA/11/22/3140	Report No (1) AA/10/22/3424N (2) AA/10/22/3434N (3) AA/10/22/3444N (4) AA/10/22/3454N (2) AA/11/22/3140N	Report Date: 10/11/2022
Name and Address of Customer	<b>PNP Maritime Services Private Limited</b> 2nd Floor, Lansdowne House, Mahakavi Bhushan road, Colaba, Mumbai - 400 001, Maharashtra	Order Reference: As per PO No. PNP/March/2021- 2022/20 Dated 31/03/2022
Sample Description/Type	Particle Size (Group: Atmospheric Pollution)	
Sampling Location	Near Custom Building	
Sampling Procedure	By Particle Counter	
Duration of Survey	24 h	

Sr. No.	Parameter	Units	Results					Method Reference
			17.10.2022	20.10.2022	24.10.2022	27.10.2022	31.10.2022	
1.	Particles	-						
a.	0.3 $\mu$	Particle/m <sup>3</sup>	599877	695823	845236	829876	654129	By Particle Counter
b.	0.5 $\mu$	Particle/m <sup>3</sup>	178258	586492	145869	158421	142596	By Particle Counter
c.	1.0 $\mu$	Particle/m <sup>3</sup>	77778	85965	85236	80775	74259	By Particle Counter
d.	2.5 $\mu$	Particle/m <sup>3</sup>	48797	36598	47583	40783	24589	By Particle Counter
e.	5.0 $\mu$	Particle/m <sup>3</sup>	8778	9569	6358	5581	4856	By Particle Counter
f.	10 $\mu$	Particle/m <sup>3</sup>	5980	7458	4859	2486	1576	By Particle Counter

  
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### TEST REPORT

Sample ID: (1) AA/10/22/3375 (2) AA/10/22/3385 (3) AA/10/22/3395 (4) AA/10/22/3415	Report No. (1) AA/10/22/3375N (2) AA/10/22/3385N (3) AA/10/22/3395N (4) AA/10/22/3415N	Report Date: 10/11/2022
Name and Address of Customer	<b>PNP Maritime Services Private Limited</b> 2nd Floor, Lansdowne House, Mahakavi Bhushan road, Colaba, Mumbai - 400 001, Maharashtra	Order Reference As per PO No. PNP/March/2021- 2022/20 Dated 31/03/2022
Sample Description/Type	Particle Size (Group: Atmospheric Pollution)	
Sampling Location	Near Lal Gate	
Sampling Procedure	By Particle Counter	
Duration of Survey	24 h	

Sr. No.	Parameter	Units	Results				Method Reference
			03.10.2022	06.10.2022	10.10.2022	13.10.2022	
	Date	-	03.10.2022	06.10.2022	10.10.2022	13.10.2022	
1.	Particles	-					
a.	0.3 $\mu$	Particle/m <sup>3</sup>	633621	622360	633020	623000	By Particle Counter
b.	0.5 $\mu$	Particle/m <sup>3</sup>	156262	145628	156663	145630	By Particle Counter
c.	1.0 $\mu$	Particle/m <sup>3</sup>	86663	85633	86892	87855	By Particle Counter
d.	2.5 $\mu$	Particle/m <sup>3</sup>	48282	46620	45477	45620	By Particle Counter
e.	5.0 $\mu$	Particle/m <sup>3</sup>	8888	8771	8632	8778	By Particle Counter
f.	10 $\mu$	Particle/m <sup>3</sup>	4612	4556	4669	4825	By Particle Counter

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### TEST REPORT

Sample ID: (1) AA/10/22/3425 (2) AA/10/22/3435 (3) AA/10/22/3445 (4) AA/10/22/3455 (2) AA/11/22/3141	Report No: (1) AA/10/22/3425N (2) AA/10/22/3435N (3) AA/10/22/3445N (4) AA/10/22/3455N (2) AA/11/22/3141N	Report Date: 10/11/2022
Name and Address of Customer	<b>PNP Maritime Services Private Limited</b> 2nd Floor, Lansdowne House, Mahakavi Bhushan road, Colaba, Mumbai - 400 001, Maharashtra	Order Reference As per PO No. PNP/March/2021- 2022/20 Dated 31/03/2022
Sample Description/Type	Particle Size (Group: Atmospheric Pollution)	
Sampling Location	Near Lal Gate	
Sampling Procedure	By Particle Counter	
Duration of Survey	24 h	

Sr. No.	Parameter	Units	Results					Method Reference
			17.10.2022	20.10.2022	24.10.2022	27.10.2022	31.10.2022	
	Date	-	17.10.2022	20.10.2022	24.10.2022	27.10.2022	31.10.2022	
1.	Particles	-						
a.	0.3 $\mu$	Particle/m <sup>3</sup>	677417	655698	695882	831976	871256	By Particle Counter
b.	0.5 $\mu$	Particle/m <sup>3</sup>	178451	432598	166741	184931	134952	By Particle Counter
c.	1.0 $\mu$	Particle/m <sup>3</sup>	88958	56984	89560	48512	69874	By Particle Counter
d.	2.5 $\mu$	Particle/m <sup>3</sup>	48282	49653	58231	24965	49523	By Particle Counter
e.	5.0 $\mu$	Particle/m <sup>3</sup>	8663	2597	5586	4247	2854	By Particle Counter
f.	10 $\mu$	Particle/m <sup>3</sup>	4600	1279	1759	1075	1669	By Particle Counter

  
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### TEST REPORT

Sample ID (1) AA/10/22/3376 (2) AA/10/22/3386 (3) AA/10/22/3396 (4) AA/10/22/3416	Report No. (1) AA/10/22/3376N (2) AA/10/22/3386N (3) AA/10/22/3396N (4) AA/10/22/3416N	Report Date: 10/11/2022
Name and Address of Customer	<b>PNP Maritime Services Private Limited</b> 2nd Floor, Lansdowne House, Mahakavi Bhushan road, Colaba, Mumbai - 400 001, Maharashtra	Order Reference: As per PO No. PNP/March/2021-2022/20 Dated 31/03/2022
Sample Description/Type	Particle Size (Group: Atmospheric Pollution)	
Sampling Location	Near DIL Main Gate	
Sampling Procedure	By Particle Counter	
Duration of Survey	24 h	

Sr. No.	Parameter	Units	Results				Method Reference
			03.10.2022	06.10.2022	10.10.2022	13.10.2022	
	Date	-	03.10.2022	06.10.2022	10.10.2022	13.10.2022	
1.	Particles	-					
a.	0.3 $\mu$	Particle/m <sup>3</sup>	633620	646200	658282	663250	By Particle Counter
b.	0.5 $\mu$	Particle/m <sup>3</sup>	168711	177181	163200	172811	By Particle Counter
c.	1.0 $\mu$	Particle/m <sup>3</sup>	83588	84562	85692	86320	By Particle Counter
d.	2.5 $\mu$	Particle/m <sup>3</sup>	32505	32330	36820	35711	By Particle Counter
e.	5.0 $\mu$	Particle/m <sup>3</sup>	8663	8787	8663	8230	By Particle Counter
f.	10 $\mu$	Particle/m <sup>3</sup>	6378	6633	6877	6582	By Particle Counter



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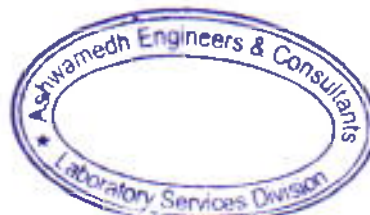


### TEST REPORT

Sample ID: (1) AA/10/22/3426 (2) AA/10/22/3436 (3) AA/10/22/3446 (4) AA/10/22/3456 (2) AA/11/22/3142	Report No: (1) AA/10/22/3426N (2) AA/10/22/3436N (3) AA/10/22/3446N (4) AA/10/22/3456N (2) AA/11/22/3142N	Report Date: 10/11/2022
Name and Address of Customer	<b>PNP Maritime Services Private Limited</b> 2nd Floor, Lansdowne House, Mahakavi Bhushan road, Colaba, Mumbai - 400 001, Maharashtra	Order Reference: As per PO No. PNP/March/2021- 2022/20 Dated 31/03/2022
Sample Description/Type	Particle Size (Group: Atmospheric Pollution)	
Sampling Location	Near DIL Main Gate	
Sampling Procedure	By Particle Counter	
Duration of Survey	24 h	

Sr. No.	Parameter	Units	Results					Method Reference
			17.10.2022	20.10.2022	24.10.2022	27.10.2022	31.10.2022	
	Date	-	17.10.2022	20.10.2022	24.10.2022	27.10.2022	31.10.2022	
1.	Particles	-						
a.	0.3 $\mu$	Particle/m <sup>3</sup>	656131	632489	819736	670259	741589	By Particle Counter
b.	0.5 $\mu$	Particle/m <sup>3</sup>	163020	144765	159760	174064	196587	By Particle Counter
c.	1.0 $\mu$	Particle/m <sup>3</sup>	87847	96583	75737	70321	69582	By Particle Counter
d.	2.5 $\mu$	Particle/m <sup>3</sup>	39920	59684	48105	46102	48642	By Particle Counter
e.	5.0 $\mu$	Particle/m <sup>3</sup>	8582	6582	8949	6596	3598	By Particle Counter
f.	10 $\mu$	Particle/m <sup>3</sup>	6888	5226	2543	2356	1745	By Particle Counter

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### TEST REPORT

Sample ID (1) AA/10/22/3377 (2) AA/10/22/3387 (3) AA/10/22/3397 (4) AA/10/22/3417	Report No. (1) AA/10/22/3377N (2) AA/10/22/3387N (3) AA/10/22/3397N (4) AA/10/22/3417N	Report Date 10/11/2022
Name and Address of Customer	<b>PNP Maritime Services Private Limited</b> 2nd Floor, Lansdowne House, Mahakavi Bhushan road, Colaba, Mumbai - 400 001, Maharashtra	Order Reference As per PO No. PNP/March/2021- 2022/20 Dated 31/03/2022
Sample Description/Type	Particle Size (Group: Atmospheric Pollution)	
Sampling Location	DIL Godown Back Side	
Sampling Procedure	By Particle Counter	
Duration of Survey	24 h	

Sr. No.	Parameter	Units	Results				Method Reference
			03.10.2022	06.10.2022	10.10.2022	13.10.2022	
	Date		03.10.2022	06.10.2022	10.10.2022	13.10.2022	
1.	Particles						
a.	0.3 $\mu$	Particle/m <sup>3</sup>	687177	661250	645122	610010	By Particle Counter
b.	0.5 $\mu$	Particle/m <sup>3</sup>	136601	122633	142556	133010	By Particle Counter
c.	1.0 $\mu$	Particle/m <sup>3</sup>	84561	85822	87141	82600	By Particle Counter
d.	2.5 $\mu$	Particle/m <sup>3</sup>	63360	64431	65336	63020	By Particle Counter
e.	5.0 $\mu$	Particle/m <sup>3</sup>	8554	8728	8825	8663	By Particle Counter
f.	10 $\mu$	Particle/m <sup>3</sup>	5711	5883	5992	5678	By Particle Counter

  
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### TEST REPORT

Sample ID (1) AA/10/22/3427 (2) AA/10/22/3437 (3) AA/10/22/3447 (4) AA/10/22/3457 (2) AA/11/22/3143	Report No (1) AA/10/22/3427N (2) AA/10/22/3437N (3) AA/10/22/3447N (4) AA/10/22/3457N (2) AA/11/22/3143N	Report Date 10/11/2022
Name and Address of Customer	<b>PNP Maritime Services Private Limited</b> 2nd Floor, Lansdowne House, Mahakavi Bhushan road, Colaba, Mumbai - 400 001, Maharashtra	Order Reference As per PO No. PNP/March/2021- 2022/20 Dated 31/03/2022
Sample Description/Type	Particle Size (Group: Atmospheric Pollution)	
Sampling Location	DIL Godown Back Side	
Sampling Procedure	By Particle Counter	
Duration of Survey	24 h	

Sr. No.	Parameter	Units	Results					Method Reference
			17.10.2022	20.10.2022	24.10.2022	27.10.2022	31.10.2022	
	Date		17.10.2022	20.10.2022	24.10.2022	27.10.2022	31.10.2022	
1.	Particles							
a.	0.3 $\mu$	Particle/m <sup>3</sup>	623000	685760	745820	695496	752369	By Particle Counter
b.	0.5 $\mu$	Particle/m <sup>3</sup>	147147	153602	198562	171256	196485	By Particle Counter
c.	1.0 $\mu$	Particle/m <sup>3</sup>	88181	98389	85786	74596	68549	By Particle Counter
d.	2.5 $\mu$	Particle/m <sup>3</sup>	67784	76426	54862	54287	48562	By Particle Counter
e.	5.0 $\mu$	Particle/m <sup>3</sup>	8894	8546	7845	2536	2970	By Particle Counter
f.	10 $\mu$	Particle/m <sup>3</sup>	5882	5280	4589	1859	1236	By Particle Counter

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