

### DPCL/ENV/MOEFCC/2021-035

23.05.2022

To

The Deputy Director General of Forests (C),
Ministry of Environment, Forest and Climate Change,
Regional Office Eastern Zone (EZ),
A/3, Chandrasekharpur,
Bhubaneswar-751023
E-mail: roez.bsr-mef@nic.in

Sub : Half yearly Compliance report of Environment & CR2 clearance for expansion of Dhamra Port at Dhamra, Bhadrak, Odisha for the period Oct'21 to Mar'22.

Ref: Environment & CR2 clearance for Revised Master Plan Development at Dhamra Port dated 15<sup>th</sup> November 2019 bearing F.No.11-104/2009-IA.III.

Dear Sir,

With reference to the above-mentioned letter for the said subject matter, please find enclosed herewith the compliance to the conditions stipulated in the letter for the period Oct'21 to Mar'22 in soft copy for your kind reference. The said period compliance report is also being e-mailed on roez.bsr-mef@nic.in.

Thanking you, Yours Sincerely,

Sugyan Nayak

HOS - Environment

## Encl: As above Copy to:

- The Director (Monitoring –IA-III Division), Ministry of Environment, Forest & Climate Change, Indira Paryavaran Bhawan, Jor Bagh Road, New Delhi – 110003
- Zonal Office, Central Pollution Control Board, Southern Conclave, Block 502, 5th & 6th Floors, 1582
   Rajdanga Main Road, Kolkata 700 107 (W. B.)
- The Member Secretary, State Pollution Control Board, Odisha, Parivesh Bhawan, A/118, Unit 8, Nilakantha Nagar, Nayapalli, Bhubneswar-751012
- The Regional Officer, State Pollution Control Board, Odisha, Plot no. 1602, Ganeshwarpur, Januganj, Balasore – 756019
- Member Secretary OCZMA & Director , Env-cum-Spl. Secretary to Govt., Forest & Environment Dept., Govt. of Odisha, Plot No 108, Surya Nagar, Unit-VII, Bhubaneswar - 751003.

The Dhamra Port Company Ltd (A Whorly Owned Subsidiary of APSEZL) At: Dosings, PC: Dhamra Bhadrak 756 171 Odisha India CIN: D452050R1998PLC005448 Tel: +91 674 230 4500 Fax +91 674 230 3828 info@adanl.com www.adaniports.com

Use of dust suppression system in conveyor

Tarpaulin covering of minerals stored in stack

Use of water mist canon for suppression of

· Road cleaning by mechanized and manual means are being carried out on regular basis.

fugitive dust emission.

**Balf Yearly Compliance Report** Dhamra Port Company Limited Revised Master Plan - Half yearly Compliance report of the conditions stipulated in Environmental and CRZ Clearance of Revised Master Plan Development of Dhamra Port project vide letter dated 15th November 2019 Ref. No. F.No.11-104/2009-1A-III. S. No. Conditions Compliance Status A. Specific Conditions: Construction activity shall be carried out strictly Construction activities are being carried out in line according to the provisions of the CRZ Notification, to the approvals accorded and in compliance to the 2011. No construction work other than those provisions of CRZ notification 2011, as amended till permitted in Coastal Regulation Zone Notification shall be carried out in Coastal Regulation Zone area. All the recommendations and conditions specified All the recommendations and conditions specified by the Odisha State Coastal Zone Management by the Odisha State Coastal Zone Management Authority vide letter No. 163/OCZMA dated Authority vide letter No. 163/OCZMA dated 10.05.2019 shall be complied with. 10.05.2019 are complied. m Consent to Establish/Operate for the project shall Complied. be obtained from the State Pollution Control Board Consent to Establish has been obtained from State as required under the Air (Prevention and Control of Pollution Control Board, Odisha vide letter no. 1874 Pollution) Act, 1981 and the Water (Prevention and IND-II-CTE-6289 dated: 17.02.2020. The copy is Control of Pollution) Act, 1974 enclosed as Annexure-I. Consent to Operate has been obtained from State Pollution Control Board, Odisha vide letter no. 4218-IND-I-CON-6348 dated: 24,04.2020 and is valid till 31.03.2025. The copy is enclosed as Annexure-II. W The project proponent shall comply with the air Complied. pollution mitigation measures as submitted. As a part of existing operation, following air pollution control and mitigation measures are being adopted. Use of dust suppression system in hopper, conveyor belt and transfer points. Pre wetting of cargo before tippling in wagon tippler. Wagon cargo loading by closed silo system. · Covering of outgoing loaded rail wagon at "Wagon covering station". · Regular water sprinkling by tankers are also being carried out. Rain guns are fixed all around the stack yard for suppression of dust during stacking, reclaiming and during high wind period. Dust suppression system at wagon tippler area. · Mobile dust buster is also used in stack yard and other areas for controlling the fugitive emission.

S. N	o. Conditions	Compliance Status
		<ul> <li>Use of leak proof transporting vehicles for intratransportation of materials.</li> <li>Limiting the vehicle speed to 20 km/hr to control the fugitive dust emission.</li> <li>Maximum mechanized handling (Loading and unloading) of cargo from ship.</li> <li>Greenbelt development along the periphery of storage yard /stack yard.</li> <li>Regular monitoring of Ambient Air Quality at 6 locations and DG stack monitoring at 6 locations are being carried out by NABL accredited laboratory following the prescribed guidelines. All the results were within the prescribed limit (Annexure-III).</li> <li>Periodic awareness and training programmes are being conducted regularly among employees and workers.</li> </ul>
٧	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.	Complied.
VI	Dredging shall not be carried out during the fish breeding season.	Noted and the same is being complied.
VII	Dredging, etc. shall be carried out in the confined manner to reduce the impacts on marine environment including turbidity and turbidly should be monitored (preferably monthly) near Kanika Island during the dredging.	Being complied.  Dredging is being carried out in the areas identified and approved as a part of Revised Master plan.  As a part of existing operation, periodic marine water quality monitoring including turbidity is carried out near Kanika Island by engaging MOEF&CC approved laboratory. The details of marine water quality monitoring reports for the period from Oct'21 to Mar'22 is enclosed as Annexure III.
/111	No underwater blasting is permitted.	No underwater blasting is carried out.
IX	Dredged material shall be disposed safely in the designated areas and also to be utilized for beach nourishment. With the enhanced quantities, the impact of dumping on the coastal environment should be studied and necessary measures shall be taken on priority basis if any adverse impact is observed.	Noted and is being complied.  As a part of existing operation, capital and maintenance dredging has been carried out. During the period of Oct'21 to Mar'22, total maintenance dredging was 4.06 MCM. As stipulated in EIA report and discussed in the EAC, dredged materials are disposed inside sea at MOEF&CC approved designated location with (-) 20 m depth. The marine water quality monitoring is being carried out by NABL & MOEF&CC accredited laboratory on periodical basis. The results conclude that there is no significant impact observed on marine water quality.

S. No.	Conditions	Compliance Status
X	Shoreline should not be disturbed due to dumping. Periodical study on shoreline changes shall be conducted and mitigation carried out, if necessary. The details shall be submitted along with the six monthly monitoring report	Noted.  Shoreline monitoring study was carried out as a part of Environment Impact Assessment study for Revised Master plan and further, the same will be carried out at regular intervals to check the impact and if required mitigation measures will be carried out.
XI	While carrying out dredging, an independent monitoring shall be carried out by Government Agency/Institute to check the impact and necessary measures shall be taken on priority basis if any adverse impact is observed.	Noted and will be complied.
XII	The freshwater requirement of 40 MLD will be met by Desalination plant of 40 MLD which will be developed on modular basis	Noted.  Desalination plant of 40 MLD will be developed when required. Existing operational requirements are being fulfilled through Mantai river. Permission for drawal of 2.05 cusec is obtained from Water Resource Department.
XIII	The domestic and industrial wastewater will be treated in STP and ETP and treated water will be reused / recycled for horticulture and other purposes	Noted.  As a part of existing operation, four STP of capacity 150 KLD, 140 KLD, 25 KLD and 15 KLD are functioning for treatment of sewage from Port and township area, 3 nos. of Settling ponds have been constructed for treatment of runoff water. The treated water is being used for dust suppression of internal roads. Periodic testing of water quality is being done by MOEF&CC approved laboratory and the results are being submitted to SPCB/MOEF&CC. All results are well within the prescribed standards. The treated water is being used for horticulture purpose.  The monitoring reports is enclosed as Annexure-III.
XIV	Marine ecological studies and its mitigation measures for protection of phytoplankton, zooplanktons, benthic macrofauna, etc. prepared by Centre of Envotech and Management Consultancy Private Limited (CEMC) as given in the EIA-EMP Report shall be complied with in letter and spirit.	Is being complied.  As part of existing operations, Periodic monitoring program covering all seasons on various aspects of the coastal environs is being carried out by NABL & MoEF&CC accredited laboratory. The monitoring results for the period Oct 21 to Mar 22 is enclosed as Annexure - III.
χv	A copy of the Marine and riparian biodiversity management plan duly validated by the State Biodiversity Board shall be obtained and implement in letter and spirit	Noted.  As a part of EIA for RMP Dhamra, detailed Biodiversity Impact study and Management plan has been prepared and developed by M/s Berhampur University. Same shall be updated for submission to the State Biodiversity Board for validation.
XVI	A periodic monitoring programme covering all the seasons on various aspects of the coastal environments need to be undertaken by NABL	Complied.  As a part of existing operations, periodic monitoring program covering all seasons on various

S. No.	Conditions	Compliance Status
	accredited laboratories during construction and operation phase of the project. The monitoring should cover various physico-chemical parameters coupled with biological indices such as microbes, plankton, benthos and fishes. Deviations in the parameters shall be addressed with suitable measures to conserve the marine environment and its resources.	aspects of the coastal environments is carried out by NABL & MoEF&CC accredited laboratory. The monitoring results for the period Oct'21 to Mar'22 is enclosed as Annexure - III.
XVII	Continuous online monitoring of air and water quality covering the project area shall be carried out and the compliance report shall be submitted to the regional office of MoEF&CC.	Noted.  As a part of existing operations, periodic monitoring of air and water quality is being carried out through MoEF&CC and NABL approved laboratory.
XVIII	Effective and efficient pollution control measures like covered conveyors/stacks (coal, iron ore and other bulk cargo) with fogging/back filters and water sprinkling commencing from ship unloading to stacking to evacuation shall be undertaken. Coal and iron ore stack yards shall be bounded by thick two tier green belt with proper drains and wind barriers wherever necessary. Coal should be handled properly at port limits so that the coal dust will not reach the surrounding areas. Sprinklers shall be used at coal storage regularly and to monitor the coal dust in the air	Noted.  As a part of existing operation, following pollution control measures are being implemented at site  Transportation of Coal/Iron ore is done in covered conveyor belt system.  Water sprinkling is being carried out on road on regular basis  Dust suppression system has been installed in dust prone area to mitigate the fugitive emission.  Dust buster & rain gun system has been deployed in stack yard to mitigate the fugitive emission from the stack yards.  Wagon covering system is being used for covering of all loaded wagons going out of Port premises.  Rain guns and dust buster are being used to sprinkle water on the coal storage regularly to suppress the coal fugitive dust.
XIX	Sediment concentration should be monitored fortnightly at source and disposal location of dredging while dredging. Online monitoring system should be installed for assessing turbidly during dredging.	Is being Compiled.  As a part of existing operation fortnightly monitoring of sediment quality is done through MOEF&CC and NABL approved laboratory.  However, the possibility of installing Online Turbidity Monitoring will be explored.
	Marine ecology shall be monitored regularly in terms of water quality (Salinity, temperature, DO, BOD, PHc, nutrients), sediment quality (Metals, PHc, Organic carbon etc) and biological characteristics (phytoplankton, zooplankton, benthic macrofauna and other marine biodiversity components) as part of the environment management plan specified in the report. Any deviations from the baseline should be reported to the OCZMA/OSPCB	Being complied.  As a part of existing operation periodic monitoring program covering all seasons on various aspects of the marine ecology monitoring is carried out by NABL & MoEF&CC accredited laboratory. The monitoring results for the period Oct'21 to Mar'22 is enclosed as Annexure - III.

S. No.	Conditions	Compliance Status
XXI	Spillage of fuel / engine oil and lubricants from the construction site are a source of organic pollution which impacts marine life, particularly benthos. This shall be prevented by suitable precautions and also by providing necessary mechanisms to trap the spillage.	Noted.  Utmost care is being taken to avoid spillage of fuel/engine oil and lubricants from the construction site. In case of any accidental spillage, saw dust or sand is being used along with absorbent to arrest the spillage. Used oil/waste oil/waste containing oils are handed over to SPCB approved authorized recyclers.
XXII	Necessary arrangements for the treatment of the effluents and solid wastes/ facilitation of reception facilities under MARPOL 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. The provisions of Solid Waste Management Rules, 2016, E-Waste Management Rules, 2016, and Plastic Waste Management Rules, 2016 shall be complied with.	As a part of existing operation, four STP of capacity 150 KLD, 140 KLD, 25 KLD and 15 KLD are functioning for treatment of sewage from Port and township area.  Waste management are being done as per the prescribed Rules. Color coded waste bins have been provided for collection and segregation of different types of waste. Generated wastes are being handled as per the 5R concept of waste management and as per the vision of APSEZ to become "A Zero Waste to landfill Company".  Waste reception facilities as per DG Shipping guidelines have been provided for visiting vessels to dispose ship generated waste. The collected wastes are being handled and disposed as per the prescribed guideline.  Plastic wastes are sent to the Cement Plant for energy recovery through co-processing. Management of plastic waste are being done as per the Plastic Waste Management Rules, 2016  The E-Waste are sent to an authorized recycler for proper disposal as per the E-Waste Management Rules, 2016.
XXIII	Compliance to Energy Conservation Building (ECBC- 2017) shall be ensured for all the building complexes. Solar/wind or other renewable energy shall be installed to meet energy demand of 1% equivalent	Noted & is being complied.  The following initiatives are being taken for conservation of electrical energy:  1. Use of LED lights in place of conventional lighting system in our Port and Township common areas.  2. Use of automatic on/off timers switch in street lightings  3. Use of solar light fitted with LED bulbs  4. Use of translucent sheets in bigger shed for natural lightings during day hours  5. Use of bigger sized glass windows in offices and MCC building for natural lights in day hours,  6. Use of central ACs system instead of individual ACs in bigger offices and buildings.  7. Use of VFD (variable frequency drive) in operational area for power savings,

Revis	sed Master Plan - Half yearly Compliance report of	the conditions stipulated in Environmental and CO
Clearance of Revised Master Plan Development of Dhamra Port project vide letter dated 15th November 201 Ref. No. F.No.11-104/2009-1A-III.		
s. No		Compliance Status
		Installation of roof top solar power plant is under progress.     We are also purchasing renewable energy from open market.
XXIV	risk assessment report, disaster management plan and safety guidelines shall be implemented.	Noted & will be complied.  At present no hazardous or petroleum products are being handled at shore and details RA recommendation will be complied as and when applicable. However, as a part of present operation following measures are being adopted.  Disaster Management Plan has been prepared and approved by District Administration. Periodic mock drills are being carried out. Prescribed Safety guidelines are followed at workplaces. Dedicated team lead by dedicated site safety team along with team of the Corporate are ensuring best safety practices at Port premises.
xxv	Measures should be taken to contain, control and recover the accidental spills of fuel and cargo. Tier 1 should be made available with the port for attending the large oil spills. The company should inform the coast guard for availing tier 2 facility.	Necessary action has been taken to contain, control and recover the accidental spills of fuel and cargo. Oil spill contingency plan has been prepared for Dhamra. Port and submitted to District Administration and Coast guard. Any accidental discharge of oil / lubricants will be handled as per the plan. Port is equipped with oil spill contingency facility and required dispersant chemicals. Seven persons have been undergone IMO Tire 1 training, three persons have undergone IMO Tire 2 training and one person has undergone IMO Tier 3 training at Port. Last drill was conducted on 09.03.2022.
XVI	Necessary arrangement for general safety and occupational health of people should be done in letter and spirit.	Complied.  We have a strict safety regimen with the motto "Safety First".  Safety observations are mandatory from every department of the Port and immediate measures are being taken to rectify the shortcoming.  OHSAS Guidelines and MSIHC Guidelines are followed for handling of Hazardous materials. First aid center facilities have been provided for employees and workers. Inline to this a wellness center is also operated outside the port premises for providing medical facilities for villagers. Vaccination programme is being carried out regularly for our waste management teams. Our

XVII 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

Port is ISO 45001-2018 certified Port. Noted.

Environment Management Plan is enclosed as Annexure-IV.

	ance of Revised Master Plan Development of Dhami No. F.No.11-104/2009-1A-III.	a none project vide letter dated 15" November 201
S. No.	production of the second secon	Compliance Status
		Rs.11.60 Crore has been spent toward Environment management for the period of Oct'2 to Mar'22 and the details is enclosed as Annexus – V.
XVIII	The effluent generated by desalination plant and FSRU should be released at designated sites as suggested in the EIA report.	At present, no FSRU & desalination plant has been developed.
XEX	The company shall draw up and implement Corporate Social Responsibility plan as per the Company's Act of 2013.	
XXX	As per the Ministry's Office Memorandum F. No. 22-65/2017-IA.III dated 1st May 2018, project proponent has proposed an amount of Rs. 21.4998 Crores (0.125% of the project cost) under Corporate Environment Responsibility (CER) Plan for the activities such as Biodiversity Conservation, Turtle and Marine life Research Centre, Water Conservation and Water Recharge, Fishermen Alternate Livelihood Development, Agriculture and Horticulture Promotion, Community Infrastructure and Women Empowerment Promote Entrepreneurship. 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.  Annual CER plan will be prepared inline to actual budget planned for the financial year and the sam will be implemented. The status will be periodical.
والمتعطيبات	andard Conditions:	
-	itutory compliance:	Paralle Control of the Control of th
	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).	Noted.  Preparation of a site-specific Conservation Plan & Wildlife Management plan is in process. The delay is due to Covid-19 pandemic.  However, DPCL has taken all-out effort for conservation of Wildlife in consultation with Forest department, particularly for the migration and nesting of Olive Ridley marine turtle.
3	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	Construction activities are being carried out in line to the approvals accorded and in compliance to the provisions of CRZ notification 2011, as amended till date.

S. No.	Conditions	Compliance Status
	Coastal Regulation Zone Notification shall be carried out in Coastal Regulation Zone area.	
111	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.	Noted.  We have received permission for 3 nos. of bore wells from CGWA for drawl of ground water.
IV	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.
٧	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.  20,000 KVA power is being sourced from NESCO Odisha. The agreement copy was submitted along with last half yearly compliance report vide our letter no. DPCL/ENV/MOEFCC/2020-113 dated 23.11.2020.
VI	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.  License for storage of diesel from Chief Controller of Explosives and NOC from fire department were submitted along with last half yearly compliance report vide our letter no. DPCL/ENV/MOEFCC/2020-113 dated 23.11.2020.
	II. Air quality monitoring and preservation:	
	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>30</sub> and PM <sub>25</sub> in reference to PM emission, and SO2 and NOx in reference to SO2 and NOx 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.	Noted.  Ambient Air Quality Monitoring (twice a week) is carried out by NABL & MoEF&CC accredited agency. All emissions are well within the prescribed standards.  Air monitoring is being carried out at 6 locations (3 inside & 3 outside). The locations are selected as per the EIA and at an angle of 120 each covering both upwind & down wind.  Air monitoring location map was submitted along with half yearly compliance report vide our letter no. DPCL/ENV/MOEFCC/2020-113 dated 23.11.2020.
п	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	Noted.  As a part of existing operation, transportation of Coal/Iron ore is done in covered conveyor belt system. Water Sprinkling is carried out on road on regular basis through water tanker. Dust suppression system has been installed in dust prone areas to mitigate the fugitive emission. Dust buster & rain gun system has been deployed in stack yard to mitigate the fugitive emission from the stack yards.
2.7.5	Shrouding shall be carried out in the work site enclosing the dock/proposed facility area. This will	As a part of existing operation, following pollution control measures are being implemented at site

S. No.	Conditions	Compliance Status
	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.	means are carried out on regular basis.     Regular water sprinkling by tankers are also carried out.
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.	Noted No such activity has been carried out during Oct'21 to Mar'22.
٧	The vessels shall comply the emission norms prescribed from time to time.	MARPOL and Ballast Water Convention guidelines are enforced by DPCL for visiting ships.
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.	Noted As a part of existing operation 6 nos, of standby DG Sets of capacity ranging from 160 KVA to 200 KVA are in position for emergency backups & uninterrupted power supply to the water supply system and firefighting system
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	Noted.  DPCL has an exclusive rail connectivity for the project and has proposal for future expansion of rail-road connectivity.  Besides, DPCL has participated with PWD for maintenance and improvement of the main service road to Dhamra and has shared the cost of development.  As a part of RMP EIA studies, Traffic study was conducted for assessment & evaluation of

S. No	Conditions	Compliance Status
	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.	approved as a part of Phase —II clearance) with future provision of Two lane, to be developed as a part of Revised Master Plan to connect Bhadrak & Dhamra Port. Based on this —
	III. Water quality monitoring and preservation	
Ĺ	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.	Drainage pattern of the area is maintained. Creeks are periodically cleaned to ensure free flow of water from both outside and inside. Further inline to Revised Master Plan proper drainage facility will be developed as per the drainage plan.
0.	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.	Noted.  DPCL ensuring dredging through TSHD and further regular marine monitoring is carried out to check the level of turbidity.  Silt curtain shall be used, when working near sensitive areas.
101	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.	Complied.  Vessels are not allowed to discharge the onboard wastewater in estuary/channel. The vessels have their own STP where sewage water is being treated. However, DPCL will explore the possibility of treating wastewater generated from ships.
IV .	Measures should be taken to contain, control and recover the accidental spills of fuel and cargo handle.	Noted. Oil spill control equipment such as booms / barriers are in readiness for oil containment and skimmers for recovery. Depending upon the type of oil spill, containment measures will be carried out in cooperation of the Coast-Guard. Seven persons have been undergone IMO Tire 1 training

S. No.	Conditions	Compliance Status
		and three persons have undergone IMO Tire 2 training and one person has undergone IMO Tier 3 training at Port. Oil Spill drills are conducted on a regular basis and the last drill was conducted on 09.03.2022.
X	The project proponents will draw up and implement a plan for the management of temperature differences between intake waters and discharge waters.	Noted. As of existing operation facility, there is no intake or discharge.
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.	Utmost care is being taken to avoid spillage of fuel/engine oil and lubricants from the construction site. In case of any accidental spillage, saw dust of sand is being used along with absorbent to arrest the spillage. Used oil/waste oil/waste containing oils are handed over to SPCB approved authorized recyclers.  Marine water quality & productivity is monitored by MoEF&CC accredited laboratory. There is no adverse impact on water quality and marine productivity in the vicinity.
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.  As a part of existing operation, required fresh water is sourced with the permission from Water Resource department, Government of Odisha.
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.	Noted.  As a part of existing operation, four numbers of STI of capacity 140 KLD, 150 KLD, 25 KLD and 15 KLD are used for treatment of sewage from Port and township area. Periodic testing of water quality is being done by MOEF&CC approved laboratory and the results are being submitted to SPCB/MOEFCC All results are well within the prescribed standards. The treated water is being used for horticulture purpose.
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.	30,754.862 KL of wastewater generated during Oct-21 to Mar-22 and has been treated in STP /ETF before reusing for Horticulture/dust suppression purpose.
X	No diversion of the natural course of the river shall be made without prior permission from the Ministry of Water resources.	No such diversion is required / proposed for the project.
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.	Noted and will be complied.

S. No.	Conditions	Compliance Status
ı	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	As a part of existing operation Noise monitoring in
JI	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.	As a part of existing operations,  Noise attenuation is being practiced for noisy
107	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.	Noted. DG set used in existing operation is equipped with acoustic enclosure and noise barrier.
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.	Noted.  As part of Existing operation, noise monitoring is carried out at 6 (six) locations, on monthly basis by engaging NABL & MOEF&CC accredited laboratory. All results are within the prescribed limits. The result is enclosed as Annexure – III.
- 17	/. Energy Conservation measures	
	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.	Noted.  DPCL had already installed solar lights along the roads and common areas. Solar power generation activity will be continued in other areas.  Installation of roof top Solar Panel is under progress.
	Provide LED lights in their offices and residential areas.	Noted.  LED lights are fitted in township and Port common area. Lighting of many operational areas are also replaced with LED lights wherever possible. DPCL will further explore the possibility of using more LED light in their offices and residential area.
٧	/I. Waste management	
	Dredged material shall be disposed safely in the designated areas.	Complied.  As a part of existing operation, maintenance dredging has been carried out during the period of Oct'21 to Mar'22. As stipulated in EIA report and

S. No.	Conditions	Compliance Status
		discussed in the EAC, dredged materials are disposed inside sea at MOEF&CC approved designated location. The marine water quality monitoring is being carried out by NABL & MOEF&CC accredited laboratory on periodical basis. The results conclude that there is no significant impact observed on marine water quality.
Ш	Shoreline should not be disturbed due to dumping. Periodical study on shoreline changes shall be conducted and mitigation carried out, if necessary. The details shall be submitted along with the six monthly monitoring report	
=	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	As a part of existing operation 3 nos, of settling pond has also been constructed with addition of chemical dosing for treatment of wastewater generated from the port.  Hazardous waste is being handled as per the Hazardous waste Management Rule. We have color coded waste bins for segregating different category of solid waste. Waste generated is being handled in line to 5R concept of waste management, as per the vision of APSEZ to become "A Zero Waste to landfill Company".
tV.	The solid wastes shall be managed and disposed as per the norms of the Solid Waste Management Rules, 2016	Noted  DPCL has developed a vision for making itself – "A  Zero Waste to Landfill Port" by adoption of 5R principle of waste management i.e., Reduce, Reuse, Reprocess, Recycle & Recover.  During the period Oct'21 to Mar'22, a total quantity of 155.310 MT of solid waste has been handled in line to 5R concept.  Color coded bins have been provided for segregation of different category of solid waste. Biodegradable wastes are used for compost preparation. Recyclable wastes are handed over to
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.	authorized recyclers.  Construction and demolition activities related waste are handled as per Construction and Demolition Waste Management Rules, 2016 and used for filling low lying area within our port premises.
٧١	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.  DPCL has undertaken the management of solid waste with a vision for achieving – "A Zero Waste to landfill Port" by adopting 'SR principle of waste management i.e., Reduce, Reuse, Reprocess, Recycle & Recover'.

S. No.	Conditions	Compliance Status
		During the period Oct'21 to Mar'22, a total quantity of 155.310 MT of solid waste has been handled in line to 5R concept.  We have color coded bins for segregating different category of solid waste. Biodegradable wastes are used for compost preparation. Recyclable wastes are handed over to authorized recyclers.
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	Complied. CFLs and TFLs are properly collected and disposed of for recycling to authorized e-waste recyclers 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	Noted Oil spill contingency plan has been prepared for Dhamra Port and submitted to District Administration and Coast guard. List of equipment is enclosed as Annexure-VII. Any accidental discharge of oil / lubricants will be handled as per the plan. Port is equipped with oil spill contingency facility and required dispersant chemicals. Seven persons have been undergone IMO Tire 1 training, three persons have undergone IMO Tire 2 training and one person has undergone IMO Tier 3 training at Port.
1	VII. Green Belt:	
1	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.	Around 11000 nos. of native trees have been planted in degraded village forest land and 5250 nos. of trees have been planted in Port during Oct'21 to Mar'22.  Earlier plantation has been done along both edges of the 62.5 km rail corridor, in adjacent villages and inside the port premises. Photographs are enclosed as Annexure-VIII.  As a part of existing operation, a large nursery of multi species has been established for greenbelt development. The nursery constructed in an area of 1.5 acres with modern poly house & green house for effective plant production. More than 70 thousand saplings were developed from the nursery during last year having local plant species, forest species, seasonal plants, ornamental shrubs, Indoor plants, medicinal plants, etc. Forest species and local species like Casuriana, Terminalia, Bahunia, Pongamia, Tecoma, Peltophoroum, Delonix, Neem, Calliandra, Bakul, Plumeria, Conocarpous etc are produced.
	Top soil shall be separately stored and used in the development of green belt	Complied.

S. No.	Conditions	Compliance Status
1	VIII. Marine Ecology:	
1	Dredging shall not be carried out during the fish breeding and spawning seasons.	Noted and is being complied.
11	Dredging, etc. shall be carried out in the confined manner to reduce the impacts on marine environment	Noted Dredging is being carried out in the areas identified and approved as a part of Revised Master plan. As a part of existing operation, Periodic marine water quality monitoring including turbidity is carried out near Kanika island by engaging MOEFCO approved laboratory. The details of Marine Water quality monitoring reports for the period Oct'21 to Mar'22 is enclosed as Annexure III.
ш	The dredging schedule shall be so planned that the turbidity developed is dispersed soon enough to prevent any stress on the fish population.	Noted & is being complied.
IV	While carrying out dredging, an independent monitoring shall be carried out through a Government Agency/Institute to assess the impact and necessary measures shall be taken on priority basis if any adverse impact is observed	Noted and will be complied.  Dredging is being carried out in the areas identified and approved as a part of Revised Master plan.
	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 & will be complied.  As a part of EIA for RMP Dhamra, detailed Biodiversity Impact study and Management plan has been prepared and developed by M/s Berhampur University. Same shall be updated for submission to the State Biodiversity Board / CRZ authority for validation.
	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	As a part of existing operation periodic monitoring program covering all seasons on various aspects of the marine ecology monitoring is being carried out by NABL & MoEF&CC accredited laboratory.
	C. Public hearing and Human health Issues:	
	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	Noted & Complied. As a part of existing operation periodic VOCs monitoring is being carried out by NABL & MoEF&CC accredited laboratory. Report is enclosed as Annexure - III.

S. No	Conditions	Compliance Status
11	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.	Complied  Workers are strictly enforced to wear PP equipment's like dust mask, ear-muffs, ear plug
BI	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.	Not Applicable.
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	The employees, workers of DPCL have been trained on safety guidelines. Regular Fire training, Mock
٧	Emergency preparedness plan based on the Hazard identification and Risk Assessment (HIRA) and Disaster Management Plan shall be implemented	Complied.  As a part of existing operation, DPCL have Disaster Management Plan and Emergency Response Plan, that are implemented as and when required. Copy was submitted along with last half yearly compliance report vide our letter no. DPCL/ENV/MOEFCC/2020-50 dated 23.05.2020.
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	Noted.  Maximum construction labor engaged at construction site are from nearby village areas and are staying at their own house. Construction labors coming from outside area are residing in our workers colony specially built for non-local labors. All basic facilities such as clean water, electricity, toilet, bathroom, health care, STP, safe drinking water etc. are provided in this colony.  Photographs attached as Annexure X.
	Occupational health surveillance of the workers shall be done on a regular basis	Complied Occupational Health Surveillance of the workers is being carried out on half yearly basis at the time of gate pass renewal.
X	. Corporate Environment Responsibility:	
10000	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	Noted. Copy of APSEZ Environment policy was submitted along with half yearly compliance report vide our letter no. DPCL/ENV/MOEFCC/2020-113 dated 23.11.2020.

Clear	ed Master Plan - Half yearly Compliance report of ance of Revised Master Plan Development of Dhami Vo. F.No.11-104/2009-1A-III.	the conditions stipulated in Environmental and CR ra Port project vide letter dated 15 <sup>th</sup> November 201:
S. No		Compliance Status
	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.	
H	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.	Management Cell, staffed with qualified manpower at site supported by team at Head Office in
401	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.	Noted. Internal and external IMS audit (Integrated Management System) is being carried out by internal auditor (half yearly) / external agency (annually) as per ISO 14001:2015 (Environment Management System). Same will be continued for Revised Master Plan development of the Port.
)	(L Miscellaneous:	to the control of the
	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.	Complied The Paper clippings of the Advertisement was already submitted vide our letter no DPCL/ENV/OSPCB/2020-20 dated 01.02.2020.
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.	Complied. The receipt of the said letters was already submitted vide our letter no DPCL/ENV/OSPCB/2020-20 dated 01.02.2020.
	The project proponent shall upload the status of compliance of the stipulated environment	Complied.

Clear	sed Master Plan - Half yearly Compliance report of rance of Revised Master Plan Development of Dham No. F.No.11-104/2009-1A-III.	ra Port project vide letter dated 15th November 2015
s. No		Compliance Status
	clearance conditions, including results of monitored data on their website and update the same on half-yearly basis.	Status of Compliance of the stipulated environmen
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.	Last Half Yearly compliance report was submitted vide letter no. DPCL/ENV/MOEFCC/2021-098
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	Environmental Statement for FY 2020-21 was submitted to SPCB Odisha vide our letter no. DPCI/FNV/OSPCR/2021-075 dated 14.09.2021
VI	The criteria pollutant levels namely; PM <sub>2.5</sub> , PM <sub>10</sub> , SO <sub>2</sub> , NOx (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.	Complied  As a part of Existing operation Ambient Level is being monitored with a frequency (weekly twice) by a NABL & MOEF&CC accredited laboratory. The Monitoring data is being displayed at DPCL main gate for public view.
VII	The project proponent shall inform the Regional Office as well as the Ministry, the date of financial closure and final approval of the project by the concerned authorities, commencing the land development work and start of production operation by the project	Noted.
VIII	The project authorities must strictly adhere to the stipulations made by the State Pollution Control Board and the State Government.	Complied.  Consent to Establish obtained from State Pollution Control Board, Odisha vide letter no. 1874 IND-II- CTE-6289 dated: 17.02.2020. The copy is enclosed as Annexure – I.  Consent to operate for Phase-I & Phase-II has been renewed from State Pollution Control Board vide letter no.4218-IND-I-CON-6348 dated 24.04.2020 valid till 31.03.2025. The copy is enclosed as Annexure-II.
	The project proponent shall abide by all the commitments and recommendations made in the EIA/EMP report, commitment made during Public Hearing and also that during their presentation to the Expert Appraisal Committee	Noted. Environment Management Plan is enclosed as Annexure IV. Commitments made during Public hearing are being complied.
×	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.  Port layout is enclosed as Annexure- XII.
X3	Concealing factual data or submission of false/fabricated data may result in revocation of this environmental clearance and attract action	Noted

S. No.	Conditions	Compliance Status
	under the provisions of Environment (Protection) Act, 1986.	
XII	The Ministry may revoke or suspend the clearance, if implementation of any of the above conditions is not satisfactory	Noted
XIII	The Ministry reserves the right to stipulate additional conditions if found necessary. The Company in a time bound manner shall implement these conditions.	Noted
XIV	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.	Noted and is compiled with full cooperation during the inspection.
xv	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
XVI	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

## **List of Annexures**

Sl.No	Annexure Number	Details
01	Annexure-I	Consent to Establish
02	Annexure-II	Consent to Operate
03	Annexure-III	Environment Monitoring Report
04	Annexure-IV	Environment Management Plan
05	Annexure-V	Environment Management Expenses
06	Annexure-VI	CSR Plan & Expenditure details
07	Annexure-VII	List of Oil Spill Control Equipment
80	Annexure-VIII	Greenbelt Photograph
09	Annexure-IX	Fire Training and Mock drill
10	Annexure-X	Labour colony photograph
11	Annexure-XI	Environment Statement
12	Annexure-XII	Port Layout Map



OFFICE OF THE

Tel: 2564033/2563924 EPABX: 2561909/2562847 E-mail: <u>paribesh1@ospcboard.org</u> Web site: www.ospcboard.org

## STATE POLLUTION CONTROL BOARD, ODISHA

Parivesh Bhawan, A/118, Nilakantha Nagar, Unit-VIII, Bhubaneswar - 751 012

> By Speed Post / Through Online

No. 1874 /

**IND-II-CTE-6289** 

Date 17.02.2020/

## **CONSENT TO ESTABLISH ORDER**

In consideration of the online application no. 2231670 for obtaining Consent to Establish of M/s Dhamra Port Company Ltd. the State Pollution Control Board is pleased to convey its Consent to Establish Under Section 25 of Water (Prevention & Control of Pollution) Act, 1974 and Under Section 21 of Air (Prevention & Control of Pollution) Act, 1981 for Revised Master Plan Development (5 years) of Dhamra Port for enhancement of Cargo Handling capacity of the port (bulk cargo, LNG / POL / Crude oil / Container / Multipurpose Cargo, Liquid / Cryogenic / Gas Cargo, Barges along with port backup facility / Infrastructure / Port Construction Equipment Facility) from 96.3 MMTPA & 1 Million TEU containers to 169.5 MMTPA along with installation of DG set of capacity 1x12000 KVA with additional cost of ₹ 17,518 Crore over a total area of 2013.4 Ha, At/Po - Dosinga, Via- Dhamra (plot nos. & khata nos. as mentioned in application form) in the district of Bhadrak with the following conditions.

### **GENERAL CONDITIONS**

- 1. This Consent to Establish is valid for the Port activity as mentioned in the application form. This order is valid for five years. The proponent shall commence construction of the project within a period of five years from the date of issue of this order. If the proponent fails to do substantial physical progress of the project within five years then a renewal of this Consent to Establish shall be sought by the proponent.
- 2. The industry shall comply to the provisions of Environment Protection Act, 1986 and the rules made there under with their amendments from time to time such as the Hazardous and Other Wastes (Management and Trans-boundary Movement) Rules, 2016 as amended from time to time, Hazardous Chemical Rules, / Manufacture, Storage and Import of Hazardous Chemical Rules, 1989 etc. and amendments there under. The industry shall also comply to the provisions of Public Liability Insurance Act, 1991, if applicable.
- 3. The Industry is to apply for grant of Consent to Operate under Section 25/26 of Water (Prevention & Control of Pollution) Act, 1974 & under Section 21 of Air (Prevention & Control of Pollution) Act, 1981 at least 3 (three) months before the commercial production and obtain Consent to Operate from this Board.
- 4. This Consent to Establish is subject to statutory and other clearances from Govt. of Odisha and/or Govt. of India, as and when applicable.

#### **SPECIAL CONDITIONS:**

#### **GENERAL:**

 The proponent shall obtain CRZ and Environmental Clearance from MoEF&CC, Govt. of India for Revised Master Plan Development (5 years) for enhancement of



cargo handling capacity from 96.3 MMTPA & 1 Million TEU containers to 169.5 MMTPA.

- The proponent shall obtain forest clearance if forest land is involved in the project area.
- 3. This Consent to Establish is granted for the capacity as mentioned above and any expansion in the capacity, change or modification in the process, addition, alternation any nature has to be undertaken with prior approval of the Board. For any change in the site or area, fresh Consent to Establish has to be obtained from the Board. The proponent shall carry out construction activity as per approved revised lay out map (enclosed). If the proponent wants to change the approved plant layout map, they can submit a modified plant layout map with adequate justification for such modification.
- The proponent shall implement the pollution control measures and safeguards as proposed in the Environment Management Plan (EMP).
- The proponent shall obtain permission from concerned authorities for drawal of surface water.
- The construction and demolition wastes to be generated from the proposed project shall be disposed of in accordance with the provision under "Construction & Demolition Wastes Management Rules 2016".
- The proponent shall comply to the provisions of E-Waste (Management) Rules, 2016 and shall handover e-waste to authorized collection centers/ register dismantlers/ recyclers for proper disposal of e-waste.
- All the plastic waste generated from industry during construction and commissioning shall be collected and sent for co-processed in a cement kiln.
- Sector wise follow up of some 'DO & DONTS' by the ground workers shall be made mandatory for better maintenance of material and machines to ensure prevention of hazards / accidents to some extent.
- 10. Temporary colonies of work force shall be established sufficiently away from the High Tide Line and proper sanitation including toilets and bathrooms shall be provided to the inhabitants to prevent abuse of the inter tidal area. Sewage and other wastes generated in these settlements shall not be released to the creek. Work force shall be provided with adequate fuel to discourage them from cutting nearby tree for firewood.
- 11. 'Good House Keeping' is the most important area of concern and it shall be attained by developing available human resources through conducting routine in house workshops on different activities for the betterment of the environment and welfare of the workers and organization.
- Comprehensive structure of "Environmental Management Cell" and the infrastructure facilities shall be developed etc. shall be detailed.
- Present & post project land use pattern of acquired land shall be prepared and submitted to the Board for reference.
- 14. The impact on marine ecology during the construction phase shall be largely confined to the duration over which the activities are spread. Hence, the key factor in minimizing the adverse impacts shall be the reduction in the construction period at the site.



- 15. The socio-economic especially related to fishing, infrastructure development etc. shall be studied as large scale infrastructure like road network, railways, power lines etc. shall develop in the vicinity of area due to this project.
- 16. Monitoring of the marine environment shall be conducted regularly during dredging and post-dredging and necessary corrective measures shall be carried out to conserve the marine environment.
- 17. The inter tidal and near shore areas shall be restored to their original contours once the construction activities are completed. General clean – up along the corridor used for construction related activities, adjacent inter tidal areas, creeks etc. shall be undertaken and all the discarded materials must be removed from the site and aesthetic quality of the surroundings restored, once the construction operations are completed.
- Detailed construction activities taken up in the CRZ area shall be submitted to the Board at the time of grant of Consent to Operate.
- 19. Details of transportation and its impact during transportation of the stones and other construction material for the construction of the groynes breakwaters and other Port facilities shall be submitted to the Board.
- Road connectivity shall be developed by the Port Authority. Fly ash shall be used for road development. Agreement with power plants shall be made for lifting of ash from power plant.
- 21. A green belt of adequate width and density preferably with local species along the periphery of the Port shall be raised so as to provide protection against particulates and noise. It must be ensured that at least 33% of the total land area shall be under permanent green cover, in such a manner that, atleast plantation shall be taken up at least in 20% of the total green belt area and progressively achieve 100% in a span of five years and under no circumstances this land earmarked for green belt shall be used for any other purpose.
- Open storage yards for dust prone materials shall be surrounded with green belt.
   Plantation and development of lawns shall be undertaken to minimize the effect of dust and noise.
- The Port authority shall take up adequate measure for routine health checkup of its employees / workers and the people residing in the neighborhood of the plant free of cost.
- 24. The civil construction shall be carried out with the fly ash bricks. If the fly ash bricks are not available locally the civil construction may carried out with other bricks with prior intimation to the concerned Regional Office of SPC Board. A quarterly statement indicating the use of fly ash bricks during civil construction shall be submitted to the Board for record.
- 25. Vehicle hired for bringing construction material at site should be in good condition and shall have valid Pollution Under Check (PUC) Certificate and to confirm to applicable air and noise emission standards and shall be operated only during nonpeaking hours.
- 26. The Board may impose further conditions or modify the conditions stipulated in this order during installation and /or at the time of obtaining consent to operate and may



revoke this clearance in case the stipulated conditions are not implemented and /or any information suppressed in the application form.

## WATER POLLUTION:

27. The domestic wastewater generated from the industry shall be treated in sewage treatment plant of adequate capacity to meet the following standards as notified by the MoEF&CC, Govt. of India vide G.S.R. 1265 (E), dated 13.10.2017. The treated water shall be reused for dust suppression, irrigating greenbelt etc. Under no circumstances there shall be any discharge of treated waste water to outside the factory premises.

SI. No.	Parameters	Standards
1.	pH	6,5-9.0
2.	BOD (mg/l)	30
3.	TSS (mg/l)	<100
4.	Fecal Coliform (MPN/100ml)	< 1000

- The proponent shall adopt Zero Liquid Discharge (ZLD) concept and under no circumstances the waste water shall be discharged to outside the premises.
- 29. The proponent shall construct dedicated drainage system of runoff water in the whole Port area and the runoff water shall be treated properly and collected for use in the purpose of sprinkling at transfer points of conveyor belts and roads and the surplus water shall be discharged to outside of the Port premises.
- The proponent shall not discharge untreated runoff water from the berths including other Port areas to the sea harbor under any circumstances.
- 31. The spillage of bulk items shall be minimized as these materials reach the dock waters, which sometimes accumulate in the sediments. These pollutants and metals may mobilized by microbes or bottom disturbances and get back into the dock waters and ultimately reach water body.
- 32. Strict prohibition shall be practiced against the discharge of ballast water and sediment in the dock water, estuarine / near shore waters to prevent introduction of exotic microorganisms including pathogens in the local waters.
- 33. The monitoring of the marine environment during dredging and post dredging over a period shall be carried out and the corrective measures shall be taken to conserve the marine environment.
- 34. Steps shall be taken towards the maintenance of health of the study area, critical locations shall be carefully selected and designed as monitoring sites for periodic monitoring with respect to water quality, sediment quality and flora and fauna.
- The proponent shall install Effluent Treatment Plant (ETP) of capacity 3 MLD to treat the waste water generated in the berth, stack yard and other areas of the Port.
- Details of drainage system in the berth and stack yard and the Effluent Treatment Plant shall be provided in order to treat the discharge/runoff form the stack yard.
- 37. The surface run off from open stack yards and mineral handling area shall be collected and adequately treated to meet prescribed standard for inland surface water before discharge to river.



- Adequate firefighting system shall be adopted at the coal stock yard to control fire hazard if any.
- 39. Leachate from storage of chemicals and other materials having toxic content if any shall be collected and treated properly. Care shall be taken to prevent the ground water contamination.
- 40. An effective oil spillage containment and management plan shall be evolved with the involvement of various agencies like Port, Pollution Control Board, Indian Coast Guard Oil Companies etc.
- 41. On site living rooms of workers and the gas storage shall be well apart to minimize the risk of accidents. Adequate safety measures including provision of gas mask and ear plugs during cutting operation and medical treatment facilities for workers in case of accidents shall be ensured. The working place shall be provided with better sanitation facilities.
- 42. The sea water in the harbor area shall meet the water quality criteria for SW-IV class of sea water as given below:

a) pH . 6.5 – 9.0

b) Dissolved oxygen : 3.0 mg/l or 40% of saturation value

whichever is high.

c) Colour and odour . No visible colour or offensive odour

d) Floating matter, Oil & grease : 10 mg/l

and scum including petroleum product

e) Fecal coliform : 500 MPN/100 ml

f) BOD (3 days) at 27°C : 5 mg/l

- Maximum precaution shall be taken to minimize spreading of sediments to the surrounding area which will otherwise increase turbidity in the river.
- 44. Rain water harvesting shall be followed by utilizing the rain water collected from the roof of the administrative buildings for recharging of ground water within the premises as per the concept and practices prescribed by CPCB.

#### AIR POLLUTION:

- 45. Necessary preventive measures shall be taken during construction phase so that the ambient air quality including noise shall conform to National ambient air quality standards and standards for noise in industrial area as per Annexure-I & II. Ambient air quality at the boundary of the Port premises shall meet the prescribed standards of the Board as per Annexure I. The ambient air quality monitoring report shall be submitted to the Board every month.
- 46. The ambient air quality including noise shall be within the prescribed norms of Environment Protection Act, 1986 for industrial area and at least 04 continuous ambient air quality monitoring stations around the Port premises shall be set up to monitor Suspended Particular Matter, SO<sub>2</sub>, NOx, CO and other important parameters within at least to the distance in down wind direction and where maximum ground level concentration is anticipated. The exact location of the monitoring stations shall be finalized in consultation with the State Pollution Control Board.
- 47. The height of the stack attached to the D.G sets shall confirm to the following:



H = h + 0.2√KVA (Where, h = Height of the building where it is installed in meter KVA = Capacity of D.G Set and H = Height of the stack in meter above ground level)

- 48. Wire mesh screen of height 9 meter shall be provided all along the boundary of the Port premises to avoid fugitive dust emission to the surroundings.
- 49. To minimize noise and vibration, heavy machinery shall be properly installed and maintained. Personal protection in the form of earplugs shall be made available to the workers, who are exposed to the high noise areas like workshop, dumper house, crane operation, tipper shop etc.
- 50. The noise level during pilling, transport and erection of structures etc. shall be kept to a minimum through proper lubrication, muffing and modernization of equipments.
- Air compressor and DG set shall be acoustically designed and shall be housed in appropriate acoustic enclosures so that the noise level outside it shall conform to the prescribed norms.
- 52. Water sprinkling, use of wind barriers and covered conveyer at various stages of coal handing shall be practiced. Other exhaust arrangement and bag filter may be included to minimize SPM content. While loading and unloading coal and other bulk materials through grab and conveyers; the dropping height shall be minimized.
- 53. The pollution caused by coal / iron ore is aggravated by its dispersal with winds. Since the wind in the area is strong it is recommended that the coal / iron ore shall be sprinkled with water so as to reduce the chances of the dust dispersed over a large area including the sea/river.
- Adequate dust suppression and or extraction system shall be installed at all potential dust generating points in ore/mineral handling system to minimize fugitive emission.
- The collection and handling of raw materials shall be carried out in closed conveyor so that fugitive emission will be minimum.
- The ballast shall be scientifically disposed.

#### SOLID AND HAZARDOUS WASTE:

- Dedicated temporary storage facility of used / waste oil, grease etc. shall be provided inside the Port premises for final disposal.
- 58. Mechanisms shall be evolved for proper monitoring, effective handling and transportation of hazardous chemicals. The mechanism for import of hazardous wastes may be strengthened with involvement of the State Pollution Control Boards.
- 59. An effective wastes collection, treatment and disposal mechanism shall be evolved for incoming ships as well as waste generated within the Port that include ballast and bilge water, solid waste, cargo waste, kitchen waste, toilet effluent, packing materials, floating debris, construction left over materials etc. A detail management plan to this effect shall be submitted to the Board.
- 60. Effective monitoring system shall be evolved to check the release of spillage of oil into the dock waters, estuary and near shore water by ship and also during transportation. Proper collection and treatment facilities shall be provided for proper treatment and disposal after achieving the standards.



- 61. A comprehensive Disaster Management Plan shall be formulated involving concerned agencies considering various aspects like containment of large scale oil spillage, accidental hazards arising from handling of dangerous / inflammable cargoes as well as natural calamities.
- 62. The industry shall obtain authorization for management of Hazardous Waste as per previsions of Hazardous and Other Wastes (Management and Trans-boundary Movement) Rules, 2016 as amended from time to time.
- Municipal Solid Waste generated from the Port shall be disposed off as per the Solid Waste Management Rules, 2016 and amendment thereafter.
- 64. The proponent shall establish Mechanized Waste Convertor having polycrack method and other similar method for processing of Municipal Solid Waste generated from the Port, under covered shed to produce valuable products like oil, water, gas, carbon, metal, glass etc.
- Spoils generated from dredging activity shall be cautiously disposed off in a proper manner to avoid contamination as recommended in the EIA.
- 66. The solid waste generated as ETP sludge and from other sources shall be suitably disposed off without causing any public nuisance or environmental contamination.
- All compliance shall be made with respect to manufacture, storage and import of Hazardous Chemical Rule, 1989 & amended thereafter and other provisions of the Environment Protection Act, 1986.

Encl: (i) Annexure – I & II (ii) Approved layout map

MEMBER SECRETARY

To,

Cdr. Anil Kumar Kar, M/s. Dhamra Port Company Ltd., Fortune Towers, 2<sup>nd</sup> Floor, Chandrasekharpur, Bhubaneswar-751023, Odisha

Memo No. 1875 /Date 17:02.2020 /

Copy forwarded to:

- 1. The Director (Env.)-cum-Special Secretary to Govt., F & E Deptt., Govt. of Odisha.
- 2. The District Magistrate & Collector, Bhadrak
- 3. District Industries Centre, Bhadrak
- 4. The Director, Factories & Boiler, Bhubaneswar
- HSM Cell, SPC Board, Bhubaneswar
- 6. DFO, Bhadrak
- Consent to Operate Section, SPC Board, Bhubaneswar
- 8. Regional Officer, SPC Board, Balasore
- 9. Copy to Guard file

CHIEF ENV. ENGINEER

(Page 7 of 7)

टियान :

ा जब कभी और अर्थ भी किसी अध्ये-अधने प्रवर्ग के रिस्ते को क्रिक प्रबोधन दिनों पर वाधित मूल्य, उपर विनिर्दिश सीमा से अधिक से तो हुते नियमित या निरंतन प्रजेशन तथा अतिरिक्ता अनेकन करकाने के लिये पर्याप्त कारण समझा जायेगा।"।

[WI. H. #4-15017/43/2007-H.W. 84-4.] रजनीश दुवे, संयुक्त समिव

टिप्पण : मूल नियम, भारत के राजगढ़ में असाधारण सं.का.आ.844 (अ), तारीखा 19 नकम्बर 1988 द्वारा प्रकाशित किये गये थे और पश्चातवर्ती संशोधन सं.का.आ.433 (31), तारीख 18 अधील 1987, सा.सा.नि. 176 (31), तारीख 2 उद्योश 1998 और हाल में ही सा.खर.नि. 97 (31), तारीख 18 फरवरी 2009; सा.खर.नि. 149 (31), तारीख 4 मार्च, 2009: बा.क.नि. 512 (31), तारीख 9 जलाई, 2009: सा.का.नि. 543 (31), तारीख 22 जलाई, 2009: सा.का.नि. 595 (31), तारीख 21 अमस्त, 2009: और सा.खा.नि. 974 (अ) तारीख, 04 नवन्त्रर 2009 द्वारा प्रकाशित किए गए 1

## MINISTRY OF ENVIRONMENT AND FORESTS

#### NOTIFICATION

New Delhi, the 16th November, 2009

- G.S.R. 826(E) .- In exercise of the powers conferred by section 6 and section 25 of the Environment (Protection) Act, 1986 (29 of 1986), the Central Government hereby makes the following rules further to amend the Environment (Protection) Rules, 1986, namely:-
- L. (1) These rules may be called the Environment (Protection) Seventh Amendment Rules,
  - (2) They shall come into force on the date of their publication in the Official Gazette.
- 2. In the Environment (Protection) Rules, 1986 (hereinafter referred to as the said rules), in rule 3, in sub-rule (3B), for the words, brackets, figures and letters, "in columns (3) to (5) of Schedule VII", the words, brackets, figures and letters "in columns (4) and (5) of Schedule VII" shall be substituted.
- 3. For Schedule VII to the said rules and entries relating thereto, the following Schedule and entries shall be substituted, namely:-

## "(SCHEDULE VIII) (See rule 3/3B)) NATIONAL AMBIENT AIR QUALITY STANDARDS

S. Na	Pollatant	Time Weighted Average	The state of the s		lr .
227			Industrial, Residential, Raral and Other Area	Ecologically Sensitive Area (notified by Central Government)	Methods of Mensurezoni
(1)	(3)	(3)	(4)	(5)	(6)
1	Sulphur Dioxide (SO <sub>2</sub> ), µg/m²	Annual*	50	20	- Improved West and Goeke
	Control	24 hours**	#0	80	-Ultraviolet fluorescence
3	Nitrogen Dioxide (NO <sub>2</sub> ), µg/m <sup>3</sup>	Annus)*	40	30	- Modified Jacob &
		24 hours**	80	80	Hochheiser (Na- Arsmite) - Chemiluminescence
3	Particulate Matter (size less than	Annual*	68	60	- Gravimetric - TOEM
	IQum) or PM <sub>10</sub> µg/m <sup>3</sup>	24 hours**	100	100	- Bota attenuation
	Particulate Matter (size loss than	Annual*	40	40	- Gravimetric - TOEM
	2.5µm) or PM <sub>2</sub> , µg/m <sup>3</sup>	24 hours**	60	60	- Beta attenuation

<b>(II)</b>	(A)	(3)	(4)	(5)	(6)
5	Osone (O <sub>3</sub> )  µg/m²	8 hours**	100	100	- UV photometris - Chemiltoniceconce
	The state of the s	1 hour**	180	180	- Chemical Method
6	Lend (Pb) µg/m	Associa .	0.50	0.50	AAS /ICP method after sampling on EPM 2000
	Corris	24 hours**	1.0	1.0	or equivalent filter paper - ED-XRF using Teston filter
7	Cerbon Monoxide(CO)	8 hours**	02	02	- Non Dispersive Infra Red (NDIR)
	mg/m²	1 hours	04	04	spectroscopy
	Ammonia(NH <sub>1</sub> )	Annual*	100	100	-Chemiluminoscence
-	µg/m³	24 hours**	400	400	-Indophenol blue method
•	Benzene (C <sub>4</sub> H <sub>4</sub> ) µg/m <sup>2</sup>	Annual*	05	95	Gas chromatography based continuous analyzor     Adsorption and Description followed by GC analysis
10	Serzo(o)Pyrene (BaP) - particulate phase only, og/m²	Annual*	01	01	<ul> <li>Solvent extraction followed by HPLC/GC analysis</li> </ul>
11	Aramic (As), ng/m²	Annual*	06	06	AAS /ICP method after sempling on EPM 2000 or equivalent filter paper
12	Nickel (NI), ng/m²	Annual*	20	20	- AAS /ICP method after sampling on EPM 2000 or equivalent filter paper

- Annual arithmetic mean of minimum 104 measurements in a year at a particular site taken twice a week 24 hourly at uniform intervals.
- \*\* 24 hourly or 08 hourly or 01 hourly monitored values, as applicable, shall be compiled with 98% of the time in a year. 2% of the time, they may exceed the limits but not on two consecutive days of monitoring.

Note.— Whenever and wherever monitoring results on two consecutive days of monitoring exceed the limits specified above for the respective estagory, it shall be considered adequate reason to institute regular or continuous monitoring and further investigation.".

[F. No. Q-15017/43/2007-CPW]
RAJNEESH DUBE, Jr. Secy.

Note.— The principal rules were published in the Gazette of India, Extraordinary vide number S.O.844(E), dated the 19th November, 1986; and subsequently amended vide numbers S.O. 433(E), dated the 18th April, 1987; G.S.R. 176 (E), dated the 2th April 1996; and were recently amended vide numbers G.S.R. 97(E), dated the 18th February, 2009; G.S.R. 149(E), dated the 4th March, 2009; G.S.R. 512(E), dated the 9th July, 2009; G.S.R. 543(E), dated the 22th July, 2009; G.S.R. 595(E), dated the 21th August, 2009; and G.S.R. 794(E), dated the 4th November, 2009.

## The Environment (Protection) Rules, 1986

## [SCHEDULE III]

(See rule 3)

## AMBIENT AIR QUALITY STANDARDS IN RESPECT OF NOISE

Area Code	Category of Area	Limits in dB(A) Leq.		
	TO PROPERTY CONTROL CONTROL CONTROL OF THE CONTROL CON	Day Time	Night Time	
(A)	Industrial area	75	70	
(B)	Commercial area	6.5	55	
(C)	Residential area	55	45	
(D)	Silence Zone	50	40	

## Note

- Day time is reckoned in between 6 a.m. and 9 p.m.
- 2. Night time is reckoned in between 9 p.m. and 6 a.m.
- Silence zone is defined as areas upto 100 meters around such premises as hospitals, educational institutions and courts. The Silence Zones are to be declared by the Competent Authority.
  - Use of vehicular horns, loudspeakers and bursting of crackers shall be banned in these zones.
- Mixed categories of areas should be declared as one of the four above mentioned categories by the Competent Authority and the corresponding standards shall apply.





Page 1

BY REGD. POST WITH AD

## STATE POLLUTION CONTROL BOARD, ODISHA

A/118, Nilakantha Nagar, Unit-VIII, Bhubaneswar-751012 Phone-2561909, Fax: 2562822, 2560955

## CONSENT ORDER

	CONCERT CREEK	
No	4218 / IND-1-CON-6348 Dt. 2	24.04.2020
CONS	ENT ORDER NO. 2749	
1	Consent for discharge of sewage and trade effluent un Water (PCP) Act, 1974 and emission under Section 1981 for operation of the port.	
Ref:	Your online application ID No. 2857727, Dtd.23-03-2020	1_
Control Act, 198 Name o	Consent to operate is hereby granted under section 25/26 of Pollution) Act, 1974 and under section 21 of Air (Prevention 21 and rules framed thereunder to:  f the Industry:  M/s The Dhamra Port Company Limit	n & Control of Pollution
Name o	f the Occupier & Designation: Shri Subrat Tripathy, Chief	Executive Officer
Address	At/Po-Dosinga, Via-Dhamra, Dist-Bhadrak-756	171, Odisha
Details	of Products Manufactured :	
SI. No.	Product	Quantity
1.	Cargo handling capacity of the Port (Dry Bulk Cargo, Break Bulk Cargo, General Cargo, Liquid Cargo, Gas Cargo)	71.84 Metric
2.	Containerized Cargo (in TEU)	10,00,000 Numbers / Annum

This consent order is valid for the period upto 31.03.2025

This consent order is valid for the specified outlets, discharge quantity and quality of effluents (ii) quantity of emission and its quality, specified chimney / stack (iii) quantity of solid waste and its disposal as specified below.

This consent is granted subject to the General and Special Conditions stipulated below:



## A. Discharge permitted through the following outlet subject to the standard

Outlet	Description	Point of	Quantity	Pre-scribed Standard							
No.	of outlet	discharge	of discharge KLD or KL/hr	рН	BOD (mg/l)	COD (mg/l)			N-total (mg/l)	Fecal Coliform (MPN/ml)	O & G (mg/l)
1	Domestic effluent at the Outlet of STP	Used for Gardening	140 KLD	6.5-9.0	10	50	20	5	10	<1000	10
2	Wastewater from Port Area	No discharge to Outside	1	-	-	-	-	-	,	-	-
3	Wastewater from vehicle washing at the outlet of ETP	No discharge to Outside	3 KL/hr	-	-	-	-	-	1	-	-

# B. Emission permitted through the following stack subject to the prescribed standard

Chimney Stack No.	Description of Stack	Stack height (m)	Quantity of	Prescribed Standard			
		Above DG set		PM (mg/Nm³)	HC (mg/Nm³)	NO <sub>x</sub> (ppm(v))	CO (mg/Nm³)
1	DG Set: 200 KVA	3.5	-	-	-	-	-
2	DG Set: 180 KVA	3.4	-	-	-	-	-
3	DG Set: 160 KVA	3.4	-	-	-	-	-
4	DG Set: 160 KVA	3.0	-	-	-	-	-
5	DG Set: 160 KVA	3.5	•	-	-	-	-
6	DG Set: 63 KVA	4.0	-	-	-	-	-

## C. Disposal of solid waste permitted in the following manner

SI. No.	Type of Solid waste			Quantity to be reused		Description of disposal site.
NO.	Solid Waste	generateu	on site	off site	off	Site.
1.	Biodegrad able food waste	200 Tonne / Month	-	-	-	Composting and used for horticulture
2.	Plastic or fibri waste	100 Tonne / Month	-	-	-	Co-incineration in ACC Cement Plant, Bargarh
3.	Mettalic waste	800 Tonne / Month	-	-	-	Supplied to scrap vendor
4.	Paper & packaging material	30 Tonne / Month				Supplied to outside parties for recycling
5.	STP sludge	10 Tonne / Month				Used as manure in horticulture work



#### D. GENERAL CONDITIONS FOR ALL UNITS

- 1. The consent is given by the Board in consideration of the particulars given in the application. Any change or alternation or deviation made in actual practice from the particulars furnished in the application will also be the ground for liable to review/variation/revocation of the consent order under section 27 of the Water (Prevention & Control of Pollution) Act, 1974 and section 21 of Air (Prevention & Control of Pollution) Act, 1981 and to make such variations as deemed fit for the purpose of the Acts.
- 2. The industry would immediately submit revised application for consent to operate to this Board in the event of any change in the quantity and quality of raw material / products / manufacturing process or quantity /quality of the effluent rate of emission / air pollution control equipment / system etc.
- The applicant shall not change or alter either the quality or quantity or the rate of discharge or temperature or the route of discharge without the previous written permission of the Board.
- 4. The application shall comply with and carry out the directives/orders issued by the Board in this consent order without any negligence on his/her part. In case of non-compliance of any order/directives issued at any time and/or violation of the terms and conditions of this consent order, the applicant shall be liable for legal action as per the provisions of the Law.
- 5. The applicant shall make an application for grant of fresh consent at least 90 days before the date of expiry of this consent order.
- 6. The issuance of this consent does not convey any property right in either real or personal property or any exclusive privileges nor does it authorize any injury to private property or any invasion of personal rights, nor any infringement of Central, State laws or regulation.
- This consent does not authorize or approve the construction of any physical structure or facilities or the undertaking of any work in any natural water course.
- The applicant shall display this consent granted to him in a prominent place for perusal of the public and inspecting officers of this Board.
- 9. An inspection book shall be opened and made available to Board's Officers during the visit to the factory.
- 10. The applicant shall furnish to the visiting officer of the Board any information regarding the construction, installation or operation of the plant or of effluent treatment system / air pollution control system / stack monitoring system any other particulars as may be pertinent to preventing and controlling pollution of Water / Air.
- 11. The applicant shall display suitable caution board at the place where the effluent is entering into any water-body or any other place to be indicated by the Board, indicating therein that the area into which the effluents are being discharged is not fit for the domestic use/bathing.
- 12. Storm water shall not be allowed to mix with the trade and/or domestic effluent on the upstream of the terminal manholes where the flow measuring devices will be installed.
- 13. The applicant shall maintain good house-keeping both within the factory and the premises. All pipes, valves, sewers and drains shall be leak-proof. Floor washing shall be admitted into the effluent collection system only and shall not be allowed to find their way in storm drains or open areas.
- 14. The applicant shall at all times maintain in good working order and operate as efficiently as possible all treatment or control facilities or systems install or used by him to achieve with the term(s) and conditions of the consent.
- 15. Care should be taken to keep the anaerobic lagoons, if any, biologically active and not utilized as mere stagnation ponds. The anaerobic lagoons should be fed with the required nutrients for effective digestion. Lagoons should be constructed impervious.
- 16. The utilization of treated effluent on factory's own land, if any, should be completed and there should be no possibility of the effluent gaining access into any drainage channel or other water courses either directly or by overflow.
- 17. The effluent disposal on land, if any, should be done without creating any nuisance to the surroundings or inundation of the lands at any time.
- 18. If at any time the disposal of treated effluent on land becomes incomplete or unsatisfactory or create any problem or becomes a matter of dispute, the industry must adopt alternate satisfactory treatment and disposal measures.
- 19. The sludge from treatment units shall be dried in sludge drying beds and the drained liquid shall be taken to equalization tank.
- 20. The effluent treatment units and disposal measures shall become operative at the time of commencement of production.
- 21. The applicant shall provide port holes for sampling the emissions and access platform for carrying out stack sampling and provide electrical outlet points and other arrangements for chimneys/stacks and other sources of emissions so as to collect samples of emission by the Board or the applicant at any time in accordance with the provision of the Acts or Rules made therein.
- 22. The applicant shall provide all facilities and render required assistance to the Board staff for collection of samples / stack monitoring / inspection.



- 23. The applicant shall not change or alter either the quality or quantity or rate of emission or install, replace or alter the air pollution control equipment or change the raw material or manufacturing process resulting in any change in quality and/or quantity of emissions, without the previous written permission of the Board.
- 24. No control equipments or chimney shall be altered or replaced or as the case may be erected or re-erected except with the previous approval of the Board.
- 25. The liquid effluent arising out of the operation of the air pollution control equipment shall be treated in the manner so as to meet the standards prescribed by the Board in accordance with the provisions of Water (Prevention and Control of Pollution) Act, 1974 (as amended).
- 26. The stack monitoring system employed by the applicant shall be opened for inspection to this Board at any time.
- 27. There shall not be any fugitive or episodal discharge from the premises.
- 28. In case of such episodal discharge/emissions the industry shall take immediate action to bring down the emission within the limits prescribed by the Board and stop the operation of the plant if required. Report of such accidental discharge /emission shall be brought to the notice of the Board within 24 hours of occurrence.
- 29. The applicant shall keep the premises of the industrial plant and air pollution control equipments clean and make all hoods, pipes, valves, stacks/chimneys leak proof. The air pollution control equipments, location, inspection chambers, sampling port holes shall be made easily accessible at all times.
- 30. Any upset condition in any of the plant/plants of the factory which is likely to result in increased effluent discharge/emission of air pollutants and / or result in violation of the standards mentioned shall be reported to the Headquarters and Regional Office of the Board by E-mail within 2 hours of its occurrence.
- 31. The industry has to ensure that minimum three varieties of trees are planted at the density of not less than 1000 trees per acre. The trees may be planted along boundaries of the industries or industrial premises. This plantation is stipulated over and above the bulk plantation of trees in that area.
- 32. The solid waste such as sweeping, wastage packages, empty containers residues, sludge including that from air pollution control equipments collected within the premises of the industrial plants shall be disposed off scientifically to the satisfaction of the Board.
- 33. All solid wastes arising in the premises shall be properly classified and disposed off to the satisfaction of the Board by :
  - Land fill in case of inert material, care being taken to ensure that the material does not give rise to leachate which may percolate into ground water or carried away with storm run-off.
  - ii) Controlled incineration, wherever possible in case of combustible organic material.
  - iii) Composting, in case of bio-degradable material.
- 34. Any toxic material shall be detoxicated if possible, otherwise be sealed in steel drums and buried in protected areas after obtaining approval of this Board in writing. The detoxication or sealing and burying shall be carried out in the presence of Board's authorized persons only. Letter of authorization shall be obtained for handling and disposal of hazardous wastes.
- 35. If due to any technological improvement or otherwise this Board is of opinion that all or any of the conditions referred to above requires variation (including the change of any control equipment either in whole or in part) this Board shall after giving the applicant an opportunity of being heard, vary all or any of such condition and thereupon the applicant shall be bound to comply with the conditions so varied.
- 36. The applicant, his/heirs/legal representatives or assignees shall have no claim whatsoever to the condition or renewal of this consent after the expiry period of this consent.
- 37. The Board reserves the right to review, impose additional conditions or condition, revoke change or alter the terms and conditions of this consent.
- 38. Notwithstanding anything contained in this conditional letter of consent, the Board hereby reserves to it the right and power under section 27(2) of the Water (Prevention & Control of Pollution) Act, 1974 to review any and/or all the conditions imposed herein above and to make such variations as deemed fit for the purpose of the Act by the Board.
- 39. The conditions imposed as above shall continue to be in force until revoked under section 27(2) of the Water (Prevention & Control of Pollution) Act, 1974 and section 21 A of Air (Prevention & Control of Pollution) Act, 1981.
- 40. In case the consent fee is revised during this period, the industry shall pay the differential fees to the Board (for the remaining years) to keep the consent order in force. If they fail to pay the amount within the period stipulated by the Board the consent order will be revoked without prior notice.
- 41. The industry shall comply to the conditions stipulated in CTE order issued by Odisha State Pollution Control Board and conditions stipulated in Environmental Clearances issued by MoEF&CC, Govt. of India.
- 42. The industry shall abide by E(P) Act, 1986 and Rules framed there-under.
- 43. The Board reserves the right to revoke/refuse consent to operate at any time during period for which consent is granted in case any violation is observed and to modify/ stipulate additional conditions as deemed appropriate.



## GENERAL CONDITIONS FOR UNITS WITH INVESTMENT OF MORE THAN Rs.50 CRORES, AND 17 CATEGORIES OF HIGHLY POLLUTING INDUSTRIES (RED A)

- 1. The applicant shall analyse the effluent / emissions and Ambient Air Quality every month through approved laboratory for the parameters indicated in TABLE- 'B', 'C' & Part 'B' as mentioned in this order and shall furnish the report thereof to the Board on monthly basis.
- 2. The following information shall be forwarded to the Member Secretary on or before 10<sup>th</sup> of every month.
  - a) Performance / progress of the treatment plant.
  - b) Monthly statement of daily discharge of domestic and/or trade effluent.
- 3. Non-compliance with effluent limitations
  - a) If for any reason the applicant does not comply with or is unable to comply with any effluent limitations specified in this consent, the applicant shall immediately notify the consent issuing authority by telephone and provide the consent issuing authority with the following information in writing within 5 days of such notification.
    - i) Causes of non-compliance
    - ii) A description of the non-compliance discharge including its impact on the receiving waters.
    - iii) Anticipated time of continuance of non-compliance if expected to continue or if such condition has been corrected the duration or period of non-compliance.
    - iv) Steps taken by the applicant to reduce and eliminate the non-complying discharge and
    - v) Steps to be taken by the applicant too prevent the condition of non-compliance.
  - b) The applicant shall take all reasonable steps to minimize any adverse impact to natural waters resulting from non-compliance with any effluent limitation specified in this consent including such accelerated or additional monitoring as necessary to determine the nature and impact of the non-complying discharge.
  - c) Nothing in this consent shall be construed to relieve the applicant from civil or criminal penalties for non-compliance whether or not such non-compliance is due to factors beyond his control, such as break-down, electric failure, accident or natural disaster.
- 4. Proper housekeeping shall be maintained inside the factory premises including process areas by a dedicated team.
- 5. The industry must constitute a team of responsible and technically qualified personnel who will ensure continuous operation of all pollution control devices round the clock (including night hours) and should be in a position to explain the status of operation of the pollution control measures to the inspecting officers of the Board at any point of time. The name of these persons with their contact telephone numbers shall be intimated to the concerned Regional Officer and Head Office of the Board and in case of any change in the team it shall be intimated to the Board immediately.
- 6. The industry shall engage dedicated qualified manpower to ensure continuous and effective operation of online stack / Ambient Air Quality / Effluent monitoring stations for maintenance of database, real time data transfer to SPCB server, data analysis and co-ordination with concerned personnel of process units for taking corrective measures in case of non-compliances and to respond to the instructions of SPCB in this matter.



#### E. **SPECIAL CONDITIONS:**

- 1) The Port Authority shall obtain Environmental Clearance (EC) from the Competent Authority for any enhancement in cargo handling capacity or change in the configuration of Master Plan or installation of any additional facilities. The Port Authority shall then obtain Consent to Establish of the Board before commissioning any of these activities.
- 2) Adequate dust suppression and / or extraction system shall be installed at potential dust generating points in ore / mineral handling system to minimize fugitive emission. Material transfer where possibility of dust nuisance is expected shall be done in covered state.
- 3) All the haulage road, transportation road, transfer, loading and unloading points and stock pipe lines of minerals shall be provided with water sprinklers arrangements to suppress the fugitive dust emissions.
- 4) The major solid wastes like fines of coal, iron ore, bauxite etc. shall be collected and dumped in such a manner that there shall not be any dust nuisance due to wind. The Port Authority shall make efforts to safe sale these materials for other productive use.
- 5) The ambient air quality inside the port premises shall conform to the standards prescribed under E(P) Rule, 1986. The Port Authority shall install and operate at least 3 nos. of permanent Ambient Air Quality monitoring stations in consultation with State Pollution Control Board and the results should be furnished to the Board on a monthly basis.
- 6) To meet with any emergency situation, adequate foam containers should be kept ready with supporting firefighting system and water pipeline.
- 7) Necessary leakage detection devices with early warning system shall be provided at strategic locations.
- 8) The unit shall provide adequate stack height to the DG sets as per the following formula:

Where  $H = h+0.2\sqrt{KVA}$ 

H = Height of stack attached to the DG in meter

h = Height of the DG room in meter where DG set is housed

KVA = capacity of DG Set

- 9) All the internal roads of the port shall be black topped or concreted and care shall be taken to avoid ruts and potholes.
- 10) Proper housekeeping shall be maintained by a dedicated team.
- An effective waste water collection, treatment and disposal mechanism shall be implemented for berth, stack yard, ballast area, mineral handling area, floor washing, ship board, boiler engine room and bilge water and it shall be treated in an adequately designed Effluent Treatment Plant (ETP). The treated water shall be used for dust suppression, water sprinkling at all potential dust generating points. Port shall submit the proposal for installation of ETP with time bound action plan. Till installation of ETP there shall not any discharge of wastewater from port premises to outside.

# **3**

#### **CONSENT ORDER**

- 12) The wastewater generated from vehicle washing shall be treated in the existing ETP and the treated water shall be entirely recycled and reused. In no case this wastewater shall be discharged to outside the port premises.
- 13) The spillage of bulk items shall be minimized so that its passage to nearby water bodies shall be restricted to avoid turbidity of nearby water bodies.
- 14) Effective monitoring system shall be enforced to check the release of spillage of oil into the dock waters, estuary and near shore water by ship and also during transportation. Proper collection and treatment facilities should be provided for proper treatment and disposal after meeting the prescribed norm.
- 15) The monitoring of the marine environment during dredging and post-dredging over a period shall be carried out and the corrective measures shall be taken to conserve the marine environment.
- 16) In order to safeguard the health of the marine ecology of port area, critical locations are to be carefully selected and periodic monitoring with respect to water quality, sediment quality and fauna shall be carried out.
- 17) Domestic effluent generated from colony and port area shall be treated in the existing Sewage Treatment Plant (STP) and treated waste water shall meet prescribed standard mentioned in Section-A of this order and used for gardening.
- 18) The surface run off from open stack yards and mineral handling area shall be collected through dedicated drainage network with settling tanks at all mineral stack ward areas and adequately treated to meet prescribed standard for inland surface water before discharge to outside during monsoon or heavy rains only.

19) The sea water in the harbour area shall meet the water quality criteria for SW-IV class of sea water as given below:

a)	pH	:	6.5-9.0
b)	Dissolved oxygen	:	3.0 mg/l or 40% of saturation
			value whichever is high.
c)	Colour and odour	:	No visible colour or offensive
			odour
d)	Floating matter, oil and		10 mg/l
	grease and scum including		_
	petroleum product		
e)	Fecal coliform	:	500 MPN/100 ml
f)	BOD (3 days) at 28 <sup>0</sup> C	• •	5 mg/l

- 20) The waste oil collected from the ships shall be properly stored so that, no spillage occurs.
- 21) Utmost care shall be taken during operational period so that there shall be no threat to Bhittarkanika and Gahirmatha sanctuary which are otherwise ecologically highly sensitive.
- 22) Rain water harvesting shall be followed by utilizing the rain water collecting from the roof top of the administrative buildings for recharging of ground water within the premises as per the concept and practices prescribed by CPCB.



- The port shall obtain authorization for disposal of all hazardous wastes under The Hazardous & Other Wastes (Management and Transboundary Movement) Rules, 2016.
- 24) All compliance shall be made with respect to Manufacture, Storage and Import of Hazardous Chemical Rule, 1989 and amended thereafter and other provisions of the Environment Protection Act, 1986.
- The unit shall abide the provisions of Environment (Protection) Act, 1986 and Rules framed thereunder.
- 26) In case the consent fees is revised upward during this period, the industry shall pay the differential fees to the Board (for the period & remaining years) to keep the consent order in force. If they fail to pay the amount within the period stipulated by the Board the consent order will be revoked without prior notice.
- 27) The port authority shall apply for consent to establish and environmental clearance for any expansion / enhancement of capacity of export and import etc.
- 28) The Board may impose further conditions or modify the conditions stipulated in this order during installation and / or at the time of renewal of consent to operate and may revoke this clearance in case the stipulated conditions are not implemented and / or any information suppressed in the application form.

To

The Chief Executive Officer, The Dhamra Port Company Limited, At/Po-Dosinga, Via- Dhamra-756171, Dist-Bhadrak, Odisha

SR. ENV. ENGINEER (L-I)

STATE POLLUTION CONTROL BOARD, ODISHA

10t. 24.04.2020

Memo No.\_\_\_

Copy forwarded to:

i) Regional Officer, SPC Board, Balasore

ii) District Collector, Bhadrak

iii) D.F.O., Bhadrak

iv) SES, Central Laboratory, SPC Board, Bhubaneswar

v) H.W.M. Cell, (Head Office)

SR. ENV. ENGINEER (L-I)
STATE POLLUTION CONTROL BOARD, ODISHA



# GENERAL STANDARDS FOR DISCHARGE OF ENVIRONMENT POLLUTANTS

Annexure-I

# GENERAL STANDARDS FOR DISCHARGE OF ENVIRONMENTAL POLLUTANTS PART –A: EFFLUENTS

SI.No.	Parameters		9	Standards		
		Inland surface	Public sewers	Land for irrigation	Marine Costal Areas	
		(a)	(b)	(c)	(d)	
1.	Colour & odour	Colourless/Odou rless as far as practible		See 6 of Annex-1	See 6 of Annex-1	
2.	Suspended Solids (mg/l)	100	600	200	<ul> <li>a. For process <ul> <li>wastewater – 100</li> </ul> </li> <li>b. For cooling water <ul> <li>effluent 10% above</li> <li>total suspended</li> <li>matter of influent.</li> </ul> </li> </ul>	
3.	Particular size of SS	Shall pass 850				
5.	pH value	5.5 to 9.0	5.5 to 9.0	5.5 to 9.0	5.5 to 9.0	
6.	Temperature	Shall not exceed 5°C above the receiving water temperature	1		Shall not exceed 5°C above the receiving wate temperature	
7.	Oil & Grease mg/l max.	10	20	10	20	
8.	Total residual chlorine	1.0			1.0	
9.	Ammonical nitrogen (as N) mg/l max.	50	50		50	
10.	Total Kajeldahl nitrogen (as NH <sub>3</sub> ) mg/l max.	100			100	
11.	Free ammonia (as NH <sub>3</sub> ) mg/l max.	5.0			5.0	
12.	Biochemical Oxygen Demand (5 days at (20 <sup>0</sup> C) mg/l max.	30	350	100	100	
13.	Chemical Oxygen Demand, mg/l max.	250	1		250	
14.	Arsenic (as As) mg/l max.	0.2	0.2	0.2	0.2	
15.	Mercury (as Hg) mg/l max.	0.01	0.01		0.001	



SI.No.	Parameters		S	Standards	
		Inland surface	Public sewers	Land for irrigation	Marine Costal Areas
		(a)	(b)	(c)	(d)
16.	Lead (as pb) mg/l max.	01.	1.0		2.0
17.	Cardmium (as Cd) mg/l max.	2.0	1.0		2.0
18.	Hexavalent Chromium (as Cr + 6) mg/l max.	0.1	2.0		1.0
19.	Total Chromium (as Cr) mg/l max.	2.0	2.0		2.0
20.	Copper (as Cu) mg/l max.	3.0	3.0		3.0
21.	Zinc (as Zn) mg/l max.	5.0	15		15
22.	Selenium (as Sc) mg/l max.	0.05	0.05		0.05
23.	Nickel (as Nil) mg/l max.	3.0	3.0		5.0
24.	Cyanide (as CN) mg/l max.	0.2	2.0	0.2	0.02
25.	Fluoride (as F) mg/l max.	2.0	15		15
26.	Dissolved Phosphates (as P) mg/l max.	5.0			
27.	Sulphide (as S) mg/l max.	2.0			5.0
28.	Phennolic compounds as (C <sub>6</sub> H <sub>5</sub> OH) mg/l max.	1.0	5.0		5.0
29.	Radioactive materials a. Alpha emitter micro curle/ml.	10 <sup>7</sup>	10 <sup>7</sup>	10 <sup>8</sup>	10 <sup>7</sup>
	b. Beta emitter micro curle/ml.	10 <sup>6</sup>	10 <sup>6</sup>	10 <sup>7</sup>	10 <sup>6</sup>
30.	Bio-assay test	90% survival of fish after 96 hours in 100% effluent	90% survival of fish after 96 hours in 100% effluent	90% survival of fish after 96 hours in 100% effluent	90% survival of fish after 96 hours in 100% effluent
31	Manganese (as Mn)	2 mg/l	2 mg/l		2 mg/l
32.	Iron (Fe)	3 mg/l	3 mg/l		3 mg/l
33.	Vanadium (as V)	0.2 mg/l	0.2 mg/l		0.2 mg/l
34.	Nitrate Nitrogen	10 mg/l			20 mg/l

#### Annexure-II

#### NATIONAL AMBIENT AIR QUALITY STANDARDS

Sl. No.	Pollutants	Time Weighed		Concentrate	of Ambient Air
100.		Average	Industrial Residential, Rural and other Area	Ecologically Sensitive Area (notified by Central Government)	Methods of Measurement
(1)	(2)	(3)	(4)	(5)	(6)
1.	Sulphur Dioxide (SO <sub>2</sub> ), µg/m <sup>3</sup>	Annual *	50	20	-Improved west and Gaeke
		24 Hours **	80	80	- Ultraviolet fluorescence
2.	Nitrogen Dioxide (NO <sub>2</sub> ), µg/m <sup>3</sup>	Annual *	40	30	- Modified Jacob & Hochheiser (Na-Arsenite)
	, , , ,	24 Hours **	80	80	- Chemiluminescence
3.	Particulate Matter (size less than 10µm) or	Annual *	60	60	-Gravimetric - TOEM
	$PM_{10}\mu g/m^3$	24 Hours **	100	100	- Beta Attenuation
4.	Particulate Matter (size less than 2.5µm) or	Annual *	40	40	-Gravimetric - TOEM
	$PM_{2.5} \mu g/m^3$	24 Hours **	60	60	- Beta Attenuation
5.	Ozone (O <sub>3</sub> ) µg/m <sup>3</sup>	8 Hours **	100	100	- UV Photometric - Chemiluminescence
		1 Hours **	180	180	- Chemical Method
6.	Lead (Pb) μg/m <sup>3</sup>	Annual *	0.50	0.50	-AAS/ICP method after sampling on EMP 2000 or
		24 Hours **	1.0	1.0	equivalent filter paper. - ED-XRF using Teflon filter
7.	Carbon Monoxide (CO) mg/m <sup>3</sup>	8 Hours **	02	02	- Non Dispersive Infra Red (NDIR)
		1 Hours **	04	04	Spectroscopy
8.	Ammonia (NH <sub>3</sub> ) μg/m <sup>3</sup>	Annual*	100	100	-Chemiluminescence - Indophenol Blue Method
		24 Hours**	400	400	_
9.	Benzene (C <sub>6</sub> H <sub>6</sub> ) μg/m <sup>3</sup>	Annul *	05	05	-Gas Chromatography based continuous analyzer - Adsorption and Desorption followed by GC analysis
10.	Benzo (a) Pyrene (BaP)- Particulate phase only, mg/m <sup>3</sup>	Annual*	01	01	-Solvent extraction followed by HPLC/GC analysis
11.	Arsenic (As), mg/m <sup>3</sup>	Annual*	06	06	-AAS/ICP method after sampling on EPM 2000 or equivalent filter paper
12.	Nickel (Ni), mg/m <sup>3</sup>	Annual*	20	20	-AAS/ICP method after sampling on EPM 2000 or equivalent filter paper

<sup>\*</sup> Annual arithmetic mean of minimum 104 measurements in a year at a particular site taken twice a week 24 hourly at uniform intervals.

<sup>\*\* 24</sup> hourly or 08 hourly or 01 hourly monitored values, as applicable, shall be complied with 98% of the time in a year, 2% of the time, they may exceed the limits but not on two consecutive days of monitoring.

# MONTHLY ENVIRONMENT MONITORING REPORT

Of



## THE DHAMRA PORT COMPANY LIMITED

AT : DOSINGA, PO : DHAMRA DIST- BHADRAK, PIN : 756171 ODISHA

## Conducted by:

M/s. Mitra S. K. Private Limited



Shrachi Centre (5th Floor) 74B, Acharya Jagadish Chandra Bose Road Kolkata - 700016 (West Bengal)



T: (0674) 2382916, 2380917

[CIN: U51909WB1956PTC023037]

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Report No: BBS/300A

Date: 05.04.2022

## AMBIENT AIR QUALITY MONITORING REPORT

Client Name & Address	M/s The Dhamra Port Company Limited, Dosinga, Bhadrak, Odisha
Work Order No.	4802006186
Reference No.	MSKGL/ED/2020-21/00200
Type of Sample	Ambient Air Sample
Sampling Location	Colony Area
Sampling Done by	Mr. Kunja Bihari Nayak
Sampling Duration	24hrs .
Monitoring Instrument	RDS (APM 860), FPS (APM 154) Lata Envirotech, CO Analyzer & VOC Sampler

		PARAMETERS											
Dere	PM <sub>26</sub> (mg/m²)	PM <sub>SA</sub> (eg/es <sup>2</sup> )	SO <sub>5</sub> (jeg/m²)	NOs (µg/m²)	CO (mg/m²)	NB <sub>2</sub> (up/m²)	0), (((5)(m <sup>2</sup> ))	P5 (pg/m²)	Ni (ng/m²)	As (mg/m²)	Call <sub>4</sub> (pg/m <sup>2</sup> )	BaP (ag/m³)	
02,03,2022	54,50	30.60	8.40	26.4	0.65	20.50	<20.0	<0.01	<5.0	<1.0	<4.2	<0.5	
05.03.2022	52.80	28.40	7,60	21.3	0.57	16.20	<20.0	<0.01	<5.0	A1.0	<4,2	<0.5	
09.03.2022	55.30	21.90	6,60	18.7	0.41	12.40	<20.0	<0.01	<5.0	<1.0	<4.2	< 0.5	
13,03,2622	44.20	23.60	8,20	28.6	0.60	22.70	<20.0	<0.01	<5.0	<1.0	<4.2	40.5	
16.63.2022	51.30	25.70	7.30	20.5	0.75	14.60	<20.0	40.01	<5.0	<1.0	<4.2	< 0.5	
23,03,2022	62.60	29.80	6.80	32.8	0.77	27.30	<20.0	<0.01	<5.0	<1.0	<4.2	<0.5	
26.03.2022	59.20	24,30	7.40	19.4	0.61	13.50	<20.0	40.01	<3.0	<1.0	<4.2	<0.5	
28.63.2021	54.10	26:20	6.30	23.6	0.45	19.49	<20.0	<0.01	<3.0	<1.0	<4.2	<0.5	
Monthly Average	54.25	26,31	7.32	23.91	0.60	18.32	<20.0	<0.01	<5.0	<1.0	<4.2	<0.5	
CPCB, New Dellie AAQ Standard	109	60	89	80	4	400	180	1	20	6	5	1	
Time Weighted Average (hrs.)	24	24	24	24	,	24	1	24	Annual	Annual	Annual	Annual	
TEST METHOD	tS 5182: Part 25:29 06 (Reaff - 2012	IS 5182: Part 24:201 9	(S 5182 : Part 2 :2001 (Reaff, 2012	IS 5182 : Part 6 :2006 (Reaft, 2012)	IS 5182 : Para 10 :1999 (Reaff.20 14)	IS 5182: Part 25:001 S	IS \$182: Part 69:197 4	EPA - 103.43 unc.19 99	EPA - 103.4Ju nc.1999	EPA - 1Q3,43 <sub>8</sub> nc,1999	IS:5182( Part- 11):2006 Rea0(20 12	IS:5182( Part- 12):2004 Reaff,: 2014	

N.B. "NAAQ- National Ambient Air Quality Standard as per 18" Nov. 2009 Gutt. Notification

Prepared By -



Ananta Ku Rut Checked By-

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Report No: BBS/3008

Date: 05.04.2022

## AMBIENT AIR QUALITY MONITORING REPORT

Client Name & Address	M/s The Dhamra Port Company Limited, Dosinga, Bhadrak, Odisha
Work Order No.	4802006186
Reference No.	MSKGL/ED/2020-21/00200
Type of Sample	Ambient Air Sample
Sampling Location	Kanak Prasad Village
Sampling Done by	Mr. Kunja Bihari Nayak
Sampling Duration	24hrs
Monitoring Instrument	RDS (APM 860), FPS (APM 154) Lata Envirotech, CO Analyzer & VOC Sampler

		15			-	PA	RAMETER	15	0			
Date	PM <sub>H</sub> (ag/m²)	PM:	SO: (#2/m²)	NOv (pg/m²)	( mg/m²)	NH <sub>2</sub> (pg/m <sup>2</sup> )	О <sub>3</sub> (ир/m²)	Ph (up/m²)	Ni (reg/m²)	As (ng/m²)	Celle (agrico)	RoP (rg/m²)
02.03,2022	55,20	39,30	8.10	24.70	0.54	21,46	<20.0	< 0.01	<5.0	<1.0	+4.2	<0.5
06.03.2022	39.70	33.50	9.40	28.50	0.66	24.80	<20.0	<0.01	<5.0	<1.0	*4.2	<0.5
09.03,2022	64.50	35.40	7.60	20.30	0.78	17.60	<20.0	<0.01	<3.0	<1.0	<4.2	<0.5
13.03.2022	48,30	26.70	6.10	21.40	0.41	14.20	<20.0	<0.01	<3.0	<1.0	<4.2	<0.5
16.03.2022	50,60	25.10	6.90	18.70	0.85	12.78	<20.0	<0.01	<5.0	<1.0	<4.2	The state of the s
23,03,2022	58.10	32,30	7.60	31.20	0.57	26.50	<20.0	<0.01	<5.0	<1.0	<4.2	<0.5
26,03,2022	63.30	34.20	8.40	27.30	0.63	22.40	<20.0	<0.01	<5.0	<1.0	×4.2	<0.5
28,03,2021	59.10	29.60	6.30	25.70	0.70	20.30	<20.8	<0.01	<5.0	<1.0	<4.2	<0.5
Mentaly Average	57.35	30.76	7,55	24.72	0.64	19.93	<20.0	<0.01	45.0	<1.0	<4.2	<0.5
CPCB, New Bellii AAQ Standard	100	60	80	80	14	400	189	1	20	6	5	ī
Fime Weighted Average (hrs.)	24	24	24	24	1	24	1	24	Ancual	Associa	Annual	Annual
TEST METHOD	IS 5182: Part 23:29 96 (Reaff , 2012	18 5182; Part 24:201 9	IS 5182 : Part 2 :2001 (Reaff, 2012	IS 5182 : Part 6 :2006 (Reaff, 2012)	IS 5182 : Part 10 :1999 (Reaff.26 14)	IS 5182: Part 25:201 8	IS 5182: Part 69:197	EPA - 103.43 nuc,19 99	EPA - 103,41u uc,1999	EPA - 103.4Ju ne,1999	(S:5182) Part- 13):2896 Reaff,20 12	IS:5182( Part- 12):2064 Resif;: 2014

N.B. \*NAAQ- National Ambient Air Quality Standard as per 18th Nov. 2009 Gan. Notification

Prepared By - S. Kannigh\_



Ananta Ku. Rath



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Report No: BBS/300C

Date: 05.04.2022

#### AMBIENT AIR QUALITY MONITORING REPORT

Client Name & Address	M/s The Dhamra Port Company Limited, Dosinga, Bhadrak, Odisha
Work Order No.	4802006186
Reference No.	MSKGL/ED/2020-21/00200
Type of Sample	Ambient Air Sample
Sampling Location	Near BMH
Sampling Done by	Mr. Kunja Bihari Nayak
Sampling Duration	24hrs
Monitoring Instrument	RDS (APM 860), FPS (APM 154) Lata Envirotech, CO Analyzer & VOC Sampler

	PARAMETERS											
Date	PM <sub>(0</sub> ()40/m <sup>3</sup> )	PMin (pg/m²)	\$0 <sub>1</sub> (µg/m²)	NOs. (µg/m²)	(mg/m³)	NHs (µg/m²)	O <sub>5</sub>	Pb (pg/m²)	Ni (ng/m²)	As (ng/m²)	Calls (up/or)	BaP (mg/m <sup>2</sup> )
02-03-2022	\$2.60	38.20	6,40	32.40	0.56	25.40	<20.8	<0.01	<5.0	<1.0	<4.2	<0.5
06,03,2022	64.40	31.70	6.90	35.30	0.71	20,30	<20.0	<0.01	<5.0	<1,0	<1.2	<0.5
09.05.2022	54.50	26.20	7.60	26.40	0.88	15.80	<20.0	<0.01	<5.0	<1.0	<4.2	<0.5
13,03,2022	69.10	50.80	9.19	21,30	0.74	16.10	<20.0	<0.01	<5.9	<1.0	<4.2	93,3
16.03.2022	57.30	29,60	8.50	23.80	0.67	21,60	<20.0	<0.01	<5.0	<1.0	<4.2	40,5
23.83.2022	73.60	35.28	6.70	30.60	0.51	24.30	<20.0	<0.01	<5.0	<1.0	<4,2	<0.5
26.03.2022	66.40	27.60	7,10	25,30	0.48	19.50	<20.0	40.01	<5.0	<1.0	<4.2	43.5
28.03.2021	45.30	23.80	6.30	23.70	0.41	18.10	<20.0	<0.01	<5.0	<1.0	<4.2	<0.5
Monthly Average	60.52	30.38	7.32	27.35	0.62	20.13	<20.0	<0.01	<5.0	<1.0	<4.2	≪0.5
CPCB, New Debt AAQ Standard	100	60	80	80	d	400	180	1	20	6	5	ſ
Time Weighted Average (hrs.)	24	24	34	24	1	24	1	24	Anneat	Annual	Anneal	Annua
TEST METHOD	18 5182: Part 23:20 06 (Reaf £ 2012	IS 5182: Part 24:20 19	18 5182 : Part 2 :2001 (Reaff .2012	1S 5183 : Part 6 :2006 (Reaff ,2012)	IS 5182 : Part 16 :1999 (Reaff.2 014)	IS 5182: Part 25:20 18	IS 5182: Part 09:19 74	EPA - 103.4 3une, 1999	EPA - 103,4Ju nc,1999	EPA - 103.4Ju nc,1999	(S:5182 (Part- 11):200 6 Resff,2 012	(S:518; (Part- 12):200 4 Reaff; 2014

N.B. \*NAAQ- National Arabient Air Quality Standard as per 18th Nov. 2009 Gatt. Notification

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Anauter Kur Rath Checked By-



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Report No: BB5/300D

Date: 05.04.2022

## AMBIENT AIR QUALITY MONITORING REPORT

Client Name & Address	M/s The Dhamra Port Company Limited, Dosinga, Bhadrak, Odisha
Work Order No.	4802006186
Reference No.	MSKGL/ED/2020-21/00200
Type of Sample	Ambient Air Sample
Sampling Location	Near Jetty
Sampling Done by	Mr. Kunja Bihari Navak
Sampling Duration	24hes
Monitoring Instrument	RDS (APM 860), FPS (APM 154) Lata Envirotech, CO Analyzar & VOC Sampler
And the said the said and said	REDS (AFM) 800E, FFS (AFM) (34) Late Envirolects, CO Analyzar & VOC Samples

		PARAMETERS											
Date	PM <sub>ss</sub> (eg/ar <sup>2</sup> )	PM <sub>2,5</sub> (ng/m <sup>2</sup> )	50 <sub>3</sub> (ug/m²)	NOs (ap/m²)	(mg/m²)	NHs (ag/m²)	O <sub>3</sub> (agin')	Ph. (jeg/m²)	Ni (no/on)	As (ag/m²)	C/H, (rg/m²)	BaP (agdu <sup>3</sup> )	
02.03.2022	68.10	34.60	8.70	29,50	0.78	25.40	<20.0	<0.01	<5.0	<1.0	<4,2	<b>30.5</b>	
06.03.2022	\$4.50	26.20	7.60	31.20	.0.61	32.60	<20.0	<0.01	<5.0	<1.0	<4.2	<0,5	
19.03.2022	52.60	25.10	6.80	32.60	0.54	31.30	<20.0	<0.01	<5.0	<1.0	<4.2	<0.5	
3.63.2022	50,30	25.50	9.10	26.30	0.47	36.28	<20.0	<0.01	<3.0	<1.0	c4.2	<0.5	
6.03.2822	64.60	35.60	7.20	29,60	0.88	27.60	<20.0	<0.01	<5.0	<1.0	<4.2	-00,5	
3.03.2022	56.30	24,30	8.60	31.20	0.64	20.50	<20.0	<0.01	<5.0	<1.0	<4.2	<0.5	
6.03,2022	46.60	37.40	6,40	26,30	0.71	25.60	<30.0	<0.01	<5.0	<1.0	<4.2	<0.5	
8.03.2621	62,30	34.20	7.30	27.60	0.61	30.10	<20.0	<0.01	<5.0	<1.0	<4.2	40.5	
Monthly Average	56.91	28.38	7.71	29.28	0.65	28.63	<30.0	<9,01	<5.0	<1.0	<4.2	<0.5	
PCB, New Delhi AAQ Standard	100	60	80	89	4	400	180	1	20	6	5	1	
Time Veighted Average (hrs.)	24	24	24	24	4	24	1	24	Asses	Annual	Animal	Annual	
TEST TETROD	18 5182: Part 23:20 06 (Reaf £ 2012	IS 5182; Part 24:20 19	IS 5182 : Purt 2 :2001 (Reaff .2012	IS 5182 : Part 6 :2006 (Reaff :2012)	IS 5182 : Part 10 :1999 (Reaff.2 014)	IS 5182: Part 25:20 18	1S 5182: Part 09:19 74	EPA - 103.4 June, 1999	EPA - 103.4Ju ne,1999	EPA - 103.4.Ju no.1999	18:5182 (Fact- 11):200 6 Reaff,2 012	IS:5182 (Part- 12):260 4 Reaff,: 2014	

N.B. \*NAAQ- National Ambieut Air Quality Standard as per 18th Nov. 2009 Gett. Notification

Prepared By - S. Kange



Anana Ku Rath



N-5/108, Ground Floor IRC Vilege, Nevepell Shubeneswar - 751015 [CIN: U51909WB1956PT0023037]

T . (0674) 2362916, 2360917.

F: (0674) 2362918

Report No: BBS/500E

Date: 05.04.2022

## AMBIENT AIR QUALITY MONITORING REPORT

Client Name & Address	M/s The Obamra Port Company Limited, Dosinga, Bhadrak, Odlsha
Work Order No.	4802006186
Reference No.	MSKGL/ED/2020-21/00200
Type of Sample -	Ambient Air Sample
Sampling Location	Doslaga Village
Sampling Done by	Mr. Kunja Bihari Nayak
Sampling Duration	24brs
Monitoring Instrument	RDS (APM 860), FPS (APM 154) Lata Envirotech, CO Analyzer & VOC Sempler

						PAU	RAMETER	S				
Date	PM <sub>re</sub> (ng/m²)	(Mg/m²)	50 <sub>j</sub> (ug/ni <sup>3</sup> )	NOs (sp/m²)	CO (mg/m²)	NH <sub>4</sub> (ng/m <sup>2</sup> )	Os (ugha <sup>1</sup> )	Pb (seg/m²)	Ni (rigim <sup>2</sup> )	As (ag/m²)	C <sub>i</sub> H <sub>c</sub> (sig/m <sup>2</sup> )	BaP (salar)
02.03.2022	\$8,40	29.40	6,40	23,60	9.64	15.7	<20.6	<0.01	<5,0	<1.0	54.2	<0.5
06.03.2022	63,20	27.10	6.60	25.40	0.78	20.9	<20.0	<0.01	<5.0	<1.0	<4.2	-0.5
09.03.2022	45.60	23.60	7.30	20.16	0.76	14.3	<20.0	<0.01	<5.0	<1.0	<4.2	<0.5
13.03.2022	49.20	30.30	8.10	27.60	0.60	25.8	<20.0	<0.01	<5.0	\$1.0	<4.2	< 0.5
16.03.2022	60.60	28.10	7.60	24.30	0.82	19.4	<30.0	<0.01	<5.0	<1.0	<4.2	<0.5
23.03.2022	67.50	25.60	6.90	29.10	0.71	27.1	<20.0	<0.01	<5.0	<1.0	<4.2	<0.5
26.03.2022	52.30	25.10	8.60	19.30	0.64	13.6	<29.0	<0.01	Si.0	\$1.0	<4.2	<0.5
28.03.2021	44.70	27.30	7.40	17.70	0.41	12.4	<20.0	<0.01	<5.0	<1.0	×4.2	The second second
Monthly Average	55.06	27.02	7.36	23,38	0.67	18.77	<20.0	<0.01	<5.0	<1.0	44.2	<0.5
CPCB, New Delhi AAQ Standard	100	60	80	80.	4	400	180	1	20	6	5	1
- Time Weighted Average (brs.)	34	24	24	24	1	24	1	24	Annual	Annual	Annual	Annual
TEST METHOD	18 5182: Part 25:20 06 (Reaf f. 2012	IS 5182: Part 24:20 19	IS 5182 : Part 2 :2001 (Reaff .2012	fS 5182 : Part 6 :2006 (Reaff .2012)	IS 5182 : Part 10 :1999 (Reaff.2 014)	IS 5182; Part 25:20 18	IS 5182: Part 69:19 74	EPA - 103,4 June, 1999	EPA - 103.4Ju ne,1999	EPA - 108.4Ju ac.1999	IS:5182 (Part- 11):200 6 Reaff,2 012	IS:5182 (Fort- 12):200 4 Reaff;: 2014

N.B- \*NAAQ- National Ambiect Air Quality Standard as per 18th Nov. 2009 Class. Notification

Propared By - S Yanng

BBSR S

Arenda Ku Rath

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N-51100, Ground Floor IRC Village, Nayapall Shubaneswar - 751015 [GIN: U51909WB1936PTC023037]

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F : (0674) 2362918

Report No: BBS/300F

Date: 05.04.2022

#### AMBIENT AIR QUALITY MONITORING REPORT

M/s The Dhamra Port Company Limited, Dosinga, Bhadrak, Odisha
4802006186
MSKGL/ED/2020-21/00200
Ambient Air Sample
Near Bhitarkanika
Mr. Kunja Bihari Nayak
24hrs
RDS (APM 860), FPS (APM 134) Late Envirotech, CO Analyzer & VOC Sampler

100						PAI	RAMETER	5				
Dstv	(P34) (p2/m²)	(100m²)	\$0 <sub>0</sub> (pp/m²)	NOs (90/41 <sup>2</sup> )	CQ ( mg/m²)	NIII <sub>1</sub> (pp/m²)	0, (m/m²)	Pb (82/01 <sup>3</sup> )	Ni (np/m²)	As (ag/m²)	Cable (rg/m²)	BaP (rg/m²)
02/03/2022	58.40	29:40	6,48	23.60	0.64	18.70	<20.0	<0.01	×5.0	<1.0	<4.2	<0.5
06.03.2022	63.20	27.10	6.60	25,40	0.78	20,90	<20.0	< 0.01	<5.0	<1.0	<4.2	<0.5
09.03.2022	45.60	23.60	7.30	20,10	0.86	14.30	<20.0	<0.01	<5.0	<1.0	<4.2	<0.5
13.03.2022	48.20	2530	8.10	27.60	0.60	23.80	<20.0	<0.01	<5.0	<1.0	<4.2	< 0.5
16.03.2022	60.60	28.10	7.60	24.30	0.82	19.40	<20.0	< 0.01	<5.0	<1.0	<1.2	<0.5
23.03,2022	48.50	32.60	6.90	29.10	0.71	27.10	<20.0	<0.01	<5.0	<1.0	<4.2	<0.5
26.03.2022	52.30	25.10	8:60	19.30	0.64	13,60	<20.0	<0.01	<5.0	<1.0	54.2	+00.5
28.03.2021	44.70	20.30	7.40	17.70	0.41	12.40	<20.0	< 0.01	<5.0	<1.0	<4.2	<0.5
Monthly Average	52.68	26.43	7.36	23.38	0.68	18.77	<29.0	<0.01	<5.0	<1.0	54.2	≪0.5
CPCR, New Delta AAQ Standard	100	60	80	80	4	408	180	ı	20	6	5	ı
Time Weighted Average (hrs.)	24	24	24	24	1	24	1	24	Annual	Annual	Annual	Angual
TEST METHOD	1S 5182: Part 23:20 06 (Resf £ 2012	IS 5182: Part 24:20 19	IS 5182 : Part 2 :2001 (Reaff 2612	IS 5182 : Part 6 :2006 (Reaff .2012)	IS 5182 : Part 10 :1999 (Reaff.2 614)	1S 5182: Part 25:20 18	1S 5182: Part 69:19 74	EPA - 103.4 June, 1999	EPA - 103.4Ju ne,1999	EPA - 103,4Ju ne,1999	IS:5182 (Pari- 11):200 6 Resff,2 012	IS:5182 (Part- 12):200 4 Resff;: 2014

N.B- "NAAQ- National Ambient Air Quality Standard as per 18" Nov. 2009 Gatt. Notification

Prepared By - S-Kanngn

Arante Ku Radh Checked By

H.C.; Shrechi Centre (5th Floor), 748, Acherye Jegedish Chandra Bose Road, Kulksta - 700 018, West Bengel, India - T; 91 33 4014 3000 / 2265 0006 / 2265 0007, F; 91 33 2265 0008, E; Info@mitrask.com, W; www.mitrask.com



N-5/100, Ground Floor IRC Village, Nayapatii Bhubaneawar - 75/1015 (CIN: U5/1909WB1958PT0023057)

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## TEST REPORT

Name & Address of the Customer:

THE DHAMRA PORT COMPANY LIMITED.

AT : DOSINGA, PO : DHAMRA

DIST: BHADRAK, PIN:756171 ODISHA

Report No.: BBS/309

Date : 05.04.2022

Sample No.: MSKGL/ED/2020-21/03/00900

Sample Description: Ambient Noise

## Noise Level Monitoring Data

SI.	Sampling	Sampling	Day Leq. Tim	e dB(A)	Night Time Le	q. dB(A)
No	Date	Location	Results	LIMIT	Results	LIMIT
1.	01.03.2022	Colony Area (R)	44.8	55	40.6	45
2.	05.03.2022	Kenak Prasad Village (R)	413	55	37,2	45
3.	07.03.2022	Near BMH (I)	56.9	75	48.4	70
4,	08.03.2022	Near Jetty (I)	72.3	75	66.7	70
ŝ.	12.03.2022	Dosinga Village (R)	48.8	55	43.1	45
6.	14.03.2022	Near Bhiterkenika ( Eco Sensitive Zone)	40.8	50	36.4	40

	- Syconomic	Noise Limit as per CP	CB
Category of Area/Zone	Leq dB(A) Day Time	Leq dB(A) Night Time	NOTE:
Industrial Area	75	70	Day Time: 06.00 Hr22.00 Hr.
Commercial Area	65	55	Night Time:22.00 Hr. 06.00 Hr.
Residential Area	55	45	
Silence Zone	50	40	

SIX am go Report Preparetilly;



For Mitra S. K. Private Limited Ananyles Ku: Rady Authorized Signatory



N-6/100, Ground Floor IRC Vilage, Neyspell Bhubenaswar - 751015 [CIN: U51909WB1956P7C023037]

T : (0674) 2382916, 2380917

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## TEST REPORT

Name & Address of the Customer: THE DHAMRA PORT COMPANY LIMITED.

AT : DOSINGA, PO : DHAMRA

DIST : BHADRAK, PIN : 756171 ODISHA

Report No.: BBS/310 Date: 05.04.2022

Sample No. : MSKGL/Ef)/2020-21/03/00910

Sample Description: Noise ( Work Zone )

## Noise Level Monitoring Data

SL No	Sampling Date	Sampling Location	MAX	MIN	Results in Avg. dB(A)
I,	02.03.2022	Stack Yard	82.1	43.6	69.5
2,	03.03.2022	Wagon Tippler	89.2	52.7	80.3
3.	06.03.2022	Near Silo	90.3	74,4	86,1
4,	09.03.2022	Near Stacker & Reclaimer	97.2	79.8	88.6
5.	10.03.2022	Project Area	85.3	49.1	76.2
6.	13.03.2022	Transfer Point	84.2	50.6	75.3
7.	15.03.2022	Workshop	110.0	83.1	89,6
\$.	16.03.2022	Steel Yard	75.2	42.7	63.1
9.	17.03.2022	FCC Shed	80.1	47.1	69.8
0.	19.03.2022	Near Port Canteen	76.2	51.9	67.7

OSHA'S Permissible Nois	e Exposure Limits
Noise Level	Exposore Limit
90 dBA	8.0 hours

Report Prepared by: S. Kange

For Mitra S.K. Private Limited

Ananta Ku Rath Authorized Signatory

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M5K TESTINGO INSPECTION

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## TEST REPORT

Name & Address of the Customer:

THE DHAMRA PORT COMPANY LIMITED

AT : DOSINGA, PO : DHAMRA

DIST: BHADRAK, PIN:756171 ODISHA

Report No. : BBS/311

Date : 05.04.2022

Sample No.: MSKGL/ED/2020-21/03/00160 Sample Description: VOC Monitoring

#### ANALYSIS

SL No	Date of Monitoring	Sampling Location	Method of Analysis	<u>Parameter</u>	Result
1.	01.03.2022	Jetty			<0.008
2.	02.03.2022	Wagon Tippler			<0.008
3.	07.03.2022	Near Silo	NIOSH-1501	Volatile Organic	<0.008
4.	07.03.2022	Transfer Point	200000000	Compound (VOC in mg/m <sup>3</sup> )	<0.008
5.	08.03.2022	BMH Workshop			<0.008
5.	08.03,2022	Steel Yard			<0.008
i,	09:03:2022	FCC Shed			<0.008
3.	09.03.2022	SS 6 Office			<0.008

S-Karrigo Report Prepared by:

For Mitra S. K. Private Limited

enta Ku Kath Authorized Signatory



N-5/100, Ground Floer IRG Village, Nayapati Shubaneswar - 751815 [CIN: U51900WB1958PTC023037]

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## TEST REPORT

Name & Address of the Customer: THE DHAMRA PORT COMPANY LIMITED

AT : DOSINGA, PO : DHAMRA

6DIST : BHADRAK, PIN :756171 ODISHA

Report No.: BBS/305 Date: 05.04,2022

Sample No.: MSKGL/ED/2020-21/03/00846 Sample Description: EFFLUENT WATER

Sampling Location : STP 150KLD Date of sampling : 03.03.2022

#### ANALYSIS RESULT

SL.	Test Parameters	Units	Limit	Test Specification	Res	alt
			S		Inlet	Outlet
1.	Colour	Hazen	-	APHA (23rd Edition) 2120B 2017	Blackish	Colourles
2,	Odour		**	APHA (23 <sup>nd</sup> Edition) 2150B	Disagrecable	Agreeable
3.	pH value at 26°C	1000	6.5 - 9.0	APHA (23rd Edition) 4500 H-B	6.93	7.24
4.	Appearance		~	Lab Method	Turbid	Clear
5.	TSS	mg/l	<20.0	APHA (23 <sup>rd</sup> Edition) 2540D	349.0	<2.5
6.	BOD	mg/l	<10.0	APHA (23 <sup>rd</sup> Edition) \$210B 2017	32.0	<2.0
7.	COD	mg/l	<50.0	APHA (23 <sup>rd</sup> Edition) 5220B 2017	95.0	<4.0
8.	Oil & Grease	mg/l	<10.0	APHA (23" Edition) 5220B 2017	2.0	<1.4
9.	Ammonical Nitrogen	mg/l	<5.0	APHA (23 <sup>rt</sup> Edition) 4500-NH3-F 2017	28	<0.1
10.	Total Nitrogen (as N)	mg/l	<10.0	IS 14684 (1999); Rffm:2014	36.0	2.7
н.	Faecal Coliform	MPN/ 100ml	<1000.0	APHA (23 <sup>rd</sup> Edition) 9221 E	2600,0	132.0

S. Kamgr Report Prepared by:



For Mitra S. K. Private Limited

Ananta Ku Path Authorized Signatory



N-5/100. Ground Floor IRC Village, Nayspelf Shubaneawar - 751015 ICIN: U51909W81956PTC0230371

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## TEST REPORT

Name & Address of the Customer: THE DHAMRA PORT COMPANY LIMITED

AT : DOSINGA, PO : DHAMRA

DIST: BHADRAK, PIN:756171 ODISHA

Report No. : BBS/306 Date : 05.04.2022

Sample No. : MSKGL/ED/2020-21/03/01717 Sample Description: EFFLUENT WATER

Sampling Location : STP 150KLD Date of sampling : 22.03,2022

## ANALYSIS RESULT

SL.	Test Parameters	Units	Limit	Test Specification	Res	ult
-90000	C 25 20 20 20 20 20 20 20 20 20 20 20 20 20	-			Inlet	Outlet
l.	Colour	Hazen	*	APHA (23 <sup>th</sup> Edition) 2120B 2017	Blackish	Colourless
2.	Odour	***	*	APHA (23 <sup>rd</sup> Edition) 2150B	Disagrecable	Agreeable
3.	pH value at 26°C		6,5 - 9.0	APHA (23rd Edition) 4500 H-B	6.91	7.48
4.	Appearance		-	Lab Method	Turbid	Clear
5.	TSS	mg/l	<20.0	APHA (23 <sup>rd</sup> Edition) 2540D	336.0	<2.5
6.	BOD	mg/l	<10.0	APHA (23 <sup>m</sup> Edition) 5210B 2017	35.0	42.0
7.	COD	mg/l	<50.0	APHA (23 <sup>rd</sup> Edition) 5220B 2017	119.0	12.0
8.	Oil & Grease	mg/l	<10.0	APHA (23 <sup>rd</sup> Edition) 5220B 2017	4.4	<1.4
9.	Ammonical Nitrogen	mg/l	<5.0	APHA (23 <sup>rd</sup> Edition) 4500-NH3-F 2017	37.0	<0.1
0.	Total Nitrogen (as N)	mg/l	<10.0	IS 14684 (1999); Rffin:2014	48.6	1.4
1.	Parcal Coliforn	MPN/ 100ml	<1000.0	APHA (23st Edition) 9221 E	2300.0	145.0

Report Prepared by

For Mitra S. K. Private Limited



N-5/100, Ground Floor IRC Village, Neyspall Bhubaneswar - 751015 [CIN: U51909WB1956PTC023087]

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## TEST REPORT

Name & Address of the Customer: THE DHAMRA PORT COMPANY LIMITED

AT: DOSINGA, PO: DHAMRA

6DIST: BHADRAK, PIN:756171 ODISHA

Report No.: BBS/302 Date: 05.04.2022

Sample No.: MSKGL/ED/2020-21/03/00844 Sample Description: EFFLUENT WATER

Sampling Location: STP 140KLD Date of sampling: 03.03.2022

#### ANALYSIS RESULT

SL.	Test Parameters	Units	Limit	Test Specification	Res	ult
				A TOTAL CONTRACTOR OF THE PARTY	Inlet	Outlet
1.	Colour	Hazen		APHA (23rd Edition) 2120B 2017	Blackish	Colourles
2.	Odour			APHA (23rd Edition) 2150B	Disagrecable	Agreenbla
3.	pH value at 26°C		6.5 - 9.0	APHA (23th Edition) 4500 H-B	6.87	7.11
4.	Appearance	19624	4	Lab Method	Turbid	Clear
5.	TSS	mg/l	<20.0	APHA (23td Edition) 2540D	488.0	₹2.5
6.	BOD	mg/l	<10.0	APHA (23" Edition) 5210B 2017	35.0	7.0
7.	COD	mg/l	<50,0	APHA (23" Edition) 5220B 2017	125.0	28.0
8.	Oil & Grease	mg/i	<10.0	APHA (23 <sup>rd</sup> Edition) 5220B 2017	5.0	<1,4
9.	Ammonical Nitrogen	mg/l	<5.0	APHA (23 <sup>rd</sup> Edition) 4500-NH3-F 2017	36.0	<0.1
0.	Total Nitrogen (as N)	mg/l	<10.0	IS 14684 (1999); Rffm:2014	44.0	2.8
i.	Faccal Coliforn	MPN/ 100ml	<1000.0	APHA (23 <sup>st</sup> Edition) 9221 E	1900.0	79.0

S. Kamzy Report Prepared by:



For Mitra S. K. Private Limited

Manda Ku Rath Authorized Signatory



N-51100, Ground Floor IRC Village, Nayapalli Bhubaneswar - 751015 [CIN: US1909WB1956PTC023037]

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F: (9574) 2362918

## TEST REPORT

Name & Address of the Customer:

THE DHAMRA PORT COMPANY LIMITED AT : DOSINGA, PO : DHAMRA

DIST: BHADRAK, PIN:756171 ODISHA

Report No.: BBS/304 Date : 05.04.2022

Sample No.: MSKGL/ED/2020-21/03/01715

Sample Description: EFFLUENT WATER

Sampling Location : STP 140KLD Date of sampling : 22.03,2021

#### ANALYSIS RESULT

SL.	Test Parameters	Units	Limit	Test Specification	Res	ult
-			20110120		Inlet	Outlet
L.	Colour	Hazen	#	APHA (23 <sup>rd</sup> Edition) 2120B 2017	Blackish	Colourles
2.	Odour	-	-	APHA (23 <sup>th</sup> Edition) 2150B	Disagrecable	Agreeable
3.	pH value at 26°C	the .	6.5 - 9.0	APHA (23rd Edition) 4500 H-B	6.85	6.85
4.	Appearance	9119	-	Lab Method	Turbid	Clear
5.	TSS	mg/l	<20.0	APHA (23 <sup>rd</sup> Edition) 2540D	108.0	<2.5
6.	BOD	mg/l	<10.0	APHA (23rd Edition) 5210B 2017	66.0	4.4
7.	COD	mg/l	<50.0	APHA (23 <sup>rd</sup> Edition) 5220B 2017	214.0	16.0
8.	Oil & Grease	mg/l	<10.0	APHA (23 <sup>rd</sup> Edition) 5220B 2017	6.6	<1.4
9.	Ammonical Nitrogen	mg/I	<5.0	APHA (23 <sup>rd</sup> Edition) 4500-NH3-F 2017	23.0	<0.1
0.	Total Nitrogen (as N)	mg/l	<10.0	IS 14684 (1999); Rffm:2014	34.0	2.3
1.	Faecal Coliform	MPN/ 100ml	<1000.0	APHA (23 <sup>rd</sup> Edition) 9221 E	1700.0	58.0



For Mitra S. K. Private Limited

narrica Ku: Raff Authorized Signatory



N-5/100, Ground Floor IRC Village, Nayapatii Bhubaneswar - 751015 ICIN: U51909WB1966FTC0230371

T: (0674) 2362916, 2360917

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## TEST REPORT

Name & Address of the Customer: THE DHAMRA PORT COMPANY LIMITED

AT : DOSINGA, PO : DHAMRA

DIST : BHADRAK, PIN :756171 ODISHA

Report No.: BBS/307 Date: 05.04.2022

Sample No.: MSKGL/ED/2020-21/03/00842 Sample Description: EFFLUENT WATER

Sampling Location: STP-25KLD Date of sampling: 03.03.2022

#### ANALYSIS RESULT

SL.	Test Parameters	Units	Limit	Test Specification	Res	ult
No.	1.000.000.000.000.0000		- Television	-	Inlet	Outlet
t.	Colour	Hazen	7	APHA (23 <sup>rd</sup> Edition) 2120B 2017	Blackish	Colourless
2	Odour	777		APHA (23 <sup>rd</sup> Edition) 2150B	Disagreeable	Agreeable
3.	pH value at 26°C		6.5 - 9.0	APHA (23 <sup>rd</sup> Edition) 4500 H-B 6.94		7.18
4.	Appearance	-		Lab Method	Turbid	Clear
5.	TSS	mg/l	<20.0	APHA (23 <sup>rd</sup> Edition) 2540D	250.0	3.0
6.	30D	mg/l	<10.0	APHA (23° Edition) 5210B 2017	110.0	4.0
7.	COD -	mg/l	<50.0	APHA (23th Edition) 5220B 2017	396.0	10.0
8.	Oil & Grease	mg/l	<10.0	APHA (23 <sup>rd</sup> Edition) 5220B 2017	15.0	<1.4
9.	Ammonical Nitrogen	ing/I	<5.0	APHA (23 <sup>rd</sup> Edition) 4500-NH3-F 2017	28.0	<0.1
10.	Total Nitrogen (as N)	mg/i	<10.0	1S 14684 (1999); Rffm:2014	32.0	1.1
il.	Faccal Coliform	MPN/ 100ml	<1000.0	APHA (23 <sup>rd</sup> Edition) 9221 E	2200.0	89.0

S-Kangi Report Prepared by:



For Mitra S. K. Private Limited

Ananja Ku Raff Authorized Signatory



N-5/100, Ground Floor IRC Village, Nayspalli Brubaneswar - 751018

[CIN: U51869WB1956PT0023037]

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## TEST REPORT

Name & Address of the Customer; THE DHAMRA PORT COMPANY LIMITED

AT : DOSINGA, PO : DHAMRA

DIST: BHADRAK, PIN: 756171 ODISHA

Report No. : BBS/308 Date : 05.04.2022

Sample No.: MSKGL/ED/2020-21/03/01713 Sample Description: EFFLUENT WATER

Sampling Location: STP 25KLD Date of sampling: 22.03,2022

## ANALYSIS RESULT

SL. No.	Test Parameters	Units	Limit	Test Specification	Res	ult
				Inlet	Outlet	
1.	Celour	Hazen	-	APHA (23 <sup>rt</sup> Edition) 2120B 2017	Blackish	Colourless
2.	Odour	1775		APHA (23 <sup>rd</sup> Edition) 2150B	Disagreeable	Agreeable
3.	pH value at 26°C		6.5-9.0	APHA (23° Edition) 4500 H-B	6.87	7.12
4.	Арреагалсе	****	. +	Lab Methed	Turbid	Clear
5.	TSS	mg/I	<20.0	APHA (23rd Edition) 2540D	254.0	<2,5
6.	BOD	mg/l	<10.0	APHA (23 <sup>rd</sup> Edition) 5210B 2017	42.0	<2.0
7.	QQD	mg/i	<50.0	APHA (23rd Edition) 5220B 2017	177.0	<4.0
8.	Oil & Grease	mg/l	<10.0	APHA (23 <sup>st</sup> Edition) 5220B 2017	7.0	<1.4
9.	Ammonical Nitrogen	mg/l	<5.0	APHA (23" Edition) 4500-NH3-F 2017	24.0	0,9
0.	Total Nitrogen (as N)	mg/l	<10.0	IS 14684 (1999); Rffm:2014	30.0	1.3
1.	Faccal Coliform	MPN/ 100ml	<1000.0	APHA (23 <sup>rd</sup> Edition) 9221 E	2100.0	69.0

Report Prepared by:



For Mitra S. K. Private Limited

nanta Ku Rut Authorized Signatory



N-6/100, Ground Floor IRC Village, Nayapalli Bhubaneswar - 751015 ICIN: U51909WB1956PTC923037

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## TEST REPORT

Name & Address of the Customer: THE DHAMRA PORT COMPANY LIMITED

AT : DOSINGA, PO : DHAMRA

DIST: BHADRAK, PIN: 756171 ODISHA

Report No.: BBS/301 Date: 05.04.2022

Sample No.: MSKGL/ED/2020-21/03/00846. Sample Description: EFFLUENT WATER

Sampling Location: STP 15 KLD Date of sampling: 03.03.2022

## ANALYSIS RESULT

SL.	Test Parameters	Units	Limit	Test Specification	Res	ult
				Inlet	Outlet	
1.	Colour	Hazen	-	APHA (23 <sup>rd</sup> Edition) 2120B 2017	Blackish	Colourless
2,	Odour		- e	APHA (23 <sup>rd</sup> Edition) 2150B	Disagreeable	Agreeable
3.	pH value at 26°C	-1	6.5 - 9.0	APHA (23rd Edition) 4500 H-B	6.87	7.11
4.	Appearance	****	16	Lab Method	Turbid	Clear
5.	TSS	ing/l	<20,0	APHA (23rd Edition) 2540D	488.0	4.0
б.	BOD	mg/l	<10.0	APHA (23 <sup>st</sup> Edition) 5210B 2017	35.0	7.0
7.	COD	mg/l	<50.0	APHA (23 <sup>rd</sup> Edition) 5220B 2017	125.0	19.0
8.	Oil & Grease	mg/l	<10.0	APHA (23 <sup>rd</sup> Edition) 5220B 2017	5.0	<1.4
9.	Ammonical Nitrogen	mg/l	<5.0	APHA (23 <sup>rt</sup> Edition) 4500-NH3-F 2017	36.0	<0.1
10.	Total Nitrogen (as N)	mg/l	<10.0	IS 14684 (1999); Rffm:2014	44.0	2.8
1,	Faecal Coliform	MPN/ 100ml	<1000.0	APHA (23 <sup>rd</sup> Edition) 9221 E	2400.0	82.0

S. Kanngy Report Prepared by:



For Mitra S. K. Private Limited



N-5/100, Ground Floor IRC Wilage, Nayspall Bhubaneswar - 75/1016 [CIN: U51909W81958PT0023037]

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## TEST REPORT

Name & Address of the Customer:

THE DHAMRA PORT COMPANY LIMITED

AT : DOSINGA, PO : DHAMRA

DIST: BHADRAK, PIN:756171 ODISHA

Report No. ; BBS/303 Date : 05.04,2022

Sample No.: MSKGL/ED/2020-21/03/01711 Sample Description: EFFLUENT WATER

Sampling Location: STP 15 KLD Date of sampling: 22.03.2022

#### ANALYSIS RESULT

SL.	Test Parameters	Units	Limit	Test Specification	Res	ult
No.					Inlet	Outlet
l.	Colour	Hazen	100	APHA (23rd Edition) 2120B 2017	Blackish	Colourless
2.	- Odour	1444	- 8 - 7	APHA (23 <sup>st</sup> Edition) 2150B	Disagreeable	Agreeable
3.	pH value at 26°C	****	6.5 - 9.0	APHA (23 <sup>st</sup> Edition) 4500 H-B	7.64	7.08
4.	Appearance	****		Lab Method Turbid		Clear
5.	TSS	mg/l	<20.0	APHA (23 <sup>rd</sup> Edition) 2540D	254.0	8.0
6.	BOD	mg/l	<10.0	APHA (23 <sup>rd</sup> Edition) 5210B 2017	54.0	4.6
7.	COD	mg/l	<50.0	APHA (23 <sup>rd</sup> Edition) 5220B 2017	185.0	10.0
8,	Oil & Grease	mg/l	<10.0	APHA (23 <sup>rd</sup> Edition) 5220B 2017	7.4	<1.4
9.	Ammonical Nitrogen	mg/l	<5.0	APHA (23 <sup>rd</sup> Edition) 4500-NH3-F 2017	17.0	1.3
10.	Total Nitrogen (as N)	mg/l	<10.0	IS 14684 (1999); Rffm:2014	22.0	2.3
ii.	Fascal Coliform	MPN/ 100ml	<1000.0	APHA (23 <sup>st</sup> Edition) 9221 E	800.0	97.0

S. Karnge Report Prepared by: 2 9250 S

For Mitra S. K. Private Limited



N-5/100, Ground Floor IRC Village, Nayspail Bhubaneswar - 751015 ICIN - US1000/IR10520

TCIN: U51909WB1956PTC0230371

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## TEST REPORT

Name & Address of the Customer :

THE DHAMRA PORT COMPANY LIMITED

AT : DOSINGA, PO : DHAMRA DIST : BHADRAK, 756171 ODISHA Report No. : BBS/312 Date : 05,04,2022

Sample No.: MSKGL/FD/2020-21/03/01730

Date of sampling : 15.03.2022

Sampling Description: Ground Water (Piezometric) Sampling Location: Township Pump House Sampling Done By: Mr. Kunja Bihari Nayak

## BACTERIOLOGICAL ANALYSIS RESULT AS PER IS: 10500 - 2012

St. No	Test Parameters	Units	Limit	Test Method / Specification	Parate
1.	E. Coli	/100ml	Not Detectable	IS: 15185 : 2016	Result Not Detected
A	Total Coliform Organism	/100ml	Not Detectable	IS: 15185 : 2016	Not Datacted

CHEMICAL ANALYSIS RESULT AS PER IS: 10500 - 2012 Requirement Permissible limit Test Parameter Units (Acceptable in the obsence of No. Test Method / Specification Result Limit alternate Source phi (at 26° C 6.5 - 8.5 No Releasing IS 3025 (Part 11)-1984 Riffer: 2012 7.62 9 Sulphate (as SO<sub>4</sub>) 200 IS 3025 (Part 24)- 1986 Riffin: 2014 me/l 4400 47.0 Calcium (as Ca) me/l IS 3025 (Part 40)- 1991 Rffin: 2014 200 34.0 4 Arsenic (as As) mall 0.01 0.05 BDL(DL:0,005) IS 3005 (Part 2) 2004 RA 2014 5. Lend (ns Pb) 0.01 mg/l No Relaxation IS 3025 (Part 2) 2004 RA 2014 BDL(DL:0.005) 6 Zinc (as Zn) 5.0 mg/l 15.0 IS 3025 (Part 3) 2004 RA 2014 BDL(DL:0.02) Copper (as Cu) 1000/1 0.05 1.5 IS 3025 (Part 2) 2004 RA 2014 BDL(DL:0.02) Mercury (as Hg) No Relaxation ma/i 0.0GI IS 3025 (Part 48)-1994 Rffm: 2014 8DL(DL:0.0002) 9 Cadmium (as Cd) mg/ī 0.003 No Relaxation IS 3025 (Pan 2) 2004 RA 2014 BDL(DL-0.001) Mineral OII mg/l 0.5 No Relaxation 1S 3025 (Part 39)-1991 Riffin: 2014 BDL(DL:0.5) 11. Fluoride (as F) mg/l 1.0 IS 3025 (Part 60)- 2008 Rffin: 2013 1.5 BDL(DL:0.2) 12 Colour Hagen 3 15 3025 (Part 4)-1983; Rffm:2012 BDL(DL:1.0) 13: Odour Agrecable Agreeable IS 3025 (Part 5)-1983 Rffm:2012 Agrecable Turbidity 14 NTU IS 3025 (Part 10)-1984 Rffm: 2012 BDL/DL:L0) 13 Residual free Chiorine me/l 1.0 IS 3025 (Part 26)- 1986 Rffm: 2014 BDL(DL:0.1 16. fron (as Fe) mof 0.3 No Relevation IS 3025 (Part 53)-1988 Rffm: 2014 BDL(DL:0.05) 12 Chloride (as Cl) 250 ing/l 1000 IS 3025 (Part 32)-1988 Rrffm: 2014 71.0 18 Total Disselved Solids mg/l 300 2000 IS 3025 (Part 16)-1984; Rffm:2012 280.0 19 Alkalinity (as CaCO<sub>a</sub>) me 200 IS 3025 (Part 23)- 1986 Rffas: 2009 176.0 20. Aluminium (as Al) 0.03 mg/l 0.2 IS 3025 (Part 2) 2004 RA 2014 BDL(DL:0.01) 21 Magnesium (as Mg) mg/i 30 100 IS 3025 (Part 46)-1994 Riffm: 2014 25.0 Total Hardness 22 mg/t 200 600 IS 3025 (Part 21)-2013 (as CaCO<sub>1</sub>) 174.0 23. Boren (as 8) 0.5 mg/i 1.6 IS 3025 (Part 2) 2004 RA 2014 BDL(DL:0.3) 24 Manganese (as Mn) sag/l 0.1 0.3 IS 3025 (Pag 2) 2004 RA 2014 BDL(DL:0.02) 25. Nitrate (as NO.) net 45 No Relaxation IS 3025 (Part 34)-1988 Rffm: 2014 BDL(DL:0.4) Phenofic Compounds 26. 0.001 IS 3025 (Part 43)- 1992; Riffm: 2014 0.502 (as CoH,OH) BDL(DL:0.001) mg/l 27 Setenhum (as Se) mg/l 0.01 No Reimestion IS 3025 (Part 2) 2004 RA 2014 BDL(DL:0.005) Total Chromium ( os Cr) 28 No Relaxation mg/i 0.05 IS 3025 (Part 2) 2004 RA 2014 BDL(DL:9.01). 29, Silver (as Ag)  $m_{\rm S}/1$ 0.1 No Relevation IS 3025 (Part 2) 2004 RA 2014 BDL(DL:0:005) 30. Barium (as Be) mg/I 0.7 Ne Relaxation IS 3025 (Part 2) 2004 RA 2014 BDL(DL:0.1) 31 Salinity mg/l IS 3025 (Part 14)- 2013 32.0



Ref. No. BBS/312

Date- 05.04,2022

32	Sulphide ( as H2S)	tre/	0.05	No Relaxation	IS 3023 (Pari 29)- 1991; Riffer: 2014	Deby (Dec. 40 (dec.
33.	Ammonia ( as total ammonia-N)	mg/f	0.5	No Releasion	15 3025 (Part 34)- 1988; Rffm: 2014	BDL(DL:0.02) BDL(DL:0.1)
34.	Chiomenines	mg/l	4.0	No Relaxation	IS 3025 (Part 26)- 1986; Rffin: 2014	
35	Nickel (as Ni)	mg/l	0.02	No Relaxation	IS 3025 (Part 2) 2004 RA 2014	BDL(DL:0.1)
36.	Oyanide (ns CN)	10/8/1	0.05	No Relaxation	18 3025 (Part 27) - 1986 Riffne 2014	BDL(DL:0.01)
37.	Anionic Detergents (2s MBAS)	mg/l	0,2	1.0	IS 13428(Annex K)- 2005	BDL(DL:0.01) BDL(DL:0.03)
38.	Polymuclear Aromatic Hydrocarbous (25 PAH)	mg/l	0.0001	No Relaxation	APMA ( 23 <sup>rd</sup> Bdm.) 6440C	BDL(DL:0.0601)
39.	Polychlorinated Biphanylis (PCB)	mg/I	0.0005	No Relevation	US EPA 8082	BDL(DL:0.0005)

S- Kames. Report Prepared by:

For Mitra S. K. Private Limited.

Ananta Ku Rath



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Name & Address of the Customer:

THE DHAMRA PORT COMPANY LIMITED

AT : DOSINGA, PO : DHAMRA

DIST: BHADRAK, PIN:756171 ODISHA

TEST REPORT

Report No. : BBS/313

Date : 05.04.2022

Sample No.: MSKGL/FD/2020-21/03/01721

Date of sampling : 15.03.2022 Sampling Description : Ground Water (Piezometric)

Sampling Location: Pump House WTP Sampling Done By : Mr. Kunja Bihari Nayak

## BACTERIOLOGICAL ANALYSIS RESULT AS PER IS: 10500 - 2012

SL No	Test Parameters	Units	Limit	Test Method / Specification	111111111111111111111111111111111111111
1.	E. Cell	/100ml	Not Detectable	IS: 15185 : 2016	Result
2.	Total Coliform Organism	/100ml	Not Detectable	The state of the s	Not Detected
The State of State of		15588010	AND RADIOUSD	IS: 15185 : 2016	Not Detected

CHEMICAL ANALYSIS RESULT AS PER IS: 10500 - 2012

SL No.		Units	Requirement (Acceptable Limit)	Permissible limit in the absence of alternate Source		Result
1.	pH (at 26°C)	5110	6.5 - 8.5	No Relaxation	IS 3025 (Part 11)-9984 Rffm: 2012	7,52
2	Sulphate (as SO <sub>4</sub> )	Figm	200	400	IS 3025 (Part 24)- 1986 Rffm: 2014	The second secon
3.	Calcium (as Ca)	mg/I	75	200	IS 3025 (Part 40)- 1991 Rffm: 2014	58.0 41.0
4,	Arsenio (as As)	Tum.	0:01	0.05	(\$ 3025 (Part 2) 2004 RA 2014	
5.	Lead (as Pb)	tng/I	0.01	No Reisontion	IS 3025 (Part 2) 2004 RA 2014	BDL(DL:0.005)
б,	Zinc (as Zn)	mg/l	5,0	15.0	IS 3025 (Part 2) 2004 RA 2014	BDL(DL:0.005)
7,	Copper (as Cu)	mg/l	0.05	1.5	IS 3025 (Part 2) 2064 RA 2014	BDL(DL:0.02)
8.	Mercury (as Hg)	mg/l	0.901	No Relevation	IS 3025 (Part 48)-1994 Rffin: 2014	BDL/DL:0.02)
9.	Cadminn (as Cd)	mg/I	0.003	No Relevation	IS 3025 (Part 2) 2004 RA 2014	BDL(DL:0.0002
10.	Mineral Oil	mg/l	0.5	No Relocation	IS 3025 (Part 39)-1991 Riffin: 2014	BDL(DL:0.001)
11.	Fluoride (as F)	mg/i	1.0	1.5	IS 3025 (Part 60)- 2008 Riffin: 2013	BDL(DL-0.5)
12	Colour	Hazen	3	15	3025 (Part 4)-1983; Riffer:2012	BDL(DL:0.2)
13.	Odour	NAME OF	Agreeable	Agrecable	IS 3025 (Part 5)-1983 R ffm :2012	BDL(DL:1.6)
14	Torbidity	NT.U	1	3	IS 3025 (Part 10)-1984 Rffm; 2012	Agrocable
15.	Residual free Chlorine	mg/1	6.2	1.0	IS 3025 (Part 26)- 1986 Rffm:2014	BDL(DL:1.0)
16.	Iron (as Pa)	mg/S	0.3	No Relaxation	IS 3025 (Part 53) 1988 Riffer 2014	SDL(DL:0.1)
17.	Chloride (as Cl)	me/i	250	1000	IS 3025 (Part 32)-1988 Riffin: 2014	BDL(DL:0.05)
18.	Total Dissolved Solids	mg/l	500	2000	IS 3025 (Part 16)-1984; Riffin:2012	54.0
19.	Alicalinity (as CaCOs)	mg/i	200	600	TS 3025 (Part 23)- 1986 Rffm: 2000	369.0
20.	Ainminium (aš Al)	mg/l	0.03	0.2	10:20/25 (Part 23)- 1986 Kritin; 2(8)9	170.0
21.	Magnesium (es Mg)	mg/l	30	100	IS 3025 (Part 2) 2004 RA 2014	BDL(0L:0.01)
22.	Total Hardness (as CaCO <sub>1</sub> )	mg/l	200	600	IS 3025 (Part 46)-1994 Riffin; 2014 IS 3025 (Part 21)-2013	23.0
23.	Boron (as B)	mg/I	0.5	1.0		to book 200 He v
24.	Manganese (as Mo)	mg/l	0.1	0.3	IS 3025 (Part 2) 2004 RA 2014	BDL(DL:0.3)
25.	Nitrate (as NO <sub>2</sub> )	notyl	45	No Relexation	IS 3025 (Part 2) 2004 RA 2014	BDL(DL:0.02)
26.	Phenolic Compounds (≈ C <sub>6</sub> H <sub>5</sub> OH)	mg/l	0.001	9.002	IS 3025 (Part 34)-1988 Rffler: 2014 IS 3025 (Part 43)-1992; Rffler: 2014	3.1 BDL(DL:0.001)
27.	Scienium (as Sc)	mg/l	0,01	No Relaxation		
28.	Total Chromium (as Cr.)	mg/l	0.05	No Religion	IS 3025 (Pert 2) 2004 RA 2014	BDL(DL:0.005)
29.	Silver (as Ag)	mg/l	1.0	No Relaxation	IS 3023 (Part 2) 2004 RA 2014	BDL(DL:0.01)
30.	Borium (as Ba)	mg/i	0.7	No Relaxation	IS 3025 (Part 2) 2004 RA 2014	BDL(DL:0.005)
31.	Salinity	mg/f	****	No sensance	IS 3025 (Part 2) 2004 RA 2014	BDL(DL:0.1)
-		108-		No.	IS 3025 (Part 14)- 2013	40.0



## Ref. No. BBS/313

#### Date- 65.04.2622

39.	Polychlorissue() Biphenyls (PCB)	mg/l	0.0005	No Relaxation	US EPA 8082	BDL(D£:0.0005
38.	Polymutear Aramnic Hydrocarbans (ss PAH)	mg/l	0.0001	No Relaxation	APNA ( 23 <sup>rd</sup> Edin.) 644BC	BDL(DL:0.0001
37.	Anionic Detargents (as MBAS)	mgd	0.2	1.0	IS 13428(Annex K)- 2005	BDL(DL:0.05)
36.	Cyanide (as CN)	mg/l	0,05	Ne Relaxation	IS 3025 (Part 27)- 1986 RJfm; 2014	BDL(DL:0.01)
35.	Nickel (as Ni)	mg/l	0.02	No Relaxation	IS 3025 (Part 26)- 1986; R/Em; 2014 IS 3025 (Part 2) 2004 RA 2014	BDL(DL:0.1)
34.	Chlorimines	me/i	4.0	No Relaxation		
33,	Ammonia ( as soul	mg/i	0.5	No Relaxation	IS 3025 (Pari 34)- 1988; Riffin: 2014	BDL(DL:0.1)
32.	Sulphide ( as H2S)	right .	0.05	No Reseasion	18 3025 (Part 29)- 1991; Refire: 2014	BD1:01:0.02

S Kamer Report Prepared by:

For Mitra S. K. Private Limited.



N-5/100, Ground Floor IRC Village, Nayapatii Bhubanaswar - 75/1016 |CRX: U51909WB1956PT0026037|

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#### TEST REPORT

Name & Address of the Customer:

THE DHAMRA PORT COMPANY LIMITED

AT : BOSINGA, PO : DHAMRA

DIST: SHADRAK, PIN:756171 ODISHA

Report No. : 8BS/314 Date : 05,04,2022

Sample No.: MSKGL/FD/0020-21/05/01721

Date of sampling : 15.03.2022

Sampling Description : Ground Water (Piezometric)

Sampling Location: Running Room Sampling Done By: Mr. Kunja Bihari Nayak

## BACTERIOLOGICAL ANALYSIS RESULT AS PER IS: 10500 - 2012

SL No	Test Parameters	Units	Limit	4 77 1	
1.	E. Coli	/100ml	Not Detectable	Test Method / Specification	Result
2	Total Collibria Organism	/100ml		IS: 15185: 2016	Not Detected
-	Total Company Organism	2.7300831	Not Detectable	IS: 15185 : 2016	Not Detected

CHEMICAL ANALYSIS RESULT AS PER IS: 18580 - 2012 Requirement Permissible fimir Test Parameter Units (Acceptable No. in the absence of Test Method / Specification Result Limit) alternate Source pH ( m 26° C) 63 - 85 No Relaxation IS 3025 (Part 11)-1984 Rffm: 2012 7.63 Sulphate (as \$.0.) mg/l: 200 IS 3025 (Part 24)- 1986 Riffer; 2014 400 56.0 Calcium (4s Ca) mg/l 75 200 1\$ 3025 (Part 48)- 1991 Riffm: 2014 44.6 4 Arsenic (as As) mg/i 0.01 0.05 3025 (Part 2) 2004 RA 2014 BDL(DL:0.005) 5. Lead (as Pb) mg/I0.01 No Relaxation IS 3025 (Part 2) 2004 RA 2014. BDL(DL:0.005) 6 Zinc (as Zn) me/7 5.0 15.0 is 3025 (Part 2) 2004 RA 2014 BDL(DL:0.02) T. Copper (as Cii) 0.05 mell 1.5 IS 3023 (Part 2) 2094 RA 2614 BDL(DL-0.02) Mercury (as Hg) 8 mg/l 0.001 No Relexation IS 3025 (Part 48)-1994 Riffin: 2014 BDL(DL:0.0002) 9, Cadaium (as Cd) mg/l 0.003 No Relaxation IS 3025 (Part 2) 2004 RA 2014 BDL(DL:0.001) 10. Mineral Oil thef 0.5 No Relaxation IS 3025 (Part 39)-1991 Riffin: 2014 BDL(DL:0.5) 11. Pluoride (as F) mg/ IS 3025 (Pert 60)- 2008 Rffm; 2013 BDL(DL:0.2) 12 Colour Hagen 15 BDL(DL:1.0) 3025 (Part 4)-1983; Riffer: 2012 13. Orlnear Agrocable Agreeable IS 3025 (Part 5)-1983 R0m:2012 Turbidity Agreeable 14 N.T.U IS 3025 (Part 10)-1984 Rffm: 2012 BDL(DL-LOS 15. Residual free Chlorine mg/i 0.2 1.0 15 3025 (Part 26)- 1986 Rffm:2014 BDL(DL:0.1) 16 fron (as Fe) mg/l 0.3 No Relevation IS 3025 (Part 53)-1988 Rffm: 2014 BDL(DL:0.05) Coloride (as CI) 17. 1002/1 250 1000 15 3025 (Part 32)-1988 Rtfm: 2014 65.0 18. **Paral Dissolved Solids** ma/l 500 2000 IS-3025 (Part 16)-1984; Rffm:2012 278.0 19. Alkslinity (as CaCO<sub>2</sub>) mg/l 200 600 IS 3025 (Part 23)-1986 Rfbn; 2009 172/0 20. Alementum (as AI) mad 0.03 0.2 IS 3025 (Part 2) 3004 RA 2014 BDL(DL:9.01) 21. Magnesium (as Mg) med 30 100 15 3025 (Part 46)-1994 Rffm; 2014 22.0 Total Flandriess 220 mg/l 200 600 las CaCOsi IS 3025 (Part 21)-2013 152.0 23 Basen (as B) me/l 0.5 1.0 IS 3025 (Part 3) 2504 RA 2014 BDL(DL:0.3) 24 Manganese (as Mo) men 0.1 0.3 IS 3025 (Part 2) 2004 RA 2014. 25. BDL(DL:0.02) Nitrate (as NO<sub>2</sub>) No Relaxation me/i 45 JS 3025 (Part 34)-1988 Riffin: 2014 BDL(DL-0.4) Phenolic Compounds 26 0.601 0.002 IS 3025 (Part 43)- 1992; Rffm: 3014 (as CaHaOH) mg/l BDL(DL:0.001) 27 Selenium (as Se) 0.91 mg/T No Relaxation IS 3025 (Purt 2) 2004 RA 2014 BDL/DL:0.005) 22 Total Circinium ( as Cr mg/1 0.05 No Relaxation IS 3025 (Pert 2) 2004 RA 2014 BDL(DL:0.01) 29 Silver ( as Ag) mp/l 0.1 No Relexation IS 3025 (Part 2) 2004 RA 2014 BDL(DL-0.005) 30, Barium (as Bu) trig/i 0.7 No Relaxation IS 3025 (Part 2) 2004 RA 2014 BDL(DL:0.1) 31. Salinity mad. 18 3025 (Part 14)- 2013 39.0

## Continuation Sheet



#### Ref. No. BBS/314

## Date- 05.04.2022

39.	Blehenvis (PCB)	mg/l	0.0005	No Relexation	US EPA 8082	BDL(DL:0.0005)
-8	(as PAH) Polychlorinated		- C-		Services County Creac	SOL(DE30.000)
38.	Polynucicer Arominic Hydrocarbons	mg/l	0.0001	No Referention	APHA (23 <sup>rd</sup> Edth.) 6440C	BDL(DL:0.0001
37.	(AS MILAS)	mg/I	0,2	1.0	1S 13428(Assec: K)-2005	BOL(DL:0.05)
	Anionio Desergents	mg/l	0.95	No Relacation	IS 3025 (Part 27)- 1986 Riffra: 2014	BDL/DL:0.01
36.	Cyanide (as CN)		The state of the s	No Reloyation	IS 3025 (Part 2) 2004 RA 2014	BIDL(DL:0.01
35.	Nickel (as Ni)	mg/	0.02	No Releastion	iS 3025 (Part 26)- 1986; Rffin: 2014	BDL(D1:0.1)
34.	Chloraminas	mg/I	4,0	No Business		- Committee of the
33.	Ammonia ( as eotal symmonia-N)	mg/l	0.5	No Relaxation	IS 5025 (Part 34)- 1988; Rffm: 2014	BDL(DL;0.02 BDL(DL:0.1)
32.	Sulphide ( as 1125)	Tegen	0.55	No Relaxation	IS 2025 (Part 29)- 1991; Rffm; 2014	Director Age

S. Kounga Report Prepared by:

For Mitra S. K. Private Limited.

MSK TERTINGS INSPECTION

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TEST REPORT

Report No. : BBS/315 Date : 05.04.2022

Sample No.: MSKGL/FD/2020-21/03/00826

Date of sampling : 05.03.2022 Sampling Description : Drinking Water Sampling Location : Township E Block Aren Sampling Done By : Mr. Kunja Bihari Nayak

#### AEGI REPORT

DIST: BHADRAK, PIN:756171 ODISHA

THE DHAMRA PORT COMPANY LIMITED

Name & Address of the Customer :

AT : DOSINGA, PO : DHAMRA

BACTERIOLOGICAL ANALYSIS RESULT AS PER IS: 10500 - 2012

SI, No	Test Parameters	Units	Limit	Test Method / Specification	Result
- 1,	E. Coli	/100ml	Not Detectable	IS: 15185 : 2016	Not Detected
2.	Total Coliform Organism	/100ml	Not Detectable	IS: 15185 : 2016	Not Detected

CHEMICAL ANALYSIS RESULT AS PER IS: 10500 - 2012

SL No.	Test Parameter	Units	Requirement (Acceptable Limit)	Permissible limit in the absence of alternate Source	Test Method / Specification	Result
	pH ( at 26° C)	- Seb -	6.5 - 8.5	No Relaxation	IS 3025 (Part 11)-1984 Riffm: 2012	8.09
1	Sulphate (as SO <sub>c</sub> )	mg/1	200	485	IS 3025 (Part 24)- 1986 Riffer: 2014	49,0
3.	Calcium (as Ca)	mg/T	75	300	18 3025 (Part 40)- 1991 Rffm: 2014	31.0
4.	Arsenio (as As)	Ngm	30,0	0.05	IS 3025 (Part 2) 2004 RA 2014	BDL(DL:0.605)
5.	Lead (as Pb)	l light	0.01	No Relaxation	IS 3925 (Part 2) 2004 RA 2014	BDL(DL:0.005)
6.	Zinc (as Zn)	mg/l	5.0	15.0	1S 3025 (Part 2) 2004 RA 2014	BDL(DL:0,02)
7.	Copper (as Cu)	mg/i	0,05	1.3	IS 3025 (Part 2) 2004 RA 2014	BDL/DL:0/021
8	Mercury (as Hg)	me/i	0.001	No Relocation	IS 3025 (Part 48)-1994 Rffm: 2014	BDL(DL:0.0002
9.	Cadmium (as Cd)	f\gm	0.003	No Relaxation	IS 3025 (Part 2) 2004 RA 2014	BDL(DL:0.001)
10.	1 Mineral Oil	mg/l	0.5	No Relexation	13 3025 (Part 39)-1991 Rrins: 2014	BDL(DL:0.5)
11.	Fluoride (as F)	1092/7	1,0	1.5	IS 3025 (Part 60)- 2008 Rffm: 2013	0.37
12.	Colour	Hazeu	5	15	3025 (Part 4)-1983; Rffm:2012	BDL(DL:1.6)
13.	Odour	-	Agrecable	Agreeable	IS 3025 (Part 5)-1983 Rifer:2012	Agrocable
14.	Turbidity	N.T.U	1	3	IS 3025 (Part 10)-1984 Rillin; 2012	BDL(DL:1.0)
13.	Residual free Chiorine	mg/l	0.2	1.6	IS 3025 (Part 26)- 1986 Rffm:2014	SDL(Ds.:0,1)
16.	fron (as Fe)	l/gain	0.3	No Relaxation	IS 3025 (Part 53)-1988 Rffm: 2014	0.20 -
17.	Chiloride (as CI)	ngA	250	1000	TS 3025 (Part 32)-1988 Rffm: 2014	71.0
18.	Total Dissolved Solids	mg/I	500	2000	IS 3025 (Part 16)-1984; Rffm:2012	580.0
19.	Alkelinity (as CaCO <sub>2</sub> )	mgQ	200	600	IS 3025 (Part 25)- 1986 Riffer: 2009	381.0
20.	Alumisium (as Ai)	ing/l	0.83	0.2	IS 3025 (Past 2) 2004 RA 2014	BDL(DL:0.01)
21.	Magnesium (25 Mg)	mg/l	30	100	18 3025 (Part 46)-1994 Rffm: 2014	28.0
22	Total Hardness (as CaCO <sub>b</sub> )	mg/l	- 200	600	IS 3025 (Part 21)-2013	196.0
23.	Boron (as B)	mg/l	0.5	1.0	IS 3025 (Part 2) 2004 RA 2014	BDL(DL:0.3)
24.	Manganese (as Mn)	mg/l	0.1	0.3	IS 3025 (Part 2) 2004 RA 2014	BDL(DL:0.02)
25.	Nitrate (as NO <sub>1</sub> )	109/1	45	No Relaxation	IS 3025 (Part 34)-1988 RJfm; 2014	0.69
26,	Phenolic Compounds (as C <sub>d</sub> H <sub>2</sub> OH)	mg/I	0.001	0.002	IS 3025 (Part 43)- 1992; Riffin; 2014	BOL(DL:0,001)
27.	Selenium (as Sa)	1509/1	0.01	No Relaxation	IS 3025 (Part 2) 2004 RA 2014	BDL(DL:0.005)
28.	Total Chromium ( as Cr )	109/1	0.05	No Relaxation	IS 3025 (Part 2) 2004 RA 2014	BDL(DL:0.01)
29.	Silver (as Ag)	mg/i	0.1	No Relexation	18 3025 (Part 2) 2004 RA 2014	BDL(DL-0.005)
30.	Bariom (as Ba)	mg/l	0.7	No Relaxation	IS 3025 (Part 2) 2004 RA 2014	BDL(DL.0.1)
31;	Selinity	mg/l	man.		1S 3025 (Part 14)- 2013	52.0



#### Ref. No. BBS/315

## Date- 05.04,2022

32	Sulphide (45 H2S)	may1	0.05	No Relevation	IS 3025 (Part 29)- 1991; Rifm: 2014	BDL(DL:0.02)
33.	Amesonia ( as total ammonia-N)	Rgin	0.5	No Relaxation	1S 3025 (Part 34)- 1988; Rffm; 2014	BDL(DL:0.02)
34.	Chloramines	figm	4.0	No Relaxation	1S 3025 (Part 26)- 1986; R8m; 2014	Company of the same of the
35.	Nickel ( as Ni)	mg/l	50.0	No Relacistion	IS 3025 (Part 2) 2004 RA 2014	BDL(DL:0.01)
36.	Cyanide (as CN)	mm <sup>2</sup>	0.05	No Relacation	IS 3025 (Pent 27)- 1986 Rffm: 2014	THE RESERVE AND ADDRESS OF THE PARTY.
37.	Antonic Detergents (as MBAS)	mg/l	0.2	1,0	IS 15428(Annex K)- 2005	BDL(DL:0.01) BDL(DL:0.05)
38.	Polyosciear Aromatic Hydrocarbons (as PAH)	mg/i	0.0001	No Relaustion	APHA (23 <sup>14</sup> Edin.) 6440C	BDL(DL:0.0001)
39.	Polychlorinated Signonyls (PCB)	mg/l	0.0005	No Relevation	US EPA 8082	BDL(DL:0.0005)

Solven Frepared by:

For Mitra S. K. Private Limited.



N-5/100, Ground Floor IRC Village, Navegorii Bhubaneswar - 751015

[CiN: U51909WB1956PTC023037]

T : (6674) 2362916, 2360917 F: (0674) 2362918

Name & Address of the Customer :

THE DHAMRA PORT COMPANY LIMITED

AT : DOSINGA, PO : DHAMRA

DIST: BHADRAK, PIN:756171 ODISHA

TEST REPORT

Report No. : BBS/316

: 05.04.2022

Sample No.: MSKGL/FD/2020-21/03/00827

Date of sampling : 05.03,2022 Sampling Description: Drinking Water Sampling Location: Prefab Area

Sampling Done By : Mr. Kunja Bihari Nayak

BACTERIOLOGICAL ANALYSIS RESULT AS PER IS: 10500 - 2012

SL No	Test Parameters	Units	Limit	Test Method / Specification	Result
- I.	E. Coti	/100ml	Not Detectable	IS: 15185 ; 2016	Not Detected
2	Total Coliform Organism	/100ml	Not Detectable	IS: 15185 : 2616	Not Detected

CHEMICAL ANALYSIS RESULT AS PER IS: 10500 - 2012

<u>S1.</u> <u>No.</u>	The state of the s	Geds	Requirement (Acceptable Limit)	Permissible limit in the absence of alternate Source		Result
- 1.	pN (at 26°C)	-/ <del>211</del>	6.5 - 8.5	No Relexetion	IS 3025 (Part 11)-1984 Riffin: 2012	8.00
2,	Sulphate (as SO <sub>c</sub> )	Rtg/i	200	400	IS 3023 (Part 24)- 1986 Rffm: 2014	8.02
3.	Calcium (as Ca)	msg/3	75	700	IS 3025 (Part 40) - 1991 Rffm: 2014	50.0
4.	Aramic (as As)	mg/l	0.01	0.05	IS 3025 (Part 2) 2604 RA 2014	37.0
5,	Load (as Pb)	mg/l	0.01	No Relaxation	IS 3025 (Pert 2) 2004 RA 2014	BDL(DL:0.005
6.	Zinc (as Zn)	139/1	5:0	15.0	IS 3025 (Part 2) 2004 RA 2014	BDU(D).:0.005
7.	Copper (as Cu)	100/1	0.05	1.5	IS 3025 (Part 2) 2004 RA 2014	BDL(DL:0.02)
8,	Mercary (as Hg)	Mg/I	0.001	No Relaxation	IS 3025 (Part 48)-1994 Rffm: 2014	BDL(DL:6.02)
9.	Cadmium (as Cd)	mg/S	0.003	No Relexation	IS 3025 (Part 2) 2004 RA 2014	BDU/DL:6.0002
10.	Mineral Oil	merl	0.5	No Relexation	IS 3025 (Part 39)-1991 R:ffm: 2014	BDL(DL:0.001)
11.	Fluoride (as F)	mg/l	1,6	1.5	IS 3025 (Part 60)- 2008 Rrim: 2013	BDL(DL:0,5)
12.	Colour	Hagen	5	15	3025 (Part 4)-1983; Rffm: 2012	BDL(DL:0.2)
13,	Odem		Agreeable	Agrecable	IS 3025 (Part 5)-1983 Rffm:2012	BDL/DL:1.0)
14.	Turbidity	N.T.U	1	5	10 2025 (Peri 27-196) Rish 2012	Agrecable
15.	Residual free Chlorine	mg/i	0.2	1.0	18 3025 (Part 10)-1984 Rffin; 2012	BOL(DL:1.0)
16.	Iron (ies Fe)	mb/1	0.3	No Relaxation	IS 3025 (Part 26)- 1986 Rffm:2014	BDL(DL:0.1)
17.	Chlorida (as Cl)	ma/l	250	1000	IS 3025 (Part \$3)-1988 Riffin: 2014	BDL(DL:0.05)
18.	Total Disselved Solids	ing/l	500	2000	IS 3025 (Part 32)-1988 Rffm: 2014	65,0
19.	Alltalinity (as CaCO <sub>1</sub> )	mg/l	200	800	IS 3025 (Part 16)-1984; Rffin:2012	561,0
20.	Aluminium (as Al)	me/1	0.03	0.2	IS 3025 (Part 23)- 1986 Rdlm: 2009	338.6
21.	Magnesium (as Mg)	mg/I	30	100	IS 3025 (Part 2) 2004 RA 2014	BDL(DL:0.01)
22.	Total Hardness (as CaCO <sub>2</sub> )	mg/l	200	600	IS 3025 (Part 46)-1994 Riffm; 2014 IS 3025 (Part 21)-2013	184.0
23.	Boron (es B)	me/l	0.5			1.0 6.00
24.	Manganese (as Mn)	med	0.1	1.6	IS 3025 (Part 2) 2064 RA 2014	BDL(DL:0.3)
25.	Nitrate (as NO <sub>3</sub> )	mg/l	45	0.3	JS 3025 (Part 2) 2004 RA 2014	BDL(DL:0.02)
26.	Phenolic Compounds (as C <sub>e</sub> H <sub>e</sub> OH)		0.001	No Relaxation 0.002	18 3025 (Part 34)-1988 Riffin; 2014 IS 5025 (Part 43)- 1992; Riffin; 2014	0.75
27.	Scienium (as Se)	mg/1	100	1617/900		BDL(DL:9.691)
28.	Foul Chromium ( as Cr)	mg/l	0.01	No Releastion	1S 3025 (Part 2) 2004 RA 2014	BDL(DL:0.005)
29	Silver (25 Ag)	mg/s	0305	No Relaxation	IS 3025 (Part 2) 2004 RA 2014	BOL(DL:0.61)
30.	Barlum (as Be)	mg/i	0.1	No Relexation	IS 3025 (Part 2) 2004 RA 2014	BDL(DL:0.005)
31.	The state of the s	mp/i	0.7	No Relexation	IS 3025 (Part 2) 2004 RA 2014	BDL(DL:0.1)
254	Salinity	mefi	Milk.	****	IS 3025 (Part 14)- 2013	47.6



## Ref. No. BBS/316

Date- 05.04.2022

32	Sulphide ( as H28)	ing/t	0.05	No Relaxation	18 3025 (Part 29)- 1991; Riffer: 2014	BDL(DL:0.02)
33.	Ammonie ( as total ammonie-N)	tright.	0.5	No Relaxation	1\$ 3025 (Part 34)- 1988; Riffer: 2014	BDL(DL:0.1)
34.	Chloramines	nig/i	4.0	No Relaxation	US 3025 (Port 26)- 1986; Reffer: 2014	BDL(DL:0.1)
36	Nickel (as Ni) Cyanide (as CN)	mg/l mg/l	0.02	No Relexation No Relaxation	IS 3025 (Part 2) 2004 RA 2014	BDL(DL:0.01)
37.	Anionic Detergents (as MBAS)	m2/1	0.2	1.0	1\$ 3025 (Part 27)- 1986 Rffm; 2014 1\$ 13428(Amex K)- 2005	BDL(DL:0.05)
38.	Pelynucicar Aromatic Hydrocarbons (as PAH)	mg/l	0.0001	No Relaxation	APHA (23 <sup>N</sup> Edia.) 6440C	BDL(DL:0,0001)
39.	Polychlorinated Biphocyls (PCB)	mg/l	0.0005	No Referencion	US BPA 8082	BDL(DL:0,9905)

Report Prepared by:

For Mitra S. K. Private Limited.



N-5/100, Ground Floor RC Village, Navepali Bhubaneswer - 751015

[CIN: U81909WB1958PTC023037]

T1 (0674) 2362916, 2360917 F: (0674) 2362918

Name & Address of the Customer: THE DHAMRA PORT COMPANY LIMITED

AT : DOSINGA, PO : DHAMRA

DIST: BHADRAK, PIN:756171 ODISHA

TEST REPORT

Report No. : BBS/317

Date : 05.04,2022

Sample No.: MSKGL/FD/2020-21/05/00828

Date of sampling : 05.03.2022 Sampling Description : Orlnking Water Sampling Location : Jetty Area

Sampling Done By : Mr. Kunja Bihari Nayak

## BACTERIOLOGICAL ANALYSIS RESULT AS PER IS: 10500 - 2012

St. No	Test Parameters	Units	Limit	Test Method / Specification	Rosult
1.	E. Coli	/100ml	Not Detectable	IS: 15185 : 2016	Not Detected
1	Total Coliform Organism	/109ml	Not Detectable	TS: 15185 : 2016	Not Detected

## CHEMICAL ANALYSIS RESULT AS PER IS: 10500 - 2012

SL No.		Units	Requirement (Acceptable Limit)	Permissible limit in the absence of alternate Source		Result
L	pH ( at 26° C)	-	6.5 - 8.5	No Relection	IS 3025 (Part 11)-1984 Rffm: 2012	8.14
2	Sulphate (as SO <sub>a</sub> )	Mg/1	200	400	1S 3025 (Part 24)- 1986 Riffin: 2014	57,0
3.	Calcium (as Ca)	mg/l	75	200	IS 3025 (Part 40)- 1991 Riffne 2014	37.0
d.	Arsenic (as As)	mg/I	0.01	0.05	IS 3025 (Pert 2) 2004 RA 2014	BDL(DL:0,005
5.	Lend (as Pb)	mg/i	0.01	No Relaxation	IS 3025 (Part 2) 2004 RA 2014	BDL/DL:0.005
6.	Zine (as Zn)	mg/I	5.0	15.0	IS 3025 (Part 2) 2004 RA 2014	BDL(DL:0.02)
7.	Copper (as Co)	men	0,05	1.5	IS 3025 (Peri 2) 2004 RA 2014	BDL/DL:0.02)
8.	Merciary (as Fig)	mg/l	0.001	No Relayation	IS 3025 (Part 48)-1994 Rffm; 2014	DOG (7) (2 0000
9	Cadmion (as Cd)	mg/l	0.003	No Refacation	IS 3025 (Part 2) 2004 RA 2014	BDL/DL:0.0002
10.	Mineral Oil	mg/l	0.5	No Relaxation	IS 3025 (Part 59)-1991 Riffer: 2014	BDL(DL:0.001)
11.	Fluoride (as F)	mg/l	1.0	1.5	IS 3025 (Part 60)- 2008 RfSq; 2013	BDL(DL:0,5)
12	Colour	Hazen	5	15	3025 (Part 4)-1983; Riffin:2012	0.25
13.	Odour	HR	* Agreeable	Agrecuble	18 3025 (Part 5)-1983 Rffm:2012	BDL(D(:1.0)
14.	Turbidity	N,T,U	The second	5	IS 3025 (Part 10)-1984 Rffm: 2012	Agrocable
15	Residual free Chlorino	mg/l	0.2	1.0	IS 3025 (Part 26)- 1986 R/lim 2014	BDL(DL:1.0)
16.	Iron (as Fe)	mg/l	0.3	No Referation	IS 3025 (Part 53)-1988 Ritim: 2014	BDL(DL:0,1)
17.	Chloride (as Cl)	mg/i	250	1000	IS 3025 (Part 32)-1988 Rffm: 2014	0.14
18.	Total Dissolved Solids	mg/l	500	2000	IS 3025 (Part 16)-1984; Rffin:2012	78.0
19.	Affectinity (as CaCO <sub>1</sub> )	mg/l	200	600	IS 3025 (Part 23)- 1986 Rffm: 2009	570,0
20,	Aluminium (as Al)	10/9/7	0.03	0.2	IS 3025 (Part 2) 2004 RA 2014	341.0
21	Magnesium (as Mg)	ntg/l	30	100	18 3025 (Part 46)-1994 Riffin; 2014	8DL(DL:0.01)
22.	Total Hardness (≥s CaOO <sub>1</sub> )	mg/l	200	660	IS 3025 (Part 21)-2013	29.0
23.	Boron (as B)	mg/l	0.5	1.0	IS 3025 (Part 2) 2004 RA 2014	- A THE STATE OF THE PARTY OF T
24.	Manganese (es Mn)	mg/I	0.1	0.3	18 2025 (Part 2) 2004 RA 2014	BDL(DL:0.3)
25	Nitrate (as NO-1	ing/l	45	No Relaxation	IS 3025 (Part 2) 2004 RA 2014	BDL(DL:0.02)
26.	Phenolic Compounds (as C <sub>2</sub> H <sub>2</sub> OH)	ms/l	0.001	0.002	JS 3025 (Part 34)-1988 Riffin: 2014 IS 3025 (Part 43)-1992, Riffin: 2014	0.95 BDL(DL,0.001)
27.	Selenium (as Se)	mg/l	0.01	No Relaxation		
28.	Total Chromium (as Cr)	mg/l	0.03	No Relevation	JS 3025 (Part 2) 2004 RA 2014	BDL(DL:0.005)
29.	Silver (as Ag)	(0.9/1	0.1	No Relacation	IS 3025 (Part 2) 2004 RA 2014	BDL(DL:0.01)
30.	Barium (as Ba)	mg/l	0.7	No Relaxation	IS 3025 (Pan 2) 2004 RA 2014	BDL(DL:0.005)
31.	Salinity	ang/1	V-1	Ten erchysellon	IS 3025 (Pert 2) 2004 RA 2014	BDL(DL:0.1)
No.	AUSTONIA.	V100-1	-	7991	IS 3025 (Part 14)- 2013	46.0



#### Ref. No. BBS/317

#### Date- 05.04.2022

39,	Polychloringsed Biphenyls (PCB)	mg/1	0.0005	No Relaxation	US EPA 8082	BDL(DL:0.0005
38	Polynuclear Aromatic Hydrocarbons (as PAH)	mg/I	0.0001	No Relexation	APHA ( 23 <sup>n)</sup> Edith,) 6440C	RDL/DL:0.0001
32.	Anionic Detergents (as MBAS)	meri	0.2	1,0	IS 13428(Annex IC)- 2605	BDL(DL:0.05) BDL(DL:0.05)
35.	Cyanide (as CN)	mg/l	0.05	No Relexation	IS 3025 (Part 27)- 1986 Refrie: 2014	BDL(DL:0.01)
35.	Nickel ( as Nf)	mg/I	0.02	No Relevation	IS 3025 (Part 26) - 1986; Rffm: 2014 IS 3025 (Part 2) 2004 RA 2014	BDL(DL:0,1)
34.	Chloramines	mgt	4.0	No Relaxation		
33,	Ammonia ( us total emmonia-N)	zng/i	0.5	No Relaxation	IS 3025 (Part 34)- 1988; Rfffm: 2014	BDL(DL:0.02) BDL(DL:0.1)
32	Sulphide ( as H25)	mig/f	0,05	No Relexation	IS 3005 (Part 29)- (99); Rffm: 26)4	I DOM ONE WAS

SKAWSY Report Prepared by:

For Mitra S. K. Private Limited.



N-5/199. Ground Floor IRC Village, Neyspelli Bhubaneswar - 75/1915 [CIN: U519/09/81956 PTC023037]

T : (0674) 2362916, 2360917

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Name & Address of the Customer:

THE DHAMRA PORT COMPANY LIMITED

AT: DOSHINGA, PO: DHAMRA

DIST: SHADRAK, PIN:756171 ODISHA

TEST REPORT

Report No. : BBS/318

Date : 05

: 05.04.2022

Sample No.: MSKGL/FD/2020-21/03/00829

Date of sampling : 05.03.2022 Sampling Description : Drinking Water Sampling Location : Port Canteen

Sampling Done By : Mr. Kunja Bilari Nayak

BACTERIOLOGICAL ANALYSIS RESULT AS PER IS: 10500 - 2012

St. No	Test Parameters	Units	Limit	Test Method / Specification	1 2000000
1.	E, Coli	/100ml	Not Detectable	IS: 15185 ; 2016	Result Not Detected
2	Total Coliform Organism	/100ml	Not Detectable	IS: 15185 : 2016	Not Detected

CHEMICAL ANALYSIS RESULT AS PER IS: 10500 - 2012

SL No.		Units	Requirement (Acceptable Limit)	Permissible limit in the absence of alternate Source		Result
1.	pH ( at 26° C)	-	6.5 - 8.5	No Relexation	IS 3025 (Part 11)-1984 Rfffr: 2012	0.04
2.	Sulphate (us SO <sub>4</sub> )	606/1	200	460	IS 3025 (Part 24)- 1986 Rffm: 2014	8,01
3.	Calcium (as Ca)	mg/l	75	200	IS 3025 (Part 40)- 1991 Rrfm: 2014	56,0
4.	Arsenic (as As)	mg/l	0.01	0.05	IS 3025 (Part 2) 2004 RA 2014	39.0
5.	Lord (as Pb)	mg/l	0.01	No Relaxation	IS 3025 (Part 2) 2004 RA 2014	BDL/DL:0.005)
6.	Zisc (as Zn)	mig/il	5.0	15.0	IS 3025 (Part 2) 2004 RA 2014	BDL(DL:0.005)
7.	Copper (ns Ca)	mg/l	9.05	1.5	15 2025 (Per 2) 2004 SA 2014	BDL(DL:0,02)
8.	Moroury (es Hg)	me/t	0.001	No Relaxation	IS 3025 (Part 2) 2004 RA 2014	BDL(DL:0,02)
9.	Cadmium (as Cd)	mg/l	0.003	No Relaxation	IS 3025 (Part 48)-1994 Rffm: 2014	BDL(DL:0.0002)
10.	Mineral Oil	mg/l	0.5	No Relacation	TS 3025 (Part 2) 2004 RA 2014	BDL(0L:0.001)
11.	Fluoride (as F)	me/l	1.0	1.5	IS 3025 (Part 39)-1991 Rilin; 2014	BDL(DL:0.5)
12.	Colour	Hazen	3	15	IS 3025 (Part 60)- 2008 Riffret 2013	BDL(DL:0.2)
13.	Odour		Agreeable	Agrecable	3025 (Part 4)-1985; Rffm:2012	BDL(DL:1.6)
14.	Turbidity	N.T.U	T	Agreeasie 5	IS 3025 (Part 5)-1983 Rffm:2012	Agreeable
15.	Residual free Chlorine	me/l	0.2	1.0	IS 3025 (Part 10)-1984 Rffm: 2012	BDL(DL:1.0)
16.	Iron (ts #e)	mg/l	0.3	No Relaxation	IS 3025 (Part 26)- 1986 Rffm:2014	BDL(DL:0.1)
17.	Chloride (as CI)	mg/l	256	1000	IS 3025 (Part 53)-1988 Rifer: 2014	0.15
18.	Total Dissolved Solids	mart	500	3000	IS 3025 (Part 32)-1985 Rffm: 2014	62.0
19.	Alkalinity (as CaCOs)	mg/i	200	600	1S 3025 (Part 16)-1984; Riffin:2012	548.0
20.	Aluminium (as Al)	01:0/7	0.03	9.2	1S 3025 (Part 23)- 1986 Rffin; 2009	345.0
21.	Magocalum (es Mg)	mg/I	30	100	15 3025 (Part 2) 2004 RA 2014	BDL/DL:0.01)
7.50	Total Hardness (as		10000	100	IS 3025 (Part 46)-1994 Rffbn: 2014	28.0
22.	Cs(00)	mg/l	200	600	IS 3025 (Piet 21)-2013	214.0
23.	Boron (as B)	mg/l	0.5	1.0	18 3025 (Pert 2) 2004 RA 2014	BDL(DL:0.3)
24.	Manganese (as Mn)	ing/l	0.1	0.3	IS 3025 (Part 2) 2004 RA 2014	BDL(DE:0.02)
25.	Nitrate (as NO:)	mg/i	45	No Religiation	IS 3025 (Part 34)-1988 Riffer; 2014	0.70
26,	Phenolic Compounds (as C.H.OH)	rng/l	0.001	0,002	IS 3025 (Part 43)- 1992; Rffm: 2014	BDL(DL:0.001)
27.	Selenium (as Se)	Neso	50.0	No Retassion	A STATE OF THE PARTY OF THE PAR	and the second second second second
28.	Fotal Chromium ( as Cr )	прЛ	0.05	No Relexation	18 3025 (Part 2) 2004 RA 2014	BOL(DL:0.005)
29.	Silver (as Ag)	638/1	0.1	No Relaxation	IS 3025 (Part 2) 2004 RA 2014	BDL(DL:0.01)
30.	Barium (as Ba)	nog/i	0.7	No Relaxation	IS 3025 (Part 2) 2004 RA 2014	BDL(DL:0.005)
31.	Salinity	mg/l		THE PRESIDENCE II	IS 3025 (Part 2) 2004 RA 2014	PDL(DL:0.1)
		- 100			IS 3025 (Part 14)-2013	45.0



#### Date- 05.04.2022

32	Sulphide ( as H28)	rog/l	0.05	No Relaxation	T 15 7005 (Pr. + 200 ) 140 - 70 Pr	
33.	Ammonia ( as total ammonia-N)	mg/l	0.5	No Relaxation	IS 3025 (Part 29)- 1997; Rffm: 2014 IS 3025 (Part 34)- 1988; Rffm: 2014	
34,	Chloramines	rug/l	4.0	No Relaxation		BDL(DL:0.1)
35. 36.	Nickel ( to Ni)	mg/i	0.02	No Relatestion	IS 3025 (Part 28)- 1986; Rffm: 3014 IS 3025 (Part 2) 2004 RA 2014	The second secon
	Cyanide (as CN) Anienie Detergents	ms/I	0.05	No Relatation	IS 3025 (Part 27)- 1986 Rffm: 2014	BDL(DL:0.01) BDL(DL:0.01)
37.	(as MBAS)	mg/l	0.2	1.0	1\$ 13428(Annex K)- 2005	BDL(DL:0.05)
38.	Polymodear Aromatic Hydrocerbons (as PAH)	mg/l	9,0001	No Referation	APHA (23 <sup>rd</sup> Edin.) 6440C	BDL(DL:0.0001)
39.	Polyeliforinated Biphonyls (PCB)	mg/f	0.0005	No Relevation	US EPA 8082	BDL(DL:0.0005)

S Kanney\_ Report Prepared by:

For Mitra S. K. Private Limited.

Authorized Signatory

TESTING INSPECTION

N-5/100, Ground Floor RC Vilage, Navapali Shubansawar - 751015 CIN: U51909/VB1966PTC0230371

T: (9874) 2382916, 2360917

F: (9874) 2362918

Name & Address of the Customer:

THE DHAMRA PORT COMPANY LIMITED

AT : DOSINGA, PO : DHAMRA

DIST: BHADRAK, PIN:756171 ODISHA

TEST REPORT

Report No. : BBS/323

: 05.04.2022

Sample No.: MSKGL/FT/2020-21/03/00834

Dute of sampling : 05.03.2022 Sampling Description ; Drinking Water Sampling Location : SS-6 Office

Sampling Done By : Mr. Kunja Bihari Nayak

### BACTERIOLOGICAL ANALYSIS RESULT AS PER IS: 10500 - 2012

SL No Test Parameters	Linits	Limit	The Atlanta of the Atlanta	1
1. E. Coli	/100ml		Test Method / Specification	Result
		Not Detectable	IS: 15185 : 2016	Not Detected
2. Total Coliform Organism	/100ml	Not Detectable	IS: 15185 : 2016	Not Detected

## CHEMICAL ANALYSIS RESULT AS PER IS: 10506 - 2012

Sl. No.		Enits	Requirement (Acceptable Limit)	Permissible timit in the absence of alternate Source	Test Method / Specification	Result
1.	pH ( #: 26° C)		6.5 - 8.5	No Relaxation	IS 3025 (Part 11)-1984 Rffm: 2012	0.00
2,	Stelphatic (as SO <sub>4</sub> )	mg/l	200	400	IS 3025 (Part 24)- 1986 Refine 2014	9.23
3	Calcium (as Ca)	mg/l	75	200	IS 3025 (Part 40)- 1991 Riffer 2014	55.0
4.	Arsenic (as As)	mg/l	0.01	0.05	IS 3025 (Part 2) 2004 RA 2014	39.0
5.	Lead (as Pb)	1000/1	0.01	No Relaxation	IS 3025 (Part 2) 2004 RA 2014	BDL/DL:0.005)
6.	Zinc (as Zn)	Figets	5.0	15.0	TS 2025 (Part 2) 2004 KA 2014	BDL(DL:0.005)
7.	Copper (as Cu)	mg/l	9.05	1.5	IS 3025 (Part 2) 2004 RA 2014	BDL/DL:0.02)
8.	Mercury (as He)	mg/l	0.601	No Relaxation	IS 3025 (Part 2) 2004 RA 2014	BDL(DL:0.02)
9.	Cadmium (as Cd)	mg/i	0.003	No Relaxation	IS 3025 (Part 48)-1994 Rffm 2014	BDL/DL:0.0002)
10.	Mineral Oil	rng/l	0.5	No Releasiion	13 3025 (Part 2) 2004 RA 2014	BDL(DL:0.001)
H.	Fluoride (as F)	mg/l	1.0	1,5	15 3025 (Part 39)-1991 Rf(m; 2014	BDL(DL:0.5)
12.	Celour	Hazen	- 5	15	IS 3025 (Part 60)- 2008 Riffin: 2013	BDL(DL:0.2)
13.	Odour		Agreeable	Agrecable	3025 (Part 4)-1983; R.ffm:2012	BDL(DL:1.0)
14.	Turbleity	N.T.U	1	3	18 3025 (Part 5)-1983 Rffm:2012	Agreeable
15.	Residual free Chloring	mg/L	0.2	1.0	IS 3025 (Part 10)-1984 Rffm: 2012	BOL(DL:1.0)
16.	Iron (as Fo)	mg/l	6.3	No Relaxation	IS 3025 (Part 26)- 1986 Rffm:2014	BDL/DL:0.1)
17.	Chloride (as Cl)	mg/!	250	1000	IS 3023 (Part 53)-1988 Rffm; 2014	0.08
18,	Total Dissolved Solids	mayi	500	2000	IS 3025 (Part 32)-1988 Rfim: 2014	74.0
19.	Alkalinity (as CaCOs)	mg/l	200	600	IS 3025 (Part 16) 1984; RIfm:2012	498.0
20.	Aluminism (as Al)	mo/l	0.03		IS 3025 (Part 23)- 1986 Rffm: 2009	318.0
21.	Magnesium (as Mg)	mor/i	30	0,2	IS 3025 (Part 2) 2004 RA 2014	BDL(DL:0.01)
-	Total Hardness (as	11001	-	100	IS 3025 (Part 46)-1994 Riffin: 2014	29.0
22.	CaCO <sub>i</sub> )	mg/l	200	600	IS 3025 (Part 21)-2013	218.9
23. 24.	Beron (as B)	figm	0.5	1.0	IS 3025 (Part 2) 2004 RA 2014	BDE(DL:0.3)
	Manganese (ns Mn)	mg/l	0,1	0.3	18 3025 (Port 2) 2004 RA 2014	BDL(DL-0:02)
25.	Mitrate (as NO <sub>1</sub> )	mg/l	45	No Relaxation	IS 3025 (Part 34)-1988 Rffm: 2014	0.65
26.	Paenelle Compounds (as C <sub>4</sub> H <sub>2</sub> OH)	mg/l	0.001	0.002	(S 3025 (Part 43)- 1992; Riffm: 2014	BBL(DL:0.001)
27.	Schmitten (as So)	mg/l	0.01	No Relaxation	IS 3625 (Part 2) 2004 RA 2014	AT DESIGNATION OF STREET
28.	Total Chromium ( as Cr)	mg/i	0.05	No Relexerion	10 1035 (Dec 2) 2004 (A 2014	BDL(DL:0.005)
29.	Silver (as Ag)	mg/i	0.1	No Relaxation	IS 3025 (Part 2) 2804 RA 2014	BDL(DL:0.01)
30.	Berium (as Ba)	mg/l	0.7	No Relaxation	IS 3025 (Pert 2) 2004 RA 2014	BDL(DL:0.005)
31.	Salinity	mg/I		(AO MERITARION	IS 3025 (Part 2) 2004 RA 2014	BDL(DL:0.1)
	7-				IS 3025 (Part 14)-2013	58.0



### Date-05.04.2022

32	Sulphide ( as H2S)	may7	0.05	No-Relaxation	18 3025 (Part 29)- 1991; Riffin: 2014	BOL(DL:0:02)
33.	Ammonia ( as total ammonia-W)	trig/1	0.5	No Relaxation	IS 3025 (Part 34)- 1988; Riffin; 2014	BDL(DL:0.1)
34.	Chloramines Nickel ( se Nr)	inig/l	4.0	No Relaxation	15 3025 (Part 26)- 1986; Riffor; 2014	BDL(01:0.1)
36.	Cyanide (es CN)	mg/l	0.02	No Relocation No Relocation	IS 3025 (Part 2) 2004 RA 2014 IS 3025 (Part 27)- 1986 Rzibr 2014	BDL(DL:0.01)
37	Anionic Detergents (as MBAS)	Ngm	0.2	1.0	IS 13428(Annex K)- 2005	BDL(DL:0.01) BDL(DL:0.05)
38,	Polynuclear Aromatic Hydrocarbons (as PAH)	mg/l	0,000)	No Relaxation	APHA (23 <sup>rd</sup> Edm.) 6440C	BDL(DL:0.5001)
39.	Polychlerinated Biphenyls (PCB)	mg/l	0.0005	No Relevation	US EPA 8082	BDL(DL:0,0005)

Stamfy Report Prepared by:

For Mitra S. K. Private Limited,

Authorized Signatory

M5K

N-5/100, Ground Floor IRC Village, Noyapalli Bhubaneswar - 75/10/15 [CIN: U5/1909WB/1958PTC023037]

T: (0674) 2302918, 2380917 F: (0674) 2362918

TEST REPORT

Name & Address of the Customer: THE DHAMRA PORT COMPANY LIMITED

AT : DOSINGA, PO : DHAMRA

DIST: BHADRAK, PIN: 756171 ODISHA

Report No. : BBS/324 Date : 05.04,2022

Sample No.: MSKGL/FD/2020-21/03/00819

Date of sampling : 06.03 2022 Sampling Description : Ground Water Sampling Location : Kanak Presad Sampling Done By : Mr. Kunja Bibari Nayak

## BACTERIOLOGICAL ANALYSIS RESULT AS PER IS; 10500 - 2012

Sl. No	Test Parameters	Units	Limit	Test Method / Specification	Result
	E. Coli	/100ml	Not Detectable	IS: 15185 : 2016	Not Detected
2.	Total Celiform Organism	/189m1	Not Detectable	IS: 15185 : 2016	Not Detected

CHEMICAL ANALYSIS RESULT AS PER IS: 10500 - 2012

SL No.	Test Parameter	Units	Requirement (Acceptable Limit)	Permissible limit in the absence of alternate Source		Result
I.	pH (at 26° C)	****	6.5 - 8.5	No Religation	IS 3025 (Part 11)-1984 Riffin: 2012	9.40
2	Solphate (as SO <sub>a</sub> )	mg/i	200	400	IS 3025 (Part 24)- 1986 Riffm: 2014	7.68
3.	Calcium (as Ca)	rig/l	75	200	IS 3025 (Part 40)- 1991 Rffm: 2014	42.0
4.	Arsonic (as As)	mg/l	0.01	0.05	3S 3025 (Part 2) 2004 RA 2014	46.0
2	Lead (as Pb)	109/	0.01	No Relaxation	JS 3025 (Part 2) 2004 RA 2014	BDL/DL:0.005)
6.	Zinc (as Zn)	nigyf	5.0	15.0	IS 3025 (Part 2) 2004 RA 2014	BDL/DL:0.005}
7.	Copper (as Co)	ros/l	+ 0.05	1,5	18 3025 (Part 2) 2004 RA 2014	BDL(DL:0,02)
8.	Mercury (as Fig)	Pgm	0.001	No Relexation	IS 3025 (Part 48)-1594 Riffett: 2014	BDL(DL:0.02)
9.	Cadmium (as Cd)	mg/l	0.003	No Relaxation	IS 3025 (Part 2) 2004 RA 2014	BDE(DL:0.0802)
10.	Mineral Oil	mg/l	0.5	No Relaxation	IS 3025 (Part 39)-1991 Riffin: 2014	BDL(DL:0.001)
11.	Fluoride (as F)	mg/l	- 1.0	1.5	IS 3025 (Part 60)- 2008 Raffm; 2013	BDL(DL:0.5)
12.	Colour	Hazen	5	13	30 3423 (Part 60) 2008 Kilm; 2013	BDL(DL:0.2)
13	Odout	ee.	Agreeable	Agreeable	3025 (Part 4)-1985; Rffm:2012	BDL(DL:1.0)
14,	Turbidity	N.T.U	1 1	5	18 3025 (Purt 5)-1983 R/fim 2012	Aspecable
15.	Residual free Chlorine	rag/l	0.2	1.0	IS 3025 (Part 10)-1984 Rffm: 2012	BDL(DL:1.0)
16.	iron (as Fe)	me/l	0.3	No Relaxation	IS 3025 (Part 26) 1986 Ratin: 2014	BDL(DL:0.1)
17.	Chloride (as Ct)	mg/l	250	1000	1S 3025 (Part 53)-1988 Rffm: 2014	BDL(DL:0.05)
18.	Total Dissolved Solids	mg/l	500	2000	IS 3025 (Part 32)-1988 Rffm; 2014	68.0
19.	Allealinety (as CaCO <sub>1</sub> )	109/1	200	600	IS 3025 (Part 16)-1984; Rffm 2012	352.0
20.	Aluminium (as Al)	mg/l	0.03	0.2	IS 3025 (Part 23)- 1986 R/fm; 2009	145.0
21.	Magnasium (es Me)	mg/l	30	100	IS 3025 (Part 2) 2004 RA 2014	BDL(DL:0.01)
22.	Total Hardness (as CaCO <sub>2</sub> )	mg/l	200	600	IS 3025 (Part 46)-1994 Rffm: 2014	24.0
23.	Boron (as B)	100/1	0.5	1.0	IS 3025 (Part 21)-2013	172.6
24,	Manganese (as Ma)	mg/l	0.3	0.3	IS 3025 (Part 2) 2004 RA 2014	RDL(DL:03)
25.	Nitrate (as NO <sub>a</sub> )	mg/l	45	No Relaxation	IS 3025 (Part 2) 2004 RA 2014	BDL(DL:0.02)
26.	Phenolic Compounds (as C <sub>4</sub> H <sub>4</sub> OH)	mg/l	0.001	0.002	IS 3025 (Part 34)-1988 Rffm: 2014 IS 3025 (Part 43)- 1992; Rffm: 2014	BDL(DL:0.4) BDL(DL:0.991)
27	Selenium (as Se)	(64/)	0.01	No Relexation	15 3025 (Part 2) 2004 R.A 2014	
28.	Foral Chromium (as Cr)	tigit	0.05	No Relayation	IS 3025 (Part 2) 2004 RA 2014	BDL(D(±0.005)
29.	Silver ( ns Ag)	mg/l	0.1	No Relaxation	10 3/03 (Part 2) 2004 (A 2014	BDL(DL:0.01)
30,	Barium (as Bu)	mg/l	0.7	No Relaxation	1S 3025 (Pert 2) 2004 RA 2014	BDL(DL:0.005)
31.	Salinity	mgfi		140 VERNBERGO	IS 3025 (Part 2) 2004 RA 2014	BDL(DL.0.1)
		-1985		-	TS 3025 (Part 14)- 2013	52.0



### Date- 05.04.2022

32.	Sulphide ( ns R2S)	med	0.05	No Reliazation	T 10 2027 ID 201 VEG TOWN	
33.	Artimenia ( as tetal aprimonia-N)	mg/l	0.5	No Relaxation	IS 3025 (Part 29)- 1991; Rifnt: 2014 IS 3025 (Part 34)- 1988; Rifnt: 2014	
34. 38.	Chlorimines Nickel ( as NI)	Nem Nem	4,0	No Relaxation	15 3025 (Part 26)- 1986; 9dfm: 2014	BDL(DL:0.1)
36.	Cysnide (ns CN) Anienic Deteraceis	mg/l	0.05	No Relaxation No Relaxation	IS 3025 (Part 2) 2004 RA 2014 IS 3025 (Part 27)- 1986 Rffnc 2014	BDL(DL:0.01) BDL(DL:0.01)
37.	(as MBAS)	mg/l	0.2	1.0	IS 13428(Annex K)- 2005	BDL(DL:0.05)
38.	Polynuclear Aremanic Hydrocerbons (46 PAH)	right	0.0001	No Relaxation	APHA ( 23 <sup>rd</sup> Edin.) 6440C	BDL(DL:6.0901)
39.	Polychlorinated Biphenyls (PCB)	my/j	0.0005	No Relection	US EPA 8002	BDL/DL:0.86051

S. Kounge Report Prepared by:

SBR E

For Mitra S. K. Private Limited.

Authorized Signatory



N-5/100, Ground Floor IRC Village, Navagalli Bhubaneswar - 751015

[CIN: U51909WB1956PTC023037]

Name & Address of the Customer :

AT : DOSINGA, PO : DHAMRA

THE DHAMRA PORT COMPANY LIMITED

DIST: BHADRAK, PIN: 756171 ODISHA

T: (0574) 2362916, 2360917

F: (0574) 2362918

Report No. : BBS/525

Date ± 05.04.2022

Sample No.: MSKGL/FEV2020-21/03/90520

Date of sampling : 06.03.2022 Sampling Description : Ground Water Sampling Location : Balisahi

Sampling Done By : Mr. Kunja Bihari Nayak

#### TEST REPORT

BACTERIOLOGICAL ANALYSIS RESULT AS PER IS: 10500 - 2012 Test Parameters Units Limit Test Method / Specification Result E. Coli /100ml Not Detectable IS: 15185 : 2016 Not Detected Total Coliform Organism /100ml Not Detectable IS: 15185 : 2016 Not Detected

CHEMICAL ANALYSIS RESULT AS PER IS: 10500 - 2012

SL No.	Test Parameter	Units	Requirement (Acceptable Limit)	Permissible limit in the absence of alternate Source		Result
1.	pH ( at 26° C)	-	6.5 - 8.5	No Relexation	1S 3025 (Part 11)-1984 Rffm: 2012	7.60
2	Sulphase (as SO <sub>2</sub> )	me/l	200	400	IS 3025 (Part 24)- 1986 R#m: 2014	7,92
3.	Calcium (as Ca)	mgft	75	200	IS 3025 (Part 40)- 1991 Riffin: 2014	43.0
4	Arsenic (as As)	mg/l	0.01	0.05	IS 3025 (Pert 2) 2004 RA 2014	The state of the s
5.	Lead (as Pb)	med	0.61	No Relaxation	IS 3025 (Part 2) 2004 RA 2014	BDL(DL:0.005)
6.	Zine (as Zn)	mg/l	5.0	15.0	IS 3025 (Part 2) 2004 RA 2014	BDL(DE:0.005)
7.	Copper (28 Cu)	mg/l	0.05	1.5	(S 3025 (Put 2) 2004 RA 2014	BDL(DL50.02)
8.	Mercury (as Fig)	Point	0.001	No Relocation	IS 3025 (Part 48)-1994 Rffm: 2014	BDL(DL:0.02)
9.	Cudmiom (es Cd)	mg/	0.003	No Relaxation	IS 3025 (Part 2) 2004 RA 2014	BDL(DL:0.0002)
10.	Mineral Oil	ms/t	0.3	No Relexation	1S 3025 (Part 39)-1991 Rffirs: 2014	BDL(DL:0.001)
11.	Fluoride (as F)	Pain	1.0	1.5	IS 3025 (Part 60)- 2008 Rffm: 2013	BDL(DL:0.5)
12	Colour	Hazen	5	15	3025 (Part 4)-1983; Rfjin: 2012	BDL(DL:0.2)
13.	Odour	1177	Aprecable	Agrecable	IS 3025 (Part 5)-1983 Rffm;2012	BDL(DL:1.0)
14.	Turbidity	NTU	1	5	18 3025 (Part 10)-1984 Rffm: 2012	Agreeable
15.	Residual free Chlorine	mg/l	0.2	1.0	IS 3025 (Part 76)- 1986 Rffm: 2014	BOL(DL:L0)
16.	Iron (as Fe)	mg/l	0.3	No Relexering	IS 3025 (Part 53)-1988 Rffm; 2014	BDL(DL:0.1)
17.	Chloride (as Cl)	me/i	250	1000	IS 3025 (Part 32)-1988 Rffm: 2014	BDL(DL:0.05)
18.	Total Dissolved Solids	Page	500	2000	1S 3025 (Part 16)-1984; Rffin:2012	71.0
19.	Alkalitnity (as CrCO <sub>2</sub> )	mg/l	200	600		398.0
20.	Aluminium (as Al)	mg/l	0.03	0.2	18 3025 (Pert 23)- 1985 Rffm: 2009	162.0
21.	Magnesium (as Mg)	mg/I	30	100	IS 3025 (Part 2) 2004 RA 2014	BDL(DL:0.01)
22.	Total Hardness (as CaCO <sub>1</sub> )	tray7	200	600	IS 3025 (Part 46)-1994 Rffm; 2014	24.0
23.	Boron (as B)	mg/l	0.5	1:0	IS 3025 (Part 21)-2013	148,0
24.	Manganese (as Mn)	mg/l	0.1	0.3	IS 3075 (Part 2) 2004 RA 2014	BDL(Ct.:03)
25	Nitrate (as NO <sub>x</sub> )	mg/i	45	No Relaxation	IS 3025 (Part 2) 2004 RA 2014	BDL(DL:0.02)
26.	Phenofic Compounds (as C <sub>2</sub> H <sub>2</sub> OH)	mg/l	0.901	0.002	IS 3025 (Part 34)-1988 Rffin: 2014 IS 2025 (Part 43)-1992; Rffin: 2014	BDL(DL:0.4) BDL(DL:0.661)
27.	Selenium (as Se)	tno!!	0.01	No Relaxation	IS 3025 (Part 2) 2004 RA 2014	To the contract of the contract of
28.	Total Chromium ( as Cr.)	ms/l	0.05	No Relaxation		BDL(DL:0,005)
29.	Sliver ( as Ag)	sng/1	0.1	No Relaxation	IS 3025 (Part 2) 2004 RA 2014	BDL(DL:0.01)
39.	Borium (as Ba)	mg/l	0.7	No Relaxation	IS 3025 (Part 2) 2004 RA 2014	BDL(DL:0.005)
31. 1	Salinity	mg/l		150 Petarapout	IS 3025 (Part 2) 2004 RA 2014	BDL(DL:0,1)
- N					IS 3025 (Part 14)- 2013	55.0



Date- 05.94.2022

32.	Sulphide ( as 1/2S)	rag/I	0.03	No Relaxation	1 (0 tate m - am 154) and	-
33.	Ammonia ( as total ammonia-N)	mg/T	0.5	No Relaxation	IS 3025 (Part 29)- 1991; RDinc 2014 IS 3025 (Part 34)- 1988; Rffin: 2014	
34.	Chloramines Nickel ( as Ni)	Pigm	4.0	No Relaxation	IS 3025 (Part 26)- 1986; Rffm: 2014	- 2017 CONTRACTOR (0.00)
36.	Oyenide (as CN) Abionic Desergents	mg/l mg/l	0.02	No Relaxation No Relaxation	IS 3025 (Part 2) 2004 RA 2014 [8 3025 (Part 27)- 1986 Rffm: 2014	BDL(DL:0.01) BDL(DL:0.01)
37,	(as MBAS)	nte/t	5,2	1,0	IS 13428(Annex K)- 2005	SDL(DL:0.05)
38.	Polynuclear Assersatio Hydrocarbons (as PAH)	mg/l	0.0001	No Relaxation	APHA ( 23 <sup>rt</sup> E6tm.) 6440C	BDL(DL:0.6001)
39.	Polychlorinated Biphenyls (PCB)	mg/1	0.0005	No Relexation	US 5PA 8082	BDL(DL:0.0005)

S. Konnsy Report Prepared by:

For Mitra S. K. Private Limited.

Authorized Signatory

N-5/100, Ground Floor (RC Villago, Nayapalli Bhubaneawar - 751015

[CIN: U51909W81966PTC023037]

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### TEST REPORT

Name & Address of the Customer :

THE DHAMRA PORT COMPANY LIMITED.

AT : DOSINGA, PO : DHAMRA

DIST: BHADRAK, PIN: 756(7) ODISHA

Report No. : BB8/327 Date : 05.04.2022

Sample No.: MSKGL/ED/2020-21/03/00788

TESTING - INSPESTION

Sample Description : Surface Water

Sampling Location : Malai River Near DPCL

Intake Point

Date of Sampling : 06.03.2022

#### ANALYSIS RESULT

St. No.	<u>Test Parameters</u>	Units	Standards us per IS 2296	Test Method / Specification	Result
1.	Colour	Hazen	300	APHA 23rd Edition, 21298 2017	BIM (DL:1.0
3.	Odoter	-	reting	APHA 23rd Edition 2150B	Agrecable
	pH at 25°C	-	6.5 - 8.5	APHA 23rd Edition, 4500-H-B	7,67
4,	Copper as Co	mail	1.5	APHA (23rd Edition)3126B 2017 (ICP OES)	BDL(DL:0.02
5,	Fluoride as F	mg/l	1.5	APHA (23rd Edition)4500 - F C/D, 2017	The second secon
6.	Iron as Fe	mg/l	50.0	APHA 23rd Edition 3500 Fe B 2017	BDL(DL-0.2
7.	Manganese as Mn	mg/l			7.9
8.	Phenolic Compound as C <sub>0</sub> H <sub>0</sub> OH	Tigm.	0.005	APEIA (23rd Edition)3120B 2017 (ICP OES)  APEIA (23rd Edition)5830C 2017 (Chloroform Extraction)	BDL(DL:0.02 BDL(DL:0.00)
9.	Selenium as Se	mg/I	0.05	APHA (23rd Edition) 3120B 2017	and the second second
16.	Cadmiam as Cd	ltig/I	0.01	APHA (23rd Edition) \$120B 2017	BDL(DI, 0.005
11.	Cytolide as CN	1/907	0.05	APHA (23rd Edition)4500 CN- F 2017	BDL(DL:0.001
12.	Lead as Pb	mg/T	0.1	APHA (23rd Edition)3120B 2017	BDL/DL:0.01
15.	Morency as Fle	mg/I	-	IS 3025(Part 48)-1994, Riffin 2014	BDL/DL:0.005
H	Nickel as Ni	mg/l		APHA (23rd Edition)31208 2017	BDL(DL-0.001
15.	Argenic as As	mag/i	0.2	APHA (23rd Edition)3120B 2017 (ICP OES)	BDL(DL:0.02
16.	Total Chromium as Cr	mari	year	APHA (23rd Edition)3111 D 2617 (AAS Fiame)	BDL(DL-0.005
17.	Zine es Zn	mg/l	15.0	APEA (23rd Edition)31209 2017	BDL(DL:0.61)
18,	Hestavalent Chromium es Cr16	mg/l	0.05	APHA 22nd Edition, 3500 Cr.15	BDL(DL:0.62)
19.	Vanedium as V	mg/i	904	APHA (23rd Edition)3120B 2017 (ICP OES)	BDL(DL:0.01)
20.	Total Suspended solids	mg/l	100	APHA 23rd Edition, 2540D	BDL/DL:0.2)
21.	Temperature	Deg C	MALE .	APHA 23rd Edin 2550 B	330.0
22	BOD (3days at 25°C)	mg/l	-3.0	APHA (23rd Edition)52188 2017	25.0
23.	COD	mg/l		APHA 23rd Edition, 52208 2017	BDL(DL2.0)
24,	Oil & Grease	mg/l	0.1	APHA 23rd Edition, 5520B 2017	8.0
25.	Ammonical, Nisrogen as N	mg/l		APHA (23rd Edition) 4500-NH3 F 2017	5.0
26.	Total Kieldal Nitrogen as N	mg/i	-	APHA (23rd Edition) 4500- Norg-B 2017	BDL(DL:0.1)
27.	Sulphide as S	1939/1		APHA (23rd Edition)4500 S2- D,2017	BDL(DL-0.01)
28,	Total Residual Chlorine	mg/l	The same	IS 3025(Part-26)-1986 Riffur:2009	BDL(DL:0.1)
29.	Dissolved Phosphate as P	mg/l		APHA 23rd Edition 4500P, B -D 2017	0.21
30.	Ammonia as NH <sub>2</sub>	mg/l		APHA 23rd Edn 4580NH3-F 2017	BDL(DL:0.1)
31.	Nitrate Nitrogen as NO.	mg/l	-	APHA (23rd Edition) 4508- NO3-E, 2017	0.22
32	Biovassay Test	-	90% Survival of fish efter 96 hours in 100% effluent	1S 6582(Part 2)2001, Ed.2.1 (2002-12)	All Fishes are survived in 100% efficient
13.	Particle Size of Suspended Solids	-	850 µ 1S sieve	TPM/MSE/P&E/3/55	after 96 hrs Pass through 850µm IS sieve
64	Dissolved Oxygen	mg/l	464	APHA 23rd-2012,4580-O-C	5.8

Report Prepared by: (114

Mitra S. K. Private Limited Anaryla Ku. Rath Authorized Signatory

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TESTING - INSPECTION

N-5/100, Ground Floor IRC Village, Nayapalt Bhubaneswar - 751015. [CIN: U51909WB1956PTC023037]

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### TEST REPORT

Name & Address of the Customer :

THE DHAMRA PORT COMPANY LIMITED.

AT : DOSINGA, PO : DHAMRA

DIST: BHADRAK, PIN: 756171 ODISHA

Report No. : BBS/328

Date : 05.04.2022

Sample No.: MSKGL/ED/2020-21/03/00789

Sample Description : Surface Water Sampling Location: Raw Water Reservoir

Date of Sampling : 06,03,2022

ANALYSIS RESULT

Sl. No.	Test Parameters	Units	per 15 2796	Test Method / Specification	Receit
1.	Colees	Hazen	300	APHA 23rd Edition,2120B 2017	BDL(DL:1.)
2.	Octour	APHA 23:d Edition 2150B		Agreeable	
3.	pH at 25°C	****	6.5 - 8.5	APHA 23rd Edition, 4500-H-B	7.62
4.	Copper as Cu	mg/l	1.5	APIIA (23rd Edition)3120B 2017 (ICP OES)	Towns or the second
5,	Fluoride as F	mg/l	1.5	APHA (23rd Edition)4500 - F C/D, 2017	BDL(DL:0.0
6.	Iron ≥s Fe	mg/l	50.0		BDL(DL:0;2
7.	Manganese as Ma	mg/l		APFIA 23rd Edition, 3500 Fe B 2617	1,5
8.	Phenolic Compound ss C <sub>e</sub> H <sub>s</sub> OH	mg/l	0.005	APHA (23rd Edition)3120B 2017 (ICP OES) APHA (23rd Edition)3539C 2017 (Chlorofurm	BDL(DL:0.00
9.	Selenium as Se	mg/l	0.05	Extraction)	
16.	Cadmium és Cd	mg/l	0.01	APHA (23rd Edition) 3120B 2017	BDL(DL:0.06
11.	Cyanido es CN	mg/l	0.05	APHA (23rd Edition)3120B 2017	BDL(DL:0.00
12	Lead by Pb	mg/I	0.1	APHA (23rd Egitics)4500 CN- F 2017	BOLOL:0.01
13	Mercury as Hg	ned		APHA (23rd Edition)81208 2017	BOL(DL:0.00)
14.	Nickel as Ni	mg/i	Tria	IS 3025(Part 48)-1994; Riffin:2014	BDL(DL:0.00)
15.	Arsenie as As	eng/l	0.2	APITA (23rd Edition)3130B 3017	BDU/DL:0.02
16.	Total Chromium as Cr	risg/I	V/IZ	APRA (23rd Edition)3120B 2017 (ICP OES)	BDL(DL:0.005
17.	Zinc as Zn	102/1	15.6	APHA (23rd Edition)3111 D 2017 (AAS Figure)	BDL(DL:0.0)
18.	Hexavelent Chromium as Cr 16	mg/l	0.05	APIIA (23rd Edition)3120B 2017	BDU(BL:0.02
19.	Vanadiom as V	mg/l	644	APRA 22nd Edition, 3500 Cr.B	BDL(DL:0.01)
20.	Total Suspended solids	mg/l	- Flori	APHA (23rd Edition)3120B 2817 (ICP OES)	BDL(DL:0,2)
21.	Temperanare	Dog C		APHA 23rd Edition, 2540D	8.0
22.	BOD (36ays at 25°C)	mg/l	3.0	APHA 23rd Edu, 2550 B	25.0
23.	COD	mg/l	200	APHA (23rd Edition)5210B 2017	BDL(DL:2.0)
24.	Oil & Grease	ing/t	0.1	APHA 23rd Edition, 5220B 2017	6.0
25.	Ammonical, Nitrogen as N	mg/l	400	APHA 23rd Edition, 55208 2017	BDL(DL:14)
26.	Total Kjeldel Mitrogen as N	mg/3	-	APHA (23rd Edition) 4500-NH3-F 2017	BDL(DL-0.1)
27.	Sulphide as S	ma/l		APHA (23rd Edition) 4500- Norg-B 2017	BDL(DL:0.3)
28.	Total Residual Chlorine	me/I	****	APFIA (23rd Edition)4500 S2- D,2017	BDL(DL:0.01)
29.	Dissolved Phosphate as P	me/I		IS 3025(Part-26)-1986 Rffm: 2009	BDL(0).:0.1)
30.	Ammonia as NH <sub>2</sub>			APHA 23rd Edition 4500P, B -17 2017	BDL(DL:0.05)
31.	Nitrate Nitrogen as NO,	mg/l		APHA 23rd Edn 4500NH3-F 2017	BDL(DL:0.1)
-	Tributes (New Open) as (New)	mg/l		APFIA (23rd Edition) 4500- NO3-E, 2017	0.56
12.	Bio-assay Test	-	90% survival of fish after 96 hours in 100% clifteen	IS 6582(Part 2)2001, Ed.2.1 (2002-12)	All Fishes are survived in 100% offluent
3.	Particle Size of Suspended Solids	****	850 µ IS sleve	TPM/MSK/P&E/3/35	after 96 hrs Pass through
4.	Dissolved Oxygen on Propared by: ( Vav	mg/l	62	APHA 23rd-2012.4500-O-C	850µm IS sleve 6.3

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N-5/100, Ground Floor IRC Village, Nayapali Bhubaneswar - 751015

[CIN: U51909WB1956PTC023037]

Date: 05.04.2022

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## MARINE WATER QUALITY REPORT

Client Name & Address	M's The Dhamra Port Company Limited, Dosinga, Bhadrak, Odishi
Work Order No.	4802086186
Reference No.	MSKGL/ED/2020-21/002050
Type of Sample	Marine Water
Sampling Location	Dhamra River Mouth
Date of Sampling	18.03.2622
Date of Analysis	18.03.2022 to 31.03.2022
Sampling Done by	Mr. Kunja Bihari Nayak

SL No		Unit	Test Method	Analysis Result	
	-			Surface Water	Bottom water
1	Colour	Hazen	APFIA (23 <sup>15</sup> Edition) 2120B 2017	<1.0	<1.0
2	Odour .	444	APHA (23 <sup>st</sup> Edition) 2150B	Agrecable	Agreeable
3	Temporepure	Deg C	APHA (23rd Edition) 2550 B	25.0	25.0
4	Turbidity	NTU	APHA (23 <sup>rd</sup> Edition) 2130B	62.0	51.0
5	Hq	-	APHA (23rd Edition) 4500-H-B	7,89	7.34
6	Electrical Conductivity	us/cm	APHA (23 <sup>th</sup> Edition) 2510 B	20245.0	17308,0
7	Salinity	mg/l	APHA (23rd Edition) 2320B,2017	11542.0	9879.0
8	Total Suspended Solids	mg/l	APHA (23 <sup>rd</sup> Edition) 2540 D	121.0	114.0
9	Total dissolved solids	mg/i	APHA (2316 Edition) 2540C	12450.0	10367.0
10	Total Hardness	mg/I	APHA (23 <sup>rd</sup> Edition) 2340B 2017	1198.0	1056.0
11	Calcium Hardness	meri	APRA (23" Edition) 3500-Ca B	345.0	318.0
12	Magnesium Hardness	Tigm	APHA (23 <sup>rd</sup> Edition) 3500-Mg B	1369.0	1256.0
13	Chloride (as CI)	mg/l	APHA (23 <sup>rd</sup> Edition) 4500-C1 B	6987,0	6288.0
14	Dissolved Oxygen	mg/l	APHA (23 <sup>rd</sup> Edition)-4500-O-C/G	6.5	5,7
15	Biochemical Oxygen Demand (3 days at 27°C)	ma/l	APHA (23 <sup>rd</sup> Edition) 5210B,2017	<2.0	<2.0
16	Chemical Oxygen Demand (COD)	mg/l	APRA (23rd Edition) 5220B,2017	<4.0	<4.0
17	Oil & Gresse	may!	APHA (23 <sup>M</sup> Edition) 52208,2017	<1.4	<1.4
18	Dissolved phosphates (as PC <sub>4</sub> )	-mg/I	APHA (23 <sup>rd</sup> Edition) 450g-P D	<9.15	<0.15
9	Sulphite (as SO <sub>4</sub> )	(ng/l	APHA (23 <sup>rd</sup> Edition)4500-SO4-E	1180.0	978.0
0.0	Nitrite (ss NO <sub>2</sub> )	mg/t	APEIA (23° Edition)4500-NO2B	<0.01	The state of the s
1	Nitrate (as NO <sub>3</sub> )	mg/l	APHA (23 <sup>rb</sup> Edition)4500-NO3-E	<0.5	<0.01
2	Ammonical Nitrogen (as NH <sub>e</sub> N)	mg/I	APHA (23 <sup>N</sup> Edition)4500-NH3F	<0.1	<0.5
3	Total Nitrogen	mg/l	APHA (25 <sup>st</sup> Edition) 4500N C	<0.3	<b>40.1</b>
4	Total Chromium	mg/f	APHA (23 <sup>rd</sup> Edition) 3111 D	<0.01	<0.3
5	Phonosic Compounds (as CaFlaOH)	mg/l	APHA (23" Edition) 5530C	<0.001	<0.001
6	Hexavalera chromium (as Cr *5)	ms/l	APHA (23rd Edition) ,3580 Cr B	<0.01	1200
7	Copper	mg/l	APHA (23 <sup>N</sup> Edition) 3120B	<0.02	<0.01
8	Cadminim	mg/l	APHA (23 <sup>rd</sup> Edition) 31708	<0.001	<0.02 49.003
2	Moreury	mg/I	IS 3025(Part 48)-1994;Rffm;2014	< 0.001	-49.001 -49.001
	Floating material	mg/I	APHA (23 <sup>rd</sup> Edition) 2530B	23	<0.601
	Petroloum Hydrocarbon	mg/l	IS 3025(Part 39)-1994;R#m:2014	90.5	<0.5

Prepared By - S. Kary

Aranta Ku- Rodi

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Date: 05.04.2022

## MARINE WATER QUALITY REPORT

Client Name & Address	M/s The Dhamra Port Company Limited, Dosinga, Bhadrak, Odisha
Work Order No.	4802006186
Reference No.	MSKGL/ED/2020-21/002050
Type of Sample	Marine Water
Sampling Location	Dry Bulk Cargo Berth Face
Date of Sampling	18.03.2022
Date of Analysis	18.03.2022 to 31.03.2022
Sampling Done by	Mr. Kunja Bihari Nayak

SL.	The state of the first the state of the stat	Unit	Test Method	Analysis Result	
1790	C. SONORID TOWN CONTROLS	4880,8-1		Surface Water	Bottem water
2	Colosy	Hazen	APHA (23 <sup>rd</sup> Edition) 21208 2017	<1.0	<1.0
-	Odour	-	APHA (23 <sup>rd</sup> Edition) 2150B	Agrecable	Agreeable
3	Temperature	Drg C	APHA (23 <sup>rd</sup> Edition) 2550 B	25.0	25.0
4	Turbidity	N.T.U	APRA (23rd Edition) 2130B	96.0	84.0
3	pH		APHA (23rd Edition) 4500-H-B	7.96	7,14
6	Electrical Conductivity	us/am	APHA (23rd Edition) 2310 B	20547.0	17603.0
7	Selinity	mg/t	APHA (23 <sup>rd</sup> Edition) 25208,2017	12110.0	10000.0
8	Total Suspended Solids	mg/l	APHA (23 <sup>rd</sup> Edition) 2540 D	166.0	110.0
9	Total dissolved solids	mg/l	APHA (23 <sup>rd</sup> Edition) 2540C	13569.0	11900.0
10	Total Haviness	mg/I	APHA (23rd Edition) 2340B 2017	1989.0	1810.0
11	Coligions Handness	mg/l	APHA (23th Edition) 3500-Ca B	379.0	322.0
12	Magnasium Hardness	mg/l	APHA (23 <sup>rd</sup> Edition) 3500-Mg B	1789.0	1566.0
13	Chloride (as CI)	mg/l	APRA (23 <sup>rd</sup> Edition) 4500-Cli B	6998.0	4789.0
14	Dissolved Oxygen	mg/L	APEIA (23 <sup>rd</sup> Edition)-4500-O-C/O	6.1	5.6
15	Blochemical Oxygen Demand (3 days at 27°C)	mg/l	APHA (23 <sup>rd</sup> Edition) 52108,2017	€.0	<2.0
16	Chemical Oxygen Demand (COD)	mg/l	APHA (23 <sup>rd</sup> Edition) 5220B,2017	×1.0	<4.0
17	Oil & Grense	rng/I	APMA (2316 Edition) 52208,2017	<1.4	\$1.4
18	Dissolved phosphates (as PO <sub>4</sub> )	mg/i	- APFIA (23 <sup>rd</sup> Edition) 4500-P D	<0.15	<0.15
19	Sulphase (as SO <sub>4</sub> )	me/l	APHA (23th Edition)4500-SO4-E	890.0	772.0
20	Nitrite (as NO <sub>2</sub> )	Pem	APHA (23 <sup>rd</sup> Edition)4500-NO2B	<0.01	<0.01
21	Nitrate (as NO <sub>2</sub> )	109/1	APHA (23 <sup>rd</sup> Edition)4509-NO3-E	<0.5	<0.5
22	Ammonical Nitrogen (as NH2-N)	ma/i	APHA (23 <sup>rd</sup> Brittlem)4500-NH3F	<0.1	40.1
23	Total Nitrogen	Pigm	APHA (23 <sup>rd</sup> Edition) 4500N C	<0.3	<0.3
24	Total Chromium	mg/l	APHA (23 <sup>rd</sup> Edition) 3111 D	<0.01	<0.01
25	Phenolic Compounds (as C <sub>6</sub> H <sub>5</sub> OH)	mg/I	APHA (23 <sup>rd</sup> Edition) 5530C	<0,001	<0.001
26	Hexavalent chromium (as Cr *4)	mg/i	APHA (23rd Edition) ,3500 Cr B	<0.01	<0.01
27	Copper	mg/l	APHA (23rd Edition) 3120B	<0.02	40.02
18	Cadmium	mg/I	APHA (23 <sup>re</sup> Edition) 3120B	<0.001	<0.001
19	Mercury	mg/l	IS 3025(Part 48)-1994;R:ffm:2014	<0.001	<0.001
0	Floating material	mg/i	APHA (23 <sup>rd</sup> Edition) 2530B	<2.5	<2.5
4 1	Petroleum Hydrocarbon	mg/l	IS 3025(Part 39)-1994;Rffm:2014	<0.5	<0.5

Prepared By - S-Kamy

-Amazuta Kar Rath Checked By-

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Date: 05.04.2022

## MARINE WATER QUALITY REPORT

Client Name & Address	M/s The Dhamra Port Company Limited, Dosinga, Bhadrak, Odisha
Work Order No.	4802006186
Reference No.	MSKGL/ED/2020-21/002050
Type of Sample	Marine Water
Sampling Location	Liquid/Gas/Cyrogenic Berth Face
Date of Sampling	18.03.2022
Date of Analysis	18.03.2022 to 31.03.2022
Sampling Done by	Mr. Kunja Bihari Nayak

SI.		Unit	Test Method	Analysi	s Result
1100		555500		Surface Water	Bottom water
4	Colour	Hazen	APHA (23rd Edition) 2120B 2017	<1.0	<1.0
2	Odour		APHA (23 <sup>H</sup> Edition) 2150B	Agrecable	Agrecable
3	Temperature	Deg C	APHA (23 <sup>rd</sup> Edition) 2550 B	25.0	25.0
4	Turbishity	N.T.U	APHA (Z3 <sup>rd</sup> Edition) 2130B	1.10.0	95.0
5	pH	(++	APHA (23rd Edition) 4500-H-B	7.38	7.09
6	Electrical Conductivity	145/cm	APHA (23" Edition) 2510 B	17856.0	14701.0
7	Salinity	mg/l	APHA (23 <sup>rd</sup> Edition) 2520B,2017	9887.0	7045.0
8	Total Suspended Solids	rng/l	APHA (23th Edition) 2540 D	126.0	98.0
9	Total dissolved solids	ing/l	APHA (23 <sup>rd</sup> Edition) 2540C	12633.0	10410.0
10	Total Hardness	mg/	APHA (23 <sup>rd</sup> Edition) 23498 2017	2578.0	2070.0
11	Calcium Hardness	mg/l	APHA (25" Edition) 3500-Ca B	620.0	487.0
12	Magnesium Hardness	mg/l	APHA (23 <sup>rd</sup> Edition) 3500-Mg 8	1910.0	1789.0
13	Chloride (as Cl)	199/1	APRA (23rd Edition) 4506-CLB	7012.0	6215.0
14	Dissolved Oxygen	Pgm	APHA (23 <sup>rd</sup> Edition)-4500-0-C/G	6.6	4.9
15	Biochemical Okygen Dermind (3 days et 27°C)	mg/l	APHA (23 <sup>rd</sup> Edition) 52) 0/8,2017	<0.0	<2.2
16	Chemical Oxygen Dennard (COD)	mg/i	APHA (23 <sup>rd</sup> Edition) 52208,2017	<1.0	<4.6
17	Oil & Grease	rng/l	APHA (23rd Edition) 5220B,2017	<1.4	<1.4
18	Disselved phosphates (as PO <sub>a</sub> )	mg/l	APHA (23 <sup>rd</sup> Edition) 4500-P D	<0.15	<0.15
19	Sulphite (as SO <sub>4</sub> )	mg/i	APHA (23" Edition)4500-SO4-E	980.6	793.0
20	Nitrite (as NO <sub>2</sub> )	mg/l	APHA (23" Edition)4500-NO2B	<0.01	<0.01
21	Nitrate (as NO <sub>3</sub> )	mg/l	APHA (23" Edition)4500-NO3-E	<0.5	<0.5
22	Ammonical Nitrogen (as NH <sub>3</sub> -N)	nsig/li	APHA (23rd Edition)4500-NH3F	<0,1	<0.1
23	Total Nitrogen	mg/f	APHA (23" Edition) 4500N C	2.8	1.1
24	Total Chromium	ma/l	APHA (23rd Edition) 3111 D	<0.01	<0.01
25	Phenelic Compounds (as C <sub>4</sub> H <sub>5</sub> OH)	mg/l	APHA (23 <sup>rd</sup> Edition) 5530C	<0.001	<0.001
26	Hexavatent chromium (as Cr +6)	mg/l	APHA (23 <sup>rd</sup> Edictor) ,3500 Cr B	<0.01	<0.01
7	Copper	mg/f	APHA (23 <sup>rd</sup> Edition) 3120B	<0.02	<0.02
18	Cadmium	mg/l	APHA (23 <sup>rd</sup> Edition) 3120B	<0.001	<0.001
No. of Concession, Name of Street, or other Designation, or other	Mercury	mg/l	IS 3625(Part 48)-1994;Rffm:2614	<0.001	<0.001
0	Pleating material	mg/l	APHA (23 <sup>rd</sup> Edition) 2530B	0.5	(2.5
1	Petroleum Hydrocarbon	mg/l	IS 3029(Part 39)-1994;Rffm:2014	<0.5	<0.5

Propaged By - S. Kanga

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MSK TESTINGS INSPECTION

N-5/100, Ground Floor IRC Village, Nayapalii Bhabaneswar - 751015 ICIN US1900W81956PTC

[CIN: U51909WB1966PTC023037]

T : (0574) 2362916, 2360917 F : (0674) 2362918 Date: 05.04.2023

## MARINE WATER QUALITY REPORT

M/s The Dhamra Port Company Limited, Dusingn, Bhadrak, Odisha
4802006186
MSKGL/ED/2020-21/002050
Marine Water
Along Channel at 1Km
18.03.2022
18.03.2022 to 31.03.2022
Mr. Kunja Bihari Nayak

SL.	Name of the Parameters	Unit	Test Method	Analysi	s Result
			and the second s	Surface Water	Bottom water
1	Colour	Hazen	APHA (23rd Edition) 21208 2017	<1.0	<1.0
2	Odour	*****	APHA (23 <sup>rd</sup> Edition) 21508	Agreeable	Agrecable
3	Temperature	Deg C	APHA (23 <sup>rd</sup> Edition) 2550 B	25,0	25.0
4	Turbidity	N.T.U	APHA (23 <sup>rd</sup> Edition) 2130B	99.0	85.0
5	pid	1111	APHA (23 <sup>rd</sup> Edition) 4500-H-B	8,12	7.66
0	Electrical Conductivity	as/am	APHA (23 <sup>st</sup> Edition) 2510 B	32113.0	29267.0
7	Salinity	mg/l	APEIA (23 <sup>rd</sup> Edition) 2520B,2017	18198.0	15630.0
8	Total Suspended Solids	mg/l	APHA (23rd Edition) 2540 D	140.0	129,0
9	Tetal dissolved solids	mg/l	APHA (23 <sup>rd</sup> Edition) 2540C	22618.0	20707.0
10	Total Hardness	mg/l	APRA (23 <sup>rd</sup> Edition) 2346B 2017	3873.0	3620.0
11	Calcium Herdness	-mg/l	APHA (23 <sup>st</sup> Edition) 3500-Ca B	621.0	587.0
12	Magnesium Hardness	mg/i	APHA (23 <sup>rd</sup> Edition) 3500-Mg B	3978.0	3722.0
13	Chloride (as CI)	mg/l	APHA (23 <sup>rd</sup> Edition) 4300-Ci B	13560.0	11200.0
14	Dissolved Oxygen	mg/l	APHA (23 <sup>rd</sup> Edition)-4500-O-C/G	6.2	5.3
13	Biochemical Oxygen Demand (3 days at 27°C)	mg/l	APHA (23" Edition) 5210B,2017	<2.0	<2.0
16	Chemical Oxygen Demand (COD)	mg/l	APHA (23 <sup>rd</sup> Edition) 5220B,2017	<4.0	<4.0
17	Oil & Grease	rng/l	APHA (23rd Edition) 5220B,2017	<1.4	<1.4
18	Dissolved phosphutes (as PO <sub>4</sub> )	mg/l	APNA (23" Edition) 4500-P D	=0.15	<0.15
19	Sulphate (ret SO <sub>4</sub> )	mg/l	APHA (23 <sup>rd</sup> Edition)4590-SO4-E	1751.0	1632.0
20	Nitrite (se NO <sub>2</sub> )	mg/l	APRA (23" Edition)4500-NO2B	<0.01	<0.01
21	Nitrate (as NO <sub>2</sub> )	mg/l	APEIA (23 <sup>rd</sup> Edition)4589-NO3-E.	<0.5	<0.5
22	Attimosical Nitrogen (as NH <sub>2</sub> -N)	Pam	APHA (23 <sup>th</sup> Edition)4500-NH3F	<0.1	<0.1
23	Total Nitrogen	mg/l	APEA (23° Edition) 450(IN C	40.3	<0.3
24	Total Chromium	mg/l	APHA (23* Edition) 3111 D	<0.01	<0.01
25	Phonelic Compounds (as C <sub>6</sub> H <sub>6</sub> OH)	mg/ī	APHA (23 <sup>rd</sup> Edition) 5330C	<0.001	< 0.001
16	Hexavalent chromlum (es Cr +6)	mg/l	APRA (23 <sup>rd</sup> Edition) 3500 Cr B	<0.01	<0.01
7	Copper	mg/l.	APHA (23rd Edition) 3120B	<0.02	<0.01
8	Cadmium	mg/I	APRA (23rd Edition) 3126B	<0.001	<0.001
9	Mercary	mg/l	IS 3025(Part 48)-1994;Rffm:2014	<0.861	<0.001
0.	Pleating material	mg/l	APHA (23 <sup>rd</sup> Edition) 2530B	<2.5	Q.5
1	Petroleum Hydrocurbon	Tigm	IS 3025(Part 39)-1994;Riffer:2014	<0.5	<0.5

Prepared By - S. Krumga

Checked By--Ancula Kar Rath

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MSK
TESTING-INSPECTION

N-5/100, Ground Floor IRC Village, Nayapell Shubaneswar - 751015

[CIN: U51909WB1958PTG023037]

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Date: 05.04.2022

## MARINE WATER QUALITY REPORT

Client Name & Address	M/s The Dhamra Port Company Limited, Desinga, Bladrak, Odishe
Work Order No.	4802006186
Reference No.	MSKGL/ED/2020-21/002050
Type of Sample	Marine Water
Sampling Location	Along Channel at 5Km
Date of Sampling	18.03.2022
Date of Analysis	18.03.2022 to 31.03.2022
Sampling Done by	Mr. Kunja Bibari Navak

SL.		Unit	Test Method	Analysis Result		
1200			V. Palita	Sarface Water	Bottom water	
1	Colour	Hazen	APEIA (33 <sup>st</sup> Edition) 2120B 2017	<1.0	<3.0	
2	Odour	men	APHA (23 <sup>rd</sup> Edition) 2150B	Agreçable	Agreeable	
3	Temperature	Deg C	APHA (23" Edition) 2550 B	25,0	25.0	
+	Turbidky	N.T.U	APHA (23 <sup>rt</sup> Edition) 2130B	75,0	58.0	
5	Flq Flq	um.	APHA (23° Edition) 4500-H-B	7.87	7.09	
6	Electrical Conductivity	us/em	APHA (23 <sup>rd</sup> Edition) 2510 B	34110.0	30830.0	
7	Salinity	rag/l	APHA (23 <sup>rd</sup> Edition) 25208,2017	21580.0	19054.0	
\$	Total Suspended Solids	ngri	APHA (25 <sup>rd</sup> Edition) 2540 D	110.0	96.0	
9	Total dissolved solids	mg/l	APHA (23 <sup>rd</sup> Edition) 2540C	24198,0	20242,0	
10	Total Hardness	mg/l	APHA (23" Edition) 2340B 2017	4560.0	4029.0	
11	Calcium Hardness	mg/t	APHA (23" Edition) 3500-Ca B	992.0	· 792.0	
12	Magnesium Hardness	mg/t	APHA (23" Edition) 3500-Mg B	3678.0	3422.0	
13	Chloride (as CI)	mg/l	APHA (23th Edition) 4500-CTB	13970.0	12057,0	
14	Dissolved Oxygen	mg/l	APHA (23 <sup>rd</sup> Edition)-4500-0-C/G	5.9	4.7	
15	Biochemical Oxygen Demand (3 days at 27°C)	mg/l	APHA (23 <sup>rd</sup> Edition) 5210B,2017	<2.0	<2.0	
16	Chemical Oxygen Demand (COD)	mg/l	APRA (23 <sup>rd</sup> Edition) 5220B,2017	<4.0	<4.0	
17	Oil & Grosse	mg/l	APHA (23 Edition) 5220B.2017	<1.4	<1.4	
18	Dissolved phosphates (as PO <sub>4</sub> )	mg/l	APHA (23" Edition) 4500-P D	<0.15	<0.15	
19	Sulphate (as SO <sub>4</sub> )	mg/l	APHA (23 <sup>rd</sup> Edition)+500-SO4-E	1680.0	1542.0	
20	Nitrite (as NO <sub>2</sub> )	mg/l	APHA (23 <sup>rd</sup> Edition)4500-NO2B	<0.01	<0.01	
21	Nitrate (as NO <sub>2</sub> )	mg/l	APHA (23 <sup>th</sup> Edition)4500-NO3-E	50.5	< 0.5	
22	Ammorical Nitrogen (as NH <sub>2</sub> -N)	mg/l	APHA (23° Edition)4500-NH3F	<0.1	<0.1	
23	Total Nitrogen	mg/l	APHA (23 <sup>st</sup> Edition) 4500N C	1.9	6.82	
24	Total Chromium	mg/l	APHA (23th Edition) 3111 D	<0.01	<0.01	
25	Phenolic Compounds (us C <sub>4</sub> H <sub>5</sub> OH)	mg/l	APHA (23 <sup>rd</sup> Edition) 5530C	<0.001	<6.001	
26	Hexavalent chromium (as Cr *5)	mg/l	APHA (21 <sup>rd</sup> Edition) 3500 Cr B	<0.01	<0.01	
27	Capper	rng/l	APHA (25" Edition) 31209	<0.02	<0.02	
8	Cadmium	mg/l	APMA (23 <sup>N</sup> Edition) 3120B	<0.001	<0.001	
9	Mercury	mg/l	IS 3025(Part 48)-1994;Rffm:2014	<0.001	<0.001	
0	Floating material	mg/l	APHA (23rd Edition) 2530B	Q.5	<2.5	
1	Petroleum Hydrocurbon	mg/i	IS 3025(Part 39)-1994;Rffbr:2014	<0.5	<0.5	

Prepared By - S. Konge

Cheeked By-Anomita Ker Radil

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Date: 05.04.2022

### MARINE WATER QUALITY REPORT

Client Name & Address	MS The Dhamra Port Company Limited, Dosinga, Bhadrak, Odisha
Work Order No.	4802006186
Reference No.	MSKGL/ED/2020-21/002050
Type of Sample	Marine Water
Sampling Location	Along Channel at 10Km
Date of Sampling	18.03,2022
Date of Analysis	18.03.2022 to 31.03.2022
Sampling Done by	Mr. Kunja Bihari Navak

SL.	Name of the Parameters	Unit	Test Method	Analysis Result		
1900		7000	03099578080	Surface Water	Bottom water	
1	Colour	Hazen	APHA (23 <sup>rd</sup> Edition) 21208 2017	<1.0	<1.0	
2	Odost	****	APHA (23 <sup>15</sup> Edition) 21,50%	Agrecable	Agreeable	
3	Temperature	Deg C	APHA (23 <sup>rd</sup> Edition) 2550 B	25.0	25.0	
4	Turbidity	N.T.U	APHA (23 <sup>rd</sup> Edition) 2130B	102.0	79.0	
5	pH	222	APHA (23" Edition) 4500-H-B	8.44	7.68	
6	Electrical Conductivity	usrem	APHA (23 <sup>8</sup> Edition) 2510 B	36112.0	32988.0	
7	Salinity	rrig/l	APHA (23 <sup>rd</sup> Edition) 2529B,2017	23152.0	20706.0	
8	Total Suspended Solids	me/1	APHA (23rd Edition) 2540 D	170,0	118.0	
9	Total dissolved solids	मञ्जी	APHA (23 <sup>rl</sup> Edition) 2540C	21623.9	19872.0	
10	Tetal Hardness	mg/l	APHA (23 <sup>rd</sup> Edition) 2340B 2017	4427.0	4199.0	
11	Calcium Hardness	mg/l	APHA (23 <sup>rd</sup> Edition) 5500-C≥ B	798.0	683.0	
12	Magnesium Hardness	mg/T	APHA (23" Edition) 3500-Mg B	3538.0	3467,0	
13	Chloride (as Cl)	mg/l	APRA (23" Edition) 4500-C1 B	150,0	12861.0	
14	Dissolved Oxygen	mg/l	APEIA (23" Edition)-4500-Q-C/G	6.4	3.2	
15	Biochemical Oxygen Demand (3 days at 27°C)	mg/t	APHA (23rd Edition) 5210B,2017	<2.0	<2.0	
16	Chemical Oxygen Demand (COD)	Dgm	APHA (23 <sup>rd</sup> Edition) 5220B,2017	<4.0	<4.6	
17	Oil & Grease	mg/l	APHA (2318 Edition) 5220B,2617	<1.4	<1.4	
18	Dissolved phosphates (as PO <sub>4</sub> )	mg/l	APHA (23 <sup>rd</sup> Edition) #590-P D	<0.15	<0.15	
19	Sulphate (23 SO <sub>4</sub> )	mg/l	APHA (23 <sup>rd</sup> Edition)4300-SO4-E	1151.0	1174.0	
20	Nitrite (us NO <sub>2</sub> )	ne/l	APHA (23 <sup>th</sup> Edition)4500-NO2B	<0.01	<0.01	
11	Nitrate (as NO <sub>2</sub> )	mg/l	APHA (28 <sup>rd</sup> Edition)4500-NO3-E	<0.5	<0.5	
22	Ammonical Nitrogen (as NH <sub>2</sub> -N)	Taget	APHA (23rd Edition):4500-NH3F	<0.1	<0.1	
3	Total Nitrogen	mge/l	APHA (23 <sup>rt</sup> Edition) 4500N C	<0.3	<0.3	
4	Yotal Chromium	mg/l	APHA (23 <sup>rd</sup> Edition) 3111 D	<0.03	<0.01	
5	Phonolic Compounds (as C <sub>4</sub> H <sub>4</sub> OH)	mg/l	APHA (Z3 <sup>re</sup> Edition) 5530C	-<0.001	<0.001	
6	Hexavulent elsromium (as Cr +6)	mg/i	APHA (23 <sup>st</sup> Edition) 3500 Cr B	<0.01	<0.01	
7	Copper	mg/l	APHA (23" Edition) 3120B	<0.02	<0.02	
8	Cadmium	mg/S	APHA (23rd Edition) 31/20/8	<0.801	<0.001	
9	Meroury	mg/l	IS 3025(Part 48)-1994;Rffm:2014	<0.001	<0.001	
0	Floating material	mg/l	APHA (23 <sup>rd</sup> Edition) 2530B	Q5	<2.5	
	Petroleum Hydrocarbon	mg/I	IS 3025(Part 39)-1994;Rffm:2014	<0.5	<0.5	

Prepared By - Q-Kamfy

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Date: 61.61.2022

## MARINE WATER QUALITY REPORT

Client Name & Address	M/s The Dhamra Port Company Limited, Dosinga, Bhadrak, Odisha
Work Order No.	4802006186
Reference No.	MSKGL/ED/2020-21/662050
Type of Sample	Marine Water
Sampling Location	Near Kanika Island
Date of Sampling	18.03.2022
Date of Analysis	18.03.2022 to 31.03.2022
Sampling Done by	Mr. Kunja Bihari Nayak

SL.		Unit	Test Method	Analysi	s Result
185		1000		Surface Water	Bottom water
1	Colour	Hazen	APBA (23rd Edition) 2120B 2017	<1.0	<1.0
2	Odnur	1000	APHA (23" Edition) 2150B	Agreeable	Agrecable
3	Temperature	Deg C	APHA (25 <sup>rd</sup> Edition) 2550 B	25.0	25.0
4	Turbidity	N.T.U	APHA (23rd Edition) 2130B	142.0	131.0
5	pН	7994	APHA (23 <sup>rt</sup> Edition) 4500-H-B	8.42	7.90
6	Electrical Conductivity	us/cim	APHA (23rd Edition) 2510 B	35715.0	30186.0
7	Salinity	mg/l	APHA (23 <sup>rd</sup> Edition) 2520B,2617	22547.0	20151.0
8	Total Suspended Solids	mg/l	APHA (23rd Edition) 2540 D	221.6	180.0
9	Total dissolved solids	mg/T	APHA (23rd Edition) 2540C	32907.0	28297.0
10	Total Hardness	mg/l	APHA (23 <sup>rd</sup> Edition) 23408 2017	3991.0	3845.0
11	Calcium Hardness	mg/l	APHA (23 <sup>rd</sup> Edition) 3500-Ca B	989.0	912.0
12	Magnesium Herdness	ng/l	APHA (23rd Edition) 3500-Mg B	2897,0	2785.0
13	Chloride (as Ct)	mg/l	APHA (23 <sup>N</sup> Edition) 4500-Cl B	12510.0	10806.0
14	Dissolved Oxygen	rog/l	APHA (23 <sup>4)</sup> Edition)-4500-O-O/G	5.7	4.2
15	Biochemical Oxygen Demand (3 days at 279C)	mg/l	APHA (23 <sup>M</sup> Edition) 5210B,2017	<2.0	- <2.0
16	Chemical Oxygen Demand (COD)	rag/l	APHA (23** Edition) 52268,2017	<4.0	<4.0
7	Off & Grease	ing/l	APHA (23 <sup>rd</sup> Edition) 3220B,2017	<1.4	<1.4
18	Dissolved phosphares (as PO <sub>4</sub> )	rog/i	APHA (23 <sup>rd</sup> Edition) 4500-P D	Q.15	
9	Sulphase (as SO <sub>4</sub> )	mg/l	APHA (23 <sup>rd</sup> Edition)4500-SO4-E	1660.0	<0.15
10	Nitrite (as NO <sub>2</sub> )	mg/l	APHA (23 <sup>rd</sup> Edition)4500-NO2B	< 0.01	1522.0
1	Nitrate (as NO <sub>2</sub> )	mg/l	APHA (23" Edition)4500-NO3-E	40.5	<0.01
2	Ammenical Nitrogen (as NH <sub>2</sub> -N)	ng/I	APHA (23rd Edition)4500-NH3F	<b>40.1</b>	<0.5
	Total Nitrogen	mg/l	APHA (2) <sup>14</sup> Edilson) 4500N C	<0.3	<0.1
	Total Chromium	mg/l	APHA (23rd Edition) 3111 D	<0.01	<0.3
5	Phasolic Compounds (as C <sub>4</sub> H <sub>2</sub> OH)	mg/l	APHA (23" Edition) 5530C	< 9.001	<0.001
6	Hexavalent chromium (as Er **)	168/1	APHA (23" Edition) 3500 Cr B	<0.61	
7	Copper	mg/L	APHA (23rd Edition) 3120B	<0.02	40.01
	Cedmiony	mg/i	APHA (23rd Edition) 3120B	40.001	< 0.02
	Mercury	, mg/l	IS 3025(Part 48)-1994;Rffm:2014	<0.001	<0.001
	Floating material	mg/l	APHA (23" Edition) 2530B	<2.5	40.001
1	Petroleum Hydrocarbon	mg/l	IS 3025(Part 39)-1994;Rffm:2014	40.5	<2.5

Prepared By - 9- Kanga

Checked Bytypanta Kw Rath

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Date: 05.04.2022

## PHYTOPLANKTONMONITORING REPORT

Client Name & Address	M/s The Dhamra Port Company	Limited, Dosings, Bladrak, Odisha				
Work Order No.	4802006186					
Reference No.	MSKGL/ED/2020-21/002050					
Type of Sample	Marine Sample (Phytoplankton	)				
Sampling Location	S1:Dhamra River Month S2:Dry Bulk Cargo Berth Face S5:Along Channel at 5Km S7:Near Kanika Island S3:Liquid/Gas/Cyrogonic Berth I S4:Along Channel at 1Km S6: Along Channel at 10Km					
Date of Sampling	18.03.2022					
Date of Analysis	18.03.2922 to 31.03.2022					
Sampling Done by	Mr. Kunja Bihari Nayak					

	ame of the grameters	Total count	No of species	Chlorophyll-a	Major Species
	Unit			mg/I	
Test	ing Method	APHA 10200	APHA 10200	APRA 10200H	APHA (23 <sup>rd</sup> Edition) 10200
			×	analysis Result	
S-1	Surface Water	22000	6	5.87	Navicula, Nereogyaris
	Bottom	00001	4	0.71	Mougetia, Zestera
S-3	Surface Water	20000	2	0.90	Zostera, Enteromorpha
3-2	Bottom water	15000	6	0.57	Fragilaria, Enteromorpha
S-3	Surface Water	23000	4	0.97	Cyclotelle, Enteromorphs
3-3	Bottem water	19000	2	0.47	Vallisneria, Fragilaria
5-4	Surface Water	20000	8	0.90	Moueotia, Fragilaria
3-4	Bottom water	11000	4	8.49	Nereocystis, Zostera
	Surface Water	18000	6	0.67	Vallisoeria, Phormidium
5-5	Bottom water	25000	8	0.95	Enteromorphs, Vallisneria
5-6	Surface Water	16000	3	0.66	Phoemidium, Calothrix
3-0	Bottont water	19000	2	0.87	Navicula, Enteromorpha
-7	Surface Water	12000	5	0.74	Cyclotella, Enteromorphs
	Bottom water	22000	3	0.81	Valtisneria, Calothrix

Prepared By - S-Kanngr

BEER E

Ananta Ku Rats



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Date: 01.01.2022

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## ZOOPLANKTONMONITORING REPORT

Client Name & Address	M/s The Dhamra Port Company Limited, Desinga, Bhadrak, Odisha
Work Order No.	4802006186
Reference No.	MSKGL/ED/2020-21/002050
Type of Sample	Marine Sample (Zooplankton)
Sampling Location	S1:Dhamra River Mouth S3:Liquid/Gas/Cyrogenic Berth Face S2:Dry Buik Cargo Berth Face S4:Along Channel at 1Km S5:Along Channel at 5Km S6: Along Channel at 10Km S7:Near Kanika Island
Date of Sampling	18.03.2022
Date of Analysis	18.03.2022 to 31.03.2022
Sampling Done by	Mr. Kunja Bihari Nayak

	ame of the	Total count	No of species	Major Species
	Unit			
Tes	ting Method	APHA 10200	APHA 10200	APHA (23 <sup>16</sup> Edition) 10200
			Analysis	
5-1	Surface Water	None	None	None
	Sottom water	None	None	None
\$-2	Surface Water	None	None	None
***	Bottom water	None	None	None
S-3	Surface Water	None	None	None
200	Bottom water	2000	2	Daphnia
\$4	Surface Water	None	None	None -
5-4	Bottom water	None	None	None
S-5	Surface Water	1500	1	Daphnia
20	Bettem water	None	None	None
\$ 6	Surface Water	None	None	None
3+6	Bottom water	None	None	None
.7	Surface Water	None	None	None
ie.	Bottom water	None	None	None

Propared By - J. Kan-gr



Checked By-Ancunta Kir Rock



N-5/100, Ground Floor IRC Village, Nayapatti Bhubaneswar - 751015

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Date: 05.04.2022

## MICROBIOLOGICAL MONITORING REPORT

Client Name & Address	M/s The Dhamra Port Company Limited, Dosinga, Bhadrak, Odlsha
Work Order No.	4802086186
Reference No.	MSKGL/ED/2020-21/002059
Type of Sample	Marine Sample (Microbiological)
Sampling Location	S1:Dhamra River Mouth S3:Liquid/Gas/Cyrogenic Berth Face S2:Dry Bulk Cargo Berth Face S4:Along Channel at 1Km S5:Along Channel at 5Km S6: Along Channel at 10Km S7:Near Kanika Island
Date of Sampling	18.03.2022
Date of Analysis	18.03.2022 to 31.03.2022
Sampling Done by	Mr. Kunja Bihari Nayak

1.759	ome of the Arameters	Total Bacteria count	Total Colliform	Paccal Celiforn	E coli	Enterococcus	Sølmonella	Shigalla	Vibrio
	Unit	CFL/ml	MPN/100ml	MPN/109ml	MPN/100mi	CFU/ml	/100ml	/100mt	/100ml
	Testing Method	APHA 5 <sup>th</sup> Edit	APHA 9231 B	APHA 9221 E	APHA 9221 F	IS 5887(Part-II)	15 5887(Pars-	18 5887(Part-	IS S\$87(Part-
	Telephone .	1		An	alysis Result			Vin	V)
s-	Surface Water	96.0	<1.8	<1.8	<1.8	<1.0	Absent	Absent	Absent
1	Bottom Water	120.0	<1.8	<1.8	≪1.8 -	<1.0	Absent	Absent	Absent
s.	Surface Water	230,0	7.8	<1.8	<1.8	<1.0	Absent	Absent	Absent
2	Bottom water	88.0	<1.8	<1.8	<1.8	<1.0	Absent	Absent	Absent
s-	Surface Water	75.0	<1.8	<1.8	<1.8	<1.0	Absent	Absent	Absent
3	Bottom water	110.0	<1.8	<1.8	<1,8	<1.0	Absent	Absent	Absent
s-	Surface Water	70.0	<1.8	<1.8	\$.1>	<1.0	Absent	Absent	Absent
4	Bottom . water	130,0	<1.8	<1.8	<1,8	<1.0	Absent	Absent	Absent
s.	Surface Water	86,0	<1.8	<1.8,	<1.8	<1.0	Absent	Absent	Absent
5	Bottom water	45.0	<1,8	<1.8	<1.8	<1.0	Absent	Absent	Absent
s.	Surface Water	50.0	<1.8	<1.8	<1.8	<1.0	Absent	Absent	Absent
6	Sottem water	95.6	<1.8	<1.8	<1.8	<1.0	Absent	Absent	Absent
5-	Surface Water	125.0	<1.8	<1.8	<1.8	<1.0	Absent	Absent	Absent
7	Bottom water	65.0	4.8	<1.8	<1.8	<1.0	Absent	Absent	Absent

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Date: 05.04.2022

## PHYTO BENTHOSMONITORING REPORT

Client Name & Address	M/s The Dhamra Port Company Limited, Dosinga, Bhudruk, Odisha
Work Order No.	4802006186
Reference No.	MSKG1/FD/2020-21/002050
Type of Sample	Marine Sample
Sampling Location	S1:Dhamra River Mouth S3:Liquid/Gus/Cyrogenic Berth Face S2:Dry Bulk Cargo Berth Face S4:Along Channel at 1Km S5:Along Channel at 5Km S6: Along Channel at 16Km S7:Near Kanika Island
Date of Sampling	18.03.2022
Date of Analysis	18.03.2022 to 31.03,2022
Sampling Done by	Mr. Kunja Bihari Navak

	iame of the argineters	Fungus	Total Count	No of species	Diversity Index	Major species
	Unit	CFU/g dry wt.	50 mg wet sediment	Nos.	-	4
Tes	ting Method	APHA 9610 B	APHA 9215 B.C	APHA 10500 B	By Calculation (Shaton's Index)	APHA 10500 B
-	120			analysis Result		
8-1	Surface Water	1457	165	8	6.7227	Ctenophora
22	Bottom water	1688	262	12	1.7847	Copepods
S-2.	Surface Water	2089	236	18	1.0112	N.longsigma
04.	Bettom water	1967	157	6	0.6815	Ctenonbora
5-3	Surface Water	1135	175	10	0.8149	Ctenophora, Ditylum,
300	Bottom water	1986	161	9	0.4115	Ditylum
	Surface Water	- 2450	-287	14	0.9002	Copepods, Podasira
\$4	Bottom water	1378	139	7	0.5592	Ditylum, Echinoderman
	Surface Water	1780	,214	. 17	1,9972	Podasira, Echinodermera
8-5	Bottom water	2850	209	. 20	1.6123	Ditylum, Echinodermate
	Surface Water	2978	312	40	2.2021	Podasira, Copepods
\$-6	Bottom water	1280	197	11	0.8362	Ctenophora, Pedasira
3.7	Surface Water	1630	112	6	0.4054	Ditylum, Podasira
	Bettem water	1970	154	12	0.8817	Podasira N.longsigma

Prepared By -

Checked By-Ananto Ker Rush



N-5/100, Ground Floer IRC Wilage, Nayapalli Bhubaneswar - 751015 [CIN: U51909WB1956P7C029097]

T: (0674) 2382916, 2380917

F: (0674) 2352918

TEST REPORT

Name & Address of the Customer: THE DHAMRA PORT COMPANY LIMITED

AT: DOSINGA, PO: DHAMRA

DIST: BHADRAK, PIN: 756171 ODISHA

Report No. : BBS/344 Date : 05.04,2022

Sample No.: MSKGL/ED/2020-21/03/00104

Sample Description: Sea Sediment Sampling Location: Dhames River Mouth

Date of sampling : 18.03.2022

#### ANALYSIS RESULT

Sl. No.	Parameters	Unit	Test Method	Year
1.	pH value	None	IS 2720 (Part 26)-1987;Rffm:2011	Result
2,	Electrical Conductivity	из/ощ	IS 3025 (Part 14)-1984;Rffm:2006	7,50
3.	Organic Matter	9%	IS 2720 (Part 22)-1972; Rffm:2015	7145.0
4.	Turbidity	N.T.U	APHA (23 <sup>rd</sup> Edition) 2130B	1.5
5.	Moisture content	96	Lab Method	36.0
6.	Chloride (as C1)	mg/kg	TPM/MSK/P&E/1/10	24,0
Ž.	Sulphate (as SO4)	mg/kg	IS 2720 (Part 27) 1977,RA 2015	2078,6
8.	Sulphide (as S)	mg/kg	TPM/MSK/P&E/1/43	457.0
9.	Phosphate (as PO4)	mg/kg	TPM/MSK/P&E/1/12	<5.0
10.	Phosphorus	mg/kg	TPM/MSK/P&B/1/12	BDL
11.	Iron (as Fe)	mg/kg	TPM/MSK/P&B/1/13	4.0
12.	Sodium (as Na)	mg/kg	TPM/MSK/P&E/I/II	7.6
13.	Potassium (as K)	nig/kg	TPM/MSK/P&P/I/S	2115.0
4.	Copper (as Cu)	mg/kg	EPA 6010D	431.0
15.	Nickel (as Ni)	mg/kg	EPA 6010D	4.2
6.	Zine (as Zn)	mg/kg	EPA 6010D	1.9
7.	Manganese (as Mn)	mg/kg	EPA 6010D	8.6
			EFS 001(0)	BDL



#### Ref. No. 885/344

Date-03.04.2022

18.	Lead (as Pb)	mg/kg	EPA 6010D	6.3
19.	Boron (as B)	mg/kg	IS 13428-2005, Annex H	7.4
20.	Alumínium ( as Al )	mg/kg	EPA 6010D	BDL
21.	Total Chromium (as Cr)	mg/kg	EPA 6010D	3,9
22.	Total Nitrogen (as N)	mg/kg	1\$ 14684 (1999); Rffm:2014	14.0
23.	Organic Nitrogen	mg/kg	TPM/MSK/P&E/3/68	10.2
24.	Total Petroleum Hydrocarbon	mg/kg	USEPA 8015 B - Dec, 1996, 8270 D - Feb, 2007	<0.05
25.	Pesticide Residue	mg/kg	USEPA 3540 C USEPA 8082	<0.5
26.	Sand	%	TPM/MSR/P&E/1/36A	34.0
27.	Silt	5%	TPM/MSK/P&E/1/36A	36.0
28,	Clay	None	TPM/MSK/P&E/1/36A	30.0
29.	Texture	96	TPM/MSK/P&E/1/36A	Loam

### Biological Result

Si No.	Parameters	Unit	Results
l,	Fungus (Phytobenthos)	CFU/g dry wt.	1600
2.	Total count (Phytobenthos)	50 mg wet sediment	187
3.	No of species (Phytobenthes)	Nos.	6
4.	Diversity index (Phytobenthos)	-	0.8254
5.	Major Species (phytobenthos)	-	Coscinadiscuss, Pieurosigma
6.	Name of Phylum (Fauna)		Annelida, Mollusca
7.	Class & Number of individuals encountered (Fauna)		Plychaeta-63,Bivalvia-20
8.	Total no. of species encountered (Faune)	Nos.	22
9.	Total fauna (Fauna)	per m <sup>2</sup>	178

Report Prepared by: S. Kaunge

For Mitra S.K. Private Limited An curried Kin Rath Authorized Signatory

M5K

N-8/100, Ground Floor IRC Villags, Neyspelli Bhubaneswar - 751015 [CIN: U61908WB1558PTG023037]

T: (0674) 2362916, 2360917

F: (0674) 2362918

Name & Address of the Customer:

THE DHAMRA PORT COMPANY LIMITED

AT: DOSINGA, PO: DHAMRA

DIST : BHADRAK, PIN: 756171 ODISHA

TEST REPORT

Report No. : BBS/345

Date : 05.04.2022

Sample No. : MSKGL/ED/2020-21/03/00105

Sample Description : Sea Sediment

Sampling Location: Dry Bulk Cargo Berth Face

Date of sampling : 18.03 2022

#### ANALYSIS RESULT

SL No.	<u>Parameters</u>	Unit	Test Method	Result
1.	pH value	None	IS 2720 (Part 26)-1987;Rffm:2011	7.87
9.	Electrical Conductivity	us/cm	(\$ 3025 (Part 14)-1984;Rffin:2006	5460.0
3.	Organic Matter	96	IS 2730 (Part 22)-1972; Rffm:2015	1.7
4.	Turbidity	N.T.U	APHA (23 <sup>nt</sup> Edition) 2130B	17.0
Š.	Moisture content	96	Lab Method	30.0
6.	Chloride (as CI )	mg/kg	TPM/MSK/P&E/1/10	2254.0
7.	Sulphate (as SO4)	mg/kg	IS 2720 (Pert 27) 1977,RA 2015	314,0
8.	Sulphide (as S)	mg/kg	TPM/MSK/P&E/1/43	<5.0
9.	Phosphate (as PO4)	mg/kg	TPM/MSK/P&E/1/12	975
10.	Phosphorus	mg/kg	TPM/MSK/P&E/1/12	9.0
11.	Iron (as Fe)	mg/kg	TPM/MSK/P&E/1/13	12.0
12.	Sodium (as Na)	mg/kg	TPM/MSK/P&E/1/4	6,4
13.	Potassium (as K)	mg/kg	TPM/MSK/P&E/1/5	2008.0
14,	Copper (as Cu)	mg/kg	EPA 6010D	312.0
S.	Nickel (as NE)	mg/kg	EPA 6010D	2.9
6.	Zinc (as Zn)	mg/kg	EPA 6010D	1.8
7.	Manganesa (as Mn)	mg/kg	EPA 6010D	7.7 BDL



18.	Lead (as Ph)	mg/kg	EPA 6010D	44.000
19.	Boron (as B)	mg/kg	202000000000000000000000000000000000000	2.6
20.	Aluminium (as Al.)	mg/leg	IS 13428-2005, Armex H	8.1
.21.	Total Chromium (as Cr)	mg/kg	EPA 6010D	BDL
22.	Total Nitrogen (as N)		EPA 6010D	2,3
23.	Organic Nitrogen	mg/kg	IS 14684 (1999); Rffm:2014	10.0
24.		mg/kg	TPM/MSK/P&E/3/68	7.8
	Total Petroleum Hydrocarbon	mg/kg	USEPA 8015 B - Dec, 1996, 8270 D - Feb,2007	<0.05
25.	Pesticide Residue	mg/kg	USEPA 3540 C USEPA 8082	<0.5
26.	Sand	%	TPM/MSK/P&E/1/36A	44.0
27.	Silt	96	TPM/MSK/P&E/1/36A	38.0
28.	Clay	None	_TPM/MSK/P&E/1/36A	22.0
29.	Texture	%	TPM/MSK/P&E/1/36A	Clay Login

### Biological Result

St No.	Parameters	Unit	1
1.	Fungus (Phytobenthos)	CFU/g dry	2027
2.	Total count (Phytobenthos)	50 mg wet sediment	274
3.	No of species (Phytobenthos)	Nos.	
4.	Diversity index (Phytobenthos)	18005	0.7955
5.	Major Species (phytobenthus)	22	Naveula Coscinadiscuss,
6.	Name of Phylom (Fauna)		Annelida, Moliusca
7.	Class & Number of individuals encountered (Fauna)		Plychaeta-41, Bivalvia-12
8.	Total no. of species encountered (Fauna)	Nos.	33
9.	Total fauna (Fauna)	per m <sup>3</sup>	212

Report Prepared by: SKang

For Mitra S.K. Private Limited

MSK TESTINGS INSPECTION

N-5/100, Ground Floor IRC Village, Neyapati Bhubanaswar - 751015 ICIN: U51909WB1958PTC0230371

T: (0574) 2362918, 2360917

F: (0874) 2352918

TEST REPORT

Report No. : BBS/346 Date : 05.04,2022

Sample No.: MSKGL/ED/2020-21/03/00106

Sample Description: Sea Sediment

Sampling Location: Liquid/Gas/Cyrogenic Berth

Face

Date of sampling : 18,03,2022

### Name & Address of the Customer:

THE DHAMRA PORT COMPANY LIMITED

AT: DOSINGA, PO: DHAMRA

DIST: BHADRAK, PIN: 756171 ODISHA

#### ANALYSIS RESULT

SL No.	<u>Parameters</u>	Unit	Test Method	Result
1.	pH value	None	IS 2720 (Part 26)-1987;Rffm:2011	7,96
2.	Electrical Conductivity	us/cm	IS 3025 (Part 14)-1984;Rffm:2006	4750.0
3.	Organic Matter	%	IS 2720 (Part 22)-1972; Rffm:2015	2.1
4.	Turbidity	N.T.U	APHA (23rd Edition) 2130B	46.0
5.	Moisture content	%	Lab Method	32.0
6.	Chloride (as CI)	mg/kg	TPM/MSK/P&E/1/10	1475.0
7,	Sulphate (as SO4)	mg/kg	IS 2720 (Part 27) 1977.RA 2015	789.0
8.	Sulphide (as \$)	mg/kg	TPM/MSK/P&E/1/43	<5.0
9.	Phosphate (as PO4)	mg/kg	TPM/MSK/P&E/1/12	DDL
10.	Phosphorus	mg/kg	TPM/MSK/P&E/1/12	BDL .
11.	Iron (as Fe)	mg/kg	TPM/MSK/P&E/1/13	3.6
12.	Sodium (es Na)	mg/kg	TPM/MSK/P&E/1/4	1988.0
13.	Potassium (as K)	rng/kg	TPM/MSK/P&E/1/5	241.0
14.	Copper (as Cu)	mg/kg	EPA 6010D	3.2
15,	Nickel (as Ni)	тід/кд	EPA 6010D	2.9
16.	Zinc (as Zn)	mg/kg	EPA 6010D	9.7
17.	Manganese (as Mn)	mg/kg	EPA 6010D	BDL



Date- 05.04.2022

18.	Lead (as Po)	mg/kg	EPA 6010D	12.0
19.	Boron (as B)	mg/kg	IS 13428- 2005,Annex H	3.6
20:	Aluminium ( as Al.)	mg/kg	EPA 6010D	BDL.
21.	Total Chromium (as Cr)	mg/kg	EPA 6010D	2.8
22.	Total Nitrogen (as N)	mg/kg	IS 14684 (1999); Rffm:2014	8.6
23.	Organic Nitrogen	mg/kg	TPM/MSK/P&E/3/68	3,2
24.	Total Petroleum Hydrocarbon	mg/kg	USEPA 8015 B - Dec, 1996, 8270 D - Feb, 2007	<0.05
25.	Pesticide Residue	mg/kg	USEPA 3540 C USEPA 8082	<0.5
26.	Sand	%	TPM/MSK/P&E/1/36A	- 46.0
27.	Silt	%	TPM/MSK/P&E/1/36A	24.0
28.	Clay	None	TPM/MSK/P&E/1/36A	30.0
29.	Texture	96	TPM/MSK/P&E/1/36A	Loam

### Biological Result

Sl No.	Parameters	Unit	Results
. 1.	Fungus (Phytobenthos)	CFU/g dry wt.	1847
2,	Total count (Phytobenthos)	50 mg wet sediment	256
3.	No of species (Phytobenthos)	Nos.	6
4,	Diversity index (Phytoberthos)		0.9250
5,	Major Species (phytobenthos)		Bidulphia, Pleurosigma
6.	Name of Phylum (Fanna)		Annelida, Mollusca
7.	Class & Number of individuals encountered (Fauna)		Plychaeta-60,Bivalvia-24
8,	Total no. of species encountered (Fauna)	Nos.	36
9.	Total fauna (Fapna)	per m <sup>3</sup>	254

S. Kown Syr Report Prepared by:



For Mitra S.K. Private Limited

MEK TERTINGNINSPECTION

N-5/199, Ground Floor IRC Village, Neyapati Shubaneswar - 75/1915 ICIN: U5/1909W8/1958PTC8250371

TEST REPORT

T: (0674) 2352916, 2360917

F: (0674) 2362918

Name & Address of the Customer: THE DHAMRA PORT COMPANY LIMITED

AT: DOSINGA, PO: DHAMRA

DIST: BHADRAK, PIN: 756171 ODISHA

Report No. : BBS/347 Date : 05.04.2022

Sample No. : MSKGL/ED/2020-21/03/00107

Sample Description: Sea Sediment

Sampling Location: Along Channel at 1 km

Date of sampling : 18.03.2022

#### ANALYSIS RESULT

Sl. No.	Parameters	Unit	Test Method	Result
L	pH value	None	IS 2720 (Part 26)-1987;Rffin:2011	8.32
2,	Electrical Conductivity	us/cm	IS 3025 (Part 14)-1984;Rffm:2006	7463.0
3.	Organic Matter	%	IS 2720 (Part 22)-1972; Rf8n:2015	3.5
4.	Turbidity	N.T.U	APHA (23 <sup>rd</sup> Edition) 2130B	26.0
<i>S.</i>	Moisture content	%	Lab Method	41.0
6.	Chloride (as CI )	mg/kg	TPM/MSK/P&E/1/10	1632.0
7.	Sulphate (as SO4)	mg/kg	IS 2720 (Part 27) 1977,RA 2015	721.0
8.	Sulphide (as S)	mg/kg	TPM/MSK/P&E/1/43	<5.8
9,	Phosphate (as PO4)	mg/kg	TPM/MSK/P&E/1/12	15.0
10.	Phosphorus	mg/kg	TPM/MSK/P&E/1/12	7.4
11.	Iron (as Fe)	mg/kg	TPM/MSK/P&E/1/13	20.8
12,	Sodium (as Na)	mg/kg	TPM/MSK/P&E/1/4	2879.0
13.	Potassium (as K)	mg/kg	TPM/MSK/P&E/1/5	274.0
14.	Copper (as Cu)	mg/kg	EPA 6010D	1.7
15.	Nickel (as Ni)	mg/kg	EPA 6010D	2.4
6.	Zinc (as Zn)	mg/kg	EPA 6010D	7.3
7.	Manganese (as Mo)	'mg/kg	- EPA 6010D	BDL



Date- 05,04,2022

15.	Lead (as Pb)	mg/kg	EPA 6010D	2.1
19,	Boron (as B)	mg/kg	IS 13428- 2005, Annex H	3.5
20.	Aleminium ( as Al.)	mg/kg	EPA 6010D	BDL
21.	Total Chromium (as Cr)	mg/kg	EPA 6010D	1.9
22.	Total Nitrogen (as N)	mg/kg	IS 14684 (1999); Rffm:2014	13.5
23.	Organic Nitrogen	mg/kg	. TPM/MSK/P&E/3/68	12.1
24.	Total Petreleum Hydrocarbon	mg/kg	USEPA 8015 B - Dec, 1996, 8270 D - Feb.2007	<0.05
25.	Pesticide Residue	mg/kg	USEPA 3540 C USEPA 8082	<0.5
26.	Sand	%6	TPM/MSK/P&E/1/36A	45.0
27.	Silt	96	TPM/MSR/P&E/1/36A	35.0
28.	Cley	None	TPM/MSK/P&E/1/36A	20.0
29.	Texture	36	TPM/MSK/P&E/1/36A	Loam

### Biological Result

SINo.	Parameters	Unit	Results
1.	Fungus (Phytobenthos)	CFU/g dry wt	1574
2,	Total count (Phytobenthos)	50 mg wet sediment	201
3.	No of species (Phytobenthos)	Nos.	6
4.	Diversity index (Phytobenthos)	222	0.7221
5,	Major Species (phytobenthos)		Bidulphia, Gyrosigma
6.	Name of Phylum (Fauna)	2000	Annelida, Mollusca
7.	Class & Number of individuals encountered (Fauna)	-	Plychecta-72, Bivalvia-38
8.	Total no. of species encountered (Fauna)	Nos.	20
9.	Total fauna (Fauna)	per m <sup>3</sup>	245

J. Kowyj Report Prepared by:



For Mitra S.K. Private Limited Annual Cu. La.H. Authorized Signatory

TESTING-INSPECTION

N-8/100, Ground Floor IRO Wage, Nayapati Bhubeneswar - 751015 (CIN: U51909WB1956FTC023037)

T : (0674) 2362915, 2360917

F: (0674) 2362918

Name & Address of the Customer:

THE DHAMRA PORT COMPANY LIMITED

AT: DOSINGA, PO: DHAMRA

DIST: BHADRAK, PIN: 756171 ODISHA

TEST REPORT

Report No. : BBS/348

Date : 05.04.2022

Sample No. : MSKGL/ED/2020-21/03/00108

Sample Description : Sea Sediment

Sampling Location : Along Channel at 5 km

Date of sampling : 18.03.2023

### ANALYSIS RESULT

Sl. No.	Parameters	Unit	Test Method	Result
1.	pH value	None	1S 2720 (Part 26)-1987;Rffm:2011	8.35
2.	Electrical Conductivity	us/cm	IS 3025 (Part 14)-1984;Rfffm:2006	7125.0
3,	Organic Matter	96	IS 2720 (Part 22)-1972; Rffm:2015	2.1
4.	Turbidity	N.T.U	APHA (23 <sup>rd</sup> Edition) 2130B	63.0
5.	Moisture content	96	Lab Method	36.0
6.	Chloride (as Cl.)	mg/kg	TPM/MSK/P&E/1/10	745.0
7.	Sulphate (as SO4)	mg/kg	IS 2720 (Part 27) 1977,RA 2015	589.0
8.	Sulphide (es S)	mg/kg	TPM/MSK/P&E/1/43	<5.0
9.	Phosphate (as PO4)	rag/kg	TPM/MSK/P&E/1/12	BDL
10.	Phosphorus	mg/kg	TPM/MSK/P&E/1/12	3.5
13.	fron (as Fe)	mg/kg	TPM/MSK/P&E/1/13	17.4
12.	Sodium (as Na)	mg/kg	TPM/MSK/P&E/1/4	2360.0
13.	Potassium (as K)	mg/kg	TPM/MSK/P&E/1/5	286.0
14.	Copper (as Cu)	mg/kg	EPA 6010D	
15.	Nickel (as Ni)	mg/kg	EPA 6010D	2,4
16.	Zinc (as Zn)	mg/kg	EPA 6010D	
17.	Manganese (es Mn)	mg/kg	EPA 6010D	BDL .



### Date- 05,04,2022

18.	Lead (as Pb)	mg/kg	EPA 6010D	1.9
19.	Boron (as B)	mg/kg	IS 13428- 2005, Annex H	1.5
20.	Aluminium ( as Al )	mg/kg	EPA 6010D	BDL
21.	Total Chremium (as Cr)	mg/kg	EPA 6010D	3.9
22.	Total Nitrogen (as N)	mg/kg	IS 74684 (1999); Rffin:2014	12.0
23.	Organic Nitrogen	mg/kg	TPM/MSK/P&E/3/68	6.2
24.	Total Petroleum Hydrocarbon	mg/kg	USEPA 8015 B - Dec, 1996, 8270 D - Feb, 2007	<0.03
25.	Pesticide Residue	mg/kg	USEPA 3540 C USEPA 8082	<0.5
26.	Sand	%	TPM/MSR/P&E/1/36A	42.0
27.	Silt	%	TPM/MSK/P&E/1/36A	38.0
28.	Clay	None	TPM/MSK/P&E/1/36A	20.0
29.	Texture	96	TPM/MSK/P&B/1/36A	Loam

### Biological Result

SI No.	Parameters	Unit	Results
1.	Fungus (Phytobenthos)	CFU/g dry wt.	1632
2.	Total count (Phytobenthos)	50 mg wet sediment	245
3.	No of species (Phytobenthos)	Nos.	6
4,	Diversity index (Phytobenthos)		1.5231
S.	Major Species (phytoherithes)		Navicula Gyrosigma
6.	Name of Phylum (Fauna)	-	Annelida, Mollusca
7.	Class & Number of individuals encountered (Fauna)		Plychaeta-51, Bivatvia-17
8.	Total no. of species encountered (Fauna)	Nos.	58
9.	Total fauna (Fauna)	per m <sup>3</sup>	202

C. Kangy Report Prepared by:



For Mitra S.K. Private Limited Awarda Ku fails Authorized Signatory



N-5/100, Ground Floor IRC Village, Nayapalli Bhubaneswar - 751015 ICIN: U51906W81956P7C023037

T: (0674) 2362918, 2360917

F. (0874) 2352918

Name & Address of the Customer: THE DHAMRA PORT COMPANY LIMITED

AT: DOSINGA, PO: DHAMRA

DIST: BHADRAK, PIN: 756171 ODISHA

TEST REPORT

Report No. : BBS/349

Date : 05:04.2022

Sample No.: MSKGL/ED/2020-21/03/00109

Sample Description: Sea Sediment

Sampling Location: Along Channel at 10 km

Date of sampling ; 18.03.2022

#### ANALYSIS RESULT

St. No.	Parameters	Unit	Test Method	Result
l.	pH value	None	IS 2720 (Part 26)-1987;Rffin:2011	8.21
2.	Electrical Conductivity	us/cm	IS 3025 (Part 14)-1984;Riffin:2006	8745.0
3.	Organic Matter	%	IS 2720 (Part 22)-1972; Rffm:2015	5,1
4.	Turbidity	N.T.U	APHA (23 <sup>rd</sup> Edition) 2130B	48.0
5.	Moisture content	96	Lab Method	42.0
6.	Chloride (as Cl )	mg/kg	TPM/MSK/P&E/1/10	1745.0
7.	Sulphate (as SO4)	mg/kg	IS 2720 (Part 27) 1977,RA 2015	452.0
8.	Sulphide (as S)	mg/kg	TPM/MSK/P&E/1/43	<5.0
9.	Phosphate (as PO4)	mg/kg	TPM/MSK/P&E/1/12	BDL
10.	Phosphorus	mg/kg	TPM/MSK/P&E/1/12	BDL
11.	Iron (as Fe)	mg/kg	TPM/MSK/P&E/1/13	22.1
12.	Sodjum (as Na)	mg/kg	, TPM/MSK/P&E/1/4	2452.0
13.	Potassium (as K)	mg/kg	TPM/MSK/P&E/1/5	1214,0
14.	Copper (as Cu)	mg/kg	EPA 6010D	3.2
15.	Nickel (as Ni)	mg/kg	EPA 6010D	2.5
16.	Zinc (as Zn)	mg/kg	EPA 6010D	12.0
17.	Manganese (as Mn)	mg/kg	EPA 6010D	BDL



Date- 05.04.2022

18.	Lead (as Pb)	mg/kg	EPA 6010D	2,8
19.	Boron (as B)	mg/kg	IS 13428-2005, Arinex H	4.1
20.	Altaninium (as A1)	mg/kg	EPA 6010D	BDL
21.	Total Chromium (as Cr)	mg/kg	EPA 6010D	5,6
22.	Total Nitrogen (as N)	mg/kg	1S 14684 (1999); Rffin:2014	10.2
23.	Organic Nitrogen	mg/kg	TPM/MSK/P&E/3/68	6.2
24,	Total Petroleum Hydrocarbon	mg/kg	USEPA 8015 B - Dec, 1996, 8270 D - Feb,2007	<0.05
25.	Pesticide Residue	mg/kg	USEPA 3540 C USEPA 8082	<0.5
26.	Sand	%	TPM/MSK/P&E/1/36A	44.0
27.	Silt	96	TPM/MSK/P&E/1/36A	36.0
28.	Clay	None	TPM/MSK/P&E/1/36A	20.0
29,	Texture	%	TPM/MSK/P&E/1/36A	Clay Loam

### Biological Result

St No.	Parameters	Unit	D
le .	Fungus (Phytobenthos)	CFU/g dry	Results 1900
2	Total count (Phytobenthos)	50 mg wet sediment	247
3.	No of species (Phytobenthes)	Nos.	12
4.	Diversity index (Phytobenthos)		1,3119
5.	Major Species (phytobenthos)	71112	Synedra, Coscinodiscuss sp.,
6.	Name of Phylum (Fauna)	200	Anthropoda, Annelida
7.	Class & Number of individuals encountered (Fauna)		Plychneta-60, Bivalvia-29
8.	Total no. of species encountered (Fauna)	Nos.	38
9.	Total fauna (Fauna)	per m³	244

S. Kampi \_\_ Report Prepared by:



For Mitra S.K. Private Limited An auda Lu Radh Authorized Signatory

MSK
TESTINGS INSPECTION

N-5/100. Ground Floor IRC Village, Neyapatii Bhubaneswar - 751015

[CIN: U51909WB1956PTC023037]

T: (0874) 2362916, 2369917

F: (0874) 2362918

Name & Address of the Customer: THE DHAMRA PORT COMPANY LIMITED

AT: DOSINGA, PO: DHAMRA

DIST: BHADRAK, PIN: 756 71 ODISHA

TEST REPORT

Report No. : BBS/350

Date : 05.04,2022

Sample No. : MSKGL/ED/2020-21/03/00110

Sample Description: Sea Sediment Sampling Location: Near Kanika Island

Date of sampling : 18.03.2022

#### ANALYSIS RESULT

St. No.	<u>Parameters</u>	Unit	Test Method	Result
T.	pH value	None	IS 2720 (Part 26)-1987:Rffm:2011	7.45
2.	Electrical Conductivity	us/cm	IS 3025 (Part 14)-1984;Rffm:2006	5870.0
3.	Organic Matter	96	IS 2720 (Part 22)-1972; Rffm:2015	4.6
4.	Turbidity	N.T.U	APHA (23 <sup>rd</sup> Edition) 2130B	21.0
5.	Moisture content	9%	Lab Method	29.0
6.	Chloride (as Cl.)	mg/kg	TPM/MSK/P&E/1/10	689.0
7.	Sulphate (as SO4)	mg/kg	IS 2720 (Part 27) 1977,RA 2015	2110.0
8.	Śulphide (as S)	mg/kg	TPM/MSK/P&E/1/43	<5.0
9.	Phosphate (as PO4)	mg/kg	TPM/MSK/P&E/1/12	BDL
10,	Phosphorus	mg/kg	TPM/MSK/P&E/1/12	BDL
14:	Iron (as Fe)	mg/kg	TPM/MSK/P&E/1/13	7.4
12.	Sodium (as Na)	mg/kg	TPM/MSK/P&E/1/4	2345.0
13.	Potessium (as K)	mg/kg	TPM/MSK/P&E/1/5	288,0
14.	Copper (as Cu)	mg/kg	EPA 6010D	5.1
15.	Nickel (as Ni)	'mg/kg	- EPA 6010D	2.8
16.	Zinc (as Zn)	mg/kg	EPA 6010D	6,7
17.	Manganese (as Mn)	mg/kg	EPA 6010D	BDL



### Date-05,04,2022

18.	Lead (as Pb)	mg/kg	EPA 6010D	2.4
19.	Boron (as B)	mg/kg	IS 13428- 2005, Annex H	3.5
20.	Aluminium ( as Ai )	mg/kg	EPA 6010D	BDL
21.	Total Chromium (as Cr)	mg/kg	EPA 6010D	4.1
22,	Total Nitrogen (as N)	mg/kg	IS 14684 (1999); Rfflm;2014	9.2
23.	Organic Nitrogen	mg/kg	TPM/MSK/P&E/3/68	4/7
24.	Total Petroleum Hydrocarbon	mg/kg	USEPA 8015 B - Dec, 1996, 8270 D - Feb,2007	<0.05
25.	Posticide Residue	mg/kg	USEPA 3540 C USEPA 8082	<0.5
26.	Sand	36	TPM/MSK/P&E/1/36A	46.0
27.	Silt	9%	TPM/MSK/P&E/1/36A	24,0
28.	Clay	None	TPM/MSK/P&B/1/36A	30.0
29.	- Texture -	%	TPM/MSK/P&E/1/36A	Clay

### Biological Result

SI No.	Parameters	Unit	n or to
- 1.	Fungus (Phytobenthos)	CFU/g dry	Results 1774
2.	Total count (Phytobenthos)	50 mg svet sediment	289
3.	No of species (Phytobenthos)	Nos.	15
4.	Diversity index (Phytobenthos)	1,1305	1,4125
5.	Major Species (phytobenthos)		Bidulphia Navicula
6.	Name of Phylum (Fauna)		Anthropoda, Annelida
7.	Class & Number of individuals encountered (Fauna)	-	Malagostraca-28,Pelecypoda-01
8.	Total no, of species encountered . (Fauna)	Nos.	36
9.	Total fauna (Fauna)	per m³	354

S. Kounga\_ Report Prepared by:



For Mitra S.K. Private Limited An auria Kur Kath Authorized Signatory



Ref: MSKGL/ED/BHU-2021/00700

Date: 05.04.2022

## Site Specific Monitored Meteorological Data

For: The Dhamra Port Company Limited, Dosinga, Bhadrak, Odisha

Sr. No.	Pa	rameters	March.22
2017	And Annual Control of the Control of	Minimum	22.1
1.	Temperature ( °C)	Maximum	36.7
		Average	28.2
	1 Sec. 19 10 10 10 10 10 10 10 10 10 10 10 10 10	Minimum	25.6
2.	Relative Humidity (%)	Maximum	95.0
		Average	65.7
	American American	Minimum	0.0
3.	Wind Speed (m/s)	Maximum	11.4
		Average	2.6
4.	Wind Direction (%)	N	3.4
	30.00	NNE	5.6
		NE	14.38
		ENE	9.8
		E	7.6
		ESE	2.4
- 7		SE	3.5
		SSE	11.0
		S	4.7
		SSW	3.7
		SW	8.2
		WSW	5.2
		W	3.6
-		WNW	2.4
		CALM	14.52
	Wilder Weeklings Service	Total	0.0
	Rainfall (mm)	Minimum Day Wise	0.0
		Maximum Day Wise	0.0
- 4		Average	0.0
		Minimum	747.8
	Ambient Pressure (mm Hg) Site Specific Data)	Maximum	758.4
		Average	751.8

Propared By SKAMB

Ventied By

FEBRUARY-2022

Directed by

### THE DHAMRA PORT COMPANY LIMITED



Ports and Logistics

AT : DOSINGA, PO : DHAMRA DIST- BHADRAK, PIN : 756171 ODISHA

Conducted by

M/s. Mitra S. K. Private Limited



Shrachi Centre (5th Floor)

74B, Acharya Jagadish Chandra Bose Road Kolkata - 700016 (West Bengal)



N-S/100. Ground Floor IRC Village, Nayapalii Bhubanaswar - 751015 ICIN: U51999WB1956PTC0230371

T: (0674) 2362916, 2360917

F: (0674) 2362918

Report No: BBS/900A

Date: 04.03.2022

#### AMBIENT AIR QUALITY MONITORING REPORT

Client Name & Address	M/s The Dhamra Port Company Limited, Dosinga, Bhadrak, Odisha
Work Order No.	4802006186
Reference No.	MSKGL/ED/2020-21/001800
Type of Sample	Ambient Air Sample
Sampling Location	Colony Area
Sampling Done by	Mr. Kunja Bihari Nayak
Sampling Duration	24hrs
Monitoring Instrument	RDS (APM 860), FPS (APM 154) Lata Envirotech, CO Analyzer & VOC Sampler

		PARAMETERS												
Date	PM <sub>10</sub> (pg/m <sup>2</sup> )	PM <sub>23</sub> (µg/m <sup>2</sup> )	SO <sub>x</sub> (pg/m²)	NOx (µg/m²)	CO (mg/m²)	NH <sub>3</sub> (µg/m²)	(pg/m²)	Pb (pg/m <sup>3</sup> )	(ng/m²)	As (mg/m²)	CaRs (mg/m²)	BaP (ng/m²)		
02.02.2022	46.30	31.20	6.50	18.90	0.38	17.30	<20.0	< 0.01	<5.0	<1.0	<4.2	<0.5		
06.02.2022	51.50	33.60	6.70	23.60	0.51	19.50	<20.0	<0.01	<5.0	<1.0	<4.2	<0.5		
09.02.2022	44.60	28.40	6.90	22.40	0.45	18.90	<20.0	<0.01	<5.0	<1.0	<4.2	<0.5		
13.02.2022	60.20	24.10	6.40	25.80	0.67	22.70	<20.0	<0.01	<5.0	<1.0	<4.2	<0.5		
16.02.2022	50.30	26,30	6.80	27.10	0.29	18.60	<20.0	< 0.01	<5.0	<1.0	<4.2	< 0.5		
20.02.2022	48.50	31.40	8.10	24.60	0.88	20.40	<20.0	<0.01	<5.0	<1.0	<4.2	<0.5		
23.02.2022	44.90	24.10	7.90	18.60	0.44	14.30	<20.0	<0.01	<5.0	<1.0	<4.2	<0.5		
27.02.2022	47.70	29.60	6.50	28.30	0.91	24.10	<20.0	< 8.01	<5.D	<1.0	<4.2	<0.5		
Monthly Average	49.25	28,59	6.97	23.66	9.57	19.47	<20.0	≥0.01	<5.0	<1.0	<4.2	<0.5		
CPCB, New Belhi AAQ Standard	100	60	80	80	4	400	180	1	20	6	5	1		
Time Weighted Average (hrs.)	24	24	24	24	1	24	1	24	Annual	Angual	Annual	Annual		
TEST METHOD	1S 5182: Part 23:20 06 (Reaff , 2012	1S 5182: Part 24:201	15 5182 : Part 2 :2001 (Reaff, 2012	1S 5182 : Part 6 :2006 (Realf, 2012)	IS 5182 : Part 10 :1999 (Reaff.20 14)	IS 5182: Part 25:201 8	1S 5182: Part 09:197 4	EPA - 103:4J une,19 99	EPA - 103.43a ne,1999	EPA - 103.4Ju ne,1999	ES:5182( Part- 11):2006 Reaff,20 12	IS:5182( Part- 12):2004 Reaff,: 2014		

N.B. "NAAQ- National Ambient Air Quality Standard as per 18th Nov. 2009 Gatt. Notification.

C. Kannin Prepared By SESR S

Avointe Kernon Rath. Checked By-

N-5/100, Ground Floor IRC Village, Nayapalif Bhubaneswar - 751015 [CIN: U61909WB1956PTC023037] TESTING INSPECTION

T: (0874) 2382916; 2360917

F : (0674) 2362918

Report No: BBS/900B

Date: 04.03.2022

### AMBIENT AIR QUALITY MONITORING REPORT

Client Name & Address	M/s The Dhamra Port Company Limited, Dosinga, Bhadrak, Odisha
Work Order No.	4802006186
Reference No.	MSKGL/ED/2020-21/001800
Type of Sample	Ambient Air Sample
Sampling Location	Kanak Prasad Village
Sampling Done by	Mr. Kunja Bihari Nayak
Sampling Duration	24hrs
Monitoring Instrument	RDS (APM 860), FPS (APM 154) Lata Envirotech, CO Analyzer & VOC Sampler

400	-	IV III			-	PA	RAMETER	S				_
Date	PMm (ag/as*)	PM <sub>25</sub> (µg/m)	SO <sub>2</sub> (µg/m <sup>2</sup> )	NOs (pg/m²)	CO (mg/m²)	NH <sub>3</sub> (pig/m <sup>3</sup> )	O <sub>3</sub> (pg/m²)	Pb (pg/m <sup>2</sup> )	NI (ng/m²)	As (ng/m³)	Celle (ug/m²)	BaP
02.02.2022	1	28.10	6.20	17.50	0.53	15.60	<20.0	<0.01	<5.0	1100000	1000	(eg/m²
06.02.2022	54.20	26.40	6.80	19.50	0.37	13.80	<20.0	<0.01	<5.0	<1.0	<4.2	<0.5
09.02.2022	45.80	27.80	6,30	21.60	0.61	24.50	<20.0	<0.01	<3.0	The state of the s	<4.2	< 0.5
13,02,2022	48.30	31.20	6.70	23.10	0.44	16.80	<20.0	<0.01		<1.0	<4.2	<0.5
16.02.2022	56.10	25,70	7.10	21.50	0.52	14.10	<20.0	<0.01	<5.0	<1.0	<4.2	<0.5
20.02.2022	50.30	32.90	6.90	25.60	0.64	21.40	<20.0	< 0.01	<5.0	<1.0	<4.2	<0.5
23.02.2022	51.70	24.20	7.80	20.30	0.58	17.50		Action Control of the Control	<5.0	<1.0	<4.2	<0.5
27.02.2022	43.20	30.50	7,70	28.70	0.89	The second second second second	<20.0	< 0.01	<5.0	<1.0	<6.2	<0.5
Monthly		177.00	UNIT THE STATE OF	130000000	0.69	25.70	<20.0	<0.01	<5.0	<1.0	<4.2	< 0.5
Average	49.81	28.35	6.93	22.22	0,57	18.67	<20.0	< 0.01	<5.0	<1.0	<4.2	<0.5
CPCB, New Delhi AAQ Standard	100	60	80	80	4	400	180	1	20	6	5	1
Time Weighted Average (hrs.)	24	24	24	24	1	24	1	24	Annual	Annual	Annual	Annual
TEST METHOD	IS 5182; Part 23;20 06 (Resff .2012	15 5182: Part 24:201 9	18 5182 : Part 2 :2601 (Reaff, 2012	IS \$182 : Parc 6 :2006 (Reaff, 2012)	IS 5182 : Part 10 :1999 (Reaf£26 14)	IS 5182; Part 25:281 8	IS 5182: Part 09:197	EPA - 103.4J unc,19 99	EPA - 103.4Ju ne,1999	EPA - 103.4Jn ne,1999	18:5182( Part- 11):2006 Reeff,20 12	18:5182( Part- 12):2004 Reaff.; 2014

National Ambient Air Quality Standard as per 18th Nov. 2009 Gatt. Notification



- (() MSK Testingwinapection

N-5/100, Ground Floor IRC Village, Nayapelli Bhubanaswar - 751815

[CIN: US1909WB1956PTC023037]

T: (0674) 2382916, 2380917

F: (0674) 2362918

Report No: BBS/900C

Date: 04.03.2022

## AMBIENT AIR QUALITY MONITORING REPORT

Client Name & Address	M/s The Dhames Port Community of A N
Work Order No.	M/s The Dhamra Port Company Limited, Dosinga, Bhadrak, Odisha
Reference No.	MSKGL/ED/2020-21/001800
Type of Sample	Ambient Air Sample
Sampling Location	Nesr BMH
Sampling Done by	Mr. Kunja Bihari Nayak
Sampling Duration	24hrs
Monitoring Instrument	RDS (APM 860), FPS (APM 154) Lata Envirotech, CO Analyzer & VOC Sampler
	(Area 134) Lata Envirotech, CO Analyzer & VOC Sampler

Dute	PMn	Toward	1 995	0.000	1	PA	RAMETE	RS				_
	(pg/m <sup>3</sup> )	PM <sub>2,5</sub> (µg/m <sup>2</sup> )	SO <sub>2</sub> (pg/m <sup>2</sup> )	NG <sub>A</sub> (µg/m <sup>3</sup> )	(mg/m²)	NH <sub>3</sub> (Pa/m²)	0 <sub>3</sub> (ug/m <sup>3</sup> )	Pb (µg/m²)	Ni	As	C <sub>s</sub> H <sub>4</sub>	Bal
02.02.2022		39.70	6.20	23.50	0.47	15.60	Name and Address of the Owner, where the Owner, which the Owner, where the Owner, which the			(ng/m²)	('mg/m')	(ng/ta
06.02.2022		38.90	6.50	26.40	0.58	13.40	<20.0	<0.01	<5.0	<1.0	<4.2	<0.5
09.02.2022	\$4.10	37.70	6.80	18.60	6.65	18.90	<20.0	<0.01	<5.0	<1.0	<4.2	<0.3
13.02,2022		24.60	7,40	15.20	0.35	21.60	<20.0	<0.01	<5.0	<1.0	<4.2	<0.5
16.02,2022		21.50	7.20	14,96	0.72	14.70	<20.0	<0.01	<5.0	<1.0	<4.2	<0.5
20.02.2022		40.60	8.10	32.60	0.97		<20.0	<0.01	<5.0	<1.0	<4.2	<0.5
23.02.2022	57.40	26.30	8.50	24.40	0.60	29.10	<20.0	<0.01	<5.0	<1.0	<4.2	<0.5
27.02.2022	58.60	32.60	7.80	36.20	0.58	20.30	<20.0	<0.01	<5.0	<1.0	<4.2	<0.5
Monthly		TERRORE.	10000	20.20	0.36	30.50	<20.0	<0.01	<5.0	<1.0	<4.2	<0.5
Average	55.82	32.73	7.31	23.97	0.61	20.51	<20.0	< 0.01	<5.0	<1.0		-
FCB, New Delhi AAQ Soudard	100	69	80	86	4	400	180	1	20	6	<4.2	<0.5
Time Veighted Average (lirs.)	24	24	24	24	1	24	1	24	Annual	Annual	5 Annual	Annua
TEST TETHOD	IS 5182: Part 23:20 06 (Reaf £ 2012	24:20	IS 5182 : Part 2 :2001 (Reaff .2012	IS 5182 : Part 6 :2096 (Reaff ,2012)	IS 5182 : Part 10 :1999 (Reaff.2 014)	IS 5182: Part 25:20 18	IS 5182; Part 09:19 74	EPA - 103.4 June, 1999	EPA - IO3.4Ju ne,1999	EPA - 103,4Ju ne,1999	IS:5182 (Part- 11):200 6 Reaff,2 012	IS:518: (Part- 12);200 4 Reaff.; 2014

N.B. \*NAAQ- National Ambient Air Quality Standard as per 18th Nov. 2009 Gett. Notification

S. Kame



Anante Komen Rath Checked By-



N-5/100, Ground Floor IRC Village, Nayapalli Bhubaneswar - 751015 ICIN: U51909WB1956PTC023037

T: (0674) 2362916, 2360917

F: (0674) 2362918

Report No: BBS/900D

Date: 04.03.2022

### AMBIENT AIR QUALITY MONITORING REPORT

Client Name & Address	M/s The Dhamra Port Company Limited, Dosinga, Bhadrak, Odisha
Work Order No.	4802006186
Reference No.	MSKGL/ED/2020-21/001800
Type of Sample	Ambient Air Sample
Sampling Location	Near Jetty
Sampling Done by	Mr. Kunja Bihari Nayak
Sampling Duration	24hrs
Monitoring Instrument	RDS (APM 860), FPS (APM 154) Lata Envirotech, CO Analyzer & VOC Sampler

-	7460		1	1	_	PA	RAMETER	CS .	. = -		100	
Date	PM <sub>10</sub> (µg/m²)	PMas (pg/m³)	SO <sub>2</sub> (µg/m <sup>2</sup> )	NOx (state)	(mg/m²)	NH <sub>3</sub> (pg/m <sup>3</sup> )	O <sub>3</sub> (ag/m <sup>3</sup> )	Pb (ng/m²)	Ni (eg/m³)	As (ng/m²)	C <sub>c</sub> H <sub>c</sub> (ng/m <sup>3</sup> )	BaP (ag/m <sup>3</sup>
02.02.2022		43.80	6,20	31.60	0.63	21.50	<20.0	<0.01	<5.0	<1.0	54.2	
06.02.2022	The second second second	41.20	6:80	34.50	0.55	23.40	<20.0	<0.01	<5.0	<1.0	100000	<0.5
09.02,2022	57.30	40.10	7.60	23.50	0.72	15.40	<20.0	<0.01	<5.0	<1.0	<4.2	<0,5
13.02.2022	59.50	23.50	7.90	17.80	0.43	16.80	<20.0	<0.01	<5.0		<4.2	<0.5
16.02,2022	56.10	27.90	7.40	16.80	0.59	15.80	<20.0	<0.01	<5.0	<1.0	<4.2	<0.5
20.02.2022	60.50	40.60	8.50	35.40	0.77	30.20	<20.0	<0.01	<5.0	<1.0	<4,2	<0.5
23.02.2022	58.70	38.40	7.60	25.30	0.85	22,10	<20.0	<0.01	<5.0	<1.0	<4.2	<0.5
27,02,2022	56.40	34.70	7.10	32.40	0.63	29.70	<20.0	<0.01	The second second	<1.0	54.2	<0.5
Monthly Average	58.56	36.27	7.38	27.16	0,65	21.86	<20.0	<0.01	<5.0 <5.0	<1.0	<4.2	<0.5
CPCB, New Delhi AAQ Standard	100	60	86	80	4	400	180	1	26	6	5	<0.5
Time Weighted Average (hrs.)	24	-24	24	24	1	24	1	24	Annual	Asnusl	Annual	Annual
TEST METHOD	IS 5182: Part 23:20 06 (Reaf £ 2012	IS 5182: Part 24:20 19	1S 5182 : Part 2 :2001 (Reaff .2012	IS 5182 : Part 6 :2006 (Reaff .2012)	IS 5182 : Part 10 :1999 (Reaff,2 014)	IS 5182: Part 25:20 18	IS 5182: Part 09:19 74	EPA - 103.4 June, 1999	EPA - 103.4Ju uc,1999	EPA - 103,4Ja ne,1999	IS:5182 (Part- 11):200 6 Reaff,2 012	IS:5182 (Part- 12):200 4 Reaff,: 2014

N.B- \*NAAQ- National Ambient Air Quality Standard as per 18th Nov. 2009 Gatt. Notification

S. Kampy Prepared By F



Avanta Kumo-Rath Checked By-

N-5/100, Ground Floor IRC Village, Nayapelli Bhubaneswar - 751015 [CIN: U51909WB1956PTC023037]

TESTING NINSPECTION

T: (0274) 2362916, 2360917

F: (0674) 2382918

Report No: BBS/900E

Date: 04.03.2022

### AMBIENT AIR QUALITY MONITORING REPORT

Client Name & Address	M/s The Dhamra Port Company Limited, Dosinga, Bhadrak, Odisha
Work Order No.	4802006186
Reference No.	MSKGL/ED/2020-21/001800
Type of Sample	Ambient Air Sample
Sampling Location	Dosinga Village
Sampling Done by	Mr. Kunja Bihari Nayak
Sampling Duration	24hrs
Monitoring Instrument	RDS (APM 860), FPS (APM 154) Lata Envirotech, CO Analyzer & VOC Sampler

		PARAMETERS													
Date	PM <sub>18</sub> (µg/m <sup>2</sup> )	Phl <sub>2.5</sub> (µg/m <sup>3</sup> )	SO <sub>2</sub> (ug/m <sup>3</sup> )	NOs (sg/m²)	CO (mg/m²)	NH <sub>3</sub> (ug/m²)	O <sub>2</sub> (pap/m²)	(ug/m²)	Ni (ag/or²)	As (ug/m²)	C <sub>c</sub> H <sub>c</sub>	BaP			
02.02.2022		42.60	6.40	26.10	0.46	24.50	<20.0	<0.01	The second second	the second second	(ng/m²)	(ag/m²			
06.02.2022		41.70	6.89	24,40	0.78	16.10	<20.0	<0.01	<5.0	51.0	<4.2	<0.5			
09.02.2022	62,80	32.30	6.20	18.60	0,64	18.50	<20.0	-	<5.0	<1.0	<4.2	<0.5			
13.02.2022	54.40	34.10	6.90	17.40	0.63	17.60	<20.0	<0.01	<5.0	<1.0	54.2	<0.5			
16.02.2022	53.10	23.20	7.50	17.60	0.41	13.80	The second second	<0.01	<5.0	<1.0	<4.2	<0.5			
20.02,2022	47.80	20.60	6.10	15.20	0.44	12.10	<20.0	< 0.01	<5.0	<1.0	<4.2	<0.5			
23.02.2022	52.70	23.70	6.50	20,40	0.57		<20.0	< 0.01	<5.0	<1.0	<4.2	40.5			
27.02.2022	40.60	19.70	7.20	18.20	The second second second	15.40	<20.0	< 0.01	<5.0	<1.0	<4.2	< 0.5			
Monthly	- 3553200	100000000	3779272	III. SALES OF THE	0.68	14.30	<20.0	< 0.01	<5.0	<1.0	<4.2	<0.5			
Average	51.61	29.73	6.70	19.73	0.58	16.53	<20.0	< 0.01	<5.0	<1.0	<4.2	<0.5			
CPCB, New Bellii AAQ Standard	100	60	80	80	4	400	180	1	20	6	5	1			
Time Weighted Average (hrs.)	24	24	24	24	ì	24	I.	24	Anoual	Annasi	Annual	Anneni			
TEST METHOD	IS 5182: Part 23:20 06 (Reaf f. 2012	IS 5182: Part 24:20 19	1S 5182 : Part 2 :2001 (Reaff .2012	1S 5182 : Part 6 :2006 (Reaff .2012)	IS 5182 : Part 10 :1999 (Reaft 2 014)	15 5182: Part 25:20 18	IS 5182; Part 09:19 74	EPA - 103.4 June, 1999	EPA - 103.4Ju ne,1999	EPA - 103,4Ju nc,1999	IS:5182 (Purt- 11):200 6 Reaff,2 012	IS:5182 (Part- 12):200 4 Realf,: 2014			

N.B. \*NAAQ- National Ambient Air Quality Standard as per 18th Nov. 2009 Gatt. Notification

S. Krungs Prepared By +



Ananta Kuman Rath Checked By-

MSK TESTING\* INSPECTION

N-5/100, Ground Floor IRG Village, Neyapalli Shutaneswar - 751015 [CIN: U51909WB1956PTC023037]

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F : (9674) 2362918

Report No: BBS/900F

Date: 04.03.2022

## AMBIENT AIR QUALITY MONITORING REPORT

Client Name & Address	M/s The Dhamra Port Company Limited, Dosinga, Bhadrak, Odisha
Work Order No.	4802006186 Company Linnieu, Dosinga, Baadrak, Odisha
Reference No.	MSKGL/ED/2020-21/001800
Type of Sample	Ambient Air Sample
Sampling Location	Near Bhitarkanika
Sampling Done by	Mr. Kunja Bihari Nayak
Sampling Duration	24hrs
Monitoring Instrument	RDS (APM 860), FPS (APM 154) Lata Envirotech, CO Analyzer & VOC Sampler
	wy Lata Environaci, CO Analyzer & VOC Sampler

12000	11/25	11000	pic.	-		PA	RAMETE	RS.		200		
Date	PM <sub>18</sub> (ng/m <sup>2</sup> )	PM <sub>23</sub> (µg/m²)	SO <sub>2</sub> (µg/m²)	NOx (µg/m²)	CO (mg/m²)	NH <sub>3</sub> (pg/m²)	O <sub>3</sub> (pg/m²)	Pb (pg/m²)	NI (ng/m²)	As (ng/m²)	Call4	BaP
02.02.2022		29.30	6.20	16.80	0.57	15.80	<20.0	<0.01	-	-	-	(ng/m
06.02.2022	66.60	27.40	6.30	15.60	0.73	18.30	<20.0		<5.0	≺1.0	<4.2	<0.5
09.02.2022		26.50	6.70	15,80	0.82	16.40	<20.0	<0.01	<5.0	<1,0	<4.2	< 0.5
13.02,2022	47.90	20.80	6.80	19.50	0.58	16.30	The second second	<0.01	<5.0	<1.0	<4.2	< 0.5
16.02.2022	46.80	24.70	6.90	23.70	0.60	21.40	<20.0	<0.01	<5.0	<1.0	<4.2	1 00.5
20.02.2022	40.50	21.60	6.40	18.50	0.54	The second second	<20.0	<0.01	<5.0	<1.0	<4.2	<0.5
23.02.2022	59.20	25.70	7.80	23.90	0.63	14.80	<20.0	<0.01	<5.0	<1.0	<4.2	<0.5
27.02.2022	52.40	23.70	7.40	20.10	0.66	20.50	<20.0	<0.01	<5.0	<1.0	<4.2	<0.5
Monthly	52.30	Control (Control	100000	100000000000000000000000000000000000000	1000000	17.40	<20.0	<0.01	<5.0	<1.0	<4,2	<0.5
Average	34.30	24.96	6.81	19.23	0.64	17.61	<20.0	< 0.01	<5.0	<1.0	₹4.2	<0.5
CPCB, New Belhi AAQ Standard	100	60	80	80	4	400	180	1	20	6	5	1
Time Weighted Average (hrs.)	24	24	24	24	1	24	1	24	Anoust	Annual	Annual	Annual
TEST METHOD	15 5182; Part 23:20 06 (Reaf f. 2012	IS 5182: Part 24:20 19	IS 5182 : Part 2 :2001 (Reaff .2012	IS 5182 : Part 6 :2006 (Reaff .2012)	IS 5182 : Part 10 :1999 (Reaff,2 014)	IS 5182: Part 25:20 18	IS 5182; Part 09:19 74	EPA - 103.4 June, 1999	EPA - 103.4Ju ue,1999	EPA - IO3.4Ju ne,1999	IS:5182 (Part- 11):200 6 Reaff,2 012	IS:5182 (Part- 12):200 4 Reaff,: 2014

N.B. \*NAAQ- National Ambient Air Quality Standard as per 18th Nov. 2009 Gatt. Notification

S. Koung



Aranda levenon Roden. Checked By-

N-5/100, Ground Floor IRC Village, Nayapalli Bhubaneawar - 751015 ICIN: U51909WB1956PT00230371

Village, Nayapalii ubaneswar - 751015

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#### TEST REPORT

Name & Address of the Customer:

THE DHAMRA PORT COMPANY LIMITED.

AT : DOSINGA, PO : DHAMRA

DIST: BHADRAK, PIN: 756171 ODISHA

Report No.: BBS/905

Date : 04.03.2022

Sample No. : MSKGL/ED/2020-21/02/01190

TESTING = INSPECTION

Sample Description: Ambient Noise

#### Noise Level Monitoring Data

SI.	Sampling	Sampling	Day Leq. Time	e dB(A)	Night Time Le	q, dB(A)
No	Date	Location	Results	LIMIT	Results	LIMIT
1.	01.02.2022	Colony Area (R)	42.8	55	38.4	45
2.	05.02.2022	Kanak Prasad Village (R)	46.4	55	40.2	45
3,	07.02.2022	Near BMH (I)	69,6	75	57.8	70
4_	08.02.2022	Near Jetty (I)	72.1	75	62.7	70
5.	12.02.2022	Dosinga Village (R)	50.5	55	41.8	45
6.	14.02.2022	Near Bhitarkanika (Eco Sensitive Zone)	44.5	50	39.6	40

		Noise Limit as per CP	CB
Category of Area/Zone	Leq dB(A) Day Time	Leq dB(A) Night Time	NOTE:
Industrial Area	75	70	Day Time: 06.00 Hr22.00 Hr.
Commercial Area	65	55	Night Time:22.00 Hr06.00 Hr.
Residential Area	55	45	
Silence Zone	50	40	

S. Kamps Report Prepared by:



For Mitra S. K. Private Limited

Arenta Kuman Rath.

N-5/100, Ground Floor IRC Village, Neyapetii Bhubaneswar - 751015 [CIN: U51909WB1956PTC023037] TESTING INSPECTION

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#### TEST REPORT

Name & Address of the Customer:

THE DHAMRA PORT COMPANY LIMITED.

AT : DOSINGA, PO : DHAMRA

DIST: BHADRAK, FIN: 756171 ODISHA

Report No.: BBS/906 Date: 01.12.2021

Sample No.: MSKGL/ED/2020-21/11/00489 Sample Description: Noise (Work Zone)

#### Noise Level Monitoring Data

Sl. No	Sampling Date	Sampling Location	MAX	MIN	Results in Avg. dB(A)
1.	02.02.2022	Stack Yard	82.1	39.6	70.4
2,	03.02.2022	Wagon Tippler	88.9	48.1	78.5
3.	06.02.2022	Near Silo	76.4	40,5	69.2
4.	09.02.2022	Near Stacker & Reclaimer	73.1	37.6	62.4
5.	10.02,2022	Project Area	80.2	41.3	66.8
6.	13.02,2022	Transfer Point	85.3	42.I	71.3
7.	15.02.2022	Workshop	83,1	40.8	77.6
8.	16.02.2022	Steel Yard	89.2	56.3	81.7
9,	17.02.2022	FCC Shed	74.6	46.1	73.2
0.	19.02.2022	Near Port Canteen	77,1	45.2	68.3

OSHA'S Permissible N	loise Exposure Limits
Noise Level	Exposure Limit
90 dBA	8.0 hours

Report Prepared by:



For Mitra S.K. Private Limited

Avanda Komon Rade,

Authorized Signatory

N-5/10B, Ground Floor IRC Village, Nayapati Bhubaneswar + 751015 (CIN: U51909WB1956PTC0230371

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### TEST REPORT

Name & Address of the Customer:

THE DHAMRA PORT COMPANY LIMITED

AT : DOSINGA, PO : DHAMRA

6DIST; BHADRAK, PIN:756171 ODISHA

Report No.: BBS/907

Date : 04 03 2022

Sample No.: MSKGL/ED/2020-21/02/01119 Sample Description: EFFLUENT WATER

Sampling Location : STP 150KLD Date of sampling : 02.02.2022

#### ANALYSIS RESULT

SL. No.	Test Parameters	Units	Limit	Test Specification	Result	
No.			STIER C.		Inlet	Outlet
1.	Colour	Hazen	*	APHA (23 <sup>st</sup> Edition) 2126B 2017	Bleckish	Clear
2.	Odour	****	-	APHA (23rd Edition) 2150B	Disagreeable	Agreeable
3.	pH value at 26°C		6.5-9.0	APHA (23 <sup>rd</sup> Edition) 4500 H-B	6.83	7,25
4.	Арреагансе			Lab Method	Turbid	Clear
5.	TSS	mg/i	<20.0	APHA (23 <sup>re</sup> Edition) 2540()	145.0	<2.5
6.	BOD	mg/l	<10.0	APHA (23 <sup>rd</sup> Edition) 5210B 2017	66.0	<2.0
7.	COD	mg/I	<50.0	APHA (23rd Edition) 5220B 2017	187.0	<4.0
8.	Oil & Grease	mg/l	<10.0	APHA (23rd Edition) 5220B 2017	14.0	<1.4
9.	Ammonical Nitrogen	mg/l	<5.0	APHA (23 <sup>st</sup> Edition) 4500-NH3-F 2017	42.0	<0.1
10.	Total Nitrogen (as N)	mg/l	<10.0	IS 14684 (1999); Rffm:2014	53.0	0.7
п.	Faecal Coliform	MPN/ 100ml	<1000.0	APHA (23 <sup>rd</sup> Edition) 9221 E	7980.0	689.0

Report P



For Mitra S. K. Private Limited Aventa Kuman Rath Authorized Signatory

N-5/100, Ground Floor IRC Village, Nayapaili Bhubanaswar - 751015

1

[CIN: U51908WB1958PTC023037]

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Name & Address of the Customer:

THE DHAMRA PORT COMPANY LIMITED

AT: DOSINGA, PO: DHAMRA

DIST : BHADRAK, PIN :756171 ODISHA

Report No.: BBS/908 Date: 04.03.2022

Sample No.: MSKGL/ED/2020-21/02/01832 Sample Description: EFFLUENT WATER

TESTING = INSPECTION

Sampling Location: STP 150KLD Date of sampling: 17.02.2022

#### ANALYSIS RESULT

No.		Units	Limit	Test Specification	Result	
					Inlet	Outlet
1.	Colour	Hazen	-	APHA (23rd Edition) 2120B 2017	Blackish	Clear
2.	Odour	-		APHA (23 <sup>rd</sup> Edition) 2150B	Disagreeable	Agreeable
3.	pH value at 26°C	30-0	6.5 - 9.0	APHA (23rd Edition) 4500 H-B	6.63	7.29
4.	Appearance	-	***	Lab Method	Turbid	Clear
5.	TSS	mg/l	<20.0	APHA (23 <sup>rd</sup> Edition) 2540D	124.0	4.6
6.	BOD	mg/l	<10.0	APHA (23rd Edition) 5210B 2017	59.0	6.6
7.	COD	mg/l	<50.0	APHA (23rd Edition) 5220B 2017	154.0	8.0
8.	Oil & Grease	mg/l	<10.0	APHA (23 <sup>rd</sup> Edition) 5220B 2017	10.0	<1.4
9.	Ammonical Nitrogen	mg/I	<5.0	APHA (23 <sup>rd</sup> Edition) 4500-NH3-F 2017	37.0	0.7
10.	Total Nitrogen (as N)	mg/I	<10.0	IS 14684 (1999); Rffm:2014	43.0	1.2
1,	Faccal Coliform	MPN/ .100ml	<1000.0	APHA (23 <sup>rd</sup> Edition) 9221 E	7220.0	740.0

S. Kongo Report Prepared by:



For Mitra S. K. Private Limited

Avanda Roman Rasta

Authorized Signatory

MSK TESTINGS INSPECTION

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### TEST REPORT

Name & Address of the Customer: THE DHAMRA PORT COMPANY LIMITED

AT : DOSINGA, PO : DHAMRA

6DIST : BHADRAK, PIN :756171 ODISHA

Report No.: BB\$/902 Date: 04.03.2022

Sample No.: MSKGL/ED/2020-21/02/01117 Sample Description: EFFLUENT WATER

Sampling Location : STP 140KLD Date of sampling : 02.02.2022

#### ANALYSIS RESULT

SL.	No. Test Parameters	Units	Limit	Test Specification	Result	
1.	Colour	-			Inlet	Quffet
	-100000	Hazen	-	APHA (23rd Edition) 2120B 2017	Blackish	Clear
2.	Odour		4	APHA (23rd Edition) 2150B	Disagrecable	Agreeabl
3.	pH value at 26°C	-	6.5 - 9.0	APHA (23rd Edition) 4500 H-B	6.68	
4.	Appearance		-	Lab Method	0001722	7.09
5.	TSS	mg/l	<20.0	APHA (23rd Edition) 2540D	Turbid	Clear
6.	BOD	mg/I	<10.0	And the second s	164.0	7.0
7.	COD	1	-	APHA (23 <sup>rd</sup> Edition) 5210B 2017	52.0	5.0
	COD	mg/l	<50.0	APHA (23rd Edition) 5220B 2017	135.0	8.0
8.	Oil & Grease	mg/l	<10.0	APHA (23rd Edition) 5220B 2017	12.0	<1.4
9.	Ammonical Nitrogen	mg/l	<5.0	APHA (23 <sup>rd</sup> Edition) 4500-NH3-F 2017	28.0	<0.1
0.	Total Nitrogen (as N)	mg/l	<10.0	IS 14684 (1999); Rffm:2014	37.0	1.7
1.	Faecal Coliform	MPN/ 100ml	<1000.0	APHA (23 <sup>rd</sup> Edition) 9221 E	6720.0	475.0

g. Karnga Report Prepared by:



For Mitra S. K. Private Limited

Aven be some Doth

Authorized Signatory

N-5/100, Ground Floor IRC Village, Nayapelli Bhubaneswar - 751015 [CIN: U51909WB1958PTC023037] (S) MSK

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## TEST REPORT

Name & Address of the Customer: THE DHAMRA PORT COMPANY LIMITED

AT : DOSINGA, PO : DHAMRA

DIST : BHADRAK, PIN :756171 ODISHA

Report No.: BBS/904 Date: 04.03.2022

Sample No.: MSKGL/ED/2020-21/02/01830 Sample Description: EFFLUENT WATER

Sampling Location : STP 140KLD Date of sampling : 17.02.2022

### ANALYSIS RESULT

SL. No.		Units	Limit	Test Specification	Res	ult
1.	Colour	Hazen			Inlet	Outlet
2.	Odour			APHA (23 <sup>rd</sup> Edition) 2120B 2017	Blackish	Clear
3.	- Laurinean		*	APHA (23 <sup>nd</sup> Edition) 2150B	Disagrecable	Agreeable
_	pH value at 26°C		6.5 - 9.0	APHA (23 <sup>rd</sup> Edition) 4500 H-B	6.59	
4.	Appearance	-	-2	Lab Method		7.18
5.	TSS	mg/l	<20.0		Turbid	Clear
6.	BOD	10000		APHA (23 <sup>rd</sup> Edition) 2540D	184.0	5.7
7.		mg/l	<10.0	APHA (23 <sup>rd</sup> Edition) 5210B 2017	47.0	4.0
100	COD	mg/l	<50.0	APHA (23rd Edition) 5220B 2017	124.0	
8.	Oil & Grease	mg/l	<10.0	APHA (23 <sup>rd</sup> Edition) 5220B 2017	124.0	7.0
	CONTROL OF THE STATE OF THE STA		10.0		14.0	<1.4
9.	Ammonical Nitrogen	mg/l	<5.0	APHA (23 <sup>rd</sup> Edition) 4500-NH3-F 2017	41.0	0.2
0.	Total Nitrogen (as N)	mg/l	<10.0	IS 14684 (1999); Rffm:2014	-	
T	# 1 (4 S V/S)	MPN/			52.0	1.9
L	Faecal Coliform	100ml	<1000.0	APHA (23 <sup>rd</sup> Edition) 9221 E	7010.0	539.0

Report Prepared by:



For Mitra S. K. Private Limited

Aventa lawmen Routh

N-5/100, Ground Floor IRC Village, Nayapall Bhubaneswar - 751015 [CIN: U51909WB1956PTC023037] MSK TESTING-INSPECTION

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### TEST REPORT

Name & Address of the Customer: THE DHAMRA PORT COMPANY LIMITED

AT : DOSINGA, PO : DHAMRA

DIST: BHADRAK, PIN:756171 ODISHA

Report No.: BBS/913 Date: 04.03.2022

Sample No.: MSKGL/ED/2020-21/02/01115 Sample Description: EFFLUENT WATER

Sampling Location: STP 25KLD Date of sampling: 02.02.2022

### ANALYSIS RESULT

SL.		Units	Limit	Test Specification	Res	ult
1.	Colour	Hazen			Inlet	Outlet
2.	15002000	razen	-	APHA (23 <sup>rd</sup> Edition) 2120B 2017	Blackish	Clear
	Odour		=	APHA (23sd Edition) 2150B	Disagreeable	Agreeabl
3.	pH value at 26°C	none.	6.5 - 9.0	APHA (23 <sup>rd</sup> Edition) 4500 H-B	The second second second	
4.	Appearance	122			6.87	7,23
5.	TSS	mod -	-000	Lab Method	Turbid	Clear
6.		mg/l	<20.0	APHA (23td Edition) 2540D	140.0	<2.5
300	BOD	mg/l	<10.0	APHA (23rd Edition) 5210B 2017	50.0	4.2
7.	COD	mg/l	<50.0	APHA (23 <sup>rd</sup> Edition) 5220B 2017		
8.	Oil & Grease	mg/l	<10.0	A PHA (22th Public ) 5220B 2017	128.0	10.0
			×10.0	APHA (23 <sup>rd</sup> Edition) 5220B 2017	20.0	<1.4
9.	Ammonical Nitrogen	mg/l	<5.0	APHA (23 <sup>rd</sup> Edition) 4500-NH3-F 2017	22.0	<0.1
10.	Total Nitrogen (as N)	mg/l	<10.0	IS 14684 (1999); Rffin:2014		
. 1	144	MPN/		(7777), кини,2014	33.0	1.3
1.	Faccal Coliform	100ml	<1000.0	APHA (23rd Edition) 9221 E	5421.0	318.0

Report Prepared by:



For Mitra S. K. Private Limited

Avander Konner Redu.

Authorized Signatory

N-5/100, Ground Floor IRC Village, Nayspalli Bhubaneswar - 751015

[CIN: U51909WB1956PTC023037]

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## TEST REPORT

Name & Address of the Customer : THE DHAMRA PORT COMPANY LIMITED

AT: DOSINGA, PO: DHAMRA

DIST: BHADRAK, PIN: 756171 ODISHA

Report No.: BBS/914 Date: 04.03.2022

Sample No.: MSKGL/ED/2020-21/11/01828 Sample Description: EFFLUENT WATER

Sampling Location: STP 25KLD Date of sampling: 17.02.2022

### ANALYSIS RESULT

SL. No.		Units	Limit	Test Specification	Res	ult
1.	Colour	Hazen	-		Inlet	Outlet
2,	Odour		-	APHA (23rd Edition) 2120B 2017	Blackish	Clear
0000		****		APHA (23rd Edition) 2150B	Disagreeable	Agreeable
3.	pH value at 26°C		6.5 - 9.0	APHA (23rd Edition) 4500 H-B		
4.	Appearance				6.53	7.21
5.	TSS	mg/l		Lab Method	Turbid	Clear
6.	12.8(2)		<20.0	APHA (23rd Edition) 2540D	116.0	6.0
1	BOD	mg/J	<10.0	APHA (23rd Edition) 5210B 2017	48.0	-
7.	COD	mg/i	<50.0	APHA (23rd Edition) 5220B 2017		5.8
8.	Oil & Grease	mg/l	<10.0	A PHA (22 <sup>rd</sup> PAN) 1 500 4m	131.0	9.0
	10 10 10 10 10 10 10 10 10 10 10 10 10 1		>10.0	APHA (23 <sup>rd</sup> Edition) 5220B 2017	28.0	<1.4
9,	Ammonical Nitrogen	mg/l	<5.0	APHA (23rd Edition) 4500-NH3-F 2017	39.0	<0.1
0.	Total Nitrogen (as N)	mg/J	<10.0	IS 14684 (1999); Rffm:2014	17.5	
1.	Faecal Coliform	MPN/	c1000.0		46.0	1.5
	PULLES SERVICE	100mI	<1000.0	APHA (23 <sup>™</sup> Edition) 9221 E	5800.0	431.0

Report Prepared by:



For Mitra S. K. Private Limited

Anongo Kuma Rost,

Authorized Signatory

N-5/100, Ground Floor IRC Village, Navapalli Bhubaneswar - 751015 [CIN: U51909WB1956PTC023037] TESTING INSPECTION

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## TEST REPORT

Name & Address of the Customer:

THE DHAMRA PORT COMPANY LIMITED AT: DOSINGA, PO: DHAMRA

DIST: BHADRAK, PIN: 756171 ODISHA

Report No.: BBS/901 Date : 04.03.2022

Sample No.: MSKGL/ED/2020-21/02/01114 Sample Description : EFFLUENT WATER

Sampling Location : STP 15 KLD Date of sampling : 02.02.2022

### ANALYSIS RESULT

SLo No.		Units	Limit	Test Specification	Res	ult
1.	Colour	Hazen			Inlet	Outlet
2	Odour			APHA (23 <sup>rd</sup> Edition) 2120B 2017	Blackish	Clear
		1777	**	APHA (23 <sup>nt</sup> Edition) 2150B	Disagrecable	Agrecab
3	pH value at 26°C		6.5 - 9.0	APHA (23 <sup>rd</sup> Edition) 4500 H <sub>2</sub> B	6.83	-116 - 176
4.	Appearance		-	Lab Method	17000	7.25
5.	TSS	mg/l	<20.0		Turbid	Clear
6,	BOD	-		APHA (23 <sup>rd</sup> Edition) 2540D	186.0	5.0
7.		mg/l	<10.0	APHA (23rd Edition) 5210B 2017	59.0	4.8
	COD	mg/l	<50.0	APHA (23 <sup>rd</sup> Edition) 5220B 2017	162.0	
8.	Oil & Grease	mg/l	<10.0	APHA (23rd Edition) 5220B 2017	22802383	7,0
0					17.0	<1.4
9.	Ammonical Nitrogen	mg/l	<5.0	APHA (23 <sup>rd</sup> Edition) 4500-NH3-F 2017	21.0	<0,1
0.	Total Nitrogen (as N)	mg/l	<10.0	IS 14684 (1999); Rffm:2014		
1,	Faccal Coliform	MPN/	~1000 a		28.0	1.8
	A SETTING TO SET IN SET	100ml	<1000.0	APHA (23rd Edition) 9221 E	7650.0	780.0



For Mitra S. K. Private Limited

franks kurron Roth Authorized Signatory

N-5/100, Ground Floor IRC Village, Nayapalli Bhubansawar - 751015 [CIN: U51909WB1956PTC023037] MSK TESTINGOINSPECTION

T: (0674) 2362916, 2360917

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## TEST REPORT

Name & Address of the Customer:

THE DHAMRA PORT COMPANY LIMITED

AT: DOSINGA, PO: DHAMRA

DIST: BHADRAK, PIN: 756171 ODISHA

Report No.: BBS/903 Date: 04.03.2022

Sample No.: MSKGL/ED/2020-21/02/01826 Sample Description: EFFLUENT WATER

Sampling Location : STP 15 KLD Date of sampling : 17.02.2022

### ANALYSIS RESULT

SL.		Units	Limit	Test Specification	Res	ult
1.	Colour	Hazen	-		Inlet	Outlet
2.	Odour	100000000000000000000000000000000000000	-	APHA (23rd Edition) 2120B 2017	Blackish	Clear
3.			-	APHA (23 <sup>rd</sup> Edition) 2150B	Disagreeable	Agrecable
	pH value at 26°C		6.5 - 9.0	APHA (23rd Edition) 4500 H-B	6.72	1
4.	Appearance	***	-	Lab Method	682	7.08
5.	TSS	mg/l	<20.0		Turbid	Clear
6.	BOD	mg/I	-	APHA (23 <sup>rd</sup> Edition) 2540D	165.0	6.2
7.	COD	1000	<10.0	APHA (23 <sup>rd</sup> Edition) 5210B 2017	46.0	6.0
		mg/l	<50.0	APHA (23rd Edition) 5220B 2017	141,0	9.1
8.	Oil & Grease	mg/l	<10.0	APHA (23 <sup>rd</sup> Edition) 5220B 2017		
9.	Ammonical Nitrogen			APHA (23 <sup>rd</sup> Edition) 4500-NH3-F	17.0	<1.4
		mg/I	<5.0	2017	30.0	<0,1
0.	Total Nitrogen (as N)	mg/I	<10.0	IS 14684 (1999); Rffm:2014	20.0	
1.	Francis or pre	MPN/			39.0	1.7
44	Faecal Coliform	100ml	<10001>	APHA (23rd Edition) 9221 E	7010.0	675.0

Report Prepared by:



For Mitra S. K. Private Limited

Ananta Roma Roth Authorized Signatory

M5K TESTING INSPECTION

N-5/100, Ground Floor IRC Village, Nayapati Bhubaneswar - 751015

[CIN: U51909WB1956PTC023037]

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#### TEST REPORT

Name & Address of the Customer :

THE DHAMRA PORT COMPANY LIMITED

AT: DOSINGA, PO: DHAMRA DIST: BHADRAK, 756171 ODISHA Report No. : BBS/910 Date : 04.03.2022

Sample No.: MSKGL/FD/2020-21/02/01837

Date of sampling : 17.02.2022

Sampling Description: Ground Water (Piezometric) Sampling Location: Township Pump House

Sampling Done By : Mr. Kunja Bihari Nayak

### BACTERIOLOGICAL ANALYSIS RESULT AS PER IS: 10500 - 2012

SI. No	Test Parameters	Units	T downer		
1.	E. Coli	/100ml	Limit	Test Method / Specification	Result
2	The state of the s	/100ml	Not Detectable	IS: 15185 : 2016	Not Detected
4.	Total Coliform Organism	/100mi	Not Detectable	IS: 15185 : 2016	Not Detected

CHEMICAL ANALYSIS RESULT AS PER IS: 10500 - 2012 Requirement Permissible limit Test Parameter No. Units (Acceptable in the absence of Test Method / Specification Result Limit) alternate Source I. pH ( at 26° C) 6.5 - 8.5 No Relaxation IS 3025 (Part 11)-1984 Rffin: 2012 2, Sulphate (as SO<sub>4</sub>) 7.51 mg/l200 400 IS 3025 (Part 24)- 1986 Rilin: 2014 Calcium (as Ca) 3. 48.0 mg/l 73 200 IS 3025 (Part 40)- 1991 Riffin: 2014 4. Arsenie (as As) 30.0 mg/i 0.01 0.05 IS 3025 (Part 2) 2004 RA 2014 5. Lead (as Pb) BDL(DL:0.005) mg/l 0.01 No Relaxation 18 3025 (Part 2) 2004 RA 2014 6. Zinc (as Zn) BDL(DL:0.005) mg/l 5.0 15.0 IS 3025 (Part 2) 2004 RA 2014 Copper (as Cu) BDL(DL:0.02) mg/I 0.05 1.5 IS 3025 (Part 2) 2004 RA 2014 8. Mercury (as Hg) BDL(DL:0.02) mg/i 0.001 No Relaxation IS 3025 (Part 48)-1994 Rffm: 2014 9. Cadmium (as Cd) BDL(DL:0.0002) mg/I 0.003 No Relaxation IS 3025 (Part 2) 2004 RA 2014 10 Mineral Oil BDL(DL:0.001) mg/I0.5 No Relaxation IS 3025 (Part 39)-1991 Rffin: 2014 П Fluoride (as F) BDL(DL:0.5) mg/l 1.0 1.5 IS 3025 (Part 60)- 2008 Rffm: 2013 12 Colour BDL(DL:0.2) Hozen 5 15 3025 (Part 4)-1983; Rffm:2012 13 Odour BDL(DL:1.0) Agreeable Agreeable IS 3025 (Part 5)-1983 Rffm:2012 14. Turbidity N.T.U Agrocable 5 IS 3025 (Part 10)-1984 Rffm: 2012 15 Residual free Chloring BDL(DL:1.0) 0.2 mig/T 1.0 IS 3025 (Part 26)- 1986 Rffm;2014 16. Iron (as Fe) BDL(DL:0.1) mg/10.3 No Relaxation IS 3025 (Part 53)-1988 Riffn: 2014 17 Chloride (as CI) BDL(DL:0.05) mg/l 250 1000 IS 3025 (Part 32)-1988 Rffm: 2014 18 Total Dissolved Solids 71.0 mg/I 500 2000 IS 3025 (Part 16)-1984; Rffin:2012 19 Alkalinity (as CaCO<sub>1</sub>) 348.0 mg/l 200 600 IS 3025 (Part 23)- 1986 Rffm: 2009 20. Aluminium (as Al) 180.0 mg/l 0.03 0.2 IS 3025 (Part 2) 2004 RA 2014 21. Magnesium (as Mg) BDL(DL:0.01) mg/l 30 100 IS 3025 (Part 46)-1994 Rffm; 2014 Total Hardness 27.0 22 mg/l 200 (as CaCO<sub>3</sub>) 600 IS 3025 (Part 21)-2013 188.0 23. Boron (as B) mg/l 0.5 1.0 IS 3025 (Part 2) 2004 RA 2014 24 Manganese (as Mn) BDL(DL:0.3) mg/l OL 0.3 IS 3025 (Part 2) 2004 RA 2014 25. Nitrate (as NO<sub>3</sub>) BDL(DL:0.02) mg/i 43 No Relaxation IS 3025 (Part 34)-1988 Rffm: 2014 Phenolic Compounds BDL(DL:0.4) 26. 0.001 (as CaH,OH) 0.002 IS 3025 (Part 43)- 1992; Rffm; 2014 mg/I BDL(DL:0.00!) 27 Selenium (ns Se) sng/l 0.01 No Relaxation \$\$ 3025 (Part 2) 2004 RA 2014 28 Total Chromium (as Cr) BDL(DL:0.005) mg/l 0.05 No Relaxation IS 3025 (Part 2) 2004 RA 2014 29. Silver (as Ag) BDL(DL:0.01) rng/l 0.1 No Relaxation IS 3025 (Part 2) 2004 RA 2014 30 Bariem (as Ba) BDL(DL:0.005) 0.7 mg/I No Relaxation LS 3025 (Part 2) 2004 RA 2014 31. Salinity BDL(DL:0.1) mg/f IS 3025 (Part 14)- 2013 42.0



### Ref. No. BBS/910

Date- 04.03.2022

32.	Sulphide (as H2S)	mg/l	0.05	Ma Dalamata	1.0.2.2.2.2.2.2.2.2.2.2.2.2.2.2.2.2.2.2.	Service S
33.	Ammonia ( as total			No Relaxation	1S 3025 (Part 29)- 1991; Rffin: 2014	BDL(DL:0.02)
-	ammonia-N)	mg/l	0.5	No Relaxation	IS 3025 (Part 34)- 1988; Rillin: 2014	BDL(DL:0.1)
34.	Chloramines	mg/l	4.0	No Relaxation		1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
35.	Nickel (as Ni)	mg/l	0.02	No Relaxation	18 3025 (Part 26)- 1986; Rffre: 2014	BDL(DL:0.1)
36.	Cynnide (as CN)	mg/i	0.05	No Relaxation	IS 3025 (Part 2) 2004 RA 2014	BDL(DL:0.01)
37.	Anionic Detergents		0.5	- CONT	IS 3025 (Part 27)- 1986 Rffm: 2014	BDL(DL:0.01)
300	(as MBAS)	mg/l	0.2	1.0	IS 13428(Annex K)- 2005	BDL(DL:0.05)
38.	Polynuclear Aromatic Hydrocarbons (ss PAH)	mg/I	0.0091	No Relaxation	APHA ( 23 <sup>rd</sup> Eðin.) 6440C	BDL(DL:0.0001)
	Polychlorinated					DIVERDIGIOUSI)
39.	Biphenyls (PCB)	mg/I	0.0005	No Relaxation	US EPA 8082	BDL(DL:0.0005)

S. Kangr Roport Propared by:

BBSR E

For Mitra S. K. Private Limited.

Ananda Komai Rath Authorized Signatory

MSK TESTINGE INSPECTION

N-5/100, Ground Floor IRC Wilage, Nayapatli Shubaneswar - 751015

[CIN: U51909WB1956PTC023037]

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TEST REPORT

Report No. : BBS/911 Date : 04.03.2022

Sample No.: MSKGL/FD/2020-21/02/01838

Date of sampling : 17.02.2022

Sampling Description : Ground Water (Piezometric)

Sampling Location: Pump House WTP Sampling Done By: Mr. Kanja Bihari Nayak

THE DHAMRA PORT COMPANY LIMITED AT: DOSINGA PO: DHAMRA

DIST: EHADRAK, PIN:756171 ODISHA

Name & Address of the Customer .

BACTERIOLOGICAL ANALYSIS RESULT AS PER IS: 10500 - 2012

Sl. No	Test Parameters	Units	Limit	Test Method / Specification	Result
L.	E. Coli	/100ml	Not Detectable	IS: 15185 : 2016	Not Detected
2.	Total Coliform Organism	/100ml	Not Detectable	IS: 15185 : 2016	Not Detected

CHEMICAL ANALYSIS RESULT AS PER IS: 10500 - 2012 Requirement Permissible limit SL Test Parameter Units (Acceptable in the absonce of Test Method / Specification No. Result Limit) alterante Source pH (at 26°C) 6.5 - 8.5 No Retaxation IS 3025 (Part 11)-1984 Rffm: 2012 7.40 Sulphate (as SO<sub>4</sub>) 200 mg/I 430 IS 3025 (Part 24)- 1986 Rffin: 2014 54.0 Calcium (as Cs) mg/l 75 200 IS 3025 (Part 40)- 1991 Rffim: 2014 42.0 4 Arsenic (as As) mg/I6:01 0.05 15 3025 (Part 2) 2004 RA 2014 BDL(DL:0.005) Lead (as Pb) 0.01 mg/l No Relaxation BDL(DL:0.005) IS 3025 (Part 2) 2004 RA 2014 6 Zino (as Zn) 5.0 15.0 mg/I IS 3025 (Part 2) 2004 RA 2014 BDL(DL:0.02) 7. Copper (as Ca) 0.05 mg/l 1,5 IS 3025 (Part 2) 2004 RA 2014 BDL/DL:0.021 8. Mercury (as Hg) me/l 0.001 No Relaxation IS 3025 (Part 48)-1994 Riffer: 2014 BDL(DL:0.0002) 9. Cadmium (as Cd)  $m_0/1$ 0.003 No Relaxation IS 3025 (Part 2) 2004 RA 2014 BDL(DL:0.001) 10. Mineral Oil mg/l 0.5 No Relaxation IS 3025 (Part 39)-1991 Riffm: 2014 BOL(DL:0.5) Fluoride (as F) 11 mg/l 1.0 1.5 IS 3025 (Part 60)- 2008 Rffm: 2013 BDL(DL:0.2) 12. Colour Hazen 5 15 3025 (Part 4)-1983; Rffin:2012 BDL(DL:1.0) 抜 Odour Agrocable Agrecable (\$ 3025 (Part 5)-1983 Rffm:2012 Agreeable Turbidity 14. NTU IS 3025 (Part 10)-1984 Rffin: 2012 BDL(DL:1.0) 15. Residual free Chlorine mg/I 6.2 1.0 IS 3025 (Part 26)- 1986 Rffin: 2014 BDE(DL:0.1) 16. Iron (as Fe) mg/l0.3 No Relaxation IS 3025 (Part 53)-1988 R@m: 2014 BDL(DL:0.05) Chloride (as Cl) 17. mu/2 250 1000 IS 3025 (Part 32)-1988 Rffin: 2014 75.0 18. 500 Total Dissolved Solids mg/l 2000 IS 3025 (Part 16)-1984; Rffm:2012 354.0 10 Alkalinity (as CaCO<sub>1</sub>) 200 mg/I 600 IS 3025 (Part 23)- 1986 Rffm: 2009 167.0 26 Aluminim (as Al) mg/l 0.03 0.2 IS 3025 (Part 2) 2004 RA 2014 BDL(DL:0.01) Magnesiam (as Mg) 21 30 rag/l 100 IS 3925 (Part 46)-1994 Rffm: 2014 27.0 Total Hardness 22. mg/i 200 600 IS 3025 (Part 21)-2013 176.0 (as CaCO<sub>s</sub>) 23 Boron (as B) 0.5 mg/l 1.0 1S 3025 (Part 2) 2004 RA 2014 BDL(DL:0.3) 24 Manganese (as Mn) meli 0.1 0.3 IS 3025 (Part 2) 2004 RA 2016 BDL(DL:0.02) 25. Nitrate (as NO<sub>3</sub>) mg/l 45 No Relaxation IS 3625 (Part 34)-1988 Rffin: 2014 BDL(DL:0.4) Phenolic Compounds 26. 100.0 0.092 IS 3025 (Part 43)- 1992; Rillin: 2014 BDL(DL:0.001) (as C,H,OH) may! 27 Sclenium (as Se) 0.01 No Relaxation mg/l IS 3025 (Part 2) 2004 RA 2014 BDL(DL:0.005) Total Chromium (28 Cr) 28 mg/l 0.05 IS 3025 (Part 2) 2004 RA 2014 No Relaxation BDL(DL:0.01) 29 Silver (as Ag) 0.1 mg/l No Refacation IS 3025 (Part 2) 2004 RA 2014 BDL(DL:0.005) 30. Barium (as Ba) 0.7 mg/l No Relaxation IS 3025 (Part 2) 2004 RA 2014 SDL(DL:0.1) 31. Salinity mg/i \*\*\*\* IS 3025 (Part 14)- 2013 47.0



#### Ref. No. BBS/911

#### Date-64.03.2022

32.	Sulphide (as H2S)	mg/li	0.83	No Relaxation	IS 3025 (Part 29)- 1991; Rffin: 2014	DDI (DI -0 (02)
13.	Ammonia ( as total emmonia-N)	mg/l	0.5	No Relaxation	IS 3025 (Part 34)- 1988; Rffm; 2014	BDL(DL:0.02) BDL(DL:0.1)
34.	Chloramines	mg/l	4.0	No Relaxation	IS 3025 (Part 26)- 1986; Riffin: 2014	
35.	Nickel ( as Ni)	mg/l	0.02	No Relexation	IS 3025 (Part 2) 2004 RA 2014	BDL(DL:0.1)
36.	Cyanide (as CN)	tng/l	0.05	No Relexation	IS 3025 (Part 27)- 1986 Rffm; 2014	BDL(DL:0.01)
37.	Anionic Detergents (as MBAS)	mg/I	0.2	1.0	IS 13428(Annex K)- 2005	BDL(DL:0.01) BDL(DL:0.05)
38.	Polynuclear Aromatic Hydrocurbans (as PAH)	mg/l	0.0001	No Relexation	APHA ( 23 <sup>rd</sup> Edin.) 6440C	BDL(DL:0.0001)
39.	Polychlorinated Bipheavis (PCB)	Rgm	0.0005	No Relexation	US EPA 8082	BDL(DL:0.0005)

S. Kannen Report Prepared by:



For Mitra S. K. Private Limited.

Avanta teuman Qath, Authorized Signatory

N-5/100, Ground Floor IRC Village, Nayapali Bhubaneawar - 751015

[CIN: U51909WB1956PTC023037]

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#### TEST REPORT

Name & Address of the Customer:

THE DHAMRA PORT COMPANY LIMITED

AT : DOSINGA, PO : DHAMRA

DIST: BHADRAK, PIN:756171 ODISHA

Report No. : BBS/912

: 04.03.2022 Date

Sample No.: MSKGL/FD/2020-21/02/01839

Date of sampling : 17.02.2022 Sampling Description : Ground Water (Plezometrie)

Sampling Location: Running Room Sampling Done By: Mr. Kunja Bihari Nayak

### BACTERIOLOGICAL ANALYSIS RESULT AS PER IS: 10500 - 2012

SL No	Test Parameters	Units	Limit	Total Mark of the No.	1
1.	E. Coli	/100ml		Test Method / Specification	Result
2	The state of the s		Not Detectable	IS: 15185 : 2016	Not Detected
-2- 1	Total Coliform Organism	/100mi	Not Detectable	IS: 15185 : 2016	Not Detected

CHEMICAL ANALYSIS RESULT AS PER IS: 10500 - 2012

SL No.	Test Parameter	Units	(Acceptable Limit)	Permissible limit in the absence of alternate Source	Test Method / Specification	Result
1.	pH ( at 26° C)	years.	6.5 - 8.5	No Relaxation	IS 3025 (Part 11)-1984 R ffin: 2012	701
2,	Sulphate (as SO <sub>4</sub> )	mg/l	200	400	IS 3025 (Part 24)- 1986 R.ffin: 2014	7.64
	Calcium (as Ca)	mg/l	75	200	IS 3025 (Part 40)- 1991 Rifm: 2014	54.0 42.0
4. 5.	Arsenic (as As)	mg/I	0.01	0.05	IS 3025 (Part 2) 2004 RA 2014	BDL(DL:0.005
6.	Lead (as Pb)	mg/l	0.01	No Releastion	IS 3025 (Part 2) 2004 RA 2014	BDL(DL:0.005
7.	Zinc (as Zn)	mg/l	5.0	15.0	IS 3025 (Part 2) 2004 RA 2014	BDL(DL:0.02)
8.	Copper (as Cu)	mg/l	0.05	1.5	IS 3025 (Part 2) 2004 RA 2014	
	Mercury (as Hg)	mg/l	0.001	No Relaxation	IS 3025 (Part 48)-1994 Rffm: 2014	BDL(DL:0.02)
9.	Cadmium (as Cd)	mg/l	0.003	No Relexation	IS 3025 (Part 2) 2004 RA 2014	BDL(DL:0.0002
10.	Mineral Oil	mg/i	0.5	No Relaxation	IS 3025 (Part 39)-1991 Rffm: 2014	BDL(DL:0.001
11.	Fluoride (as F)	mg/l	1.0	1.5	IS 3025 (Part 60)- 2008 R/fm: 2013	BDL(DL:0.5)
12.	Colour	Hazen	5	15	3025 (Part 4)-1983; Rffin: 2012	BDL(D1:0.2)
13.	Odour		Agreeable	Agreeable	IS 3025 (Part 5)-1983 Rffm:2012	BDL(DL:1.0)
14.	Turbidity	N.T.U	1	5	VS 3025 (Part 10) 1084 D.M. 2015	Agreeable
15.	Residual free Chlorine	mg/l	0.2	1.0	IS 3025 (Part 10)-1984 Rffm: 2012	BDL(DL:1.0)
16.	Iron (as Fe)	mg/l	0.3	No Relaxation	IS 3025 (Part 26)- 1986 Rffm:2014	BDL(DL:0.1)
17.	Chloride (as Cl)	mg/I	250	1000	IS 3025 (Part 53)-1988 Rffm: 2014	BDL(DL:0.05)
18.	Total Dissolved Solids	mg/I	500	2000	IS 3025 (Part 32)-1988 Rffm: 2014	68.0
19.	Alkalinity (as CaCO <sub>1</sub> )	mg/l	200	600	IS 3025 (Part 16)-1984; Rffm:2012	351.0
20.	Aluminium (as Ai)	mg/l	0.03	0.2	IS 3025 (Part 23)- 1986 Rffm: 2009	165.0
21.	Magnesium (as Mg)	mg/i	30	100	IS 3025 (Part 2) 2004 RA 2014	BDL(DL:0.01)
22,	Total Hardness (as CoCO <sub>2</sub> )	mg/l	200	600	IS 3025 (Part 46)-1994 Rffin: 2014 IS 3025 (Part 21)-2013	25.0 172.0
23.	Boron (as B)	mg/l	0.5	1.0	IS 3025 (Part 2) 2004 RA 2014	The second secon
24.	Manganese (as Mn)	mg/I	0.1	0.3	IS 3025 (Part 2) 2004 RA 2014	BDL(DL:0.3)
25.	Nitrate (as NO <sub>3</sub> )	mg/l	45	No Relaxation	IS 3025 (Part 34)-1988 Rffm: 2014	BDL(DL:0.02)
26.	Phonolic Compounds (as C <sub>c</sub> H <sub>c</sub> OH)	mg/l	0.001	0.002	15 3025 (Part 43)- 1992; Rffm: 2014	BDL(DL:0.4) BDL(DL:0.001)
27.	Sclenium (as Se)	mg/l	0.01	No Relaxation		
28.	Total Chromium (as Cr)	mg/l	0.05	No Retacation	18 3025 (Part 2) 2004 RA 2014	BDL(DL:0.005)
9.	Stiver (as Ag)	mg/I	0.1	No Relaxation	IS 3025 (Part 2) 2004 RA 2014	BDL(DL:0.01)
0.	Barium (as Ba)	mg/l	0.7	No Relexation	IS 3025 (Past 2) 2004 RA 2014	BDL(DL:0.005)
1.	Salinity	mg/l		1 SO SOUTHARDER	IS 3025 (Part 2) 2004 RA 2014	BDL(DL:0.1)
					IS 3025 (Part 14)- 2013	45.0



### Ref. No. BBS/912

#### Date-04.03.2022

32.	Sulphide ( as H2S)	mg/l	0.05	No Relaxation	IS 3025 (Part 29)- 1991; Rffin: 2014	I BELLEVIN
33,	Ammonia ( as total ammonia-N)	mg/I	0.5	No Relaxation	IS 3025 (Part 34)- 1988; Rffln: 2014	BDL(DL:0.02) BDL(DL:0.1)
34.	Chloramines	mg/I	4.0	No Relaxation	IS 3025 (Part 26)- 1986; Rffm: 2014	L. Strikersking Washing
35.	Nickel (as Ni)	mg/l	0.02	No Relaxation	IS 3025 (Part 2) 2004 RA 2014	BDL(DL:0.1)
36.	Cyanido (as CN)	mg/l	0.05	No Relaxation	IS 3025 (Part 27)- 1986 Rffin: 2014	BDL(DL.0.01)
37.	Anionic Detergents (as MBAS)	mg/l	0.2	1.0	IS 13428(Annex K)- 2005	BDL(DL:0.01) BDL(DL:0.05)
38.	Polymuclear Aromatic Hydrocarbons (as PAH)	mg/l	0.0001	No Relaxation	APHA (23rd Edin.) 6440C	BDL(DL:0.0001)
39.	Polychlorinated Biphenyls (PCB)	mg/l	0.0005	No Relaxation	US EPA 8082	BDL(DL:0.0005)

G. Karnen Report Prepared by:

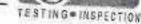
Y. .

BBSR E

For Mitra S. K. Private Limited.

Aremite German Rostin. Authorized Signatory

N-5/100, Ground Floor IRC Village, Nayapalli Bhubaneswar - 751015



[CIN: U51909WB1956PTC023037]

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## TEST REPORT

Name & Address of the Customer : THE DHAMRA PORT COMPANY LIMITED

AT: DOSINGA, PO: DHAMRA

DIST: BHADRAK, PIN: 756171 ODISHA

Report No. : BBS/915 : 04.03.2022

Sample No.: MSKGL/ED/2020-21/02/01843

Sample Description : Sea Sediment Sampling Location: Dredging Area Date of sampling : 17.02.2022

### ANALYSIS RESULT

Sl. No.	<u>Parameters</u>	Unit	Test Method	
1.	pH value	None	IS 2720 (Part 26)-1987;Rffm:2011	Result
2.	Electrical Conductivity	us/cm		7.98
3.	Organic Matter	96	IS 3025 (Part 14)-1984;Rffin:2006	9781.0
4.	Turbidity	N.T.U	IS 2720 (Part 22)-1972; Rffin:2015	0.87
5.	Moisture content	96	APHA (23 <sup>rd</sup> Edition) 2130B	280,0
6.	Chloride (as CI)		Lab Method	30.0
7.	Sulphate (as SO4)	mg/kg	TPM/MSK/P&E/1/10	3221.0
8.		mg/kg	IS 2720 (Part 27) 1977,RA 2015	689.0
9.	Sulphide (as S)	mg/kg	TPM/MSK/P&E/1/43	<5.0
200	Phosphate (as PO4)	mg/kg	TPM/MSK/P&E/1/12	32.0
10.	Phosphorus	mg/kg	TPM/MSK/P&E/1/12	356.0
11.	Iron (as Fe)	mg/kg	TPM/MSK/P&E/1/13	
12.	Sodium (as Na)	mg/kg	TPM/MSK/P&E/1/4	487,0
13.	Potassium (as K)	mg/kg	TPM/MSK/P&E/1/5	3227.0
4.	Copper (as Cu)	mg/kg	EPA 6010D	824.0
5.	Niekel (as Ni)	mg/kg		21,0
6.	Zine (as Zn)	mg/kg	EPA 6010D	17.0
7.	Manganese (as Mn)	100000	EPA 6010D	24.0
	De less (no trut)	mg/kg	EPA 6010D	412.0



#### Ref. No. BBS/915

Date- 04.03.2022

18.	Lead (as Pb)	mg/kg	EPA 6010D	
19.	Boron (as B)	mg/kg		7.4
20.	Aluminium (as Al)	mg/kg	IS 13428- 2005, Annex H	<5.0
21.	Total Chromium (as Cr)		EPA 6010D	3047.0
22.	Total Nitrogen (as N)	mg/kg	EPA 6010D	40.0
23.	Company of the Compan	mg/kg	IS 14684 (1999); Rffm:2014	501.0
	Organic Nitrogen	mg/kg	TPM/MSK/P&E/3/68	466.0
24.	Total Petroleum Hydrocarbon	mg/kg	USEPA 8015 B - Dec, 1996, 8270 D - Feb, 2007	<0.05
25.	Pesticide Residue	mg/kg	USEPA 3540 C USEPA 8082	<0.5
26.	Sand	%	TPM/MSK/P&E/1/36A	(Section)
27.	Silt	%	TPM/MSK/P&E/1/36A	36.0
28.	Texture	None		24.0
29.	Clay	-	TPM/MSK/P&E/1/36A	Clay Loam
1	Ciay	96	TPM/MSK/P&E/1/36A	40.0

#### Biological Result

SI No.	Parameters	Unit	
1.	Fungus (Phytobenthos)	CFU/g dry	Results 1330
2.	Total count (Phytobenthos)	50 mg wet sediment	260
3.	No of species (Phytobenthos)	Nos.	
4.	Diversity index (Phytobenthos)		6
5.	y () ()		1.91
-50	Major Species (phytobenthes)		Riddulphia makilawi - C.
6.	Name of Phylum (Fauna)		Biddulphia mobilensis, Gyrosigma sp
	Class & Number of individuals encountered (Fauna)		Annelida, Mollusca
	Total no. of species encountered (Fauna)	Nos.	Plychaeta-50,Bivalvia-14
	Total fauna (Fauna)	per m³	180

S. Konnsy Report Prepared by:



For Mitra S.K. Private Limited
Avange Name Rate
Authorized Signatory

N-5/100, Ground Floor IRC Village, Neyspalli Bhubaneswar - 751015

[CIN: U51909WB1956PTC023037]

T: (0674) 2362916, 2360917

F: (0674) 2362918



### TEST REPORT

Name & Address of the Customer: THE DHAMRA PORT COMPANY LIMITED

AT: DOSINGA, PO: DHAMRA

DIST: BHADRAK, PIN: 756171 ODISHA

Report No.: BBS/916 Date: 04.03.2022

Sample No. : MSKGL/ED/2020-21/02/01844

Sample Description : Sea Sediment

Sampling Location: Dredging Disposal Site

Date of sampling : 17.02.2022

### ANALYSIS RESULT

Sl. No.	Parameters	Unit	Test Method	Result
1.	pH value	None	1S 2720 (Part 26)-1987;Rffm:2011	8.14
2.	Electrical Conductivity	us/cm	IS 3025 (Part 14)-1984;Rffm:2006	9040.0
3.	Organic Matter	96	IS 2720 (Part 22)-1972; Rffm:2015	13-
4.	Turbidity	N.T.U	APHA (23 <sup>rd</sup> Edition) 2130B	310.0
5.	Moisture content	%	Lab Method	SAL HARM
6.	Chloride (as CI)	mg/kg	TPM/MSK/P&E/1/10	40.0 5487.0
7.	Sulphate (as SO4)	mg/kg	IS 2720 (Part 27) 1977,RA 2015	874.0
8.	Sulphide (as S)	mg/kg	TPM/MSK/P&E/1/43	
9.	Phosphate (as PO4)	mg/kg	TPM/MSK/P&E/1/12	<5.0
10.	Phosphorus	mg/kg	TPM/MSK/P&E/1/12	<3.0
II.	Iron (as Fe)	mg/kg	TPM/MSK/P&E/1/13	178.0
12.	Sodium (as Na)	mg/kg	TPM/MSK/P&E/1/4	90.0
13.	Potassium (as K)	mg/kg	TPM/MSK/P&E/1/5	6020,0
14.	Copper (as Cu)	mg/kg	EPA 6010D	697.0
5.	Nickel (as Ni)	mg/kg	EPA 6010D	15.0
6,	Zinc (as Zn)	mg/kg		20.0
7.	Manganese (as Mn)	mg/kg	EPA 6010D	33.0
	The Continue of the Name of Street,	WOLKE .	EPA 6010D	460.0



### Ref. No. BBS/916

Date-04.03.2022

18.	Lead (as Pb)	mg/kg	EPA 6010D	
19.	Boron (as B)	mg/kg		7.8
20.	Aluminium ( as AI )		IS 13428- 2005, Annex H	<5.0
21.	Total Chromium (as Cr)	mg/kg	EPA 6010D	7158.0
22.	ALTER STATE OF THE	mg/kg	EPA 6010D	32.0
11/23	Total Nitrogen (as N)	mg/kg	IS 14684 (1999); Rffm:2014	542.0
23.	Organic Nitrogen	mg/kg	TPM/MSK/P&E/3/68	498.0
24.	Total Petroleum Hydrocarbon	mg/kg	USEPA 8015 B - Dec, 1996, 8270 D - Feb, 2007	<0.05
25.	Pesticide Residue	mg/kg	USEPA 3540 C USEPA 8082	
26.	Sand	%	TPM/MSK/P&E/1/36A	<0.5
27.	Silt	96		40.0
18.	Texture	1	TPM/MSK/P&E/1/36A	38.0
9.	N. (100 No. 2022)	None	TPM/MSK/P&E/1/36A	Loam
-	Clay	%	TPM/MSK/P&E/1/36A	22.0

#### Biological Result

SI No.	Parameters	Unit	2000
1.	Fungus (Phytobenthos)	CFU/g dry wt.	Results 1514
2.	Total count (Phytobenthos)	50 mg wet sediment	
3.	No of species (Phytobenthos)	Nos.	
4,	Diversity index (Phytobenthos)	NOS.	10
5.	(r nytotesimos)	7500	1,64
	Major Species (phytobenthos)	-	Biddylphia mobileusta National
6.	Name of Phylum (Fauna)		Biddulphia mobilensis, Navicula closterium
7.	Class & Number of individuals encountered (Fauna)		Annelida, Mollusca
8.	Total no. of species encountered (Fauna)	Nos.	Plychaeta-52,Bivalvia-20
9.	Total fauna (Fauna)	per m <sup>1</sup>	196

Report Prepared by:



For Mitra S.K. Private Limited Arange terms Rostin Authorized Signatory

TESTING # INSPECTION

N-5/100, Ground Floor IRC Village, Nayapalli Bhubaneswar - 751015 [CIN: U51909WB1956PTC023037]

T: (0874) 2362916, 2360917

F: (0674) 2362918

## TEST REPORT

Name & Address of the Customer:

THE DHAMRA PORT COMPANY LIMITED

AT: DOSINGA, PO: DHAMRA

DIST: BHADRAK, PIN: 756171 ODISHA

Report No. : BBS/917 Date : 04.03.2022

Sample No. : MSKGL/ED/2020-21/02/01147

Sample Description : Sea Sediment

Sampling Location: Dredging Disposal Site

Date of sampling : 03.02.2022

#### ANALYSIS RESULT

St. No.	Parameters	Unit	Test Method	2000
I.	pH value	None	IS 2720 (Part 26)-1987;Rffin:2011	Result
2.	Electrical Conductivity	us/cen	ATT 1 (1) (1) (1) (1)	7.78
3.	Organic Matter	%	IS 3025 (Part 14)-1984;Rffin:2006	9250.0
4.	Turbidity	N.T.U	IS 2720 (Part 22)-1972; Rffm:2015	0.94
5.	Moisture content	%	APHA (23rd Edition) 2130B	312,0
6.	Chloride (as Cl.)		Lab Method	41.0
7.	Sulphate (as SO4)	mg/kg	TPM/MSK/P&E/1/10	5200.0
8.	Sulphide (as S)	mg/kg	IS 2720 (Part 27) 1977,RA 2015	713.0
9.		mg/kg	mg/kg TPM/MSK/P&E/1/43	
10.	Phosphate (as PO4)	mg/kg	mg/kg TPM/MSK/P&E/1/12	
	Phosphorus	mg/kg	'TPM/MSK/P&E/1/12	9.8
11.	Iron (as Fe)	mg/kg	TPM/MSK/P&E/1/13	62.0
12.	Sodium (as Na)	ing/kg	TPM/MSK/P&E/1/4	1893
13.	Potassium (as K)	mg/kg	TPM/MSK/P&E/1/5	4994,0
4.	Copper (as Cu)	mg/kg	EPA 6010D	722.0
5.	Nickel (as Ni)	mg/kg	EPA 6010D	18,0
6.	Zine (as Zn)	mg/kg		22.0
7,	Manganese (as Mn)	mg/kg	EPA 6010D	38.0
		inging .	EPA 6010D	481,0



#### Ref. No. BBS/917

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T 20	 DV.	0.00	20.0	Sec.	
Dat	 UA:3		. 24	2.2	z

18.	Land (or Dis)			
3588	Lead (as Pb)	mg/kg	EPA 6010D	9.8
19.	Boron (as B)	mg/kg	IS 13428- 2005, Annex H	<5.0
20.	Aluminium ( as Al )	mg/kg	EPA 6010D	9387.0
21.	Total Chromium (as Cr)	mg/kg	EPA 6010D	39.0
22.	Total Nitrogen (as N)	mg/kg	IS 14684 (1999); Rffin:2014	616.0
23.	Organic Nitrogen	mg/kg	TPM/MSK/P&E/3/68	571.0
24.	Total Petroleum Hydrocarbon	mg/kg	USEPA 8015 B - Dec, 1996, 8270 D - Feb, 2007	<1.0
25.	Pesticide Residue	mg/kg	USEPA 3540 C USEPA 8082	<0.5
26.	Sand	%	TPM/MSK/P&E/1/36A	41.0
27.	Silt	%	TPM/MSK/P&E/1/36A	33.0
28.	Texture	None	TPM/MSK/P&E/1/36A	Loam
29,	Clay	%	TPM/MSK/P&E/1/36A	26.0

#### Biological Result

SI No.	Parameters	Unit	Results
1.	Fungus (Phytobenthos)	CFU/g dry wt.	1687
2.	Total count (Phytobenthos)	50 mg wet sediment	245
3.	No of species (Phytobenthos)	Nos.	6
4.	Diversity index (Phytobenthos)	-	1.66
5.	Major Species (phytobenthos)	7775	Coscinodiscus sp. Bldchilphia mobilensis
6.	Name of Phylum (Fauna)	****	Annelida, Mollusca
7.	Class & Number of individuals encountered (Fauna)	-	Plychaeta-48,Bivalvia-21
8.	Total no. of species encountered (Fauna)	Nos.	22
9.	Total fauna (Fauna)	per m <sup>3</sup>	272

Report Prepared by:



For Mitra S.K. Private Limited
Averder Come Roth
Authorized Signatory

N-5/100, Ground Floor IRC Village, Nayapatli Bhubaneswar - 751015 [CIN: U51909WB1968PTC023037] TESTING INSPECTION

T: (0674) 2362916, 2360917

F: (0674) 2362918

## TEST REPORT

Name & Address of the Customer:

THE DHAMRA PORT COMPANY LIMITED

AT: DOSINGA, PO: DHAMRA

DIST: BHADRAK, PIN: 756171 ODISHA

Report No. : BBS/918 : 04.03.2022

Sample No. : MSKGL/ED/2020-21/02/01148

Sample Description : Sea Sediment Sampling Location: Dredging Area Date of sampling : 03.02.2022

### ANALYSIS RESULT

Sl. No.	Parameters	Unit	Test Method	
1.	pH value	None	The state of the s	Result
2.	Electrical Conductivity	us/cm	IS 2720 (Part 26)-1987;Rffm:2011	8.26
3.	Organic Matter	%	1S 3025 (Part 14)-1984;Rffm:2006	5660.0
4.	Turbidity	N.T.U	IS 2720 (Part 22)-1972; Rffm:2015	1.4
5.	Moisture content		APHA (23rd Edition) 2130B	278.0
6.	Chloride (as Cl )	96	Lab Method	36.0
7.		mg/kg	TPM/MSK/P&E/1/10	3450.0
8.	Sulphate (as SO4)	mg/kg	mg/kg IS 2720 (Part 27) 1977,RA 2015	
-	Sulphide (as S)	mg/kg	TPM/MSK/P&E/1/43	690.0 <5.0
9.	Phosphate (as PO4)	mg/kg	TPM/MSK/P&E/1/12	
10.	Phosphorus	mg/kg	TPM/MSK/P&E/1/12	<3.0
11.	Iron (as Fe)	mg/kg	TPM/MSK/P&E/1/13	210.0
12,	Sodium (as Na)	mg/kg	TPM/MSK/P&E/1/4	310.0
13.	Potassium (as K)	mg/kg	TPM/MSK/P&E/1/5	1987.0
4.	Copper (as Cu)	mg/kg	100-2017 Male 2017	258.0
5.	Nickel (as Ni)		EPA 6010D	28.0
6.	Zine (as Zn)		mg/kg EPA 6010D	
7.	Manganese (as Mn)	mg/kg	EPA 6010D	22.0
-		mg/kg	EPA 6010D	196.0



#### Ref. No. BBS/918

Date-04.03.2022

				The state of the s
18.	Lead (as Pb)	mg/kg	EPA 6010D	7.5
19.	Boron (as B)	mg/kg	IS 13428- 2005, Annex H	<5.0
20.	Aluminium ( as Al )	mg/kg	EPA 6010D	2149.0
21.	I. Total Chromium (as Cr)		EPA 6010D	14.6
22. Total Nitrogen (as N)		mg/kg	IS 14684 (1999); Rffm:2014	245.0
23.	Organic Nitrogen	mg/kg	TPM/MSK/P&E/3/68	218.0
24.	Total Petroleum Hydrocarbon	mg/kg	USEPA 8015 B - Dec, 1996, 8270 D - Feb,2007	<0.05
25.	Pesticide Residue	mg/kg	USEPA 3540 C USEPA 8082	<0.5
26.	Sand	%	TPM/MSK/P&E/1/36A	40.0
27.	Silt	%	TPM/MSK/P&E/1/36A	35.0
28.	Texture	None	TPM/MSK/P&E/1/36A	Clay Loam
29.	Clay	%	TPM/MSK/P&E/1/36A	25.0

### **Biological Result**

SI No.	Parameters	Unit	-
1.	Fungus (Phytobenthos)	CFU/g dry wt.	Results 1356
2.	Total count (Phytobenthos)	50 mg wet sediment	279
3.	No of species (Phytobenthos)	Nos.	8
4.	Diversity index (Phytobenthos)		1.78
5.	Major Species (phytobenthos)		Nizschia distans, Coscinodiscus sp
6.	Name of Phylum (Fauna)	****	Annelida, Mollusca
7.	Class & Number of individuals encountered (Fauna)		Plychaeta-53, Bivalvia-17
8.	Total no. of species encountered (Fauna)	Nos.	16
9.	Total fauna (Fauna)	per m <sup>3</sup>	179

9. Kanga Report Prepared by:

For Mitra S.K. Private Limited

Avorde Some Rote

Authorized Signatory



Ref: MSKGL/ED/BHU-2021/01300

Date: 04.03.2022

## Site Specific Monitored Meteorological Data

For: The Dhamra Port Company Limited, Dosinga, Bhadrak, Odisha

Sr. No.	199	Parameters	February.22
		Minimum	16,9
1.	Temperature (°C)	Maximum	33.4
		Average	23.5
2	Liverage and the same average	Minimum	26.4
2.	Relative Humidity (%)	Maximum	98.2
-		Average	67.9
3	200 cm / FC	Minimum	0.0
3.	Wind Speed (m/s)	Maximum	10.5
7	-	Average	2.9
4,	Wind Direction (%)	N	5.6
	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	NNE	2.4
		NE	11.5
		ENE	6.9
1		E	2.44
1		ESE	2.6
1		SE	13.4
		SSE	5.4
		S	6,47
		SSW	18.4
1		SW	3.5
		WSW	6.4
		W	7.64
-		WNW	5.12
-		CALM	2.23
	D. L. C. D. C.	Total	35.6
	Rainfall (mm)	Minimum Day Wise	0.0
		Maximum Day Wise	35.0
-		Average	0.05
1	Ambiant Day	Minimum	746.8
12	Ambient Pressure (mm Hg)	Maximum	758.7
	šite Specific Data)	Average	751.9

Verified By

JANUARY-2022

Directed by

### THE DHAMRA PORT COMPANY LIMITED



AT : DOSINGA, PO : DHAMRA DIST- BHADRAK, PIN : 756171 ODISHA

Conducted by

M/s. Mitra S. K. Private Limited



Shrachi Centre (5th Floor) 74B, Acharya Jagadish Chandra Bose Road Kolkata - 700016 (West Bengal)



N-5/100, Grouns Floor IRC Vilage, Najepell Bhubaneswar - 751015

[CIN: U51999WB1956PTC023037]

T: (0674) 2352916, 2360917

F: (0674) 2362918

Report No: BBS/866A

Date: 01.02.2022

### AMBIENT AIR QUALITY MONITORING REPORT

Client Name & Address	M/s The Dhamra Port Company Limited, Dusinga, Bhadrak, Odisha
Work Order No.	4862096186
Reference No.	MSKGL/ED/2020-21/003334
Type of Sample	Ambient Air Sample
Sampling Location	Colony Area
Sampling Done by	Mr. Kunja Bihari Nayak
Sampling Duration	24hrs
Monitoring Instrument	RDS (APM 860), FPS (APM 154) Lata Environech, CO Analyzer & VOC Sampler

Service		1			-	PA	RAMETER	S									
Date	P.M., (pg/m²)	PM <sub>23</sub> (pg/m²)	SO <sub>2</sub> (ug/m <sup>3</sup> )	NOx (pg/m²)	CG (mg/m²)	MH <sub>3</sub> (ag/m²)	(up/m <sup>3</sup> )	Pb (pp/m²)	Ni (ng/m²)	As (#g/m²)	Calls (papinal)	ExP (ug/m²)					
02.01.2022	47.80	24.10	6.40	19.50	0.52	16.50	<20.0	< 0.01	45.0	<1.0	<42	< 0.5					
05.01.2022	44.00	22,60	6.80	24.40	0.45	20.40	<20.0	<0.01	<5.0	<1.0	<4.2	<0.5					
09.01.2022	43.28	24.80	7.10	21.30	0.61	19.20	520.0	<0.01	<5.0	<1.0	<4.2	<0.5					
12.01.2022	45.28	27.70	6.30	26.70	0.68	23,40	<20.0	<0.01	<5.0	<1.0	<4.2	<0.5					
16.01.2022	48.00	28.10	6.50	24.50	0.79	18.30	<20.0	<0.01	<5.0	41.0	<4.2	<0.5					
19.01.2022	42.70	22,30	6.80	17.20	0.66	20.10	<70.0	<0.01	<5.0	<1.0	<4.2	40.5					
25.01.2022	47.12	21.90	6.90	28.70	9.88	18.70	<26.0	<0.01	<5.0	<1.0	44.2	<0.5					
26.01.2022	45.06	28.80	6.10	26.90	0.46	22.20	<20.0	<0.01	<3.0	<3.0	<4.2	<0.5					
30.01.2022	47.20	28.20	6.80	23,50	0.57	17.20	<20.0	< 0.01	<5.0	<1.0	44.2	<0.5					
Monthly Average	45.59	25.39	6.63	23,63	0.62	19.55	<20.0	<0.01	<5.0	<1.0	<4.2	<0.5					
CPCE, New Delhi AAQ Standard	100	60	80	80	4	400	180	1	28	6	5	1					
Time Weighted Average (hrs.)	24	24	24	24	1	24	i	24	Annual	Annual	Annual	Annual					
TEST METHOD	IS 5182: Part 23:29 05 (Reaff 2012	1S 5182: Part 24:201 9	IS 5282 : Part 2 :200 1 (Reaff, 2012	tS 5182 : Part 6 :206 6 (Reaff, 2012)	18 5182 ; Part 16 :1999 (Reaff 29 14)	IS 5182: Part 25:201 8	15 5182: Part 09:197	EPA - 103.4) inc.19 99	EPA- 103.4Ju nc.1999	EPA - 103.4/a nc,1999	ES:5182( Part- 11):2006 Reaff:20 12	IS:5183( Part- 12):3004 Reaff,: 2014					

N.B. "NAAQ" National Ambient Air Quality Standard as per 18" Nov. 2009 Gatt. Notification

S-Karnzo Propared By D



Checked By-

N-5/100, Ground Floor IRC Village, Navasalli Bhubaneswar - 751016

[CIN: U51909WB1956PTC023937]

T : (0674) 2362915, 2360917 F : (0674) 2362918

Report No: BBS/800B



Date: 01.02,2022

#### AMBIENT AIR QUALITY MONITORING REPORT

Client Name & Address	M/s The Dhazara Fort Company Limited, Bosinga, Bhadrak, Odisha
Work Order No.	4802006186
Reference No.	MSKGL/ED/2020-21/003334
Type of Sample	Ambient Air Sample
Sampling Location	Kanak Prasad Village
Sampling Done by	Mr. Kunja Bikari Navak
Sampling Duration	24brs
Monitoring Instrument	RDS (APM 860), FPS (APM 154) Lata Envirotech, CO Analyzer & VOC Sampler

Deta		PARAMETERS											
	PM <sub>a</sub> (up/m <sup>3</sup> )	PM <sub>23</sub> (spm)	50; (125/m²)	NOx (HS/RE)	CO (mg/m²)	NH <sub>2</sub> (ag/m²)	O <sub>2</sub> (pg/m²)	Po (na/m²)	Ni (ng/m²)	A1 (ng/m²)	CaRe (sector)	BaP (og/m²)	
02.01.2022	48.7	26.4	6.3	24,6	0,47	22.4	<20.0	<0.01	<5.0	<1.0	ol2	<0.5	
05.91.2022	44.2	21.2	6.7	23.5	0.56	20.3	<20.0	<0.01	<5.0	<1.0	94.2	<0.5	
09.01.2022	46,3	30.8	8.1	27.1	0.63	19.1	<20.0	40,01	<5.0	<1.0	<4.2	<0,5	
12.01,2022	45.2	25.7	6.5	19.5	9,51	15.3	<20.0	<0,01	<5.0	<1.0	<1,2	<0.5	
16.01.2022	44.1	23.6	7.5	18.2	0.72	24.1	<20.0	<0.01	<5.0	<1.0	<4.2	<0.5	
19.01.2022	48.3	24.5	7.1	27.9	0.88	18.3	<20.0	<0.01	<5.0	<1.0	44.2	<0.5	
23.01.2022	47.9	27.6	6.2	29.1	0.61	16.7	<20.0	<0.01	₫.0	<1.0	<4.2	48.5	
26.01.2022	49.1	31,1	6.9	26.4	0.54	25.6	<20.0	<0.01	<5.0	<1.0	44.2	<0.5	
30.01.2022	46.5	23.8	6.2	22.1	6.40	26.6	<20.0	<0.01	<5.0	<1.0	<4.2	<0.5	
Monthly Average	46.70	26,08	6.83	24.27	0,60	20.93	<20,0	<0.03	<5,0	<1.0	<4.2	<0.5	
CPCR, New Delta AAQ Standard	100	60	80	86	۵	400	180	1	20	6	5	ĵ.	
Time Weighted Average (hrs.)	24	24	24	24	i	24	1	24	Anusal	Aanual	Angual	Annual	
TEST MZTHOD	IS 5182: Part 25:20 96 (Reaff 2012	IS 5182: Part 24:201 9	ES 5182 ; Part 2 :2001 (Reaff: 2012	IS \$182 : Part 6 :2005 (Reaff, 2012)	18 5182 : Part 10 :1999 (Resff.20 14)	IS 5182: Part 25:291 8	IS 5182: Pari 09:197	EPA - 103.4J mc,19	EPA - 103:434 sa;1999	EPA - 103.4Ju nc,1999	IS:5181( Fart- 11):2006 Rraff,20 12	IS:5182( Part- 12):2004 Renff; 2014	

N.S-\*NAAQ-National Anticient Air Quality Standard as per 18" Nov. 2009 Gent. Notification



N-5/100, Ground Floor IRC Village, Nayapatil Brubeneswar - 761015

[CIN: U51909WB1956PTC023037]

T: (0674) 2352916, 2360917

F: (0674) 2382918

Report No: BBS/800C



Date: 91.02.2022

### AMBIENT AIR QUALITY MONITORING REPORT

M/s The Dhamra Port Company Limited, Dosinga, Bhadrak, Odisha
4802006186
MSKGL/ED/2020-21/003354
Ambient Air Sample
Nesr BMH
Mr. Kanja Bihari Nayak
24hrs
RDS (APM 860), FPS (APM 154) Leta Envirotech, CO Analyzer & VOC Sampler
֡֡֜֜֜֜֜֜֜֜֜֜֜֜֜֜֜֜֜֜֜֜֜֜֜֜֜֜֜֜֜֜֜֜֜֜֜

Date		PARAMETERS											
	PM <sub>26</sub> (09/61)	PM <sub>24</sub> (up/m²)	\$10 <sub>1</sub> (µg/n/³)	NOE (sights)	(mg/m²)	NH <sub>1</sub> (og/m <sup>2</sup> )	O <sub>3</sub> (sp/m²)	Pb (ap/m²)	No (ngini)	As (ng/m²)	C <sub>6</sub> H <sub>6</sub> (ug/so <sup>3</sup> )	BaP (ng/m²	
02.01.2022	57.2	36.4	7.5	22.5	0.67	16.5	<20.0	<0.01	<5.0	<1.0	44.2	<0.5	
05.01.2022	58.1	35,5	7.1	26.8	0.73	16.8	<20.0	<0.01	<5.0	<1.0	44.2		
09.61.2022	54.1	30.3	6.2	23.1	0.65	23.7	<20.0	<0.01	<5.0	<1.0	44.2	<0,5	
12.01.2022	53,6	29.8	6.5	19.2	0.78	25.2	<20.0	<0.01	<5.0	<1.0	The state of the s	<0.5	
16.01.2022	38.5	36,6	7.8	15,3	0.64	18.2	<20.0	<0.01	45.0	The second live of the second	<4.2	<0.5	
19.01.2022	59.8	32.4	6.9	23.6	0.80	26.4	<20.0	<0.01	65.0	<1.0	94.2	<0.5	
23,61,2022	55.2	36.6	7.8	26.8	0,53	23.4	<20.0	Control State of the Control		<1.0	<4.2	<0.5	
26.01.2022	56.1	37.1	7,4	31.5	0,49	27,1	<20.0	<0.01	<5.0	<1.0	4.2	<0.5	
30,01,2022	57.6	33.5	7.8	24.1	0.66	17.5	Property and the second	<0.01	55,0	<1.0	<4.2	<0.5	
Monthly Average	72,47	37.58	7,23	23.65	0.72	21,64	<20.0	<0.01	<5,0 <5,0	<1.0	<4.2 <4.3	<0.5	
CPCB, Now Dolls AAQ Standard	100	60	80	80	4	400	180	1	20	6	5	1	
Time Weighted Average (hrs.)	24	24	24	24	1	24	i	24	Annual	Aroust	Annual	Annua	
TEST MRTHOD	IS 5182: Part 23:20 06 (Reef £ 2012	IS 5182; Part 24:20 19	IS 5182 : Part 2 :2001 (Reafi :2012	IS 5182 : Part 6 :2006 (Reaff .2012)	IS 5182 : Part 10 :1999 (Reaff.2 014)	18 5182; Part 25:20 18	IS 5182: Part 09:19 74	EPA- 103.4 June, 1999	EPA - 103.4Js ne,1999	EPA - 103.43s ne,1999	IS:5182 (Part- 11):200 6 Reaft,2 012	IS:518: (Part- 12):20( 4 Reaff,: 2014	

N.B. "NAAQ: National Ambient Air Quality Standard as per 18th Nov. 7009 Gast. Notification



MSK TESTING INSPECTION

N-5/100, Ground Floor IRC Village, Neyapalii Shubaneswar - 751015

[CIN: U51909WB1956PTC023037]

T: (0874) 2382916, 2360917

F: (0674) 2382918

Report No: BBS/800D

Date: 01.62.2022

### AMBIENT AIR QUALITY MONITORING REPORT

Client Name & Address	M/s The Dhamra Port Company Limited, Dosinga, Bhadrak, Odisha
Work Order No.	4802006186
Reference No.	MSKGL/ED/2020-21/003334
Type of Sample	Ambient Air Sample
Sampling Location	Near Jetty
Sampling Done by	Mr. Kunja Bihari Nayak
Sampling Duration	24brs
Monitoring Instrument	RDS (APM 860), FPS (APM 154) Lata Envirotech, CO Analyzer & VOC Sampler
	The state of the s

	-	1	-		The second	PA	RAMETER	S		100		-
Date	P.M.i. (ug/m²)	PNts/ (eg/m²)	\$0; (µg/m²)	NOx (pg/m²)	( unhjes.)	NH <sub>a</sub> (pg/ns <sup>2</sup> )	O <sub>2</sub> (jug/m²)	Ph (pg/m²)	Ni (ag/m²)	Ax (og/os*)	Cellia (paylor)	nar (ag/m²
02.01.2022	56.40	37.30	6.70	32.50	0,54	18.20	<20.0	<0.01	<5.0	<1.0	<4.2	<0.5
05:01:2022	67.20	41.60	6.30	26.40	0.72	21.80	<20.0	<0.01	<5.0	<1.0	<4.2	<0.5
09.01.2022	\$6.30	42.30	6.90	35.60	0.63	19.70	<20.0	<0.01	<5.0	<1.0	<4.2	<0.5
12.01.2022	57.10	33.90	7.80	19,50	0.76	17.60	<20.0	<0.01	<5.0	<1.0	<4.2	\$0,5
16.01.2022	59.20	38:10	6.50	28.40	0.67	21,50	<20.0	<0.01	<5.0	<1.0	<4.2	<0.5
19.01.2022	61.30	35.60	6.30	28.70	0.43	24.80	<20.0	<0.01	<5.0	<1.0	44.2	<0.5
23.01,2022	60.00	44.40	6.70	31.20	0.59	19.30	<20.0	<0.01	<5.0	<1.0	<4.2	<0.5
26.01.2022	58.20	37.10	7.20	26.50	0.63	20.50	<20:0	<0.01	<5.0	<1.0	<4.2	<0.5
30.01,2022	64.10	41.80	6.30	19.40	0.49	14.60	<20.0	< 0.01	<5.0	<1.0	<4.2	<0.3
Monthly Average	59.98	39.12	6.77	27.58	9.61	19.78	<20.0	< 0.01	<5.0	<1.0	<4.2	₹9.5
CPCB, New Debt AAQ Standard	100	60	80	80	4	400	183	1	20	6	5	1
Time Weighted Average (hrs.)	24	24	24	24	i	24	ı	24	Annual	Annual	Annual	Annual
TEST METHOD	15 5182: Part 23:20 06 (Reaf £ 2012	IS 5182: Part 24:20 19	1S 5182: Part 2:200 1 (Reaff 2012	1S 5182 : Part 6 :200 6 (Reaff .2012)	1S 5182: Part 10:199 9 (ReafL2 014)	18 5182: Part 25:20 18	IS 5182: Part 09:19 74	EPA - 1O3,4 June, 1999	EPA - 103.4Ju ac,1999	EPA - 103.4Ju ne,1999	IS:5182 (Part- 11):200 6 Reaff,2 012	IS:5182 (Part- 12):266 4 Reaff,: 2014

N.S. \*NAAQ- National Ambient Air Quality Standard as per 18th Nov. 2019 Gatt. Notification

S-Kawaya Prepared By - J



Checked By-



N-5/100, Ground Floor IRC Village, Nayapalii Bhubaneswar - 751015 [CIN: U51805WB1858PTC023037]

T : (9874) 2362916, 2360917

F: (0674) 2362918

Report No: BBS/800F

Date: 01.02.2022

# AMBIENT AIR QUALITY MONITORING REPORT

Client Name & Address	M/s The Dhamra Port Company Limited, Dosinga, Bhadrak, Odisha
Work Order No.	4802006186 disha di Company Limmed, Dosinga, Baadrak, Odisha
Reference No.	MSICGL/ED/2020-21/003334
Type of Sample	Ambient Air Sample
Sampling Location	Near Bhitarkanika
Sampling Done by	Mr. Kunja Bihari Nayak
Sampling Duration	24hrs
Monitoring Instrument	RDS (APM 860), FPS (APM 154) Lata Envirotech, CO Analyzar & VOC Samples

Date	944	122	1	-		PA	RAMETER	es .	53.77			-
(25)(55)	(pg/10 <sup>2</sup> )	(ag/ar <sup>2</sup> )	SO: (12p/su²)	NOs (reg/m²)	(m5(m²)	(mp/m²)	Ο <sub>2</sub> (μg/m²)	(pg/m²)	Na (opini')	As (ag/m²)	Colls (pg/m²)	Balt
02.01,2022	The second second	25.10	7,40	20.20	0.46	14.60	<20.0	< 0.01	<5.0	and the second second second	1000	(agin
05.01,2022	And the second second	30.20	7.10	19.50	0.38	16.30	<20.0	<0.01	<5.0	<1.0	<4.2	<0.5
09.01.2022	programming designation (CA) or	25.60	6.80	18.60	0.53	21.50	<20.0	<0.01	<5.0	<1.0	<4.2	40.5
12.01.2022		31.50	7.20	22.70	9.61	18.68	<20.0	<0.01		<1.0	<4.2	< 0.5
16.01.2022	50.60	25.60	6.90	19.60	0.49	19,40	<20.0	The second second second	<5.0	<1.0	44.2	<0.3
19.01.2022	52.40	25.80	7.20	18.80	0.68	18.60	<20.0	<0.01	<5.0	<1.0	<4.2	*0.5
23,01,2022	43.20	29.80	7.60	24.30	0.64	22.40	<20.0	<0.01	<5.0	<1.0	\$4.2	50.5
26.01.2022	51.80	33.30	7,30	21.20	0.73	16.80	<20.0	-	<5.0	<1.0	<4.2	10.3
30.01.2022	44,40	27.90	6.20	17.40	0.67	17.80	THE RESERVE OF THE PARTY OF THE	<0.01	<5.0	<1.0	<4.2	< 0.5
Mostley Average	50.38	28,42	7.08	20.25	0.58	18.44	<20.0 <20.0	<0.01	<5,0 <5.0	<1.0	<4.2	<0.5
OPCB, New Delhi AAQ Standard	100	60	80	80	4	400	180	1	20	<1.0 6	<4.2 5	<0.5
Time Weighted Average (brs.)	24	24	24	24	1	24	1	24	Anneal	Anneal	Annual	Annua
TEST METHOD	1S 5182: Part 23:28 06 (Reaf f. 2012	24:29	IS 5182 : Part 2 :200 1 (Reaff ,2012	IS 5182 : Part 6 :200 6 (Reaff .2012)	IS 5182 : Fart 10 :199 9 (Reaff.2 614)	IS 5182: Part 25:26 IS	IS 5182; Part 69:19 74	EPA - 103.4 June, 1999	EPA - 103.4Ju ne,1999	EPA - 103.4Ju nc,1999	IS:5182 (Part- 11):200 6 Rcalf,2 012	IS:5182 (Part- 12):200 4 Reaff,: 2014

NAAQ Nutional Ambient Air Quality Standard as per 18th Nov. 2009 Gat. Notification



Checked By-



N-5/100, Graund Floor IRC Villago, Nayapelli Bhubeneswar • 751015

[OIN: U61909WB1958PTC823037]

T: (0674) 2362918, 2360917

F: (0674) 2362918

Report No: BBS/800E

Date: 01.02.2022

### AMBIENT AIR QUALITY MONITORING REPORT

Client Name & Address	M/s The Dhamra Port Company Limited, Dosinga, Bhadrak, Odisha
Work Order No.	4802006186
Reference No.	MSKGL/ED/2020-21/003334
Type of Sample	Amblent Air Sample
Sampling Location	Dosinga Village
Sampling Done by	Mr. Kunja Bihari Nayak
Sampling Duration	24hrs
Monitoring Instrument	RDS (APM 860); FPS (APM 154) Lata Envirotech, CO Analyzer & VOC Sampler

	-		-			PA	RAMETER	S .				
Date	PM <sub>in</sub> (ug/m²)	PM <sub>25</sub> (ag/m <sup>2</sup> )	SO <sub>2</sub> (pg/m <sup>2</sup> )	NOs (us/m²)	(mg/m²)	NH <sub>2</sub> (rephyl)	(yp/m²)	Pe (ugint)	Ni (ng/m²)	As (ng/m²)	CaBs (sup/m²)	BaP
02.61.2832	52.30	33.20	7.20	23,60	0.60	21,60	<20.0	<0.01	×5.0	20.76	The second second	(ng/m²)
08.01.2022	59.40	32.10	7.70	27.90	0.52	26.50	<20.0	<0.01	<5.0	<1.0	<4.2	₹9.5
09.01.2022	56,30	35.20	7.40	22.50	0.76	23,50	<20.0	<0.01		51,0	<4.2	<0.5
12.01.2022	49,40	30.00	6.40	28.60	0.67	18.70	<20.0	<0.01	<5.0	<1.0	<4.2	<0.5
16.01.2022	32.20	37.50	7.70	27.90	0.59	22.60	<20.0	<0.01	<5.0	<1.0	54.2	< 0.5
19.01.2022	57.80	38,40	7,40	28.20	0.69	21.90	<20.0	THE RESERVE AND THE PARTY NAMED IN	<5.0	<1.0	<4.2	<0.5
23.01.2022	58.10	29.50	6.40	21.60	0.62	18.60	<20.8	<0.01	<5.0	<1.0	<4.2	< 0.5
26.01.2022	52.60	37.20	6.90	24,80	0.70	23.40	<20.0	<0.01	<5.0	<1.0	<4.2	<0.5
36.01.2022	48.80	32.10	7.50	23.70	0.71	15.50		<0.01	<5.0	<1.0	<4.2	<0.5
Monthly Average	54.10	33.91	7.18	25.42	0.65	21.37	<20.0 <20.6	<0.01	<5.0	<1.0	<4.2	<0.5
CPCB, New Delhi AAQ Standard	100	60	80	80	4	400	180	1	20	6	5	<0.5
Time Weighted Average (hts.)	24	24	24	24	1	24	1	24	Annual	Anesal	Annual	Ansual
TEST METHOD	15 5182: Part 23:20 06 (Reaf f. 2012	IS 5182: Part 24:20 19	15 5182 : Part 2 :200 1 (Reaff .2012	IS 5182 : Part 6 :200 6 (Reaff .2012)	IS 5182 : Part 10 :199 9 (Renff.2 014)	15 5182: Part 25:20 18	IS 5182; Part 09:19 74	EPA - 103.4 June, 1999	EPA - IO3.4/lu ne,1999-	EPA - 103.43a ne,1999	ES:5187 (Part- 11):200 6 Reaff,2 012	IS:5182 (Part- 12):200 4 Reaff;: 2014

N.B. \*NAAQ- National Ambient Air Quality Steadard as per 18th Nov. 2009 Gatt. Notification

S. Karnja Prepared By - J BBSR

Checked By-

H.O.: Shrachi Centre (5th Floor), 74B, Acharya Jagadish Chandra Bose Road, Kolkata - 760 016, West Bengal, India T: 91 33 4014 3000 / 2265 0006 / 2265 0007, F: 91 33 2265 0008, E: info@mitrask.com, W: www.mitrask.com



N-5/100, Ground Floor IRC Vilage, Neyspall Bhubaneswar • 751015 [CIN: U51909WB1956PTC023037]

T: (0674) 2382918, 2360917

F: (0674) 2362918

### TEST REPORT

Name & Address of the Customer:

THE DHAMRA PORT COMPANY LIMITED.

AT: DOSINGA, PO: DHAMRA

DIST: BHADRAK, PIN:756171 ODISHA

Report No.: BBS/809

Date

: 01.02.2022

Sample No.: MSKGL/ED/2020-21/91/00249

Sample Description: Ambient Noise

### Noise Level Monitoring Data

SI.	Sampling	Sampling	Day Leq. Time	e dB(A)	Night Time Leq. dB(A)		
No	Date	Location	Results	LIMIT	Results	LIMIT	
1,	01.01,2022	Colony Area (R)	44.6	55	42.1	45	
2,	03.01.2022	Kanak Presed Village (R)	47.2	55	40.6	45	
3.	04.01.2022	Near BMH (I)	61.1	75	55.4	70	
4,	08.01.2022	Near Jetty (I)	68.7	75	56.8	70	
5,	10.91.2022	Dosinga Village (R)	52,1	55	43.6	45	
6.	11.01.2022	Near Bhitarkanika ( Eco Sensitive Zone)	44.2	50	36.2	40	

	Landa V	Noise Limit as per CP	CB
Category of Area/Zone	Leq dB(A) Day Time	Leq dB(A) Night Time	
Industrial Area	75	70	NOTE:
Commercial Area	65	55	Day Time: 06.00 Hr22.00 Hr. Night Time: 22.00 Hr06.00 Hr.
Residential Area	55	45	171ght 11116.22.00 Hr00.00 Hr.
Silence Zone	50	40	9-

repared/by:

For Mitra S. K. Private Limited



N-5/100, Ground Floor IRC Village, Neyspall/ Bhubaneswer - 751015 [CIN: U51909WB1956PTG023037]

T: (0874) 2362916, 2360917 . F: (0674) 2362918

TEST REPORT

Name & Address of the Customer :

THE DHAMRA PORT COMPANY LIMITED.

AT: DOSINGA, PO: DHAMRA

DIST : BHADRAK, PIN : 756171 ODISHA

Report No.: BBS/810 Date: : 01.02.2022

Sample No. : MSKGL/ED/2020-21/01/00560

Sample Description: Noise (Work Zone)

### Noise Level Monitoring Data

SL No	Sampling Date	Sampling Location	MAX	MIN	Results in Avg. dB(A)
I,	92.01.2022	Stack Yard	88.4	47.2	76.2
2.	05.01.2022	Wagon Tippler	85.8	45.3	73.1
3.	06.01.2022	Near Silo	74.1	40.7	66.9
4.	09,01,2022	Near Stacker & Reclaimer	72.6	37.3	61,8
5.	12.01.2022	Project Area	80,4	39,2	68.1
6.	13.01.2022	Transfer Point	83.8	44.1	71.5
7.	15.01.2022	Workshop	86.7	48.7	82.1
8.	16.01.2022	Steel Yard	89.4	57.3	80.5
9.	18.01.2022	FCC Shed	75.1	43.6	72.3
٥.	19.01.2022	Near Port Canteen	70.6	41.5	63.2

OSHA'S Permissible	Noise Exposure Limits
Noise Level	Exposure Limit
90 dBA	8.0 hours

Report Prepared by:

For Mitra S.K. Private Limited

Authorized Signatory

H.O.: Shrachi Centre (5th Floor), 748, Acharya sagadish Changra Bose Road, Kolkata - 700 016, West Bengal, India T: 91 33 4014 3000 / 2286 0006 / 2285 0007, F: 91 33 2285 0008, E: info@milrask.com, W: www.mitrask.com

BBSR

MSK TESTING INSPECTION

N-5/100, Ground Floor IRC Village, Nayspaši Bhubaneswar - 751015 [CIN: U51909WB1958PTC023037]

T : (0874) 2362916, 2360917

F: (0674) 2352918

### TEST REPORT

Name & Address of the Customer:

THE DHAMRA PORT COMPANY LIMITED

AT : DOSINGA, PO : DHAMRA

6DIST: BHADRAK, PIN: 756171 ODISHA

Report No.: BBS/805 Date: 01,02,2022

Sample No.: MSKGL/ED/2020-21/01/01000 Sample Description: EFFLUENT WATER

Sampling Location : STP 150KLD Date of sampling : 03.01.2022

### ANALYSIS RESULT

SL.	Test Parameters	Units	Limit	Test Specification	Res	alt
10.00			2-000		Inlet	Outlet
1.	Colour	Hazen	-	APHA (23rd Edition) 2120B 2017	Blackish	Clear
2,	Odour		34	APHA (23 <sup>rd</sup> Edition) 2150B	Disagreeable	Agreeable
3.	pH value at 26°C		6.5 - 9.0	APHA (23 <sup>rd</sup> Edition) 4500 H-B	6.91	7.53
4.	Appearance	***	-	Lab Method	Turbid	Clear
S.	TSS	mg/l	<20.0	APHA (23rd Edition) 2540D	150.0	6.5
6.	BOD	mg/l	<10.0	APHA (23rd Edition) 5210B 2017	46.0	6.0
7.	COD	mg/I	<50.0	APHA (23st Edition) 5220B 2017	125.0	8.0
8.	Oil & Grease	mg/I	<10.0	APHA (23 <sup>™</sup> Edition) 5220B 2617	6.4	<1.4
9,	Ammonical Nitrogen	tng/l	<5,0	APHA (23 <sup>rd</sup> Edition) 4500-NH3-F 2017	41.0	<0.1
0.	Total Nitrogen (as N)	mg/l	<10.0	IS 14684 (1999); Rffin;2014	56.0	4.2
1,	Faecal Coliform	MPN/ 100ml	<1000.0	APHA (23rd Edition) 9221 E	5541.0	210.0

Report Prepared By:

BBSR

For Mitra S. K. Private Limited



N-8/100, Ground Floor IRC Village, Nayapalii Bhubansawar - 75/015 ICIN: US Yanguya Yasaparay

[CIN: US1909W81956PT0023037]

T: (0674) 2362916, 2360917 F: (0674) 2362918

### TEST REPORT

Name & Address of the Customer:

THE DHAMRA PORT COMPANY LIMITED

AT: DOSINGA, PO: DHAMRA

DIST: BHADRAK, PIN: 756171 ODISHA

Report No.: BBS/806 Date : 01.02.2022

Sample No.: MSKGL/ED/2020-21/01/01457 Sample Description: EFFLUENT WATER

Sampling Location : STP 150KLD Date of sampling : 18.01.2022

#### ANALYSIS RESULT

No.	Test Parameters	Units	Limit	Test Specification	Resi	<u>olt</u>
200			-		Inlet	Ontlet
I:	Colour	Hazen	*	APHA (23rd Edition) 2120B 2017	Bleckish	Clear
2.	Odour		-2	APHA (23rd Edition) 2150B	Disagreeable	Agreeable
3.	pH value at 26°C		6.5 - 9.0	APHA (23rd Edition) 4500 H-B	6.89	7.62
4.	Appearance		_	Lab Method	Turbid	Clear
S.	TSS	mg/l	<20.0	APHA (23th Edition) 2540D	195.0	10.2
6.	BOD	mg/l	<10.0	APHA (23rd Edition) 5210B 2017	102.0	4.0
7.	COD	mg/I	<50,0	APHA (23rd Edition) 5220B 2017	188.0	12.6
8.	Oil & Grease	mg/I	<10.0	APHA (23rd Edition) 5220B 2017	8.0	<1.4
9.	Ammonical Nitrogen	mg/l	<5.0	APHA (23 <sup>rd</sup> Edition) 4500-NH3-F 2017	21.0	<0.1
10,	Total Nitrogen (as N)	mg/l	<10.0	IS 14684 (1999); Rffm:2014	32.0	3.2
í.	Fascal Coliform	MPN/ 100ml	<1000.0	APHA (23 <sup>rt</sup> Edition) 9221 E	4320.0	197.0

Report Prepared by:

BBSR 5

For Mitra S. K. Private Limited

MSK TESTINGS INSPECTION

N-5/100, Ground Floor IRC Village, Nevepalli Bhubanoswar - 751015

[CIN: U51909WB1956PTC523037]

T: (0674) 2382916, 2360917 F: (0674) 2362918

### TEST REPORT

Name & Address of the Customer:

THE DHAMRA PORT COMPANY LIMITED

AT : DOSINGA, PO : DHAMRA

6DIST: BHADRAK, PIN: 756171 ODISHA

Report No.: BBS/802 Date: 01.02.2022

Sample No.: MSKGL/ED/2020-21/01/00998 Sample Description: EFFLUENT WATER

Sampling Location : STP 140KLD Date of sampling : 03.01.2022

#### ANALYSIS RESULT

5La	Test Parameters	Units	Limit	Test Specification	Result	
No.	770000000000000000000000000000000000000	J. September	2000000	Ass. Speciality	Inlet	Outlet
1.	Colour	Hazen	45	APHA (23 <sup>rd</sup> Edition) 2120B 2017	Blackish	Colouries
2.	Odour	200		APHA (23 <sup>st</sup> Edition) 2150B	Disagreeable	Agreeable
3.	pH value at 26°C	-	6.5-9.0	APHA (23rd Edition) 4500 H-B	6.87	7,60
4.	Appearance	34	-	Lab Method	Turbid	Clear
5.	TSS	mg/l	<20.0	APHA (23 <sup>rd</sup> Edition) 2540D	195.0	<4.5
6.	BOD	mg/l	<10.0	APHA (23 <sup>rd</sup> Edition) 5210B 2017	145.0	<3.0
7,	COD	mg/l	<50.0	APHA (23th Edition) 5220B 2017	278.0	6,0
8.	Oil & Grease	mg/l	<10.0	APHA (23 <sup>rd</sup> Edition) 5220B 2017	13.8	<1.4
9.	Ammonical Nitrogen	mg/I	<5.0	APHA (23" Edition) 4500-NH3-F 2017	25.0	<0,5
10.	Total Nitrogen (as N)	mg/l	<10.0	IS 14684 (1999); Rffim:2014	31,0	3.5
11.	Faccal Coliforn	MPN/ 100ml	<1000.0	APHA (23 <sup>rd</sup> Edition) 9221 E	1854.0	131.0

Private Limited Report Prepared by: For Mitra S. K.

For Mitra S. K.

Provide

Authorized Signatory

()MSK

N-5/100, Ground Fleor IRC Wilege, Nayapalli Bhubaneswar - 751015 ICIN: U51909WB1958PTC0230371

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### TEST REPORT

Name & Address of the Customer: THE DHAMRA PORT COMPANY LIMITED

AT: DOSINGA, PO: DHAMRA

DIST: BHADRAK, PIN: 756171 ODISHA

Report No. : BBS/804 Date : 01.02.2022

Sample No.: MSKGL/ED/2020-21/01/01455 Sample Description: EFFLUENT WATER

Sampling Location: STP 140KLD Date of sampling: 18.01.2022

#### ANALYSIS RESULT

SL	Test Parameters	Units	Limit	Test Specification	Resi	ult
No.		- AMARIANS	arment.	Assi Sessamente	Inlet	Outlet
1.	Colour	Colour Hazen - APHA (23 <sup>rd</sup> Edition) 2120B 2017		Blackish	Colourles	
2.	Odour	-		APHA (23st Edition) 2150B	Disagreeable	Agrecable
3.	pH value at 26°C		5.5 - 9.0	APHA (23rd Edition) 4500 H-B	7.01	7.52
4.	Appearance		-	Lab Method	Terbid	Clear
5.	TSS	mg/l	<20.0	APHA (23 <sup>rd</sup> Edition) 2540D	142.0	8.0
6.	BOD	mg/l	<10.0	APHA (23 <sup>rd</sup> Edition) 5210B 2017	114.0	<3.0
7.	COD	mg/l	<50.0	APHA (23th Edition) 5220B 2017	182.0	8.0
8.	Oil & Grease	mg/l	<10.0	APHA (23 <sup>st</sup> Edition) 5220B 2017	6,0	<1.4
9.	Ammonical Nitrogen	mg/I	<5.0	APHA (23 <sup>rd</sup> Edition) 4500-NH3-F 2017	22.0	<0.1
10.	Total Nitrogen (as N)	mg/l	<10.0	IS 14684 (1999); Rfflm:2014	27,0	3.5
11.	Faecal Coliform	Coliform MPN/ 100ml <1000.0 APHA (23 <sup>rd</sup> Edition) 9221 E 2505.0		2505.0	156.0	

Private Limited
Report Prepared by:

For Mitra S. K.



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### TEST REPORT

Name & Address of the Customer: THE DHAMRA PORT COMPANY LIMITED

AT: DOSINGA, PO: DHAMRA

DIST: BHADRAK, PIN: 756171 ODISHA

Report No.; BBS/807 Date : 01.02.2022

Sample No.: MSKGL/ED/2020-21/01/00996 Sample Description: EFFLUENT WATER

Sampling Location: STP 25KLD Date of sampling: 03.01.2022

#### ANALYSIS RESULT

SL.	Test Parameters	Units	Limit	Test Specification	Rest	<u>zlt</u>
No.		314111111	20000	110 Optementos	Inlet	Outlet
1.	Colour	Hazan	-	APHA (23st Edition) 2120B 2017	Blackish	Colourless
2.	Odour	-	-	APHA (23st Edition) 2150B	Disagrecable	Agreeable
3,	pH value at 26°C	****	6.5 - 9.0	APHA (25" Edition) 4500 H-IS 6.96		7.41
4.	Appearance	-	-	Lab Method	Turbid	Clear
5.	TSS	mg/l	<20.0	APHA (23 <sup>rd</sup> Edition) 2340D	128.0	3.0
6.	BOD	mg/l	<10.0	APHA (23 <sup>rd</sup> Edition) 5210B 2017	72.0	4.2
7.	COD	mg/l	<50.0	APHA (23 <sup>rd</sup> Edition) 5220B 2017	158.0	6.0
S.	Oil & Grease	mg/i	<10.0	APHA (23 <sup>rd</sup> Edition) 5220B 2017	7.2	<1.4
9.	Ammonical Nitrogen	mg/l	<5,0	APHA (23" Edition) 4500-NH3-F 2017	23.0	≪0.1
10.	Total Nitrogen (as N)	mg/I	<10.0	IS 14684 (1999); Rffin;2014	27.0	4.0
11.	Fascal Coliform MPN/ <1000.0 APHA (2		APHA (23 <sup>rd</sup> Edition) 9221 E	4829,0	119.0	

Private Limited Report Prepared by: For Mitra S. K.

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N-5/100, Ground Floor IRC Village, Nayapali Bhubaneswar - 751015

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## TEST REPORT

Name & Address of the Customer:

THE DHAMRA PORT COMPANY LIMITED

AT : DOSINGA, PO : DHAMRA

DIST: BHADRAK, PIN: 756171 ODISHA

Report No.: BBS/808 Date : 01.02.2022

Sample No.: MSKGL/ED/2020-21/01/01453 Sample Description: EFFLUENT WATER

Sampling Location : STP 25KLD Date of sampling : 18.01.2022

#### ANALYSIS RESULT

SL.	Test Parameters	Units	Limit	Test Specification	Resi	ult
No.		1000		23033541123311	Inlet	Outlet
1.	Colour	Hazen	-	APHA (23 <sup>rd</sup> Edition) 2120B 2017	Blackish	Colourless
2.	Odour		-	APHA (23rd Edition) 2150B	Disagreeable	Agrecable
3.	pH value at 26°C	-	6.5-9.0	APHA (23rd Edition) 4500 H-B	6.93	7.32
4.	Appearance		-	Lab Method	Turbid	Clear
5.	TSS	mg/i	<20.0	APHA (23 <sup>rd</sup> Edition) 2540D	104.0	5.0
6,	BOD	mg/l	<10.0	APHA (23 <sup>rd</sup> Edition) 5210B 2017	98.0	3,0
7.	COD	mg/l	<50:0	APHA (23 <sup>rd</sup> Edition) 5220B 2017	146.0	6.0
8.	Oil & Grease	mg/l	<10.0	APHA (23 <sup>st</sup> Edition) 5220B 2017	4.6	<1.2
9.	Ammonical Nitrogen	mg/l	<5.0	APHA (23 <sup>rd</sup> Edition) 4500-NH3-F 2017	21.0	0.5
10.	Total Nitrogen (as N)	mg/l	<10.0	18 14684 (1999); Rffin:2014	32.0	4:0
11.	1. Fascal Colliform MPN/ 100ml		<1000.0	APHA (23 <sup>rd</sup> Edition) 9221 E	6410.0	162.0

Private Limited Report Prepared by: For Mitra S. K.



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### TEST REPORT

Name & Address of the Customer: THE DHAMRA PORT COMPANY LIMITED

AT : DOSINGA, PO : DHAMRA

DIST: BHADRAK, PIN: 756171 ODISHA

Report No.: BBS/803 Date : 01,02,2022

Sample No.: MSKGL/ED/2020-21/01/01451 Sample Description: EFFLUENT WATER

Sampling Location: STP 15 KLD Date of sampling: 18.01.2022

#### ANALYSIS RESULT

SL.	Test Parameters	Units	Limit	Test Specification	Resi	tlt
No.	ASICA BIAMBISMS	Samuel .	automat.	1 est ispecimention	Inlet	Outlet
1.	Colour	Hazen - APHA (23 <sup>rt</sup> Edition) 2120B 2017		Blackish	Colourless	
2,	Odour		-	APHA (23rd Edition) 2150B	Disagreeable	Agreeable
3.	pH value at 26°C	-	6.5 - 9.0	APHA (23** Edition) 4500 H-B 6.89		7.62
4.	Appearance		-	Lab Method	Turbid	Clear
<b>5</b> .	TSS	mg/l	<20.0	APHA (23 <sup>rd</sup> Edition) 2540D	195.0	10.2
6.	BOD	mg/l	<10.0	APHA (23" Edition) 5210B 2017	102.0	4.0
7.	COD	mg/l	<50,0	APHA (23 <sup>rd</sup> Edition) 5220B 2017	188.0	12.0
8,	Oil & Grease	mg/l	<10.0	APHA (23 <sup>rd</sup> Edition) 5220B 2017	8.0	<1.4
9.	Ammonical Nitrogen	mg/l	<5.0	APHA (23 <sup>st</sup> Edition) 4500-NH3-F 2017	21.0	<0.1
10.	Total Nitrogen (as N)	mg/l	<10.0	IS 14684 (1999); Rffm:2014	32.0	3.2
11.	Faccal Coliform	MPN/ <1000.0 APHA (23 <sup>rd</sup> Edition) 9221 E 4320.0		197.0		

Private Limited Report Prepared by:

For Mitra S. K.



N-5/100, Ground Fhoor IRC Village, Nevapalli Bhubanaswar - 751015 [CIN: U51906WB1956P1C023037]

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### TEST REPORT

Name & Address of the Customer: THE DHAMRA PORT COMPANY LIMITED

AT : DOSINGA, PO : DHAMRA

DIST: BHADRAK, PIN:756171 ODISHA

Report No. : BBS/801 Date : 01.02.2022

Sample No.: MSKGL/ED/2020-21/01/00994 Sample Description: EFFLUENT WATER

Sampling Location : STP 15 KLD Date of sampling : 03.01.2022

#### ANALYSIS RESULT

SL.	Test Parameters	Units	Limit	Test Specification	Resi	ult
No.		ALIEUM.	, ALLEGE AL	2501 07000000000	Inlet	Outlet
1.	Colour	Hazen	-	APHA (23 <sup>rd</sup> Edition) 2120B 3017	Blackish	Clear
2.	Odour	-	320	APHA (23 <sup>nt</sup> Edition) 2150B	Disagrecable	Agrecable
3.	pH value at 26°C	-	6.5 - 9.0	APHA (23 <sup>rd</sup> Edition) 4500 H-B 7.01		7.51
4.	Appearance	***	-	Lab Method	Turbid	Clear
5,	TSS	mg/l	<20.0	APHA (23th Edition) 2540D	113,0	4.0
6,	BOD	mg/l	<10.0	APHA (23 <sup>re</sup> Edition) 5210B 2017	112.0	3.1
7.	COD	mg/l	<50.0	APHA (23 <sup>rd</sup> Edition) 5220B 2017	220.0	8.0
8.	Oil & Grease	mg/l	<10.0	APHA (23 <sup>rd</sup> Edition) 5220B 2017	11.7	<1.4
9.	Ammonical Nitrogen	mg/l	≪5.0	APHA (23 <sup>rd</sup> Edition) 4500-NH3-F 2017	19.0	4.8
10.	Total Nitrogen (as N)	mg/i	<10.0	1S 14684 (1999); Rffm;2014	24.0	4.8
11.	Faccal Coliform	MPN/ 100ml	<1000,0	APHA (23 <sup>rd</sup> Edition) 9221 E	3664,0	218

Private Limited Report Prepared by:

For Mitra S. K.

Authorized Signatory

MSK TESTING

N-5/100, Ground Floor IRC Villago, Nayapali Bhubaneswar - 751015

[CIN: U51909WB1956PTC023037]

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### TEST REPORT

Name & Address of the Customer:

THE DHAMRA PORT COMPANY LIMITED

AT: DOSINGA, PO: DHAMRA DIST: BHADRAK, 756171 ODISHA Report No. : BBS/812 Date : 01.02.2022

Sample No.: MSKGL/FD/2020-21/01/01/60

Date of sampling : 15.01.2022

Sampling Description: Ground Water (Piezometric) Sampling Location: Township Pump House Sampling Done By: Mr. Kunja Bihari Nayak

### BACTERIOLOGICAL ANALYSIS RESULT AS PER IS: 18500 - 2012

St. No	Test Parameters	Units	Limit	Test Method / Specification	Result
-	E. Coli	/100ml	Not Detectable	IS: 15185 ; 2016	Not Detected
2.	Total Coliform Organism	/100ml	Not Detectable	- IS: 15185 : 2016	Not Detected

CHEMICAL ANALYSIS RESULT AS PER IS: 10500 - 2012 Requirement Permissible limit Test Parameter Units No. (Acceptable in the absence of Test Method / Specification Result Limit) alternate Source pH ( 8126° C) 6.5 - 8.5 Ne Relocation IS 3025 (Part 11)-1984 Rillin: 2012 7.73 2 Sulphate (as SO<sub>4</sub>) 200 mg/l 400 1S 3025 (Part 24)- 1986 Riffin: 2014 38.0 3 Celcium (as Ca) 世纪节 75 200 IS 3025 (Part 40)- 1991 Rfflia: 2014 42.0 Arsenic (as As) mg/I 0.01 0.05 IS 3025 (Part 2) 2004 RA 2014 BDL(DL:0.005) Lead (as Ph) mg/l 10.0 No Religiation IS 3025 (Part 2) 2004 RA 2014 BDL/DL:0.005) Zinc (as Zn) 8 mg/l 3.8 15.0 IS 3025 (Part 2) 2004 RA 2014 BDL(DL:0.02) Copper (as Cu) ma/! 0.05 15 DS 3025 (Past 2) 2004 RA 2014 BDL(DL:0.02) 8. Mercury (as Hg) msyl 0.001 No Relaxetion IS 3025 (Part 48)-1994 Rffm: 2014 BDL(DL:0.0002) 9. Cadmium (as Cd)  $m_2/7$ 0.003 No Relaxation IS 3025 (Part 2) 2004 RA 2014 BDL(DL:0.001) 10 Mineral Oil mg/l 0.5 No Relaxation IS 3025 (Part 39)-1991 Riffor: 2014 BDL(DL:0.5) H Flooride (as F) me/I 1:0 13 IS 3025 (Part 60)- 2008 Rifin: 2013 BDL(DL:0.2) Colour 12 Hazen 3 15 3025 (Part 4)-1983; Rffim 2012 BDL(DL:1.0) 13 Agrecable Agrecuble IS 3025 (Part 5)-1983 Riffor 2012 Agreeable 14. Turbidky N.T.U 1 IS 3025 (Part 10)-1984 Rffm: 2012 BDL(DL:1.0) 15. Residual free Chierine mg/l 0.2 IS 3025 (Part 26)- 1986 Rffin:2014 BDL(DL:0.1) 16. Iron (as Fe) mg/l 0.3 No Relevation IS 3025 (Part 53)-1988 Rffin: 2014 BDL(DL:0.05) 17, Chloride (as CI) 250 mgл 1000 IS 3025 (Part 32)-1988 Rffm: 2014 82.0 18, Total Dissatved Solids 500 ma/l IS 3025 (Part 16)-1984; Rffm:2012 2000 320.0 19: Alkalinity (as CaCO<sub>2</sub>) 200 mg/l 600 iS 3025 (Part 23)- 1986 Rffin: 2009 20. 188.0 Aluminium (es A5) 0.03 mg/l 0.2 IS 3025 (Part 2) 2004 RA 2014 BDL(DL:0.01) Magnesium (as Mg) mg/I 30 100 IS 3025 (Part 46)-1994 Rffm; 2014 12.0 Total Hardness 22. med 280 600 (as CaCO<sub>6</sub>) IS 3025 (Part 21)-2013 112.0 23 Boron (as B) 0.5 mp/I 1.0 IS 3025 (Part 2) 2004 RA 2014 BDL(DL:0.3) 24. Manganese (as Mri) 0.1 mg/ IS 3025 (Part 2) 2004 RA 2014 BDL(DL:0.02) 25 Nitrate (as NO2) mg/l 45 No Relaxation IS 3025 (Part 34)-1988 Riffin: 2014 BDL(DE:0.4) Phenolic Compounds 26. 0.001 0.002 IS 3025 (Part 43)- 1992; Rffm: 2014 (8s C<sub>2</sub>H<sub>2</sub>OH) BDL(DL:0.001) mp'l 27 Selenium (as Su) mg/l 0.01 No Relaxation IS 3025 (Part 2) 2004 RA 2014 BDL(DL:0.005) 28 Total Chromium ( as Cr) marit 0.05 No Relaxation 1S 3025 (Part 2) 2004 RA 2014 BDL(DL:0.01) 29. Silver (as Ag) No Relaxation mo/l 0.1 IS 3025 (Part 2) 2004 RA 2014 BDL(DL:0,095) 30. Barium (as Ba) mg/l 0.7 No Relaxation IS 3025 (Part 2) 2004 RA 2014 BDL(DL:G.1) 31. Salimity mage/I IS 3025 (Part 14)- 2013 42.0



N-5/100, Ground Floor IRC Village, Nalyapelli Bhubaneswar - 75/015 [CIN: US1909WB1958PTC023037]

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Ref. No. BBS/812

Date- 01.02.2022

32.	Sulphide ( as FI2S)	mg/l	0.05	No Religeation	IS 3025 (Part 20)- 1991; Refin: 2014	HOL(DL:0.02)
33.	Ammonia ( as total ammonia-N)	mg/I	0.5	No Relaxation	15 3025 (Part 34)- 1988; Riffin: 2014	BDL(DL:0,02)
34.	Chloranines	figm	4.0	No Relaxation	IS 3025 (Part 26)- 1986; Rffer: 2014	BDL(DL:0,1)
35	Nickel ( as Ni)	mg/l	0.02	No Relaxation	IS 3025 (Part 2) 2004 RA 2014	BDL(01, 0.01)
36.	Cyanide (as CN)	figm.	0.05	No Relaxation	IS 3025 (Part 27)- 1986 Riffm; 2014	BDL(DL:0,01)
37.	Anionic Detergents (as MBAS)	mayl	0.2	1.0	3S 13428(Annex K)- 2005	BDL(DL:0.01)
38.	Polymuclear Aromatic Hydrocarbons (ss PAH)	mg/l	0,0001	No Relesation	APHA (23 <sup>rd</sup> Bdsn.) 6440C	BDL(DL:0.05)
39.	Polychlorinated Biphenyls (PCB)	mg/l	0.0003	No Relaxation	US EPA 8082	BDL(DL:0000T)

Report Prepared by

For Mitra S. K. Private Limited,



N-5/160, Ground Floor IRC Vilage, Nayapall Bhubaneswar - 751615

[CIN: U51909WB1956PTC023037]

T: (0674) 2362916, 2360917 F: (0674) 2362918

Name & Address of the Customer:

THE DHAMRA FORT COMPANY LIMITED

AT: DOSINGA, PO: DHAMRA

DIST: BHADRAK, PIN:756171 ODISHA

TEST REPORT

Report No. : BBS/813

Date : 01.02.2022

Sample No.: MSKGL/FD/2020-21/01/01461

Date of sampling : 15.01,2022

Sampling Description : Ground Water (Piezometric)

Sampling Location ; Pump House WTP Sampling Done By ; Mr. Kunja Bihari Nayak

### BACTERIOLOGICAL ANALYSIS RESULT AS PER IS: 10500 - 2012

SL No	Test Parameters	Units	Limit	Test Method / Specification	F
1.	E. Coli	/100ml	Not Detectable	IS: 15185 : 2016	Not Detected
2.	Total Coliform Organism	/100ml	Not Detectable	18: 15185 : 2016	Not Detected

### CHEMICAL ANALYSIS RESULT AS PER IS: 10500 - 2012

SI, No.	Test Parameter	Units	Requirement (Acceptable Limit)	Permissible limit in the absence of alternate Source		Result
1,	pH ( mt 26° C)	_	6.5 - 8.5	No Relaxation	IS 3025 (Pert 11)-1984 Rffin: 2012	200
2,	Sulphate (as SO <sub>4</sub> )	rng/l	200	400	IS 3025 (Part 24)- 1986 Riflin: 2014	7.63
3.	Calcium (as Ce)	mg/l	75	200	IS 3025 (Part 40)- 1991 Rillin; 2014	The second secon
4	Arsenic (os As)	mg/l	10.0	0.65	IS 3025 (Part 2) 2004 RA 2014	50.0
5;	Lead (as Pb)	tngA	0,01	No Relaxation	IS 3025 (Part 2) 2004 RA 2014	BDL(DL:0.005)
6.	Zinc (as Zn)	medi	5.0	15.0	IS 3025 (Part 2) 2004 RA 2014	BDL(DL:0.005)
- 75	Copper (as Ca)	mg/l	0.05	1.5	IS 3025 (Part 2) 2004 RA 2014	BDL(DL:0,02)
8.	Moreury (as Hg)	mg/l	0.001	No Relaxation	IS 3025 (Part 48)-1994 Ritter: 2014	BDL(DL:0.02)
9.	Cadmium (as Cd)	mg/l	0.003	No Relacation	IS 3025 (Part 2) 2004 RA 2014	BDL(DL:0.0002)
10.	Mineral Cit	me/l	0.5	No Relaxation	18 3025 (Part 39)-1991 Rffm: 2014	BDL(DL:0.001)
31.	Fluoride (as F)	mg/l	0.0	1.5	18 3025 (Part 60)- 2008 Rffm: 2013	BDL/DL:0.5)
12	Colour	Hazen	5	15	10 3023 (Part 00) 2008 KHM: 2013	BDL(DL:0.2)
13.	Odour		Agreeable	Agrocable	3025 (Part 4)-1983; Rffm:2012	BDL(DL:1.0)
14.	Turbidity	N.T.U	1	5	IS 3025 (Part 5)-1983 Rffm:2012	Agreeable
15.	Residual free Chlorina	mg/l	0.2	1.0	IS 3025 (Part 10)-1984 Rffin: 2012	BDL(DL:1.0)
16.	Iron (as Fo)	mg/l	0.3	No Relaxation	IS 3025 (Part 26): 1986 Riffen: 2014	BDL(DL:0.1)
17.	Chiloride (as CI)	mg/l	250	1000	IS 3025 (Part 53)-1988 Rfilm: 2014	BDL(DL:0.05)
18.	Total Dissolved Solids	ng/l	500	2000	IS 3025 (Part 32)-1988 Rffin: 2014	42.0
19.	Albalinity (as CaCO <sub>2</sub> )	ma/l	200	600	IS 3025 (Pert 16)-1984; Rifm; 2012	298.0
20.	Aluminium (as AI)	rag/t	9.03	0.2	IS 3025 (Part 23)- 1986 Riffin: 2009	172.0
21.	Megnesium (ns Mg)	mg/l	30	The state of the s	IS 3025 (Part 2) 2004 RA 2014	BDL(DL:0.01)
**	Total Hardness	100	30	100	IS 3025 (Part 46)-1994 Rffin: 2014	21,0
22.	(as CsCOy)	mg/l	209	600	IS 3025 (Part 21)-2013	152.0
23.	Boron (as B)	Pen	0.5	1.0	IS 3025 (Part 2) 2004 RA 2014	rien and A.S.
24	Manganese (as Mn)	mg/l	0.1	5.3	IS 3025 (Part 2) 2004 RA 2014	BDL(01:0,3)
25.	Nitrate (as NO <sub>2</sub> )	mg/I	45	No Relocation	IS 3025 (Part 34)-1988 Rffm: 2014	BDL(DL:0.02)
26.	Phenolie Compounds (as CuHyOH)	mg/l	0.001	0.002	IS 3025 (Part 43)- 1992; Rffm: 2014	BDL(DL:0.001)
27.	Selenium (as Se)	mg/l	0.01	No Relaxation		A CONTRACTOR OF THE PARTY OF TH
28	Total Chromium ( as Cr)	mg/l	0.03	No Relaxation	IS 3025 (Part 2) 2004 RA 2014	BDL(DL:0.005)
29.	Silver ( as Ag)	me/l	0.1	No Relaxation	IS 3025 (Part 2) 2004 RA 2014	BDL(DL:0.01)
30.	Barium (as Ba)	mg/I	0.7	No Relaxation	IS 3025 (Part 2) 2004 RA 2014	BDL(DL:0.005)
31.	Satinity	mg/I	3	TAN BUTTER STREET	IS 3025 (Part 2) 2004 RA 2014	BDL(DL:6.1)
					IS 3025 (Part 14)- 2013	44.0



N-6/100. Ground Floor IRC Village, Nayapalli Bhubareswar - 751015

[CIN: U51909WB1956PTC023037]

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Ref. No. BBS/813

Date-01.02,2822

32.	Sulphida (ps H2S)	flgm	0,05	No Relevation	IS 3025 (Part 29)- 1991; Rffin: 2014	BDL(DL:0.02)
33.	Ammonia ( as total orozponia-N)	mg/t	0.3	No Relaxation	IS 3025 (Part 34)- 1988; Riffin: 2014	BDL(DL:0.02)
34.	Chloramines	Typen 1	41.0	No Relaxation	38 3025 (Part 26)- 1986; Rffin: 2014	BDL(DL(0,1)
35.	Niekel (as Ni)	mg/l	0.02	No Relexation	IS 3025 (Pert 2) 2004 RA 2014	BDL(DL:0.01)
36	Cyunide (as CN)	mg/I	0.05	No Relaxation	IS 3025 (Part 27)- 1986 Rffee 2014	BDL(DL:0.01)
37.	Anionic Detergents (as MBAS)	figm	9.2	1.0	IS 13428(Annex K)- 2005	BDL(DL:0.01)
38.	Polymedear Aromatic Hydrocarbons (as PAH)	ngfl	1000.0	No Relevation	APHA (23 <sup>rd</sup> Edm.) 6440C	BDL(DL:0.05)
39.	Polychlorinated Biology's (PCB)	ngA	0,0003	No Relaxation	US EPA 8082	BDL(DL:0.0001)

Report Prepared by:

For Mitra S. K. Private Limited.



N-5/100, Ground Floor IRC Village, Neyspelli Bhubaneswar - 751015

[CIN: U51909W81958FTC023007]

T: (0674) 2382918, 2360917

F: (0674) 2362918

### TEST REPORT

Name & Address of the Customer:

THE DHAMRA PORT COMPANY LIMITED

AT : DOSINGA, PO : DHAMRA

DIST : BHADRAK, PIN :756171 ODISHA

Report No. ; BBS/814

Date : 01.02.2022

Sample No.: MSKGL/FD/2020-21/01/01462

Date of sampling : 15.01.2022

Sampling Description: Ground Water (Piczometric)

Sampling Location: Running Room Sampling Done By: Mr. Kunja Bibari Navak

### BACTERIOLOGICAL ANALYSIS RESULT AS PER IS: 10500 - 2012

SL No	Test Parameters	Units	Limit	Test Method / Specification	The He
1.	E. Coli	/100ml	Not Detectable		Result
2.	Total Coliform Organism		Not Detectable	IS: 15185 : 2016	Not Detected
	- The state of the	1 2 5 0 2000	ANY EXCIPCIONS	IS: 15185 : 2016	Not Desected

CHEMICAL ANALYSIS RESULT AS PER IS: 10500 - 2012 Permissible limit Requirement SI. Test Parameter Units (Acceptable in the absence of Test Method / Specification No. Result Limit) alternate Source pH ( at 26° C) 1. 6.5 - 8.5 No Relaxation IS 3025 (Part 11)-1984 Rffm: 2012 7.75 2 Sulphate (as SO<sub>2</sub>) ma/l IS 3025 (Part 24)- 1986 Rffm: 2014 51.0 3. Calcium (as Ca) mg/I 75 200 IS 3025 (Part 40)- 1991 Rffat: 2014 56.0 4. Arsenio (as As) med 0.01 0.05 IS 3035 (Part 2) 2004 RA 2014 BDL(D1::0.005) Lead (as Po) mg/I 0.61 No Religation IS 3025 (Part 2) 2004 RA 2014 BDL(DL:0.005) 6 Zinc (as Zo) IS 3025 (Part 2) 2004 RA 2014 mg/l 5.0 15.0 BDL(DL:0.02) Copper (as Cu) 0.05 mg/l 1.5 IS 3025 (Part 2) 2004 RA 2014 BDL(DL:0.02) 8 Mercury (as Hg) No Releastion me/i 0.001 IS 3025 (Part 48)-1994 Rffin: 2014 BDL(DL:0.0002) q Cadmioni (as Cd) mg/l 0.003 No Relaxation 1S 3025 (Part 2) 2004 RA 2014 BDL(DL:0.001) 30 Mineral Oil mg/ 0.5 No Relaxation IS 3025 (Part 39)-1991 Rfffs: 2014 BDL(DL:0.5) 11 Fluoride (as F) mg/l 1.0 1.5 IS 3025 (Part 60)- 2008 Rffm: 2013 SDL(DL:0.2) 12 Colour Hazen 5 15 3025 (Part 4)-1983; Riffin:2012 BDL(DL:1.0) 13 Oddur Agrecable Agreeable IS 3025 (Part 5)-1983 Rffm:2012 Agreeable 14. Turbidity N.T.U . IS 3025 (Part 10)-1984 Rffm: 2012 BDL(DL:1.0) 15. Residual free Chlorine mg/i 0.2 1:0 1S 3025 (Part 26)- 1986 Rffm:2014 8DL(DL:0.1) 16 Iran (as Fe) mg/i 0.3 No Relexation IS 3025 (Part 53)-1988 Rffm: 2014 BDL(DL:0.05) 17. 250 Chloride (as Cl) ing/ 1000 IS 3025 (Part 32)-1988 Riffin: 2014 78.0 18 Total Dissolved Solids me/i 500 2000 IS 3025 (Part 16)-1984; Rffin:2012 362 D Alkalinity (as CaCO<sub>3</sub>) 19 mg/l 200 600 IS 3025 (Part 23)- 1986 Rffm: 2009 166,0 70 Aluminium (as Al) ragy) 0.03 0.2 IS 3025 (Part 2) 2004 RA 2014 BOL(DL:0.01) Magnesium (as Mg) 21 me/i 30 100 IS 3025 (Part 46)-1994 R.frm: 2014 18.0 Total Hardness 22 102/1 200 (as CaCO<sub>3</sub>) 600 IS 3025 (Part 21)-2013 144 0 23 Beron (as B) mg/l 0.5 1.0 IS 3025 (Put 2) 2004 RA 2014 BDL(DL:0.3) 24 Manganose (as:Mn) 100/1 0.1 IS 3025 (Part 2) 2004 RA 2014 EDL(DL:0.02) 25. Nitrate (as NO<sub>3</sub>) тел 45 No Relaxation IS 3025 (Part 34)-1988 Riffin: 2014 BDL/DL:0.4) Phenolic Compounds 26 0.001 0.002 IS 3025 (Part 43)- 1992; Rffin: 2014 (as CsHsOH) mog/i BDL(DL:0.001) 27 Selenium (as Se) 0.01 mg/l No Relayation IS 3025 (Part 2) 2004 RA 2014 BDL(DL:0.005) 28. Total Cheorelum ( as Cr ) mg/l 0,05 No Relayation IS 3025 (Part 2) 2004 RA 2014 BDL(DL:0.01) 29 Silver (as Ag) mg/l0.1 No Relaxation IS 3025 (Part 2) 2004 R.A. 2014 BDL(DL:0.005) 30. Barium (as Ba) mg/l No Relexation IS 3025 (Part 2) 2004 RA 2014 BDL(DL:0.1) 31. Salinity ma/i IS 3025 (Part 14)- 2013 45.0



N-5/100, Ground Floor IRC Village, Nayapatil Bhubareswer - 751915

[CIN: U51909WE1956PTC023057]

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Ref. No. BBS/814

Date- 61.02.2022

32	Sulphide ( as H2S)	mg/l	0.05	No Relevation	15 3025 (Part 29)- 1991; Rffm: 2014	SDL(Di.:0.02)
33,	Antmonia ( as tota) antmonia-N)	mg/l	0.5	No Relexation	15 3025 (Part 34)- 1988; Rffm: 2014	BDL(DL-0.02)
34.	Chloramines	mga	4.0	No Relaxation	IS 3025 (Part 26)- 1986; Riffm: 2014	BDL(D(.:0.1)
35.	Nickel ( as Nir)	mg/l	0.02	No Relaxation	IS 3025 (Part 2) 2004 RA 2014	BDL(DL:0.1)
36.	Cyonida (as CN)	me/l	0.05	No Relaxation	IS 3025 (Part 27)- 1986 Rffm: 2014	BDL(DL:0.01)
37.	Anionic Detergents (as MBAS)	mg/l	0.2	1,0	TS 13428(Annex K)-2005	BDL(DL-0.01)
38.	Polynacion Arometic Hydrocarbons (as PAH)	mg/l	0.0001	No Relexation	APHA (23 <sup>rd</sup> Edin.) 6440C	BOL(DL:0.05)
39.	Polychlorinated Riphenyls (PCB)	mg/l	0,0003	No Relexation	US EPA \$082	BDL(DL:0,6001)

Report Prepared by.

For Mitra S. K. Private Limited.

Authorized Signatory

H.O.: Shrachi Centre (5th Floor), 748, Acharya Jagadish Chandra Bose Road, Kolkala - 700 016, West Bengal, India T: 91 33 4014 3000 / 2265 0006 / 2265 0007, F: 91 33 2265 0009, Et Info@mitrask.com, W: www.mitrask.com



N-5/100, Ground Floor IRC Vilisge, Neyspalli Bhubaneswar - 751015 [CIN: U51909W81956PTC023037]

T : (0874) 2382916, 2380917

F: (0874) 2352918

### TEST REPORT

Name & Address of the Customer: THE DHAMRA PORT COMPANY LIMITED

AT: DOSINGA, PO: DRAMRA

DIST: BHADRAK, PIN: 756171 ODISHA

Report No. : BBS/820 Date : 01.02.2022

Sample No.: MSKGL/ED/2020-21/01/01042

Sample Description: Sea Sediment Sampling Location: Dredging Area Date of sampling: 03.01,2022

#### ANALYSIS RESULT

Sl. No.	Parameters	Unit	Test Method	Result
I.	pH value	None	IS 2720 (Part 26)-1987;Rffm:2011	8.01
2.	Electrical Conductivity	us/cm	IS 3025 (Part 14)-1984;Rffin:2006	8660.0
3.	Organic Matter	96	IS 2720 (Part 22)-1972; Rffm:2015	0.54
4.	Turbidity	N.T.U	APHA (23rd Edition) 2130B	287.0
5.	Moisture content	%	Lab Method	38.0
6.	Chloride (as CI)	mg/kg	TPM/MSK/P&E/1/10	4800.0
7.	Sulphate (as SO4)	mg/kg	IS 2720 (Part 27) 1977,RA 2015	812.0
8.	Sulphide (as S)	mg/kg	TPM/MSK/P&E/1/43	<5.0
9.	Phosphate (as PO4)	mg/kg	TPM/MSK/P&E/1/12	21.0
10.	Phosphorus	mg/kg	TPM/MSK/P&E/1/12	176.0
11.	Iron (as Fe)	mg/kg	TPM/MSK/P&E/1/13	416.0
12.	Sodium (as Na)	mg/kg	TPM/MSK/P&E/1/4	3815.0
13.	Potassium (as K)	mg/kg	TPM/MSK/P&E/1/5	824.0
14.	Copper (as Cu)	mg/kg	EPA 6010D	21.0
15.	Nickel (as Ni)	mg/kg	EPA 6010D	30.0
16.	Zinc (as Zn)	mg/kg	EPA 6010D	34.0
17.	Manganese (as Mn)	mg/kg	EPA 6010D	425.0



#### Ref. No. 885/820

Date- 01.02.2022

18.	Lead (as Pb)	mg/kg	EPA 6010D	14.0
19_	Boron (as B)	nig/kg	IS 13428- 2005, Annex H	18.0
20.	Aluminium (as Al.)	mg/kg	EPA 6010D	6610.0
21.	Total Chromium (as Cr)	mg/kg	EPA 6010D	40.0
22.	Total Nitrogen (as N)	mg/kg	IS 14684 (1999); Rffm:2014	538.0
23.	Organic Nitrogen	mg/kg	TPM/MSK/P&E/3/68	498.0
24.	Total Petroleum Hydrocarbon	mg/kg	USEPA 8015 B - Dec, 1996, 8270 D - Feb, 2007	<0.05
25.	Pesticide Residue	mg/kg	USEPA 3540 C USEPA 8082	<0.5
26.	Sand	%	TPM/MSK/P&E/1/36A	42.0
27.	Silt	%	TPM/MSK/P&E/1/36A	34.0
28.	Texture	None	TPM/MSK/P&E/1/36A	Loam
19.	Clay	%	TPM/MSK/P&E/1/36A	24.0

### Biological Result

SI No.	Parameters	Unit	Down to
1.	Fungus (Phytobenthos)	CFU/g dry	Results 1386
2,	Total count (Phytobenthos)	50 mg wet sediment	258
3.	No of species (Phytobenthos)	Nos.	3
4.	Diversity index (Phytobenthos)		
5.	( systematics)	100	1.22
	Major Species (phytobenthos)	. Its	Biddulphia mobilensis.
6.	Name of Phylum (Fauna)	100	Annelida, Mollusca
7.	Class & Number of individuals encountered (Fauna)		Plychacta-52,Bivalvia-39
8.	Total no. of species encountered (Fauna)	Nos.	22
9.	Total fauna (Fauna)	per m <sup>3</sup>	180

Report Prepared by:

BBSR E

For Mitra S.K. Private Limited



N-5/100, Ground Floor IRC Village: Nayapell Bhubaneswar - 751016 [CIN: U51909WB1958PTC023037]

T : (0€74) 2362916, 2360917

F: (0874) 2362918

### TEST REPORT

Name & Address of the Customer : THE DHAMRA PORT COMPANY LIMITED

AT: DOSINGA, PO: DHAMRA

DIST : BHADRAK, PIN: 756171 ODISHA

Report No.: BBS/821 Date: :01.02.2022

Sample No.: MSKGL/ED/2020-21/01/01043

Sample Description : Sea Sediment

Sampling Location: Dredging Disposal Site

Date of sampling : 03.01.2022

#### ANALYSIS RESULT

SI. No.	Parameters	Unit	Test Method	Result
1.	pH value	None	IS 2720 (Part 26)-1987;Rffm:2011	8.04
2.	Electrical Conductivity	us/cm	IS 3025 (Part 14)-1984;Rffm:2006	7830.0
3.	Organic Matter	96	IS 2720 (Part 22)-1972; Rffin:2015	0.79
4.	Turbidity	N.T.U	APHA (23rd Edition) 2130B	312.0
5.	Moisture content	%	Lab Method	35.0
6.	Chloride (as CI)	mg/kg	TPM/MSK/P&E/1/10	4100.0
7.	Sulphate (as SO4)	mg/kg	IS 2720 (Part 27) 1977,RA 2015	743.0
8.	Sulphide (as S)	mg/kg	TPM/MSK/P&E/1/43	<5.0
9.	Phosphate (as PO4)	mg/kg	TPM/MSK/P&E/1/12	23.0
10.	Phosphorus	mg/kg	TPM/MSK/P&E/1/12	214,0
11.	Iron (as Fe)	mg/kg	TPM/MSK/P&E/1/13	378.0
12.	Sodium (as Na)	mg/kg	TPM/MSK/P&E/1/4	4414.0
13.	Potassium (as K)	mg/kg	TPM/MSK/P&E/1/5	703,0
14.	Copper (as Cu)	mg/kg	EPA 6010D	-0.2
15.	Nickel (as Ni)	mg/kg	EPA 6010D	26.0
6,	Zinc (us Zn)	mg/kg	EPA 6010D	42.0
7.	Manganese (as Mn)	mg/kg	EPA 6010D	27.0 355.0

### Continuation Sheet



### Ref. No. BBS/821

Date- 01.62,2022

18.	Lead (as Pb)	mg/kg	EPA 6010D	198603
19.	Boron (as B)	mg/kg		10.0
20.	Aluminium ( as A) )		IS 13428- 2005, Annex H	<5.0
21.		mg/kg	EPA 6010D	6250.0
	Total Chromium (as Cr)	mg/kg	EPA 6010D	32.0
22.	Total Nitrogen (as N)	mg/kg	IS 14684 (1999); Rffm:2014	577.0
23.	Organic Nitrogen	mg/kg	TPM/MSK/P&E/3/68	543.0
24.	Total Petroleum Hydrocarbon	mg/kg	USEPA 8015 B - Dec, 1996, 8270 D -	<0.05
25.	Pesticide Residue	mg/kg	Feb.2007 USEPA 3540 C USEPA 8082	
26.	Sand	%		<0.5
27.	Silt	%	TPM/MSK/P&E/1/36A	46.0
28.	Texture	-	TPM/MSK/P&E/1/36A	29.0
9.		None	TPM/MSK/P&E/1/36A	Loam
24	Clay	96	TPM/MSK/P&E/1/36A	25.0

### Biological Result

SI No.	Parameters	Unit	
1.	Fungus (Phytobenthos)	CFU/g dry	1405
2.	Total count (Phytobenthos)	50 mg wet sediment	296
3.	No of species (Phytobenthos)	Nos.	6
4.	Diversity index (Phytobeathes)	-	1.77
S.	Major Species (phytobenthos)	444	SANGER STATE OF THE STATE OF TH
6.	Name of Phylum (Fauna)	-	Navicula closterhan
7.	Class & Number of individuals encountered (Fauna)		Annelida, Mollusca
	Total no. of species encountered (Fauna)	Nos.	Plychaeta-60,Bivalvin-24
	Total fauna (Fauna)	per m <sup>f</sup>	180

Report Prepared by:

BBSR E

Fer Mitra S.K. Private Limited



N-5/100, Ground Floor IRC Villege, Nayspati Boubansswar - 751015

[CIN: U51909WB1956PT0023037]

T : (0674) 2362916, 2360917 F : (0674) 2362918

### TEST REPORT

Name & Address of the Customer: THE DHAMRA PORT COMPANY LIMITED

AT: DOSINGA, PO: DHAMRA

DIST : BHADRAK, PIN: 756171 ODISHA

Report No. : BBS/823 Date : 01.02.2022

Sample No. : MSKGL/ED/2020-21/01/00801

Sample Description: Sea Sediment Sampling Location: Dredging Area Date of sampling: 17.01.2022

#### ANALYSIS RESULT

Sl. No.	Parameters	Unit	- Test Method	Result
1,	pH value	None	IS 2720 (Part 26)-1987;Rffm:2011	7.81
2.	Electrical Conductivity	us/cm	IS 3025 (Part 14)-1984;Rffm:2006	12900.0
3.	Organic Matter	%	IS 2720 (Part 22)-1972; Rffm:2015	0.91
4.	Turbidity	N.T.U	APHA (23 <sup>rd</sup> Edition) 2130B	285.0
5.	Moisture content	%	Leb Method	40.0
6.	Chloride (as Cl )	nig/kg	TPM/MSK/P&E/1/10	8600.0
7.	Sulphate (as SO4)	mg/kg	IS 2720 (Part 27) 1977,RA 2015	952.0
8.	Sulphide (as S)	mg/kg	TPM/MSK/P&E/1/43	<5.0
9.	Phosphate (as PO4)	mg/kg	TPM/MSK/P&E/1/12	19.0
10.	Phosphorus	mg/kg	TPM/MSK/P&E/1/12	212.0
11.	Iron (as Fe)	mg/kg	TPM/MSK/P&E/1/13	449.0
12.	Sodium (as Na)	mg/kg	TPM/MSK/P&E/1/4	7687.0
13.	Potassium (as K)	mg/kg	TPM/MSK/P&E/1/5	1092.0
14.	Copper (as Cu)	mg/kg	EPA 6010D	31.0
15.	Nickel (as Ni)	mg/kg	EPA 6010D	39.0
16.	Zinc (as Zn)	mg/kg	EPA 6018D	41.0
17.	Manganese (as Mn)	mg/kg	EPA 6010D	521.0



#### Ref. No. BBS/823

Date- 01.02.2022

18.	Lead (as Pb)	mg/kg	EPA 6010D	21.0
19.	Boron (as B)	mg/kg	IS 13428- 2005, Annex II	21.0
20.	Aluminium (es Al.)	mg/kg	EPA 6010D	<5.0 7566.0
21.	Total Chromium (as Cr)	mg/kg	EPA 6010D	35.0
22.	Total Nitrogen (as N)	mg/kg	IS 14684 (1999); Rffm:2014	627,0
23.	Organic Nitrogen	mg/kg	TPM/MSK/P&E/3/68	571.0
24.	Total Petroleum Hydrocarbon	mg/kg	USEPA 8015 B - Dec, 1996, 8270 D - Feb, 2007	<0.05
25.	Pesticide Residue	mg/kg	USEPA 3540 C USEPA 8082	<0.5
26.	Sand	%	TPM/MSK/P&E/1/36A	44.0
27.	Silt	96	TPM/MSK/P&E/1/36A	20.0
28.	Texture	None	TPM/MSK/P&B/1/36A	Clay Loam
29.	Clay	%	TPM/MSK/P&E/1/36A	36.0

### Biological Result

SI No.	Parameters	Unit	W. V. V.
1.	Fungus (Phytobenthos)	CFU/g dry	Results 1422
2.	Total count (Phytobenthos)	50 mg wet sediment	256
3.	No of species (Phytobenthos)	Nos.	6
4.	Diversity index (Phytobenthos)		1.49
5.		-	1.49
	Major Species (phytobenthos)		Nitschia distans,
6.	Name of Phylum (Fauna)		Annelida, Mollusca
7.	Class & Number of individuals encountered (Fauna)		Plychneta-49,Bivalvia-14
8.	Total no. of species encountered (Fauna)	Nos.	12
9.	Total fauna (Fauna)	per m <sup>3</sup>	180

Report Prepared 17:

For Mitra S.K. Private Limited



N-5/100, Ground Floor IRG Village, Nayapalii Bhubaneswar - 751015 [CIN: U51939WB1966PT0023037]

T: (0674) 2382916, 2360917

F: (0674) 2362918

## TEST REPORT

Name & Address of the Customer; THE DHAMRA PORT COMPANY LIMITED

AT: DOSINGA, PO: DHAMRA

DIST: BHADRAK, PIN: 756171 ODISHA

Report No. : BBS/822 Date : 01.02.2022

Sample No.: MSKGL/ED/2020-21/01/01463

Sample Description : Sea Sediment

Sampling Location : Dredging Disposal Site

Date of sampling : 17.01.2022

#### ANALYSIS RESULT

Sl. No.	<u>Parameters</u>	Unit	Test Method	Result
1.	pH value	None	IS 2720 (Part 26)-1987;Rffm:2011	7.77
2.	Electrical Conductivity	us/cm	IS 3025 (Part 14)-1984;Rffin:2006	13105.0
3.	Organic Matter	36	IS 2720 (Part 22)-1972; Rffm:2015	0.79
4.	Turbidity	N.T.U	APHA (23rd Edition) 2130B	232.0
5,	Moisture content	%	Lab Method	37.0
6.	Chloride (as Cl.)	mg/kg	TPM/MSK/P&E/1/10	9260,0
7.	Sulphate (as SO4)	mg/kg	IS 2720 (Part 27) 1977,RA 2015	896.0
8,	Sulphide (as S)	mg/kg	- TPM/MSK/P&E/1/43	<5.0
9.	Phosphate (as PO4)	mg/kg	TPM/MSK/P&E/1/12	24.0
10.	Phosphorus	mg/kg	TPM/MSK/P&E/1/12	289.0
11.	Iron (as Fe)	mg/kg	TPM/MSK/P&E/1/13	503.0
12.	Sodium (as Na)	mg/kg	TPM/MSK/P&E/1/4	8023.0
13.	Potassium (as K)	mg/kg	TPM/MSK/P&E/1/5	937.0
14.	Copper (as Cu)	mg/kg	EPA 6010D	36.0
15.	Nickel (as Ni)	mg/kg	EPA 6010D	36,0
16.	Zinc (as Zn)	mg/kg	EPA 6010D	35.0
17.	Manganese (as Mn)	mg/kg	EPA 6010D	477.0



Ref. No. BBS/822

THE SOURCE DATE OF THE SECOND	MARKET LINES AND AND ADDRESS OF
Phone Dr.	02.2022
8,815000 = 8,77	CHOCK SHEEK

1.00	And the second second	Towns Comment	17.00	e- 01.02.2022
18.	Lead (as Pb)	mg/kg	EPA 6010D	16,0
19,	Boron (as B)	mg/kg	IS 13428- 2005, Annex H	<5.0
20.	Aluminium ( as Al )	mg/kg	EPA 6010D	7956.0
21.	Total Chromium (as Cr)	mg/kg	EPA 6010D	28.0
22.	Total Nitrogen (as N)	mg/kg	IS 14684 (1999); Rffm:2014	594.0
23.	Organic Nitrogen	mg/kg	TPM/MSK/P&E/3/68	554,0
24.	Total Petroleum Hydrocarbon	mg/kg	USEPA 8015 B - Dec, 1996, 8270 D - Feb, 2007	<1.0
25.	Pesticide Residue	mg/kg	USEPA 3540 C USEPA 8082	<0.5
26.	Sand	%	. TPM/MSK/P&E/1/36A	45.0
27.	Silt	%	TPM/MSK/P&E/1/36A	22.0
28.	Texture	None	TPM/MSK/P&E/1/36A	Clay Loam
29.	Clay	%	TPM/MSK/P&B/1/36A	33.0

### Biological Result

SI No.	Parameters	Unit	
15	Fungus (Phytobenthos)	CFU/g dry	Results 1644
2.	Total count (Phytobenthios)	50 mg wet sediment	242
3.	No of species (Phytobenthos)	Nos.	7
4.	Diversity index (Phytobenthos)	1409.	
5.	( ayananing)	1	1.92
	Major Species (phytobenthos)		Coscinodiscus sp.
6.	Name of Phylum (Fauna)		Annelida, Mollusca
7.	Class & Number of individuals encountered (Fauna)	-	Plycheeta-57, Bivalvia-28
8.	Total no. of species encountered (Fauna)	Nos.	22
9.	Total fauna (Faune)	per m <sup>1</sup>	228

C. Konny Report Prepared by:



For Mitra S.K. Private Limited



Ref: MSKGL/ED/BHU-2021/002001

Date: 01.02.2022

# Site Specific Monitored Meteorological Data

For: The Dhamra Port Company Limited, Dosinga, Bhadrak, Odisha

Sr. No.	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	rameters	January.22
1		Minimum	15.1
1.	Temperature ( °C)	Maximum	29.2
_		Average	20.9
2	2/2020/08/09/09	Minimum	33.0
2,	Relative Humidity (%)	Maximum	99.5
		Average	69.8
	2007/00/00 10:00 10:00	Minimum	0.0
3.	Wind Speed (m/s)	Maximum	11.4
		Average	3.0
1.	Wind Direction (%)	N	4.9
		NNE	6.8
		NE	11.4
		ENE	2.7
		E	3.2
		ESE	2.8
		SE	15.4
		SSE	6.3
. 1		S	9.11
- 1		SSW	10.6
		SW	2.56
- 1		WSW	8.4
. 1		W	5.2
		WNW	3.1
		CALM	7.53
	2/3/40	Total	28.0
Rainf	Rainfall (mm)	Minimum Day Wise	0.0
		Maximum Day Wise	7.6
-		Average	0.03
	AVER NEW YORK	Minimum	746.8
	Ambient Pressure (mm Hg)	Maximum	758.7
	The second secon	Average	752.0
ree-	Site Specific Data)		152.0

Prepared By

Verified By

# DEBEWINE ZUZI

Directed by

## THE DHAMRA PORT COMPANY LIMITED



Logistics

AT : DOSINGA, PO : DHAMRA DIST-BHADRAK, PIN : 756171 ODISHA

Conducted by

M/s. Mitra S. K. Private Limited



Shrachi Centre (5<sup>th</sup> Floor) 74B, Acharya Jagadish Chandra Bose Road Kolkata - 700016 (West Bengal)



N-5/100, Ground Floor IRC Village, Neyspell Bhubaneswar - 751015 [CIN: U51989WB1956PTC023037]

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Report No: BBS/500A

Date: 01.01,2022

#### AMBIENT AIR QUALITY MONITORING REPORT

Client Name & Address	M/s The Dhamra Port Company Limited, Dosinga, Bhadrak, Odisha
Work Order No.	4802006186
Reference No.	MSKGL/ED/2020-21/002738
Type of Sample	Ambient Air Sample
Sampling Location	Colony Area
Sampling Done by	Mr. Kunja Bihari Nayak
Sampling Duration	24hrs
Monitoring Instrument	RDS (APM 860), FPS (APM 154) Lata Envirotech, CO Analyzer & VOC Sampler

100000		2	united and			PAI	RAMETER	S	J. Com			
Date	PM <sub>86</sub> (pg/m <sup>3</sup> )	PM <sub>2A</sub> (µp/m²)	50 <sub>1</sub> (pp/m²)	NOs (ag/m²)	CO (mg/m²)	NH <sub>3</sub> (pg/m²)	Os (ng/m²)	Ph (ngin')	Ni (ng/m²)	As (ng/m³)	Calls (µg/m²)	EaP (ng/m²)
01.12,2021	46.00	23.40	6.40	16.00	0.71	12.80	<20.0	<0.01	<5.0	<1.0	<4.2	<0.5
06.12.2021	42.60	20.00	6.90	22.70	0.62	19.52	<20.0	<0.01	<5.0	<1.0	<4.2	< 0.5
08.12.2021	41.00	24.00	7.50	28.00	0.54	25.80	<20.0	<0.01	<5.0	<1.0	44.2	<0.5
12.12.2021	43.20	22.70	6.70	19.70	0.48	17.61	<20.0	<0.01	<5.0	<1.0	<4.2	< 0.5
15.12.2021	40.80	26:00	7.63	26.74	0.80	24.18	<20.0	<0.01	<5.0	<1.0	<4.2	<0.5
19.12.2021	44.00	21.40	7.22	23.56	0.77	20.12	<20.0	<0.01	<5.0	<1.0	<4.2	< 0.5
22,12.2021	45.20	24.36	6.19	20.15	0.41	16.75	<20.0	<0.01	<5.0	<1.0	<4.2	<0.5
26.12.2021	42.80	25.61	7.89	28.71	0.90	26.56	<20.0	< 0.01	<5.0	<1.0	<4.2	<0.5
29.12.2021	45.60	21.26	6.25	21.69	0.61	14.29	<20.0	<0.01	<5.0	<1.0	<4.2	<0.5
Monthly M.verage	43.58	23.19	6.96	23.02	0.65	19.73	<20.0	<0.01	<5.6	<1.0	<4.2	<0.5
CPCB, New Delhi AAQ Standard	100	60	80	80	4	400	180	1	20	6	5	1
Time Weighted Average (hrs.)	24	24	24	24	1	24	1	24	Annual	Annual	Annual	Ansoal
TEST METHOD	IS 5182: Part 23:20 06 (Reaff 2012	1S 5182: Part 24:201 9	IS 5182 : Part 2 :200 1 (Reaff, 2012	IS 5182 : Part 6 :200 6 (Reaff, 2012)	IS 5182 : Part 10 :1999 (Reaff,20 14)	IS 5182: Part 25:201 8	IS 5182: Part 89:197 4	EPA - IO3.4J noc,19 99	EPA - 103,4Ju ne,1999	EPA - 103.4Ju nc <sub>s</sub> 1999	1S:5182( Part- 11):2006 Reaff,20 12	18:5182( Part- 12):2004 Reaff,: 2014

N.B. \*NAAQ- National Ambient Air Quality Standard as per 18th Nov. 2009 Gatt. Notification

S. Kanga Prepared By BBSR 5

Cuecked By-

MSK TESTING INSPECTION

N-5/100, Ground Floor IRC Village, Nayapalli Bhubaneswar - 751015

[CIN: U51909WB1956PTC023037]

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Report No: BBS/500B

Date: 01.01.2022

#### AMBIENT AIR QUALITY MONITORING REPORT

Client Name & Address	M/s The Dhamra Port Company Limited, Dosinga, Bhadrak, Odisha
Work Order No.	4802006186
Reference No.	MSKGL/ED/2020-21/002738
Type of Sample	Ambient Air Sample
Sampling Location	Kanak Prasad Village
Sampling Done by	Mr. Kunja Bihari Nayak
Sampling Duration	24hrs
Monitoring Instrument	RDS (APM 860), FPS (APM 154) Lata Envirotech, CO Analyzer & VOC Sampler

	_				101	FAI	RAMETER	S			eu-	W
Date	PMo (µg/m²)	PM <sub>1.5</sub> (µg/m²)	SO <sub>2</sub> (µg/m²)	NO <sub>3</sub> (µg/m²)	CO (mg/m²)	NH <sub>2</sub> (pg/m <sup>2</sup> )	(µg/m²)	Pb (ug/m²)	Ni (ng/m <sup>5</sup> )	As (ng/m²)	CaBe (up/m²)	BaP (ng/m²)
01.12.2021	48,20	16.62	7.54	26.49	0.47	25.10	<20.0	<0.01	<5.0	<1.0	<4.2	< 0.5
06.12.2021	40.56	22.81	6.47	16.78	0.60	12.88	<20.0	<0.01	<5.0	<1.0	<4.2	<0.5
08.12.2021	47.00	32.11	7.09	23.89	0.57	21.74	<20.0	< 0.01	<5.0	<1.0	<4.2	<0.5
12.12.2021	44.60	28.55	7.88	29.08	0.81	25.97	<20.0	<0.01	<5.0	<1.0	<4.2	<0.5
15.12.2021	45.24	18.37	6.79	20.14	0.76	14.77	<20.0	<0.01	<5.0	<1.0	<4.2	<0.5
19.12.2021	43.61	24.57	6.45	18.22	0.63	13.47	<20.0	< 0.01	<5.0	<1.0	<4.2	<0.5
22.12.2021	45.80	20.29	7.19	25.33	0.87	20.78	<20.0	<0.01	<5.0	<1.0	<4.2	<0.5
26.12.2021	46.00	26.79	6.97	19.85	0.54	16.66	<20.0	< 0.01	<5.0	<1.0	<4.2	<0.5
29.12.2021	49.58	24.78	7.69	30.29	0.97	27.63	<20.0	< 0.01	<5.0	<1.0	<4.2	<0.5
Monthly Average	45.62	23.88	7,12	23.34	0.69	19.89	<20.0	< 0.01	×5.0	<1.0	<4.2	<0.5
CPCB, New Bellsi AAQ Standard	100	60	80	80	4	400	180	1	20	6	5	ī
Time Weighted Average (hrs.)	24	24	24	24	1	24	1	24	Annoal	Angual	Annual	Annual
TEST METHOD	1S 5182: Part 23:29 06 (Reaff . 2012	IS 5182: Part 24:201 9	IS 5182 : Part 2 :206 1 (Reaff, 2012	IS 5182 : Part 6 :200 6 (Reaff, 2012)	IS 5182 : Part 10 :1999 (Reaff,20 14)	IS 5182: Part 25:201 8	18 5182: Part 09:197 4	EPA - 103.4J une,19 99	EPA - 103.4Ju ne,1999	EPA - 103.4Ju ne <sub>3</sub> 1999	IS:S182( Part- 11):2006 Reaff,20 12	IS:5182: Pairt- 12)r2084 Reaff,: 2014

N.B. \*NAAQ- National Ambient Air Quality Standard as per 18th Nov. 2009 Gatt. Notification

J. Karngs Prepared By - F BBSR W

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N-5/100, Ground Floor IRC Village, Nayapali Bhubaneawar - 751015 ICIN: U51909WB1956PTC023037I

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Report No: BBS/500C

Date: 01.01.2022

### AMBIENT AIR QUALITY MONITORING REPORT

Client Name & Address	M/s The Dhamra Port Company Limited, Dosinga, Bhadrak, Odisha
Work Order No.	4802006186
Reference No.	MSKGL/ED/2020-21/002738
Type of Sample	Ambient Air Sample
Sampling Location	Near BMB
Sampling Done by	Mr. Kunja Bihari Nayak
Sampling Duration	24hrs
Monitoring Instrument	RDS (APM 860), FPS (APM 154) Lata Envirotech, CO Analyzer & VOC Sampler

						PAI	RAMETER	8	S	Carrie	u-	
Date	PM <sub>0</sub> (µg/m²)	PM <sub>65</sub> (µg/m <sup>5</sup> ).	SO <sub>2</sub> (µg/m²)	NOx (ug/m³)	CO (mg/m²)	NB <sub>3</sub> (µg/m²)	О <sub>3</sub> (µg/m³)	Pb (µg/m²)	Ni (ng/m³)	As (ng/m²)	CaRs (jeg/ur²)	BaP (eg/ss <sup>2</sup> )
01.12.2021	54,21	35.64	7.72	28.65	0.87	26.53	<20.0	<0.01	<5.0	<1.0	<4.2	<0.5
06.12.2021	61.19	30,29	7.10	19.87	0.68	15.47	<20.0	<0.01	<5.8	<1.0	<4.2	<0.5
08.12.2021	52.45	31.48	6.59	20.19	0.55	18.75	<20.0	<0.01	<5.0	<1.0	<4.2	<0.5
12.12.2021	55.71	38.09	7.81	27.98	0.74	25.14	<20.0	<0.01	<5.0	<1.0	<4.2	< 0.5
15.12.2021	59.02	31.56	6.91	23,09	0.67	20.51	<20.0	<0.01	<5.0	<1:0	<4.2	<0.5
19.12.2021	57.23	24.60	8.12	29.36	0.81	27.46	<20.0	<0.01	<5.0	<1.0	<4.2	<0.5
22.12.2021	59.00	33.56	7.89	26.15	0.77	22.13	<20.0	< 0.01	<5.0	<1.0	<4.2	<0.5
26.12.2021	58.29	39.78	8.94	35.46	0.68	30.21	<20.0	<0.01	<5.0	<1.0	<4.2	<0.5
29.12.2021	57.00	32.15	7.45	26.18	0.66	23.17	<20.0	< 0.01	<5.0	<1.6	<4.2	<0.5
Monthly	57,12	33.01	7.61	26,32	0.71	23.26	<20.0	<0.01	<5.8	<1.8	<4.2	<0.5
CPCB, New Delhi AAQ Standard	100	60	80	80	4	400	180	1	20	6	5	F
Time Weighted Average (hrs.)	24	24	24	24	1	24	1	24	Annual	Annual	Annual	Annual
TEST METHOD	IS 5182: Part 23:20 06 (Reaf f. 2012	IS 5182: Part 24:20 19	IS 5182: Part 2:200 1 (Reaff .2012	IS 5182 : Part 6 :200 6 (Reaff ,2012)	IS 5182 : Part 10 :199 9 (Reaff.2 014)	JS 5182: Part 25:20 18	IS 5182: Part 09:19 74	EPA - 103.4 June, 1999	EPA - 103.4Ju ns,1999	EPA - 103.4Ju ne,1999	IS:5182 (Part- 11):200 6 Reaff,2 012	IS:5182 (Part- 12):200 4 Reaff,: 2014

N.B. \*NAAQ- National Ambient Air Quality Standard as per 18th Nov. 2009 Gatt. Notification

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()MSK

N-5/100, Ground Floor IRC Village, Nayspetti Bhubaneswar - 751015 ICIN: U51909WB1956PTC023037]

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Report No: BBS/500D

Date: 01.01.2022

### AMBIENT AIR QUALITY MONITORING REPORT

Client Name & Address	M/s The Dhamra Port Company Limited, Dosings, Bhadrak, Odisha
Work Order No.	4802006186
Reference No.	MSKGL/ED/2020-21/002738
Type of Sample	Ambient Air Sample
Sampling Location	Near Jetty
Sampling Done by	Mr. Kunja Bihari Nayak
Sampling Duration	24hrs
Monitoring Instrument	RDS (APM 860), FPS (APM 154) Lata Envirotech, CO Analyzer & VOC Sampler

	-				7	PAI	RAMETER	S				
Detc	PM <sub>10</sub> (pg/m²)	PM <sub>ki</sub> (µg/m²)	80; (pg/m²)	NOx (ug/m³)	(mg/m³)	NIIb (pg/m²)	Co (mg/m²)	Pb (µg/m²)	NI (ng/m³)	As (og/or <sup>3</sup> )	CeHe (ug/m²)	BaP (ng/m²)
01.12.2021	59.82	38.91	7.95	25.72	0.65	22.63	<20.0	< 0.01	\$5.0	<1.0	<4.2	<0.5
06.12.2021	56.52	35.78	7.85	29.06	0.62	26.19	<20.0	<0.01	<5.0	<1.0	<4.2	<0.5
08.12.2021	59.53	37.65	7.38	22.68	0.74	20.70	<20.0	<0.01	<5.0	<1.0	<4.2	<0.5
12.12.2021	68.81	30.21	8.36	38.40	0.59	36.31	<20.0	<0.01	<5.0	<1.0	<4.2	<0.5
15,12,2021	59,23	30.74	7.18	18.80	0.67	15.24	<20.0	<0.01	<5.0	<1.0	<4.2	<0.5
19.12.2021	60.26	38.97	8.12	35.39	0.69	30.25	<20.0	<0.01	<5.0	<1.0	<4.2	< 0.5
22.12.2021	59.42	39.61	8.66	34.15	0.78	32.47	<20.0	<0.01	<5.0	<1.0	<4.2	<0.5
26.12.2021	57,14	33.64	7.41	25.63	0.54	21.58	<20.0	<0.01	<5.0	<1.0	<4.2	<0.5
29.12.2021	58.90	34.21	7.98	23.57	0.71	19.87	<20.0	< 0.01	<5.0	<1.0	<4.2	<0.5
Monthly Average	59.96	35.52	7.88	28.15	0.66	25.02	<20.0	<0.01	<5.0	<1.0	<4.2	<0.5
CPCB, New Delhi AAQ Standard	100	60	80	80	4	400	180	1	20	6	5	1
Time Weighted Average (hrs.)	24	24	24	24	1	24	1	24	Annual	Annual	Annual	Annual
TEST METHOD	1S 5182; Part 23:20 06 (Reaf f. 2012	IS 5182: Part 24:20 19	IS 5182 : Part 2 :200 1 (Reaff .2012	IS 5182: Part 6:200 6 (Reaff .2012)	IS 5182: Part 10:199 9 (Resff.2 014)	18 5182: Part 25:20 18	18 5182: Part 09:19 74	EPA - 103.4 June, 1999	EPA - IO3,4Ju no,1999	EPA - 103,4Ju nc,1999	IS:5182 (Part- 11):200 6 Reaff,2 012	IS:5182 (Part- 12):200 4 Reaff,: 2014

N.B- \*NAAQ- National Ambient Air Quality Standard as per 18th Nov. 2009 Gett. Notification

S. Kango

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N-5/100, Ground Floor IRC Village, Neyspalli Bhubaneswar - 751015

[CIN: U51909WB1956PTC023037]

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Report No: BBS/500E

Date: 01.01.2022

### AMBIENT AIR QUALITY MONITORING REPORT

Client Name & Address	M/s The Dhamra Port Company Limited, Dosinga, Bhadrak, Odisha
Work Order No.	4802006186
Reference No.	MSKGL/ED/2020-21/002738
Type of Sample	Ambient Air Sample
Sampling Location	Dosinga Village
Sampling Done by	Mr. Kunja Bihari Navak
Sampling Duration	24hrs
Monitoring Instrument	RDS (APM 860), FPS (APM 154) Lata Envirotech, CO Analyzer & VOC Sampler

	PARAMETERS											
Date	PMa (ug/m²)	PM <sub>25</sub> (µg/m³)	SO <sub>2</sub> (μg/m <sup>2</sup> )	NOx (µg/m²)	CO (mg/m²)	NH <sub>3</sub> (µg/m <sup>2</sup> )	O <sub>3</sub> . (1/8/m²)	Pb (µg/m²)	Ni (ug/m²)	As (eg/m²)	C <sub>4</sub> H <sub>4</sub> (µg/m²)	BaP (ng/m²)
01.12.2021	54.73	26.49	7.19	22.63	0.74	19.84	<20.0	<0.01	<5.0	<1.0	<4.2	<0.5
06.12.2021	58.05	38.23	7.71	28.80	0.85	27.22	<20.0	<0.01	<5.0	<1.0	<4.2	<0.5
08,12,2021	49.79	36.54	7.48	26.75	0.66	21.51	<20.0	<0.01	<5.0	<1.0	<4.2	<0.5
12.12.2021	53.32	23.82	6,47	16.47	0.57	13.61	<20.0	<0.01	<5.0	<1.0	<4.2	< 0.5
15.12,2021	50.62	35.12	6.91	27.50	0.46	24.09	<20.0	<0.01	<5.0	<1.0	<4.2	<0.5
19.12.2021	47.89	22.46	6.34	18.78	0.40	14.62	<20.0	< 0.01	<5.0	<1.0	<4.2	v0.5
22.12.2021	52.13	28.96	6.88	27.81	0.69	24.32	<20.0	< 0.01	<5.0	<1.0	<4.2	<0.5
26.12.2021	54.28	37.63	8.15	33.47	0.80	31.28	<20.0	<0.01	<5.0	<1.0	<4.2	<0.5
29.12.2021	50.47	24.12	7.22	20.84	0.91	15.83	<20.0	< 0.01	<5.0	<1.0	<4.2	<0.5
Monthly Average	52,36	30,37	7.15	24.78	0.67	0.69	<20.0	< 0.01	<5.0	<1.0	<4.2	<0.5
CPCB, New Della AAQ Standard	100	60	80	80	4	400	180	1	20	6	5	1
Time Weighted Average (brs.)	24	24	24	24	1	24	1	24	Annual	Annual	Anneal	Annual
TEST METROD	IS 5182: Part 23:20 06 (Reaf f. 2012	IS 5182: Part 24:20 19	IS 5182: Part 2:200 1 (Reaff ,2012	IS 5182: Part 6:200 6 (Reaff .2012)	IS 5182: Part 10:199 9 (Reaff.2 014)	IS 5182: Part 25:20 18	1S 5182: Part 09:19 74	EPA - 103.4 June, 1999	EPA - 103.4Ju ne,1999	EPA - IO3.4Ju ne,1999	IS:5182 (Part- 11):200 6 Reaff,2 012	IS:5182 (Part- 12):200 4 Reaff,: 2014

N.B. \*NAAQ- National Ambient Air Quality Standard as per 18th Nov. 2009 Geft. Notification

S.Kanzi Prepared By-J BBSR B

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MSK TESTINGO INSPECTION

N-5/100, Ground Floor IRC Village, Nayapelli Bhubaneswar - 751015

[CIN: U51909WB1956PTC023037]

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Report No: BBS/S00F

Date: 01.01.2022

### AMBIENT AIR QUALITY MONITORING REPORT

Client Name & Address	M/s The Dhamra Port Company Limited, Dosinga, Bhadrak, Odisha
Work Order No.	4802006186
Reference No.	MSKGL/ED/2020-21/002738
Type of Sample	Ambient Air Sample
Sampling Location	Near Bhitarkanika
Sampling Done by	Mr. Kunja Bihari Nayak
Sampling Duration	24hrs
Monitoring Instrument	RDS (APM 860), FPS (APM 154) Lata Envirotech, CO Analyzer & VOC Sampler

						PAI	RAMETER	5	E9 = -	35		(E) (H)
Date	PM <sub>th</sub> (pg/m²)	PM <sub>15</sub> (pg/m²)	SO <sub>2</sub> (µg/m²)	NOx (µg/m²)	(mg/m²)	NH <sub>3</sub> (sg/m <sup>2</sup> )	Ο <sub>2</sub> (με/m²)	Pb (µg/ni²)	Ni (ng/m²)	As (ng/m²)	C <sub>s</sub> H <sub>s</sub> (µp/m²)	BaP (og/m <sup>3</sup> )
01,12,2021	50.91	26.03	6.62	18.99	0.58	12.61	<20.0	<0.01	<5.0	<1.0	<4.2	<0.5
06.12.2021	42.14	23.32	7.28	23,47	0.61	19.52	<20.0	<0.01	<5.0	<1.0	<4.2	<0.5
08,12,2021	41.73	26.54	6.79	18.47	0.45	15.24	<20.0	<0.01	<5.0	<1.0	<4.2	<0.5
12.12.2621	42.59	24.96	7.92	25.69	0.73	22.82	<20.0	< 0.01	<5.0	<1.0	×4.2	<0.5
15.12.2021	45.70	29.93	6.58	18.97	0.43	14.96	<20.0	< 0.01	<5.0	<1.0	<4.2	<0.5
19.12,2021	48.75	22.13	6.32	16.18	0.66	12.36	<20.0	<0.01	<5.0	<1.0	<4.2	<0.5
22.12.2021	40.47	25.31	6.87	20.16	0.79	17.22	<20.0	<0.01	<3.0	<1.0	<4.2	<0.5
26,12,2021	44,63	20.17	6.19	24.13	0.40	11.66	<20.0	<0.01	<5.0	<1.0	<4.2	<0.5
29.12.2021	50.32	20.78	6.65	26.45	0.84	23.41	<20.0	< 0.01	<5.0	<1.0	<4.2	<0.5
Monthly Average	45.24	24.35	6.80	21.39	0.61	16.64	<20.0	<0.01	<5.0	<1.0	<4.2	<0.5
CPCB, New Delbi AAQ Standard	100	60	80	80	4	400	180	1	29	6	5	1
Time Weighted Average (hrs.)	24	24	24	24	i.	24	1	24	Acnust	Annual	Annual	Annual
TEST METHOD	IS 5182: Part 23:20 06 (Reaf £ 2012	IS 5182: Part 24:20 19	1S 5182: Part 2:200 1 (Reuff ,2012	1S 5182 : Part 6 :200 6 (Reaff .2012)	IS 5182: Part 10:199 9 (Reaff.2 014)	IS 5182: Part 25:20 18	IS 5182: Part 09:19 74	EPA - 103.4 June, 1999	EPA - 103.4Ju ne <sub>2</sub> 1999	EPA - 103.4.Ju ne,1999	IS:5182 (Part- 11):200 6 Reaff.2 012	IS:5182 (Part- 12):200 4 Reaff,: 2014

N.B. \*NAAQ- National Ambient Air Quality Standard as per 18th Nov. 2009 Gatt. Notification

S. Karney Prepared By BBSR B

Checked By-

M5K

N-5/100, Ground Floor IRC Village, Nayapatil Bhubaneswar - 751015 ICIN: U51909/WB1956PTC0230371

T: (0674) 2362916, 2360917

F: (0674) 2382918

### TEST REPORT

Name & Address of the Customer:

THE DHAMRA PORT COMPANY LIMITED.

AT : DOSINGA, PO : DHAMRA

DIST: BHADRAK, PIN:756171 ODISHA

Report No.: BBS/509 Date: 01.01.2022

Sample No.: MSKGL/ED/2020-21/12/00900

Sample Description: Ambient Noise

#### Noise Level Monitoring Data

SI.	Sampling	Sampling	Day Leq. Time	e dB(A)	Night Time Leq. dB(A)		
No	Date	Location	Results	LIMIT	Results	LIMIT	
1.	04.12.2021	Colony Area (R)	47.3	55	44.1	45	
2.	07.12.2021	Kanak Prasad Village (R)	42.7	55	38.6	45	
3.	11.12.2021	Near BMH (I)	58.4	75	52.9	70	
4,	13.12.2021	Near Jetty (I)	70.6	75	64.2	70	
5.	18.12.2021	Dosinga Village (R)	49.2	55	42.6	45	
6.	20.12.2021	Near Bhitarkanika ( Eco Sensitive Zone)	42.3	50	37.8	40	

		Noise Limit as per CF	CB		
Category of Area/Zone	Leq dB(A) Day Time	Leq dB(A) Night Time	NOTE:		
Industrial Area	75	70	Day Time: 06.00 Hr22.00 Hr.		
Commercial Area	65	55	Night Time:22,00 Hr06,00 Hr.		
Residential Area	55	45			
Silence Zone	50	40			

S. Kange Report Prepared by:

BBSR B

For Mitra Sok, Private Limited

N-5/100, Ground Floor IRC Village, Nayapalli Bhubaneswar - 751015

[CIN: U51909WB1956PT0023037]

T: (0£74) 2362916, 2360917

F: (0874) 2362918



#### TEST REPORT

Name & Address of the Customer:

THE DHAMRA PORT COMPANY LIMITED.

AT : DOSINGA, PO : DHAMRA

DIST: BHADRAK, PIN: 756171 ODISHA

Report No.: BBS/510 Date: 01.01.2022

Sample No.: MSKGL/ED/2020-21/12/00910 Sample Description: Noise (Work Zone)

### Noise Level Monitoring Data

<u>SL</u> <u>No</u>	Sampling Date	Sampling Location	MAX	MIN	Results in Avg. dB(A)
1.	01.12.2021	Stack Yard	80.6	44.3	70.3
2.	02.12.2021	Wagon Tippler	88.4	48.7	77.8
3.	21.12.2021	Near Silo	96.3	79.4	84.2
4.	07.12.2021	Near Stacker & Reclaimer	110.6	87.1	89.7
5.	08.12.2021	Project Area	90.8	52.9	72.1
6.	09.12.2021	Transfer Point	93.6	61.6	76.3
7,	12.12.2021	Workshop	101.0	80.7	87.6
8.	14.12.2021	Steel Yard	77.2	49.1	67.9
9.	15.12.2021	FCC Shed	83.1	45.8	71.1
10.	16.12.2021	Near Port Canteen	74.2	54.9	66.7

OSHA'S Permissible N	oise Exposure Limits
Noise Level	Exposure Limit
90 dBA	8.0 hours

Report Prepared by:

For Mitra S.K. Private Limited

Authorized Signatory

H.O.: Shrachi Centre (5th Floor), 74B, Acharya Jagadish Chandra Bose Road, Kolkata - 700 016, West Bengal, India T: 91 33 4014 3000 / 2265 0006 / 2265 0007, F: 91 33 2265 0008, E: info@mitrask.com, W: www.mitrask.com

MSK TESTINGS INSPECTION

N-5/100, Ground Floor IRC Village, Neyapatil Bhubanaswar - 751015

[CIN: U61909WB1956PTC029037]

T: (0674) 2362918, 2360817

F: (0674) 2362918

### TEST REPORT

Name & Address of the Customer:

THE DHAMRA PORT COMPANY LIMITED

AT : DOSINGA, PO : DHAMRA

DIST: BHADRAK, PIN:756171 ODISHA

Report No. : BBS/511 Date : 01.01.2022

Sample No.: MSKGL/ED/2020-21/12/00980

Sample Description : VOC Monitoring

#### ANALYSIS

SL No	Date of Monitoring	Sampling Location	Method of Analysis	<u>Parameter</u>	Result
1.	01.12.2021	Jetty	Jetty Wagon Tippler		<0,008
2.	01.12.2021	Wagon Tippler			<0.008
3.	02.12.2021	Near Silo	NIOSH-1501 Volatile Organic	<0.008	
4.	04.12.2021	Transfer Point	1 64	Compound (VOC in mg/m³)	<0.008
5.	06.12.2021	BMH Workshop			<0.008
6.	09.12.2021	Steel Yard	1		<0.008
7.	09.12,2021	FCC Shed			<0.008
8.	09.12.2021	SS 6 Office			<0.008

S. Kange Report Prepared by:

BBSR E

For Mitra S. K. Private Limited

()M5K

N-5/100, Ground Floor IRC Village, Nayapatii Bhubaneswar - 751015

[CIN: U51909WB1956PTC023037]

T: (0874) 2362916, 2380917

F: (0874) 2362918

### TEST REPORT

Name & Address of the Customer: THE DHAMRA PORT COMPANY LIMITED

AT : DOSINGA, PO : DHAMRA

6DIST: BHADRAK, PIN: 756171 ODISHA

Report No.: BBS/505 Date: 01.01.2022

Sample No.: MSKGL/ED/2020-21/12/01721 Sample Description: EFFLUENT WATER

Sampling Location : STP 150KLD Date of sampling : 04.12.2021

#### ANALYSIS RESULT

SL	Test Parameters	Units	Limit	Test Specification	Resi	alt
No.	200000000000000000000000000000000000000	-		22000	Inlet	Outlet
1.	Colour	Hazen	-	APHA (23rd Edition) 2120B 2017	Blackish	Clear
2.	Odour		-	APHA (23 <sup>nd</sup> Edition) 2150B	Disagrecable	Agreeable
3.	pH value at 26°C	-	6.5 - 9.0	APHA (23rd Edition) 4500 H-B	6.93	7.12
4.	Appearance		7.2	Lab Method	Turbid	Clear
5.	TSS	mg/l	<20.0	APHA (23rd Edition) 2540D	130,0	5.0
6,	BOD	mg/l	<10.0	APHA (23rd Edition) 5210B 2017	33.0	4.6
7,	COD	mg/l	<50.0	APHA (23 <sup>rd</sup> Edition) 5220B 2017	107.0	6.0
8.	Oil & Grease	mg/l	<10.0	APHA (23rd Edition) 5220B 2017	4.2	<1.4
9.	Ammonical Nitrogen	mg/l	<5.0	APHA (23 <sup>rd</sup> Edition) 4500-NH3-F 2017	33.0	<0.1
10.	Total Nitrogen (as N)	mg/l	<10.0	IS 14684 (1999); Rffm:2014	42.0	2.3
11.	Faecal Coliform	MPN/ 100ml	<1000.0	APHA (23 <sup>rd</sup> Edition) 9221 E	5900.0	470.0

S. Kowy Report Prepared by: BBSR

For Mitra S. K. Private Limited

()MSK

N-5/100, Ground Floor IRC Village, Nayapalli Shubaneswar - 751015 [CIN: US1909WB1996PTC023037]

T: (0674) 2362916, 2360917

F: (0874) 2362918

### TEST REPORT

Name & Address of the Customer: THE DHAMRA PORT COMPANY LIMITED

AT : DOSINGA, PO : DHAMRA

DIST: BHADRAK, PIN:756171 ODISHA

Report No.: BBS/506 Date: 01.01.2022

Sample No.: MSKGL/ED/2020-21/12/01894 Sample Description: EFFLUENT WATER

Sampling Location: STP 150KLD Date of sampling: 18.12.2021

#### ANALYSIS RESULT

SL.	Test Parameters	Units	Limit	Test Specification	Result	
No.		32,000	23340	A CONTROLLEGION	Inlet	Outlet
1.	Colour	Hazen	-	APHA (23 <sup>rd</sup> Edition) 2120B 2017	Blackish	Clear
2.	Odour			APHA (23 <sup>rd</sup> Edition) 2150B	Disagreeable	Agreeable
3.	pH value at 26°C		6.5-9.0	APHA (23 <sup>rd</sup> Edition) 4500 H-B	6.91	7.17
4.	Appearance		-	Lab Method	Turbid	Clear
5.	TSS	mg/l	<20.0	APHA (23 <sup>rd</sup> Edition) 2540D	181.0	8.0
6.	BOD	mg/l	<10.0	APHA (23 <sup>rd</sup> Edition) 5210B 2017	64.0	<2.0
7.	COD	mg/I	<50.0	APHA (23rd Edition) 5220B 2017	187.0	8.0
8.	Oil & Grease	mg/l	<10.0	APHA (23 <sup>st</sup> Edition) 5220B 2017	6.2	<1.4
9.	Ammonical Nitrogen	mg/l	<5.0	APHA (23 <sup>rd</sup> Edition) 4500-NH3-F 2017	34.0	<0.1
10.	Total Nitrogen (as N)	mg/l	<10.0	IS 14684 (1999); R.ffin:2014	40.0	1.9
11.	Faecal Coliform	MPN/ 100ml	<1000.0	APHA (23rd Edition) 9221 E	4780.0	516.0

Sixan-ju\_ Report Prepared by: BBSR B

For Mitta S. K. Private Limited

MSK TESTING NSPECTION

N-5/100, Ground Floor IRC Village, Nayepalli Bhubaneswar - 751015 [CIN: U51909WB1956PTC023037]

T: (0674) 2362916, 2360917

F: (0674) 2362918

### TEST REPORT

Name & Address of the Customer: THE DHAMRA PORT COMPANY LIMITED

AT : DOSINGA, PO : DHAMRA

6DIST: BHADRAK, PIN:756171 ODISHA

Report No.: BBS/502 Date: 01.01.2022

Sample No.: MSKGL/ED/2020-21/12/01311 Sample Description: EFFLUENT WATER

Sampling Location: STP 140KLD Date of sampling: 04.12.2021

#### ANALYSIS RESULT

SL.	Test Parameters	Units	Limit	Test Specification	Result	
No.		-	-	2 co. operates don	Inlet	Outlet
1.	Colour	Hazen	-	APHA (23 <sup>rd</sup> Edition) 2120B 2017	Blackish	Clear
2.	Odour		- 2	APHA (23rd Edition) 2150B	Disagreeable	Agreeable
3.	pH value at 26°C	****	6.5 - 9.0	APHA (23 <sup>rd</sup> Edition) 4500 H-B	6.88	7.06
4.	Appearance		-	Lab Method	Turbid	Clear
5.	TSS	mg/t	<20.0	APHA (23 <sup>rd</sup> Edition) 2540D	195.0	- 7.0
6.	BOD	mg/l	<10.0	APHA (23 <sup>rd</sup> Edition) 5210B 2017	127.0	<2.0
7.	COD	mg/l	<50.0	APHA (23rd Edition) 5220B 2017	214.0	<4.0
8.	Oil & Grease	mg/l	<10.0	APHA (23 <sup>rd</sup> Edition) 5220B 2017	20.0	<1.4
9.	Ammonical Nitrogen	mg/l	<5.0	APHA (23 <sup>rd</sup> Edition) 4500-NH3-F 2017	34.0	<0.1
10.	Total Nitrogen (as N)	mg/l	<10.0	IS 14684 (1999); Rffm:2014	41.0	2.3
11.	Faecal Coliform	MPN/ 100ml	<1000.0	APHA (23 <sup>rd</sup> Edition) 9221 E	1790.0	120.0

S. Konny Report Prepared by: BBSR BBSR

For Mitra S. K. Private Limited

N-5/100, Ground Floor IRC Village, Neyapelli Bhubaneswar - 751015

[CIN: U51909WB1956PTC023037]

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TEST REPORT

Name & Address of the Customer:

THE DHAMRA PORT COMPANY LIMITED

AT : DOSINGA, PO : DHAMRA

DIST: BHADRAK, PIN: 756171 ODISHA

Report No.: BBS/504

Date : 01.01.2022

Sample No.: MSKGL/ED/2020-21/12/01892 Sample Description: EFFLUENT WATER

Sampling Location : STP 140KLD Date of sampling : 18.12.2021

#### ANALYSIS RESULT

SL.	Test Parameters	Units	Limit	Test Specification	Result	
No.			and the same of th	200 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	Inlet	Outlet
1.	Colour	Hazen	-	APHA (23 <sup>rd</sup> Edition) 2120B 2017	Blackish	Clear
2.	Odour	***		APHA (23 <sup>rd</sup> Edition) 2150B	Disagreeable	Agreeable
3.	pH value at 26°C	1001	6.5 - 9.0	APHA (23 <sup>rd</sup> Edition) 4500 H-B	7.20	7.09
4.	Appearance	3944 - T	-	Lab Method	Turbid	Clear
5.	TSS	mg/l	<20.0	APHA (23 <sup>rd</sup> Edition) 2540D	178.0	6.0
6.	BOD	mg/I	<10.0	APHA (23 <sup>rd</sup> Edition) 5210B 2017	107.0	<2.0
7.	COD	mg/I	<50.0	APHA (23 <sup>rd</sup> Edition) 5220B 2017	160.0	<4.0
8.	Oil & Grease	mg/l	<10.0	APHA (23rd Edition) 5220B 2017	4.2	<1.4
9.	Ammonical Nitrogen	mg/l	<5.0	APHA (23 <sup>rd</sup> Edition) 4500-NH3-F 2017	25.0	<0.1
10.	Total Nitrogen (as N)	mg/l	<10.0	IS 14684 (1999); Rffm:2014	37.0	2.0
11.	Faecal Coliform	MPN/ 100ml	<1000.0	APHA (23 <sup>rd</sup> Edition) 9221 E	2700.0	190.0

S. Kannys Report Prepared by: BBSR B

For Mitra S. K. Private Limited

()MSK

N-5/100, Ground Floor IRC Village, Nayapalli Bhubaneswar - 751015

[CIN: U51909W81956PTC023037]

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### TEST REPORT

Name & Address of the Customer:

THE DHAMRA PORT COMPANY LIMITED

AT : DOSINGA, PO : DHAMRA

DIST: BHADRAK, PIN: 756171 ODISHA

Report No. : BBS/507 Date : 01.01.2022

Sample No.: MSKGL/ED/2020-21/12/01309 Sample Description: EFFLUENT WATER

Sampling Location: STP 25KLD Date of sampling: 04.12.2021

#### ANALYSIS RESULT

SL	Test Parameters	Units	Limit	Test Specification	Result	
No.		2.00	Dinne	Test operation	Inlet	Outlet
1.	Colour	Hazen	*	APHA (23 <sup>rd</sup> Edition) 2120B 2017	Blackish	Clear
2.	Odour		-	APHA (23 <sup>rd</sup> Edition) 2150B	Disagreeable	Agrecable
3,	pH value at 26°C		6.5 – 9.0	APHA (23 <sup>rd</sup> Edition) 4500 H-B	7.24	7.12
4.	Appearance			Lab Method	Turbid	Clear
5.	TSS	mg/l	<20.0	APHA (23 <sup>nt</sup> Edition) 2540D	101.0	<2.5
6.	BOD	mg/l	<10.0	APHA (23 <sup>rd</sup> Edition) 5210B 2017	58.0	<2.0
7.	COD	mg/l	<50.0	APHA (23 <sup>rd</sup> Edition) 5220B 2017	167.0	<4.0
8.	Oil & Grease	mg/l	<10.0	APHA (23 <sup>rd</sup> Edition) 5220B 2017	4.0	<1.4
9.	Ammonical Nitrogen	mg/l	<5.0	APHA (23 <sup>rd</sup> Edition) 4500-NH3-F 2017	25.0	<0.1
10.	Total Nitrogen (as N)	mg/l	<10.0	IS 14684 (1999); Rffm:2014	34.0	1.3
11.	Faccal Coliform	MPN/ 100ml	<1000.0	APHA (23 <sup>rd</sup> Edition) 9221 E	5290.0	130.0

S. Kange Report Prepared by: BBSR III

For Mitra S. K. Private Limited

N-5/100, Ground Floor IRC Village, Nayapall Bhubaneswar - 751015

[CIN: U51909WB1956PTC023037]

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### TEST REPORT

Name & Address of the Customer:

THE DHAMRA PORT COMPANY LIMITED

AT : DOSINGA, PO : DHAMRA

DIST: BHADRAK, PIN: 756171 ODISHA

Report No.: BBS/508

Date : 01.01.2022

Sample No.: MSKGL/ED/2020-21/12/01890 Sample Description: EFFLUENT WATER

Sampling Location: STP 25KLD Date of sampling: 18.12,2021

#### ANALYSIS RESULT

SL.	Test Parameters	Units	Limit	Test Specification	Result	
No.		20000	and the same	A CONTRACTOR AND A CONTRACTOR	Inlet	Outlet
1.	Colour	Hazen	7	APHA (23 <sup>rd</sup> Edition) 2120B 2017	Blackish	Clear
2.	Odour		- 4	APHA (23rd Edition) 2150B	Disagreeable	Agreeable
3.	pH value at 26°C		6.5 - 9.0	APHA (23 <sup>rd</sup> Edition) 4500 H-B	6.69	6.89
4.	Appearance	name .	- 4	Lab Method	Turbid	Clear
5.	TSS	mg/l	<20.0	APHA (23 <sup>rd</sup> Edition) 2540D	95,0	5.0
6.	BOD	mg/l	<10.0	APHA (23 <sup>rd</sup> Edition) 5210B 2017	63.0	3.0
7.	COD	mg/l	<50.0	APHA (23 <sup>rd</sup> Edition) 5220B 2017	135.0	7.0
8.	Oil & Grease	mg/l	<10.0	APHA (23td Edition) 5220B 2017	1.8	<1.4
9.	Ammonical Nitrogen	mg/l	<5.0	APHA (23 <sup>rd</sup> Edition) 4500-NH3-F 2017	28.0	0.7
10.	Total Nitrogen (as N)	mg/l	<10.0	IS 14684 (1999); Rffm:2014	35.0	1.6
11.	Faecal Coliform	MPN/ 100ml	<1000.0	APHA (23 <sup>rd</sup> Edition) 9221 E	7900.0	205.0

S. Yange Report Prepared by: BBSR B

For Mitra S. K. Private Limited

MSK TESTING INSPECTION

N-5/100, Ground Floor IRC Village, Nayapelli Bhubaneswar - 751015 ICIN: US1909WB1956PTC0230371

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F: (0674) 2362918

### TEST REPORT

Name & Address of the Customer:

THE DHAMRA PORT COMPANY LIMITED

AT : DOSINGA, PO : DHAMRA

DIST: BHADRAK, PIN:756171 ODISHA

Report No.: BBS/501

Date : 01.01.2022

Sample No.: MSKGL/ED/2020-21/12/01317 Sample Description: EFFLUENT WATER

Sampling Location : STP 15 KLD Date of sampling : 04.12.2021

#### ANALYSIS RESULT

SL.	Test Parameters	Units	Limit	Test Specification	Result	
No.		2.00.00	0	3 cot opecitication	Inlet	Outlet
1.	Colour	Hazen	-	APHA (23rd Edition) 2120B 2017	Blackish	Clear
2.	Odour		-	APHA (23rd Edition) 2150B	Disagrecable	Agreeable
3.	pH value at 26°C		6.5 - 9.0	APHA (23rd Edition) 4500 H-B	6.71	7.31
4.	Appearance		72	Lab Method	Turbid	Clear
5.	TSS	mg/l	<20.0	APHA (23rd Edition) 2540D	143.0	<2.5
6.	BOD	mg/l	<10.0	APHA (23rd Edition) 5210B 2017	92.0	<2.0
7.	COD	mg/l	<50.0	APHA (23 <sup>rd</sup> Edition) 5220B 2017	205.0	<4.0
8.	Oil & Grease	mg/l	<10.0	APHA (23 <sup>rd</sup> Edition) 5220B 2017	8.0	<1.4
9.	Ammonical Nitrogen	mg/l	<5.0	APHA (23 <sup>rd</sup> Edition) 4500-NH3-F 2017	26.0	0.8
10.	Total Nitrogen (as N)	mg/l	<10.0	IS 14684 (1999); Rffm:2014	38.0	1.9
11.	Faecal Coliform	MPN/ 100ml	<1000.0	APHA (23rd Edition) 9221 E	3415.0	210.0

Report Prepared by:

BBSR B

For Mitra S. K. Private Limited

MSK
TESTING INSPECTION

N-5/100, Ground Floor IRC Village, Nayapalli Bhubaneswar - 751015

[CIN: U51909WB1956PTC023037]

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### TEST REPORT

Name & Address of the Customer:

THE DHAMRA PORT COMPANY LIMITED

AT: DOSINGA, PO: DHAMRA

DIST: BHADRAK, PIN: 756171 ODISHA

Report No.: BBS/503 Date : 01.01.2022

Sample No.: MSKGL/ED/2020-21/12/01888 Sample Description: EFFLUENT WATER

Sampling Location : STP 15 KLD Date of sampling : 18.12.2021

#### ANALYSIS RESULT

SL.	Test Parameters	Units	Limit	Test Specification	Result	
No.	STATE OF THE STATE				Inlet	Outlet
1.	Colour	Hazen	- 0	APHA (23rd Edition) 2120B 2017	Blackish	Clear
2.	Odour		7	APHA (23rd Edition) 2150B	Disagreeable	Agreeable
3.	pH value at 26°C		6.5 - 9.0	APHA (23rd Edition) 4500 H-B	6.53	7.12
4.	Appearance		-	Lab Method	Turbid	Clear
5.	TSS	mg/l	<20.0	APHA (23rd Edition) 2540D	128.0	<2,5
6.	BOD	mg/l	<10.0	APHA (23 <sup>rd</sup> Edition) 5210B 2017	67.0	<2.0
7.	COD	mg/l	<\$0.0	APHA (23 <sup>rd</sup> Edition) 5220B 2017	148.0	8.0
8.	Oil & Grease	mg/l	<10.0	APHA (23rd Edition) 5220B 2017	3,8	<1.4
9.	Ammonical Nitrogen	mg/l	<5.0	APHA (23 <sup>rd</sup> Edition) 4500-NH3-F 2017	21.0	1.0
10.	Total Nitrogen (as N)	mg/l	<10.0	IS 14684 (1999); Rffm:2014	24.0	1.5
11.	Faecal Coliform	MPN/ 100ml	<1000.0	APHA (23 <sup>rd</sup> Edition) 9221 E	4600.0	243.0

S' Kannge\_ Report Prepared by: BBSR S

For Mitya S. K. Private Limited

MSK TESTINGUINSSECTION

N-5/100, Ground Floor IRC Village, Nayapalli Bhubaneswar - 751015 [CIN: U51909WB1956PTC023037]

T: (0874) 2362916, 2360917

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### TEST REPORT

Name & Address of the Customer:

THE DHAMRA PORT COMPANY LIMITED

AT: DOSINGA, PO: DHAMRA DIST: BHADRAK, 756171 ODISHA Report No. : BBS/512 Date : 01.01.2022

Sample No.: MSKGL/FD/2020-21/12/01718

Date of sampling : 15.12.2021

Sampling Description: Ground Water (Piezometric)

Sampling Location: Township Pump House Sampling Done By: Mr. Kunja Bihari Nayak

### BACTERIOLOGICAL ANALYSIS RESULT AS PER IS: 10500 - 2012

St. No	Test Parameters	Units	That		
1.	E. Coli	/100ml	Limit	Test Method / Specification	Result
2.	Total Coliform Organism	/100ml	Not Detectable	IS: 15185 : 2016	Not Detected
-	1 Organism	TOOMI	Not Detectable	IS: 15185 : 2016	Not Detected

CHEMICAL ANALYSIS RESULT AS PER IS: 10500 - 2012 Requirement Permissible limit Test Parameter Units (Acceptable No. in the absence of Test Method / Specification Result Limit) alternate Source 1. ph ( at 26° C) 6.5 . 8.5 No Relaxation IS 3025 (Part 11)-1984 Rffm: 2012 7 Sulphate (as SO<sub>6</sub>) 7.43 mg/l200 400 IS 3025 (Part 24)- 1986 Riffin: 2014 3. Calcium (as Ca) 47.0 mg/l 75 200 IS 3025 (Part 40)- 1991 Rffm: 2014 4. Arsenic (as As) 34.0 mg/l 0.01 0.05 IS 3025 (Part 2) 2004 RA 2014 3. Lead (as Pb) BDL(DL:0.005) mg/l 0.01 No Relaxution IS 3025 (Part 2) 2004 RA 2014 6. Zine (as Zn) BDL(DL:0.003) mg/I 5.0 15.0 IS 3025 (Part 2) 2684 RA 2014 Copper (as Cu) BDL(DL:0.02) mg/l 0.05 1.5 IS 3025 (Part 2) 2004 RA 2014 8 Mercury (as Hg) BDL(DL:0.02) mg/l 0.001 No Relaxation IS 3025 (Part 48)-1994 Rffm: 2014 Cadetium (as Cd) 9 BDL(DL:0.0002) mg/l 0.003 No Relaxation 1S 3025 (Part 2) 2004 RA 2014. 10. Mineral Oil BDL(DL:0.001) mg/l0.5 No Relaxation IS 3025 (Part 39)-1991 Rffm: 2014 11 Fluoride (as F) BDL(DL:0.5) mg/l 1.0 1.5 IS 3025 (Part 60)- 2008 Rffin: 2013 12 Colour BDL(DL:0.2) Hazen 5 15 3025 (Part 4)-1983; Rffin:2012 13. Odour BDL(DL:1.0) Agreeable Agrecable IS 3025 (Part 5)-1983 Rffm:2012 14. Turbidity N.T.U Agrecable IS 3025 (Part 10)-1984 Rffm; 2012 Residual free Chlorine 15 BDL(DL:1.0) mg/l 0.2 1.0 IS 3025 (Part 26)- 1986 Rffm:2014 16. Iron (as Fc) BDL(DL:0.1) mg/l 0.3 No Relaxation IS 3025 (Part 53)-1988 Rffm: 2014 17. Chloride (as Cl) BDL(DL:0.05) mg/l 250 1000 IS 3025 (Part 32)-1988 Rffm: 2014 18. Total Dissolved Solids 71.0 mg/l sno 2000 IS 3025 (Part 16)-1984; Rffin:2012 19 Alkalinity (as CaCO<sub>1</sub>) 280,0 mg/l200 600 IS 3025 (Part 23)- 1986 Rffin: 2009 Aluminium (as AI) 20. 176.0 mg/I 0.03 0.2 IS 3025 (Part 2) 2004 RA 2014 21. Magnesium (as Mg) BDL(DL:0.01) mg/l 30 100 IS 3025 (Part 46)-1994 Rffm: 2014 Total Hardness 25.0 22 mg/i 200 (as CaCO<sub>5</sub>) 600 IS 3025 (Part 21)-2013 174.0 23 Boron (as B) mg/l 0.5 1.0 IS 3025 (Part 2) 2004 RA 2014 24. Manganose (as Mn) BDL(DL:0.3) mg/I 0.1 0.3 IS 3025 (Part 2) 2004 RA 2014 25. BDL(DL:0.02) Nitrate (as NO<sub>5</sub>) mg/l45 No Relaxation IS 3025 (Part 34)-1988 Rffm: 2014 Phenolic Compounds BDL(DL:0.4) 26. 0.001 0.002 (as C<sub>6</sub>H<sub>5</sub>OH<sub>5</sub>) IS 3025 (Part 43)- 1992; Riffin: 2014 mg/l BDL(DL:0.001) 27. Selenium (as Se) mg/l 0.01 No Relaxation IS 3025 (Part 2) 2004 RA 2014 28. Total Chromium (as Cr) BDL(DL:0.005) mg/I 0.05 No Relaxation IS 3025 (Part 2) 2004 RA 2014 29 BDL(DL:0.01) Silver (as Ag) mg/l 0.1 No Relaxation IS 3025 (Part 2) 2004 RA 2014 30. Barium (as Ba) BDL(DL:0.005) mg/l 0.7 No Relexation IS 3025 (Part 2) 2004 RA 2014 31 Salinity. BDL(DL:0.1) mg/l 18 3025 (Part 14)- 2013 32.0



Date- 01.01,2022

32.	Sulphide ( as H2S)	mg/l	0.05	No Relaxation	T 10 2005 (But 20) 1001 541	
33.	Anomonia ( as total	mg/l	0.5	The second second	IS 3025 (Part 29)- 1991; Rffin: 2014	The second secon
34.	ammonia-N) Chloramines	100		No Relaxation	IS 3025 (Part 34)- 1988; Rffm: 2014	BDL(DL:0.1)
35.	Nickel ( as Ni)	nsg/l	4.0	No Relaxation	IS 3025 (Part 26)- 1986; Rffm: 2014	BDL(DL:0.1)
36.	Cyanide (as CN)	mg/l	0.02	No Relaxation	IS 3025 (Part 2) 2004 RA 2014	BDL(DL:0.01)
37.	Anionic Detergents	toget.	0.05	No Relaxation	IS 3025 (Part 27)- 1986 Rffm: 2014	BDL(DL:0.01)
50	(as MBAS)	mg/t	0.2	1.0	IS 13428(Annex K)- 2005	BDL(DL:0.05)
38.	Polynuclear Aromatic Hydrocarbons (as PAH)	mg/l	0.0001	No Relaxation	APHA (23rd Edits.) 6440C	BDL(DL:0.001)
39.	Polychlorinated Biphcoyls (PCB)	mg/l	0.0005	No Relaxation	US EPA 8082	BDL(DL:0.0005)

S. Kounge Report Prepared by:

BBSR

For Mitra S, K. Private Limited.

TESTING + INSPECTION

N-5/100, Ground Floor IRC Village, Nayapalli Bhubaneswar - 751015

ICIN: U51909WB1956PTC023037I

T : (0674) 2362916, 2360917 F: (0674) 2362918

Name & Address of the Customer: THE DHAMRA PORT COMPANY LIMITED

AT : DOSINGA, PO : DHAMRA

DIST: BHADRAK, PIN:756171 ODISHA

#### TEST REPORT

Report No. : BBS/513

Date : 01.01.2022

Sample No.: MSKGL/FD/2020-21/12/01719

Date of sampling : 15.12.2021 Sampling Description : Ground Water (Piezometric)

Sampling Location: Pump House WTP Sampling Done By : Mr. Kunja Bihari Nayak

### BACTERIOLOGICAL ANALYSIS RESULT AS PER IS: 10500 - 2012

Sl. No	Test Parameters	T7mtea	4.1		
1		Units	Limit	Test Method / Specification	Result
	E. Coli	/100ml	Not Detectable	IS: 15185 : 2016	4000000
L 2.	Total Coliform Organism	/100ml	Not Detectable	The bound of the bound	Not Detected
	A CONTRACTOR OF THE PARTY OF TH	-	1401 Descrizing	IS: 15185 ; 2016	Not Detected

SL No.	1 est Parameter	Units	Requirement (Acceptable Limit)	Permissible limit in the absence of alternate Source	Test Method / Specification	Result
1.	pH (at 26°C)	-	6.5 - 8.5	No Relaxation	IS 3025 (Part 11)-1984 Riffm: 2012	-
2.	Sulphate (as SO <sub>4</sub> )	mg/I	200	400	15 30/15 (Part 11) 1984 Kilm: 2012	The state of the s
3,	Calcium (as Ca)	mg/I	75	200	IS 3025 (Part 24)- 1986 Rffm: 2014	
4.	Arsenic (as As)	mg/l	0.01	0.05	IS 3025 (Part 40)- 1991 Rffin: 2014	
5.	Lead (as Pb)	mg/l	0.01	No Relaxation	IS 3025 (Part 2) 2004 RA 2014	BDL(DL:0.005)
6.	Zinc (as Zn)	mg/I	5.0	15.0	IS 3025 (Part 2) 2004 RA 2014	BDL(DL:0.005)
7.	Copper (as Co)	mg/I	0.05	1.5	IS 3025 (Part 2) 2004 RA 2014	BDL(DL:0.02)
8,	Mercury (as Hg)	mp/I	0.001	No Relaxation	IS 3025 (Part 2) 2004 RA 2014	BDL(DL:0.02)
9.	Cadmium (as Cd)	mg/l	0.003	No Relaxation	IS 3025 (Part 48)-1994 Rffm: 2014	BDL(DL:0.0002)
10.	Mineral Oil	mg/l	0.5	No Relaxation	IS 3025 (Part 2) 2004 RA 2014	BDL(DL:0.001)
11.	Fluoride (as F)	mg/l	1.0	1.5	IS 3025 (Part 39)-1991 Rffin: 2014	BDL(DL:0.5)
12.	Colour	Hazen	5	The second secon	IS 3025 (Part 60)- 2008 Rffin: 2013	BDL(DL:0.2)
13.	Odour		Agrecable	15	3025 (Part 4)-1983; Rffm:2012	BDL(DL:1.0)
14.	Turbidity	N.T.U	i i	Agreeable	IS 3025 (Part 5)-1983 Rffm:2012	Agrecable
15.	Residual free Chlorine	mg/l	0.2	5	IS 3025 (Part 10)-1984 Rffm: 2012	BDL(DL:1.0)
16.	Iron (as Fe)	mg/i	0.3	1.0	IS 3025 (Part 26)- 1986 Rffm:2014	HDL(DL:0.1)
17.	Chloride (as Cl)	mg/l	250	No Relaxation	IS 3025 (Part 53)-1988 Rffm: 2014	BDL(DL:0.05)
18.	Total Dissolved Solids	mg/l	500	1000	IS 3025 (Part 32)-1988 Rffm: 2014	33.0
19.	Alkalinity (as CaCO <sub>2</sub> )	mg/l	200	2000	IS 3025 (Part 16)-1984; Rffm:2012	269.0
20.	Aluminium (as Al)	mg/I	The second second	600	18 3025 (Part 23)- 1986 Riffn: 2009	170.0
21.	Magnesium (as Mg)		0.03	0.2	IS 3025 (Part 2) 2004 RA 2014	BDL(DL:0.01)
	Total Hardness	mg/l	30	100	IS 3025 (Part 46)-1994 Rffm: 2014	23.0
22.	(as CaC(O <sub>s</sub> )	mg/l	200	600	IS 3025 (Part 21)-2013	161.0
24.	Boron (as B)	mg/ī	0.5	1.0	IS 3025 (Part 2) 2004 RA 2014	0.00000
25	Manganese (as Mn)	mg/l	0.1	0.3	IS 3025 (Part 2) 2004 RA 2014	BDL(DL:0.3)
25.	Nitrate (as NO <sub>3</sub> )	mg/l	45	No Relaxation	IS 3025 (Part 34)-1988 Rffm: 2014	BDL(DL:0.02)
26.	Phenolic Compounds (as C <sub>6</sub> H <sub>8</sub> OH)	mg/i	0.001	72.77	IS 3025 (Part 43)- 1992; Rffin: 2014	L.1 BDL(DL:0.001)
27.	Selenium (as Se)	mg/I	0.01	No Refacation	The state of the s	
28.	Total Chromium (as Cr)	mg/l	0.05	No Relaxation	IS 3025 (Part 2) 2004 RA 2014	BDL(DL:0.005)
29.	Silver (as Ag)	mg/l	0.1	No Relaxation	IS 3025 (Part 2) 2004 RA 2014	BDL(DL:0.01)
30.	Berium (as Ba)	mg/l	0.7	No Relaxation	IS 3025 (Part 2) 2004 RA 2014	BDL(DL:0.005)
31.	Salinity	mg/l	V-7	NO KEIANMOON	IS 3025 (Part 2) 2004 RA 2014	BDL(DL:0.1)
2000	100000000	1		Print	IS 3025 (Part 14)- 2013	40.0



#### Date- 01.01.2022

32,	Sulphide ( as H2S)	mg/l	0.05	No Relaxation	IS 3025 (Part 29)- 1991; Rffin: 2014	BDL(DL:0.02)
33.	Antonia ( as total ammonia-N)	mg/t	0.5	No Relaxation	IS 3025 (Part 34)- 1988; Rffm: 2014	BDL(DL:0.1)
34.	Chlorantines	mg/l	4.0	No Relaxation	IS 3025 (Purt 26)- 1986; Rffm: 2014	BDL(DL:0.1)
35.	Nickel (as Ni)	mg/l	0.02	No Relaxation	IS 3025 (Part 2) 2004 RA 2014	BDL(DL:0.01)
36.	Cyanide (as CN)	mg/l	0.05	No Relaxation	IS 3025 (Part 27)- 1986 Rilin: 2014	BDL(DL:0.01)
37.	Anionic Detergents (as MBAS)	mg/t	0.2	1.0	IS 13428(Annex K)- 2005	BDL(DL:0.05)
38.	Polynocicar Aromatic Hydrocarbons (as PAH)	mg/l	0.0001	No Relexation	APHA (23rd Edits.) 6440C	BDL(DL:0.0001)
39.	Polychlorinated Biphenyls (PCB)	mg/I	0.0005	No Relaxation	US EPA 8082	BDL(Dt.:0.0005)

S. Kange Report Prepared by:

BBSR E

For Mitra S. K. Private Limited.



N-5/100. Ground Floor IRC Village, Navapalli Bhubaneswar - 751015

ICIN: U51909V/B1956PTC0230371

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### TEST REPORT

Name & Address of the Customer :

THE DHAMRA PORT COMPANY LIMITED

AT : DOSINGA, PO : DHAMRA

DIST: BHADRAK, PIN: 756171 ODISHA

Report No. : BBS/514 : 01.01.2022

Sample No.: MSKGL/FD/2020-21/12/01720

Date of sampling ; 15.12.2021

Sampling Description: Ground Water (Piczometric)

Sampling Location: Running Room

Sumpling Done By : Mr. Kunja Bihari Nayak

# BACTERIOLOGICAL ANALYSIS RESULT AS PER IS: 10500 - 2012

SI IVO	Test Parameters	Units	Limit	Protect State	
1,	E. Coli	/100ml	Not Detectable	Test Method / Specification	Result
1 2	Total Coliform Organism	/100ml	Not Detectable	IS: 15185 : 2016	Not Detected
			TANK DECORRORS	IS: 15185 : 2016	Not Detected

CHEMICAL ANALYSIS RESULT AS PER IS: 10500 - 2012 St. Requirement Permissible limit Test Parameter Units No. (Acceptable in the absence of Test Method / Specification Result Limit) alternate Source 1 pH (at 26°C) 6.5 - 8.5 No Relaxation 2 IS 3025 (Part 11)-1984 Riffin: 2012 Sulphate (as SO<sub>4</sub>) 7.63 mg/l 200 400 IS 3025 (Part 24)- 1986 Rffm: 2014 3. Calcium (as Ca) 56.0 mg/1 73 200 IS 3025 (Part 40)- 1991 Rffm: 2014 4 Arsonic (as As) 44.0 mg/l 0.01 0.05 IS 3025 (Part 2) 2004 RA 2014 5. Load (as Pb) BDL(DL:0.005) mg/l 0.01 No Relaxation IS 3025 (Part 2) 2004 RA 2014 6 Zine (as Zn) BDL(DL:0.005) mg/l 5.0 15.0 IS 3025 (Part 2) 2004 RA 2014 7. Copper (as Cu) BDL(DL:0.02) mg/I 0.05 1.5 IS 3025 (Part 2) 2004 RA 2014 8. Mercury (as Hg) BDL(DL:0.02) mg/l 0.001 No Relaxation IS 3025 (Part 48)-1994 Rffm: 2014 9. Cadmium (as Cd) BDL(DL:0.0002) mg/l0.003 No Relaxation 10. IS 3025 (Part 2) 2004 RA 2014 Mineral Oil BDL(DL:0.001) mg/l 0.5 No Relaxation IS 3025 (Part 39)-1991 Rffm: 2014 11 Fluoride (as F) BDL(DL:0.5) mg/T 1.0 1.5 IS 3025 (Part 60)- 2008 Rffm: 2013 12 Colour BDL(DL:0.2) Hazen 3 15 3025 (Part 4)-1983; Rffm:2012 13. Odour BDL(DL:1.0) Agreeable Agreeable 15 3025 (Part 5)-1983 Rffm:2012 14 Turbidity N.T.U Agreeable IS 3025 (Part 10)-1984 Rffin; 2012 15. Residual free Chlorine BDL(DL:1.0) mg/l 0.2 1.0 IS 3025 (Part 26)- 1986 Rffm:2014 16 Iron (as Fe) BDL(DL:0.1) mg/I 0.3 No Relaxation IS 3025 (Part 53)-1988 Rffm: 2014 17 Chloride (as CI) BDL(DL:0.05) mg/l 250 1000 IS 3025 (Pert 32)-1988 Rffin: 2014 Total Dissolved Solids 18 65.0 me/t 500 2000 IS 3025 (Part 16)-1984; Rffin:2012 19 Alkalinity (as CaCO<sub>5</sub>) 278.0 mg/l 200 600 IS 3025 (Part 23)- 1986 Rffm: 2009 20. Aluminium (as AJ) 172.0 mg/l 0.03 0.2 IS 3025 (Part 2) 2004 RA 2014 21. Magnesium (as Mg) BDL(DL:0.01) mg/I 30 100 IS 3025 (Part 46)-1994 Riffm; 2014 Total Hurdness 22.0 22 mg/l 200 (as CaCO<sub>3</sub>) 500 IS 3025 (Part 21)-2013 157.0 23 Boron (as B) mg/I 0.5 1.0 24 IS 3025 (Part 2) 2004 RA 2014 Manganese (as Mn) BDL(DL:0.3) mg/i 0.1 0.3 IS 3025 (Part 2) 2004 RA 2014 25 Nitrate (as NO<sub>3</sub>) BDL(DL:0.02) mg/I No Relexation 45 IS 3025 (Part 34)-1988 Riffin: 2014 Phenolic Compounds BDL/DL:0.4} 26 0.001 (as CdH-OH) 0.002 IS 3025 (Part 43)- 1992; Rffin: 2014 me/l 27. BDL(DL:0.001) Scienium (as Se) mg/I 0.01 No Relaxation 28 IS 3025 (Part 2) 2004 RA 2014 Total Chromium (as Cr) BDL(DL:0.005) mg/I 0.05 No Relaxation IS 3025 (Part 2) 2004 RA 2014 29. Silver ( as Ag) BDL(DL:0.01) mg/l 0.1 No Relaxation 30 IS 3025 (Part 2) 2004 RA 2014 Barium (as Ba) BDL(DL:0.905) mg/I 0.7 No Relaxation IS 3025 (Part 2) 2004 RA 2014 31. Salinity-BDL(DL:0.1) mg/I IS 3025 (Part 14)-2013 39.0



#### Date- 01.01.2022

32	Sulphide ( as H2S)	mg/l	0.05	No Relaxation	T 10 2025 00 - 501 - 505 - 505	
33.	Ammonia ( as total ammonia-N)	mg/l	0,5	No Relexation	18 3025 (Part 29)- 1991; Rffin: 2014 IS 3025 (Part 34)- 1988; Rffin: 2014	
34.	Chloramines	mg/l	4.0	No Relaxation		BDL(DL:0.1)
35,	Nickel ( as NI)	tng/l	0.02	No Relaxation	IS 3025 (Part 26)- 1986; Riffin: 2014	
36.	Cyanide (as CN)	mg/l	0.05	No Relexation	IS 3025 (Part 2) 2004 RA 2014	BDL(DL:0.01)
37.	Anionic Detergents (as MBAS)	mg/l	0.2	1.0	18 3025 (Part 27)- 1986 Rffm: 2014 IS 13428(Annex K)- 2005	BDL(D1:0.01)
38.	Polynticlear Aromatic Hydrocarbons (as PAH)	mg/l	0.0001	No Relaxation	APHA (23rd Edita,) 6140C	BDL(DL:0.05)  BDL(DL:0.0001)
39.	Polychlorinated Biphenyls (PCB)	mg/I	0.0005	No Relaxation	US EPA 8082	BDL(DL:0.0005)

Report Prepared by:

BBSR B

For Mitra S. K. Private Limited.

N-5/100, Ground Floor IRC Village, Nayapali Bhubaneswar - 751015

[CIN: U51909WB1956PTC023037]

Name & Address of the Customer:

AT : DOSINGA, PO : DHAMRA

T: (0674) 2362916, 2360917

F: (0674) 2382918

#### TEST REPORT

Report No. : BBS/515 Date : 01.01.2022

Sample No.: MSKGL/FD/2020-21/12/01422

TESTING MINSPECTION

Date of sampling : 11.12.2021 Sampling Description : Drinking Water Sampling Location : Township E Block Area Sampling Done By : Mr. Kunja Bihari Nayak

DIST : BHADRAK, PIN .756171 ODISHA

THE DHAMRA PORT COMPANY LIMITED

#### BACTERIOLOGICAL ANALYSIS RESULT AS PER IS: 10500 - 2012

Sl. No	Test Parameters	Units	Limit	Test Method / Specification	Result
1.	E, Coli	/100ml	Not Detectable	IS: 15185 : 2016	Not Detected
2.	Total Coliform Organism	/100ml	Not Detectable	IS: 15185 : 2016	Not Detected

SL No.	Test Parameter	Units	Requirement (Acceptable Limit)	Permissible limit in the absence of alternate Source	Test Method / Specification	Result
- L	pH ( at 26°C)	400	6.5 - 8.5	No Relexation	IS 3025 (Part 11)-1984 Rffm: 2012	7.86
2.	Sulphate (as SO <sub>d</sub> )	mg/I	200	400	IS 3025 (Part 24)- 1986 Riffin; 2014	48.0
3.	Calcium (as Ca)	mg/l	75	200	IS 3025 (Part 40)- 1991 Rffm: 2014	34.0
4.	Arsenic (as As)	mg/l	0.01	0.05	IS 3025 (Part 2) 2004 RA 2014	BDL(DL:0.005)
5.	Lead (as Pb)	mg/l	0.01	No Relaxation	IS 3025 (Part Z) 2004 RA 2014	BDL(DL:0.005)
6.	Zinc (as Za)	mg/I	5.0	15,0	IS 3025 (Part 2) 2004 RA 2014	BDL(DL:0.02)
7.	Copper (as Cu)	mg/l	0.05	1.5	IS 3025 (Part 2) 2004 RA 2014	BDL(DL:0.02)
8.	Mercury (as Hg)	mg/l	0.001	No Relaxation	IS 3025 (Part 48)-1994 Rffin; 2014	BDL(DL:0.0002)
9.	Cadmium (as Cd)	mg/l	0.603	No Relaxation	IS 3025 (Part 2) 2004 RA 2014	BDL(DL:0.001)
10.	Mineral Oil	mg/I	0.5	No Relaxation	IS 3025 (Part 39)-1991 Rffm: 2014	BDL(DL:0.5)
11.	Fluoride (as F)	mg/l	1.0	1.5	IS 3025 (Part 60)- 2008 Rffm: 2013	0.52
12.	Colour	Hazen	5	15	3025 (Part 4)-1983; Rffm:2012	BDL(DL:1.0)
13,	Odour	and the same	Agrecable	Agreeable	IS 3025 (Part 5)-1983 Rffin 2012	Agreeable
14.	Turbidity	N.T.U	1	5	IS 3025 (Part 10)-1984 Riffin: 2012	BDL(DL:1.0)
15.	Residual free Chlorine	mg/l	0.2	1.0	IS 3025 (Part 26)- 1986 Rffm:2014	BDL(DL:0.1)
16.	Iron (as Fe)	mg/l	0.3	No Relaxation	IS 3025 (Part 53)-1988 Rffm: 2014	0.27
17.	Chloride (as Cl)	mg/l	250	1000	IS 3025 (Part 32)-1988 Rffm; 2014	65.0
18.	Total Dissolved Solids	mg/l	500	2000	IS 3025 (Part 16)-1984; Rffm:2012	551.0
19.	Alkalinity (as CaCO <sub>1</sub> )	mg/l	200	600	IS 3025 (Part 23)- 1986 Rffm: 2009	308.0
20.	Aluminium (as AI)	mg/l	0.03	0.2	IS 3025 (Part 2) 2004 RA 2014	BDL(DL:0.01)
21.	Magnesium (as Mg)	mg/l	30	100	IS 3025 (Part 46)-1994 Riffin: 2014	33.0
22,	Total Hardness (as CaCO <sub>3</sub> )	mg/I	200	600	IS 3025 (Part 21)-2013	223.0
23.	Boron (as B)	mg/l	0.5	1.0	IS 3025 (Part 2) 2004 RA 2014	BDL(DL:0.3)
24.	Manganese (as Mn)	mg/l	0.1	0,3	IS 3025 (Part 2) 2004 RA 2014	BDL(DL:0.02)
25.	Nitrate (as NO <sub>2</sub> )	mg/l	45	No Relaxation	IS 3025 (Part 34)-1988 Rffm: 2014	1.7
26.	Phenolic Compounds (as C <sub>o</sub> H <sub>o</sub> OH)	mg/l	100.0	0.002	IS 3025 (Part 43)- 1992; Rffin: 2014	BDL(DL:0.001)
27.	Scienium (as Sc)	mg/l	0.01	No Relaxation	IS 3025 (Part 2) 2004 RA 2014	BDL(DL:0.005)
28.	Total Chromium ( as Cr )	mg/l	0.05	No Relaxation	IS 3025 (Part 2) 2004 RA 2014	BDL(DL:0.01)
29.	Silver ( as Ag)	mg/l	0.1	No Relaxation	IS 3025 (Part 2) 2004 RA 2014	BDL(DL:0.005)
30.	Barium (as Ba)	mg/l	0.7	No Relaxation	IS 3025 (Part 2) 2004 RA 2014	BDL(DL:0.1)
31.	Salinity	mg/t	444		IS 3025 (Part 14)- 2013	38.0



#### Date- 01.01.2022

32.	Sulphide ( as H2S)	mg/I	0.05	No Relaxation	IS 3025 (Part 29)- 1991; Rifm; 2014	BDL(DL:0.02)
33.	Ammonia ( as total ammonia-N)	mg/l	0.5	No Relaxation	IS 3025 (Part 34)- 1988; Rffm: 2014	BDL(DL:0.1)
34.	Chloramines	mg/l	4.0	No Relaxation	IS 3025 (Part 26)- 1986; Rffin: 2014	BDL(DL:0.1)
35.	Nickel ( as Ni)	mg/l	0.02	No Relaxation	IS 3025 (Part 2) 2004 RA 2014	BDL(DL:0.01)
36.	Cyanide (as CN)	mig/l	0.05	No Relaxation	IS 3025 (Part 27)- 1986 Riffio: 2014	BDL(DL:0.01)
37.	Anionic Detergents (as MBAS)	mg/l	0.2	1.0	IS 13428(Annex K)- 2005	BDL(DL:0.05)
38.	Polynuclear Aromatic Hydrocarbons (as PAH)	mg/l	0.0001	No Relaxation	APHA ( 23 <sup>rd</sup> Edtn.) 6440C	BDL(DL:0.0001)
39.	Polychlorinated Biphenyls (PCB)	mg/l	0.0005	No Relexation	US EPA 8082	BDL(DL:0.0005)

Report Prepared by:

For Mitra S. K. Private Limited.

()MSK

N-5/100, Ground Floor IRC Village, Nayapall Bhubaneswar - 751015

[CIN: U51909WB1956PTC023037]

T: (0674) 2362916, 2360917

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#### TEST REPORT

Name & Address of the Customer :

THE DHAMRA PORT COMPANY LIMITED

AT : DOSINGA, PO : DHAMRA

DIST: BHADRAK, PIN:756171 ODISHA

Report No. : BBS/516 Date : 01.01.2022

Sample No.: MSKGL/FD/2020-21/12/01423

Date of sampling : 11.12.2021 Sampling Description : Drinking Water Sampling Location : Prefab Area

Sampling Done By: Mr. Kunja Bihari Nayak

### BACTERIOLOGICAL ANALYSIS RESULT AS PER IS: 10500 - 2012

Sl. No	Test Parameters	Units	Limit	Test Method / Specification	Result
1.	E. Coli	/100ml	Not Detectable	IS: 15185 : 2016	Not Detected
2.	Total Coliform Organism	/100ml	Not Detectable	IS: 15185 : 2016	Not Detected

SL No.	Test Parameter	Units	Requirement (Acceptable Limit)	Permissible limit in the absence of alternate Source		Result
L	pH (at 26°C)		6.5 - 8.5	No Relaxation	IS 3025 (Part 11)-1984 Rffm: 2012	7.48
2	Sulphate (as SO <sub>4</sub> )	mg/l	200	400	IS 3025 (Part 24)- 1986 Rffm; 2014	49.0
3.	Calcium (as Ca)	mg/l	75	200	IS 3025 (Part 40)- 1991 Rffin: 2014	34.0
4.	Arsenic (as As)	mg/l	0.01	0.05	IS 3025 (Part 2) 2004 RA 2014	BDL(DL:0.005)
5.	Lead (as Pb)	mg/l	0.01	No Relaxation	IS 3025 (Part 2) 2004 RA 2014	BDL(DL:0.005)
6.	Zinc (as Zn)	mg/I	5.0	15.0	IS 3025 (Part 2) 2004 RA 2014	BDL(DL:0.02)
7.	Copper (as Ou)	Pgm	0.05	1.5	IS 3025 (Part 2) 2004 RA 2014	BDL(DL:0.02)
8.	Mercury (as Hg)	mg/I	0.001	No Relaxation	IS 3025 (Part 48)-1994 Rffin; 2014	BDL(DL:0.0002)
9.	Cadmium (as Cd)	mg/l	0.003	No Retaxation	IS 3025 (Part 2) 2004 RA 2014	BDL(DL:0.001)
10,	Mineral Oil	mg/l	0.5	No Relaxation	IS 3025 (Part 39)-1991 Rffm: 2014	BDL(DL:0.5)
11.	Fluoride (as F)	mg/l	1.0	1.5	IS 3025 (Part 60)- 2008 Riffin: 2013	0.49
12.	Colour	Hazen	5	15	3025 (Part 4)-1983; Rffin:2012	RDL(DL:1.0)
13.	Odour		Agrecable	Agrecable	IS 3025 (Part 5)-1983 Rffm 2012	Agreeable
14.	Turbidity	N.T.U	1	5	IS 3025 (Part 10)-1984 Rffm: 2012	BDL(DL:1.0)
15.	Residual free Chlorine	mg/l	0.2	1.0	IS 3025 (Part 26)- 1986 Rtfin:2014	BDL(DL:0.1)
16.	Iron (as Fe)	mg/l	0.3	No Relaxation	IS 3025 (Part 53)-1988 Riffin: 2014	0.44
17,	Chloride (as CI)	mg/l	250	1000	IS 3025 (Part 32)-1988 Rffm: 2014	65,0
18.	Total Dissolved Solids	mg/l	500	2000	IS 3025 (Part 16)-1984; Rffm: 2012	552.0
19.	Alkalinity (as CaCO <sub>3</sub> )	nig/l	200	600	IS 3025 (Part 23)- 1986 Rffm: 2009	311.0
20.	Aluminium (as Al)	mg/l	0.03	0.2	IS 3025 (Part 2) 2004 RA 2014	BDL(DL:0.01)
21.	Magnesium (as Mg)	mg/l	30	100	IS 3025 (Part 46)-1994 Riffin: 2014	27.0
22.	Total Hardness (as CaCO <sub>3</sub> )	mg/l	200	600	IS 3025 (Part 21)-2013	198.0
23.	Boron (as B)	mg/ī	0.5	1.0	IS 3025 (Part 2) 2004 RA 2014	BDL(DL:0.3)
24.	Manganese (as Mn)	mg/l	0.1	0.3	IS 3025 (Past 2) 2004 RA 2014	BDL(DL:0.02)
25.	Nitrate (as NO <sub>1</sub> )	mg/l	45	No Relaxation	IS 3025 (Part 34)-1988 Rffm; 2014	1.2
26.	Phenolic Compounds (as C <sub>6</sub> H <sub>5</sub> OH)	mg/l	0.001	0.002	IS 3025 (Part 43)- 1992; Riffin: 2014	BDL(DL:0.001)
27.	Sclenium (as Se)	mg/l	0.01	No Relaxation	IS 3025 (Part 2) 2004 RA 2014	BDL(DL:0.005)
28.	Total Chromium (as Cr)	mg/l	0.05	No Relaxation	IS 3025 (Part 2) 2004 RA 2014	BDL(DL:0.01)
29.	Silver (as Ag)	mg/l	0.1	No Relaxation	IS 3025 (Part 2) 2004 RA 2014	BDL(DL:0.005)
30,	Barium (as Ba)	mg/l	0.7	No Relaxation	IS 3025 (Part 2) 2004 RA 2014	BDL(DL:0.1)
31.	Salinity	mg/l	****	200-	IS 3025 (Part 14)- 2013	50.0



### Date-01.01.2022

32.	Sulphide ( as H2S)	mg/l	0.05	No Relocation	IS 3025 (Part 29)- 1991; Rffm: 2014	BDL(DL:0.02)
33,	Ammonia ( as total ammonia-N)	mg/l	0,5	No Relaxation	IS 3025 (Port 34)- 1988; Riffm: 2014	BDL(DL:0.1)
34.	Chloramines	mg/l	4.0	No Relaxation	IS 3025 (Part 26)- 1986; Rffin: 2014	
35.	Nickel ( as Ni)	mg/l	0.02	No Relaxation	IS 3025 (Part 2) 2004 RA 2014	BDL(DL:0.1) BDL(DL:0.01)
36.	Cyanide (as CN)	mg/l	0.05	No Relaxation	IS 3025 (Part 27)- 1986 Rffm: 2014	
37.	Anionic Detergents (as MBAS)	mg/l	0.2	1.0	IS 13428(Annex K)- 2005	BDL(DL:0.01) BDL(DL:0.05)
38.	Polynuclear Aromatic Hydrocarbons (as PAH)	mg/l	0.0001	No Relaxation	APHA ( 23 <sup>rd</sup> Edm.) 6440C	BDL(DL:0.0001)
39.	Polychlorinated Biphenyls (PCB)	mg/l	0.0005	No Relaxation	US EPA 8082	BDL(DL:0.0005)

Report Prepared by:

For Mitra S. K. Private Limited.

MSK

N-5/100, Ground Floor IRC Village, Nayapalli Bhubaneswar - 751015

[CIN: U51909WB1956PTC023037]

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#### TEST REPORT

Name & Address of the Customer:

THE DHAMRA PORT COMPANY LIMITED

AT : DOSINGA, PO : DHAMRA

DIST: BHADRAK, PIN:756171 ODISHA

Report No. : BBS/517 Date : 01.01.2022

Sample No.: MSKGL/FD/2020-21/12/01424

Date of sampling : 11.12.2021 Sampling Description : Drinking Weter Sampling Location : Jetty Area

Sampling Done By : Mr. Kunja Bihari Nayak

#### BACTERIOLOGICAL ANALYSIS RESULT AS PER IS: 10500 - 2012

SI. No	Test Parameters	Units	Limit	Test Method / Specification	Result
1.	E. Coli	/100ml	Not Detectable	IS: 15185 : 2016	Not Detected
2.	Total Coliform Organism	/100ml	Not Detectable	- IS: 15185 : 2016	Not Detected

SL No.	Test Parameter	Units	Requirement (Acceptable Limit)	Permissible limit in the absence of alternate Source	Test Method / Specification	Result
L	pH ( at 26° C)	-	6.5 - 8.5	No Relaxation	IS 3025 (Part 11)-1984 Rffm; 2012	7.99
2,	Sulphate (as SO <sub>2</sub> )	mg/l	200	400	IS 3025 (Part 24)- 1986 Rffm: 2014	57.0
3,	Calcium (as Ca)	mg/l	75	200	1S 3025 (Part 40)- 1991 Rffm: 2014	42.0
4.	Arsonic (as As)	mg/l	0.01	0.05	IS 3025 (Part 2) 2004 RA 2014	BDL(DL:0.005)
5.	Lead (as Pb)	tng/i	0.01	No Relaxation	IS 3025 (Part 2) 2004 RA 2014	BDL(DL:0.005)
6.	Zinc (as Zn)	mg9	5.0	15.0	IS 3025 (Part 2) 2004 RA 2014	BDL(DL:0.02)
7.	Copper (as Cu)	mg/l	0.05	1.5	IS 3025 (Part 2) 2004 RA 2014	BDL(DL:0.02)
8.	Mercury (as Hg)	mg/l	0.001	No Relaxation	IS 3025 (Part 48)-1994 Rffm: 2014	BDL(DL:0.0002)
9.	Cadmium (as Cd)	mg/l	0.003	No Relaxation	IS 3025 (Part 2) 2004 RA 2014	BDL(DL:0.001)
10.	Mineral Oil	mg/3	0.5	No Relaxation	IS 3025 (Part 39)-1991 Rffm: 2014	BDL(DL:0.5)
11.	Pluoride (as F)	mg/l	1.0	1.5	IS 3025 (Part 60)- 2008 Rffm: 2013	0.47
12.	Colour	Hazen	5	15	3025 (Part 4)-1983; Rffm:2012	BDL(DL:1.0)
13.	Odour	200	Agrecable	Agrocable	IS 3025 (Part 5)-1983 Rffm:2012	Agrecable
14,	Turbidity	N.T.U	1	5	IS 3025 (Part 10)-1984 Rffm: 2012	BDL(DL;1.0)
15.	Residual free Chlorine	mg/l	0.2	1.0	IS 3025 (Part 26)- 1986 RfEm:2014	BDL(DL:0.1)
16.	Iron (as Fc)	mg/l	0.3	No Relaxation	IS 3025 (Part 53)-1988 Rffm: 2014	0.09
17.	Chloride (as Cl)	mg/l	250	1000	IS 3025 (Part 32)-1988 Rffm; 2014	77.0
18.	Total Dissolved Solids	mg/l	500	2000	IS 3025 (Part 16)-1984; Rffm:2012	560.0
19.	Alkalinity (as CaCO <sub>1</sub> )	mg/l	200	600	IS 3025 (Part 23)- 1986 Rffm: 2009	329.0
20.	Aluminium (as AI)	mg/l	0.03	0.2	IS 3025 (Part 2) 2004 RA 2014	BDL(DL:0.01)
21.	Magnesium (as Mg)	mg/i	30	100	IS 3025 (Part 46)-1994 Rffm: 2014	32.0
22.	Total Hardness (as CaCO <sub>3</sub> )	mg/l	200	600	IS 3025 (Part 21)+2013	238,0
23.	Boron (as B)	mg/l	0.5	1.0	IS 3025 (Part 2) 2004 RA 2014	BDL(DL:0.3)
24.	Manganese (as Mn)	mg/l	0.1	0.3	IS 3025 (Part 2) 2004 RA 2014	BDL(DL:0.02)
25.	Nitrate (as NO <sub>3</sub> )	mg/l	45	No Relaxation	IS 3025 (Part 34)-1988 Rffm: 2014	1.4
26.	Phenolic Compounds (as C <sub>6</sub> H <sub>5</sub> OH)	mg/I	0.001	0.002	IS 3025 (Part 43)- 1992; Rffin: 2014	BDL(DL:0.001)
27.	Solenium (as Sc)	mg/l	0.01	No Relaxation	IS 3025 (Part 2) 2004 RA 2014	BDL(DL:0.005)
28	Total Chromium (as Cr)	mg/l	0.05	No Relaxation	IS 3025 (Part 2) 2004 RA 2014	BDL(DL:0.01)
29.	Silver (as Ag)	mg/l	0.1	No Relaxation	IS 3025 (Part 2) 2004 RA 2014	BDL(DL:0.005)
30.	Barium (as Ba)	mg/l	0.7	No Relaxation	IS 3025 (Part 2) 2004 RA 2014	BDL(DL:0.1)
31.	Salinity	mg/I			IS 3025 (Part 14)- 2013	44.0



Date-01.01.2022

32.	Sulphide ( as H2S)	mg/l	0.05	No Relaxation	IS 3025 (Part 29)- 1991; Rffm: 2014	BDL(DL:0.02)
33.	Ammonia ( as total ammonia-N)	mg/l	0.5	No Relaxation	IS 3025 (Part 34)- 1988; Rffin: 2014	BDL(DL:0.1)
34.	Chloramines	mg/l	4.0	No Relaxation	IS 3025 (Part 26)- 1986; Rffin; 2014	BDL(DL:0.1)
35.	Nickel (as Ni)	mg/l	0.02	No Relaxation	IS 3025 (Put 2) 2004 RA 2014	BDL(DL:0.01)
36.	Cyanide (as CN)	mg/l	0.05	No Relaxation	IS 3025 (Part 27)- 1986 Rffm: 2014	BDL(DL:0.01)
37.	Anionic Detergents (as MBAS)	mg/I	9.2	1.0	IS 13428(Annex K)- 2005	BDL(DL:0.05)
38.	Polynuclear Aromatic Hydrocarbons (as PAH)	mg/l	0.0001	No Relaxation	APHA ( 23 <sup>rd</sup> Edin.) 6440C	BDL(DL:0.0001)
39.	Polychlorinated Biphenyls (PCB)	mg/l	0.0005	No Relaxation	US EPA 8082	BDL(DL:0.0005)

S. Konngo\_ Report Prepared by:

For Mitra S. K. Private Limited.

()MSK

N-5/100, Ground Floor IRC Village, Nayapalli Bhubaneswar - 751015

[CIN: U51909WB1956P7C023037]

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TEST REPORT

Report No. : BBS/518 Date : 01.01.2022

Sample No.: MSKGL/FD/2020-21/12/01425

Date of sampling : 11.12.2021 Sampling Description : Drinking Water Sampling Location : Port Canteen

Sampling Done By: Mr. Kunja Bihari Nayak

### Name & Address of the Customer :

AT: DOSHINGA, PO: DHAMRA

DIST: BHADRAK, PIN:756171 ODISHA

THE DHAMRA PORT COMPANY LIMITED

BACTERIOLOGICAL ANALYSIS RESULT AS PER IS: 10500 - 2012

Si. No	Test Parameters	Units	Limit	Test Method / Specification	Result
1.	E. Celi	/100ml	Not Detectable	IS: 15185 : 2016	Not Detected
2.	Total Coliform Organism	/100ml	Not Detectable	IS: 15185 : 2016	Not Detected

SL No.	Test Parameter	<u>Units</u>	Requirement (Acceptable Limit)	Permissible limit in the absence of alternate Source	Test Method / Specification	Result
17	pH ( at 26° C)	2000	6,5 - 8.5	No Relaxation	IS 3025 (Part 11)-1984 R/fin: 2012	8.15
2.	Sulphate (as SO <sub>c</sub> )	mg/l	200	400	IS 3025 (Part 24)- 1986 Rffm: 2014	51.0
3.	Calcium (as Ca)	mg/l	75	200	IS 3025 (Part 40)- 1991 Rffm: 2014	39.0
4,	Arsenic (as As)	mg/l	0.01	0.05	IS 3025 (Part 2) 2004 RA 2014	BDL(DL:0.005)
5.	Lead (as Pb)	-mg/l	0.01	No Relaxation	IS 3025 (Part 2) 2004 RA 2014	BDL(DL:0.005)
6.	Zinc (as Zn)	mg/I	5.0	15.0	IS 3025 (Part 2) 2004 RA 2014	BDL(DL:0.02)
7.	Copper (as Cu)	mg/l	0.05	1.5	IS 3025 (Part 2) 2004 RA 2014	BDL(DL:0.02)
8.	Mercury (as Hg)	mg/l	0.001	No Relaxation	IS 3025 (Part 48)-1994 Rffm: 2014	BDL(DL:0.0002
9.	Cadmium (as Cd)	mg/I	0.003	No Relaxation	IS 3025 (Part 2) 2004 RA 2014	BDL(DL:0.001)
10.	Mineral Oil	mg/l	0.5	No Relaxation	IS 3025 (Part 39)-1991 Riffin: 2014	BDL(DL:0.5)
11.	Fluoride (as F)	mg/l	1.0	1.5	IS 3025 (Part 60)- 2008 Rffm: 2013	0.46
12.	Colour	Hazen	5	15	3025 (Part 4)-1983; Rffin:2012	BDL(DL:1.0)
13.	Odour	4444	Agreeable	Agrecable	IS 3025 (Part 5)-1983 Rffm:2012	Agrecable
14.	Turbidity	N.T.U	1	5	IS 3025 (Part 10)-1984 Rffim: 2012	BDL(DL:1.0)
15.	Residual free Chlorine	mg/l	0.2	1.0	IS 3025 (Part 26)- 1986 Rffm:2014	BDL(DL:0.1)
16.	iron (as Fe)	mg/l	0.3	No Relaxation	IS 3025 (Part 53)-1988 Rffin: 2014	0.36
17.	Chloride (as Cl)	mg/l	250	1000	IS 3025 (Part 32)-1988 Rffm: 2014	75.0
18.	Total Dissolved Solids	mg/i	500	2000	IS 3025 (Part 16)-1984; Rffm:2012	556.0
19.	Alkalinity (as CaCO <sub>3</sub> )	mg/l	200	600	IS 3025 (Part 23)- 1986 Rffm: 2009	332.0
20.	Aluminium (as Al)	mg/l	0.03	0.2	IS 3025 (Part 2) 2004 RA 2014	BDL(DL:0.01)
21.	Magnessium (as Mg)	mg/1	30	100	IS 3025 (Part 46)-1994 Rffin: 2014	24.0
22,	Total Hardness (as CaCO <sub>1</sub> )	mg/l	200	600	IS 3025 (Purt 21)-2013	197.0
23.	Boron (as B)	mg/l	0.5	1.0	1S 3025 (Part 2) 2004 RA 2014	BDL(DL:0.3)
24.	Manganese (as Mn)	mg/I	0.1	0.3	IS 3025 (Part 2) 2004 RA 2014	BDL(DL:0.02)
25.	Nitrate (as NO <sub>5</sub> )	mg/l	45	No Relaxation	IS 3025 (Part 34)-1988 Rffm: 2014	1.3
26.	Phenolic Compounds (as CoHoOH)	mg/l	0.001	0.002	18 3025 (Part 43)- 1992; Riffm: 2014	BDL(DL:0.001)
27.	Selenium (as Se)	mg/l	0.01	No Relaxation	IS 3025 (Part 2) 2004 RA 2014	BDL/DL:0.005)
28.	Total Chromium (as Cr)	mg/l	0.65	No Relaxation	IS 3025 (Part 2) 2004 RA 2014	BDL(DL:0.01)
29.	Silver (as Ag)	mg/l	0.1	No Relaxation	IS 3025 (Part 2) 2004 RA 2014	BDL(DL:0.005)
30.	Barium (as Ba)	mg/l	0.7	No Relaxation	IS 3025 (Part 2) 2004 RA 2014	The state of the s
31.	Salinity	mg/l		THE RESEARCH	IS 3025 (Part 14)- 2013	BDL(DL:0.1) 41.0



#### Date-01.01.2022

32	Sulphide (as H2S)	mg/l	0.05	No Relaxation	IS 3025 (Part 29)- 1991; Rffm; 2014	BDL(DL:0.02)
33.	Ammonia ( as total ammonia-N)	mg/l	0.5	No Relaxation	IS 3025 (Part 34)- 1988; Rffm: 2014	BDL(DL:0.02)
34.	Chloramines	mg/l	4.0	No Relaxation	IS 3025 (Part 26)- 1986, Rffin: 2014	BDL(DL:0.1)
35.	Nickel (as Ni)	mg/l	0.02	No Relaxation	IS 3025 (Part 2) 2004 RA 2014	BDL(DL:0.01)
36.	Cyanide (as CN)	mg/T	0.05	No Relaxation	IS 3025 (Part 27)- 1986 Rffm: 2014	BDL(DL:0.01)
37.	Anionic Detergents (as MBAS)	mg/l	0.2	1.0	IS 13428(Annex K)- 2005	BDL(DL:0.05)
38.	Polynaclear Aromatic Hydrocarbons (as PAH)	mg/l	0.0001	No Relaxation	APHA (23 <sup>rd</sup> Edtn.) 6440C	BDL(DL:0.0001)
39.	Polychlorinated Biphenyls (PCB)	l\gm	0.0005	No Relaxation	US EPA 8082	BDL(DL:0.0005)

S. Karnge Report Prepared by:

For Mitra S. K. Private Limited.

TESTING INSPECTION

N-5/100, Ground Floor IRC Village, Navagalli Bhubaneswar - 751015

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#### TEST REPORT

Name & Address of the Customer : THE DHAMRA PORT COMPANY LIMITED

AT : DOSINGA, PO : DHAMRA

DIST: BHADRAK, PIN: 756171 ODISHA

Report No. : BBS/523 Date :01.01.2022

Sample No.: MSKOL/PD/2020-21/12/01430

Date of sampling : 11.12.2021 Sampling Description: Drinking Water Sampling Location: SS-6 Office

Sampling Done By : Mr. Kunja Bihari Nayak

#### BACTERIOLOGICAL ANALYSIS RESULT AS PER IS: 10500 - 2012

SI. No	Test Parameters	Units	Limit	Test Method / Specification	Result
1.	E. Celi	/100ml	Not Detectable	IS: 15185 : 2016	Not Detected
2.	Total Coliform Organism	/100ml	Not Detectable	IS: 15185 : 2016	Not Detected

SL No.	Test Parameter	Units	Requirement (Acceptable Limit)	Permissible limit in the absence of alternate Source	Test Method / Specification	Result
1,	pH (at 26°C)		6.5 - 8.5	No Relaxation	IS 3025 (Part 11)-1984 R/fin: 2012	8.14
2.	Sulphate (as SO <sub>4</sub> )	mg/l	200	400	IS 3025 (Part 24)- 1986 Rffm; 2014	57.0
3.	Calcium (as Ca)	mg/l	75	200	IS 3025 (Part 40)- 1991 Rffm: 2014	36.0
4:	Arsenic (as As)	mg/I	0.01	0.05	IS 3025 (Part 2) 2004 RA 2014	BDL(DL:0.005)
5.	Lead (as Pb)	mg/l	0.01	No Relaxation	IS 3025 (Part 2) 2004 RA 2014	BDL(DL:0.005)
6.	Zinc (as Zn)	mg/l	5.0	15.0	IS 3025 (Part 2) 2004 RA 2014	BDL(DL:0.02)
7.	Copper (as Cu)	mg/l	0.05	1.5	IS 3025 (Part 2) 2004 RA 2014	BDL(DL:0.02)
8.	Mercury (as Hg)	mg/l	0.001	No Relaxation	1S 3025 (Part 48)-1994 Rffm: 2014	BDL(DL:0.0002)
9.	Cadmium (as Cd)	mg/l	0.003	No Relaxation	IS 3025 (Part 2) 2004 RA 2014	BDL(DL:0.001)
10.	Mineral Oil	mg/l	0.5	No Relaxation	IS 3025 (Part 39)-1991 Riffm; 2014	BDL(DL:0.5)
11.	Fluoride (as F)	mg/l	1.0	1.5	IS 3025 (Part 60)- 2008 Rffm; 2013	0.46
12.	Colour	Hazen	5	15	3025 (Part 4)-1983; Rffin:2012	BDL(DL:1.0)
13.	Odour		Agraeable	Agrecable	IS 3025 (Part 5)-1983 Rffm:2012	Agreeable
14.	Turbidity	N.T.U	1	5	18 3025 (Part 10)-1984 Rffm: 2012	BDL(DL:1.0)
15.	Residual free Chlorine	mg/l	0.2	1.0	IS 3025 (Part 26)- 1986 Rffm:2014	BDL(DL:0.1)
16.	Iron (as Fe)	mg/l	0.3	No Relaxation	IS 3025 (Part 53)-1988 Rffm: 2014	0.20
17.	Chloride (as Cl)	mg/l	250	1000	IS 3025 (Part 32)-1988 Rffm: 2014	73.0
18.	Total Dissolved Solids	mg/l	500	2000	IS 3025 (Part 16)-1984; Rffin:2012	560.0
19.	Alkalinity (as CaCO <sub>1</sub> )	mg/I	200	600	IS 3025 (Part 23)- 1986 R/fm: 2009	311.0
20.	Afuminium (as Al)	mg/l	0.03	0.2	IS 3025 (Part 2) 2004 RA 2014	BDL(DL:0.01)
21.	Magnesium (as Mg)	mg/I	30	100	IS 3025 (Part 46)-1994 Rffin: 2014	31.0
22.	Total Hardness (as CaCO <sub>5</sub> )	mg/I	200	600	IS 3025 (Part 21)-2013	220.0
23.	Boron (as B)	mg/l	0.5	1.0	IS 3025 (Part 2) 2004 RA 2014	BDL(DL:0.3)
24.	Manganese (as Mn)	mg/l	0.1	0.3	IS 3025 (Part 2) 2004 RA 2014	BDL(DL:0.02)
25.	Nitrate (as NO <sub>3</sub> )	mg/l	45	No Relaxation	IS 3025 (Part 34)-1988 Rffm: 2014	1.6
26.	Phenolic Compounds (as C <sub>e</sub> H <sub>5</sub> OH)	Ngm	0.001	0.002	IS 3025 (Part 43)- 1992; Riffin: 2014	BDL(DL:0.001)
27.	Selenium (as Se)	mg/l	0.01	No Relaxation	IS 3025 (Part 2) 2004 RA 2014	BDL(DL:0.005)
28.	Total Chromium ( as Cr)	mg/l	0.05	No Relaxation	IS 3025 (Part 2) 2004 RA 2014	BDL(DL:0.01)
29.	Silver (as Ag)	mg/l	0.1	No Relaxation	IS 3025 (Part 2) 2004 RA 2014	BDL(DL:0.005)
30.	Barium (as Ba)	mg/i	0.7	No Relaxation	IS 3025 (Part 2) 2004 RA 2014	BDL(DL:0.1)
31.	Salinity	mg/l		****	IS 3025 (Part 14)-2013	57.0



### Date- 01.01.2022

32.	Sulphide (ns H2S)	mg/l	0.05	No Relaxation	IS 3025 (Part 29)- 1991; Rffm: 2014	BDL(DL:0.02)
33.	Ammonia ( as total ammonia-N)	tng/I	0.5	No Relaxation	IS 3025 (Part 34)- 1988; Rffm; 2014	BDL(DL:0.1)
34.	Chloramines	mg/I	4.0	No Relaxation	IS 3025 (Part 26)- 1986; Rffin: 2014	1 - 2 - 2 - 2 - 2 - 2 - 2 - 2 - 2 - 2 -
35.	Nickel ( as Ni)	mg/l	0.02	No Relaxation	IS 3025 (Part 2) 2004 RA 2014	BDL(DL:0.1) BDL(DL:0.01)
36.	Cyanide (as CN)	mje/l	0.05	No Relaxation	IS 3025 (Part 27)- 1986 Rffm; 2014	BDL(DL:0.01)
37.	Anionic Detergents (as MBAS)	mg/l	0.2	1.0	IS 13428(Annex K)- 2005	BDL(DL:0.05)
38.	Polynuclear Aromatic Hydrocarbons (as PAH)	mg/i	0.0001	No Relaxation	APHA ( 23 <sup>rd</sup> Edtn.) 6440C	BDL(DL:0.0001)
39.	Polychlorinated Biphonyls (PCB)	mg/I	0.0005	No Relaxation	US EPA \$082	BDL(DL:0.0005)

S'Kamyo Report Prepared by:

For Mitra S. K. Private Limited.



N-5/100, Ground Floor IRC Village, Nayapalli Bhubaneswar - 751015

[CIN: U51909WB1956PTC023037]

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#### TEST REPORT

Name & Address of the Customer :

THE DHAMRA PORT COMPANY LIMITED

AT : DOSINGA, PO : DHAMRA

DIST: BHADRAK, PIN: 756171 ODISHA

Report No. : BBS/524 Date : 01.01.2022

Sample No.: MSKGL/FD/2020-21/12/01328

Date of sampling : 12.12.2021 Sampling Description : Ground Water Sampling Location : Kanak Prasad

Sampling Done By: Mr. Kunja Bihari Nayak

#### BACTERIOLOGICAL ANALYSIS RESULT AS PER IS: 10500 - 2012

Si. No	Test Parameters	Units	Limit	Test Method / Specification	Result
1.	E. Coli	/100ml	Not Detectable	IS: 15185 : 2016	Not Detected
2.	Total Coliform Organism	/100ml	Not Detectable	IS: 15185 : 2016	Not Detected

SL No.	Test Parameter	Units	Requirement (Acceptable Limit)	Permissible limit in the absence of alternate Source	Test Method / Specification	Result
1.	pH (at 26°C)		6.5 - 8.5	No Relaxation	IS 3025 (Part 11)-1984 Rffm: 2012	7.58
2.	Sulphate (as SO <sub>4</sub> )	mg/l	200	400	IS 3025 (Part 24)- 1986 Rffin: 2014	47.0
3,	Calcium (as Ca)	mg/l	75	200	IS 3025 (Part 40)- 1991 Rffm: 2014	34.0
4.	Arsenic (as As)	mg/I	0.01	0.05	IS 3025 (Part 2) 2004 RA 2014	BDL(DL:0.005)
5.	Lead (as Pb)	mg/l	0.01	No Relexation	IS 3025 (Part 2) 2004 RA 2014	BDL(DL:0.005)
6.	Zine (as Zn)	mg/l	5.0	15.0	IS 3025 (Part 2) 2004 RA 2014	BDL/DL:0.02)
7.	Copper (as Cu)	mg/l	0.05	1.5	IS 3025 (Part 2) 2004 RA 2014	BDL(DL:0,02)
8.	Mercury (as Hg)	mg/l	100.0	No Relaxation	IS 3025 (Part 48)-1994 Rffm: 2014	BDL(DL:0.0002)
9,	Cadmium (as Cd)	mg/l	0.003	No Relaxation	IS 3025 (Part 2) 2004 RA 2014	BDL(DL:0.001)
10.	Miseral Oil	mg/l	0,5	No Relaxation	IS 3025 (Part 39)-1991 Rffin: 2014	BDL(DL:0.5)
11.	Fisoride (as F)	mg/l	1.0	1.5	IS 3025 (Part 60)- 2008 Rffm: 2013	BDL(DL:0.2)
12.	Colour	Hazen	5	15	3025 (Part 4)-1983; Rffm:2012	BDL(DL:1.0)
13.	Odour	*****	Agreeable	Agreeable	IS 3025 (Part 5)-1983 Rffm: 2012	Agreeable
14.	Turbidity	N.T.U	1	5	IS 3025 (Part 10)-1984 Rifm: 2012	BDL(DL:1.0)
15.	Residual free Chlorine	mg/l	0.2	1.0	IS 3025 (Part 26)- 1986 Rffm:2014	BDL(DL:0.1)
16.	Iron (as Fe)	mg/l	0.3	No Relaxation	IS 3025 (Part 53)-1988 Rifin: 2014	BDL(DL:0.03)
17.	Chloride (as CI)	mg/l	250	1000	IS 3025 (Part 32)-1988 Rffm: 2014	61.0
18.	Total Dissolved Solids	mg/l	500	2000	IS 3025 (Part 16)-1984; Rffm:2012	361.0
19.	Alkalinity (as CaCO <sub>2</sub> )	mg/l	200	600	IS 3025 (Part 23)- 1986 Rffm: 2009	152.0
20.	Aluminium (as Al)	mg/l	0.03	0.2	IS 3025 (Part 2) 2004 RA 2014	BDL(DL:0.01)
21.	Magnesium (as Mg)	mg/l	30	100	IS 3025 (Part 46)-1994 Rffm: 2014	26.0
22.	Total Hardness (as CaCO <sub>1</sub> )	mg/I	200	600	IS 3025 (Part 21)-2013	193.0
23.	Boron (as B)	mg/l	0.5	1.0	IS 3025 (Part 2) 2004 RA 2014	BDL(DL:0.3)
24.	Manganese (as Mn)	mg/l	0.1	0.3	IS 3025 (Part 2) 2004 RA 2014	BDL(DL:0.02)
25.	Nitrate (as NO <sub>3</sub> )	mg/l	45	No Relaxation	IS 3025 (Part 34)-1988 Rffin: 2014	BDL(DL:0.4)
26.	Phenolic Compounds (as C <sub>4</sub> H <sub>5</sub> OH)	mg/l	0.001	0.002	IS 3025 (Part 43)- 1992; Rffm: 2014	BDL(DL:0.001)
27.	Selenium (as Sc)	mg/l	0.01	No Relaxation	IS 3025 (Part 2) 2004 RA 2014	BDL(DL:0.005)
28.	Total Chromium ( as Cr)	mg/l	0.05	No Relaxation	IS 3025 (Part 2) 2004 RA 2014	BDL(DL:0.01)
29.	Silver ( as Ag)	mg/l	0.1	No Relaxation	IS 3025 (Part 2) 2004 RA 2014	BDL(DL:0.005)
30.	Barium (as Ba)	mg/l	0.7	No Relaxation	IS 3025 (Part 2) 2004 RA 2014	BDL(DL:0.1)
31_	Salinity	mg/l			IS 3025 (Part 14)- 2013	42.0



#### Date- 01.01.2022

32	Sulphide (as H2S)	mg/l	0.05	No Relaxation	IS 3025 (Part 29)- 1991; Rffm; 2014	BDL(DL:0.02)
33,	Ammonia ( as total ammonia-N)	mg/l	0.5	No Relaxation	IS 3025 (Part 34)- 1988; Riffn: 2014	BDL(DL:0.1)
34.	Chloramines	mg/l	4.0	No Relexation	1S 3025 (Part 26)- 1986; Rffm: 2014	BDL(DL:0.1)
35.	Nickel (as Ni)	mg/l	0.02	No Relaxation	IS 3025 (Part 2) 2004 RA 2014	BDL(DL:0.01)
36.	Cyanide (as CN)	mg/I	0.05	No Relaxation	IS 3025 (Part 27)- 1986 Riffin: 2014	BDL(DL:0.01)
37.	Anionic Delergents (as MBAS)	mg/l	0.2	1.0	IS 13428(Annex K)- 2005	BDL(DL:0.05)
38.	Polynuclear Aromatic Hydrocarbons (as PAH)	mg/t	0.0001	No Relaxation	APHA ( 23 <sup>rd</sup> Edus.) 6440C	BDL(DL:0.0001)
39.	Polychlorinated Biphenyls (PCB)	mg/l	0.0005	No Relaxation	US EPA 8082	BDL(DL:0.000s)

SKange Report Prepared by:

BBSR B

For Mitra S. K. Private Limited.

()MSK

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[CIN: U51909W81956PT0023037]

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#### TEST REPORT

Name & Address of the Customer: THE DHAMRA PORT COMPANY LIMITED

AT : DOSINGA, PO : DHAMRA

DIST: BHADRAK, PIN: 756171 ODISHA

Report No. ; BBS/525 Date : 01.01.2022

Sample No.: MSKGL/FD/2020-21/12/01329

Date of sampling : 12.12.2021 Sampling Description : Ground Water Sampling Location : Belieski

Sampling Location: Balisahi

Sampling Done By : Mr. Kunja Bihari Nayak

#### BACTERIOLOGICAL ANALYSIS RESULT AS PER IS: 10500 - 2012

SL No	Test Parameters	Units	Limit	Test Method / Specification	Result
1.	E. Coli	/100m1	Not Detectable	IS: 15185 : 2016	Not Detected
2.	Total Coliform Organism	/100ml	Not Detectable	IS: 15185 : 2016	Not Detected

<u>SL</u> <u>No.</u>	Test Parameter	Units	Requirement (Acceptable Limit)	Permissible limit in the absence of alternate Source	Test Method / Specification	Result
1.	pH (at 26°C)		6.5 - 8.5	No Relaxation	IS 3025 (Part 11)-1984 Rffm: 2012	7.78
2.	Sulphate (as SO <sub>4</sub> )	mg/l	200	400	IS 3025 (Part 24)- 1986 Rffm: 2014	49.0
3.	Calcium (as Ca)	mg/l	75	200	IS 3025 (Part 40)- 1991 Rffm: 2014	30.0
4.	Arsenic (as As)	mg/l	0.01	0.05	IS 3025 (Part 2) 2004 RA 2014	BDL(DL:0.005)
5.	Lead (as Pb)	mg/t	0.01	No Relaxation	IS 3025 (Part 2) 2004 RA 2014	BDL(DL:0.005)
6.	Zinc (as Zn)	mg/l	5.0	15,0	IS 3025 (Part 2) 2004 RA 2014	BDL(DL:0.02)
7.	Copper (as Cu)	mg/l	0.05	1.5	IS 3025 (Part 2) 2004 RA 2014	BDL(DL:0.02)
8.	Mercury (as Hg)	mg/l	0.001	No Relaxation	IS 3025 (Part 48)-1994 Rffm: 2014	BDL(DL:0.0002)
9.	Cadmium (as Cd)	mg/l	0.003	No Relaxation	IS 3025 (Part 2) 2004 RA 2014	BDL(DL:0.001)
10.	Mineral Oil	mg/l	0.5	No Relaxation	IS 3025 (Part 39)-1991 Riffin: 2014	BDL(DL:0.5)
II.	Fluoride (as F)	mg/l	1.0	1,5	IS 3025 (Part 60)- 2008 Rffim: 2013	BDL(DL:0.2)
12.	Colour	Hazen	5	15	3025 (Part 4)-1983; Rffm:2012	BDL(DL:1.0)
13.	Odour		Agreeable	Agreeable	IS 3025 (Part 5)-1983 Rffin: 2012	Agreeable
14.	Turbidity	N.T.U	1	5	IS 3025 (Part 10)-1984 Rffm: 2012	BDL(DL:1.0)
15.	Residual free Chlorine	mg/l	0.2	1.0	IS 3025 (Part 26)- 1986 Rffm: 2014	BDL(D1:0.1)
16.	Iron (as Fe)	mg/l	0.3	No Relaxation	IS 3025 (Part 53)-1988 Rffin: 2014	BDL(DL:0.05)
17.	Chloride (as Cl)	mg/l	250	1000	IS 3025 (Part 32)-1988 Rffm: 2014	69.0
18.	Total Dissolved Solids	mg/l	500	2000	1S 3025 (Part 16)-1984; Rffm 2012	342.0
19.	Alkalinity (as CaCO <sub>3</sub> )	mg/l	200	600	IS 3025 (Part 23)- 1986 Rffin: 2009	159.0
20.	Aluminium (as Al)	mg/l	0.03	0.2	IS 3025 (Part 2) 2004 RA 2014	BDL(DL:0.01)
21.	Magnesium (as Mg)	mg/l	30	100	IS 3025 (Part 46)-1994 Rffm: 2014	25.0
22.	Total Hardness (as CaCO <sub>3</sub> )	mg/l	200	600	IS 3025 (Part 21)-2013	179.0
23.	Boron (as B)	mg/l	0.5	1.0	IS 3025 (Part 2) 2004 RA 2014	BDL(DL:0.3)
24.	Manganese (as Mn)	mg/l	0.1	0.3	IS 3025 (Part 2) 2004 RA 2014	BDL(DL:0.02)
25.	Nitrate (as NO <sub>3</sub> )	mg/l	45	No Relaxation	IS 3025 (Part 34)-1988 Rffm: 2014	BDL(DL:0.4)
26.	Phenolic Compounds (as C <sub>t</sub> H <sub>t</sub> OH)	mg/I	0.001	0.002	IS 3025 (Part 43)- 1992; Riffin: 2014	BDL(DL:0,001)
27.	Selenium (as Se)	mg/l	0.01	No Relaxation	IS 3025 (Part 2) 2004 RA 2014	BDL(DL:0.005)
28,	Total Chromium (as Cr)	mg/I	0.05	No Relaxation	IS 3025 (Part 2) 2004 RA 2014	BDL(DL:0.01)
29.	Silver ( as Ag)	mg/l	0.1	No Relaxation	IS 3025 (Part 2) 2004 RA 2014	BDL(DL:0,005)
30.	Barium (as Ba)	mg/I	0.7	No Relaxation	IS 3025 (Part 2) 2004 RA 2014	BDL(DL:0.1)
31.	Salinity	mg/l			IS 3025 (Part 14)- 2013	40.6



### Date- 01.01.2022

32.	Sulphide (ax H2S)	mg/l	0.05	No Relaxation	IS 3025 (Part 29)- 1991; Rffm: 2014	BDL(DL:0.02)
33.	Ammonia ( as total ammonia-N)	mg/I	0,5	No Relaxation	IS 3025 (Part 34)- 1988; Rffin: 2014	BDL(DL:0.02)
34.	Chloramines	rng/T	4.0	No Relaxation	IS 3025 (Part 26)- 1986; Riffin: 2014	BDL(DL:0.1)
35.	Nickel (as Ni)	mg/l	0.02	No Relaxation	IS 3025 (Part 2) 2004 RA 2014	BDL(DL:0.01)
36.	Cyanide (as CN)	mg/l	0.05	No Relaxation	IS 3025 (Part 27)- 1986 R ffm: 2014	BDL(DL:0.01)
37.	Anionic Detergents (as MBAS)	Igm	0.2	1.0	TS 13428(Annex K)- 2005	BDL(DL:0.05)
38.	Polynuclear Aromatic Hydrocarbons (as PAH)	mg/l	0.0001	No Relexation	APHA ( 23 <sup>rd</sup> Edtn.) 6440C	BDL(DL:0.0001)
39.	Polychlorinated Biphenyls (PCB)	mg/l	0.0005	No Relaxation	US EPA 1082	BDL(DL:0.0005)

Roport Prepared by:

For Mitra S. K. Private Limited.

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[CIN: U51909WB1958PTC023037]

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### TEST REPORT

Name & Address of the Customer:

THE DHAMRA PORT COMPANY LIMITED.

AT : DOSINGA, PO : DHAMRA

DIST: BHADRAK, PIN: 756171 ODISHA

Report No. : BBS/527 Date : 01.01.2022

Sample No. : MSKGL/ED/2020-21/12/01324

Sample Description : Surface Water

Sampling Location: Matai River Near DPCL

Intake Point

Date of Sampling : 12.12.2021

#### ANALYSIS RESULT

Sl. No.	Test Parameters	Units	Standards as per IS 2296	Test Method / Specification	Result
L	Colour	Hazen	300	APHA 23rd Edition,2120B 2017	BDL(DL:1.0)
2.	Odour			APHA 23rd Edition, 2150B	Agrecable
3,	pH at 25°C	-	6.5 - 8.5	APHA 23rd Edition, 4500-H-B	7.03
4.	Copper as Cu	mg/l	1.5	APHA (23rd Edition)3120B 2017 (ICP OES)	BDL(DL:0.02)
5.	Fluoride as F	mg/l	1.5	APHA (23rd Edition)4500 - F C/D, 2017	0.44
6.	Iron as Fe	mg/l	50.0	APHA 23rd Edition 3500 Fe B 2017	0,76
7.	Manganese as Mn	mg/l	140	APNA (23rd Edition)3120B 2017 (ICP OES)	BDL(DL:0.02)
8.	Phenolic Compound as C <sub>6</sub> H <sub>5</sub> OH	mg/l	0.005	APHA (23rd Edition)5530C 2017 (Chloroforms Extraction)	BDL(DL:0.001
9.	Selenium as Se	mg/l	0.05	APHA (23rd Edition) 3120B 2017	BDL(DL:0.005
10.	Cadmium as Cd	mg/l	10.0	APHA (23rd Edition)3120B 2017	BDL(DL:0.001
11.	Cyanide as CN	mg/l	0.05	APHA (23rd Edition)4500 CN- F 2017	BDL(DL:0.01)
12.	Lead as Pb	mg/I	0.1	APHA (23rd Edition)3120B 2017	BDL(DL:0.005
13.	Mercury as Hg	mg/l		TS 3025(Part 48)-1994; Rffm:2014	BDL(DL:0.001)
14.	Nickel as Ni	mg/l	****	APHA (23rd Edition)31208 2017	BDL(DL:0.02)
15.	Arsenic as As	mg/l	0.2	APHA (23rd Edition)3120B 2017 (ICP OES)	BDL(DL:0.005
16,	Total Chromium as Cr	mg/l	U. Staff	APHA (23rd Edition)3111 D 2017 (AAS Flame)	BDL(DL:0.01)
17.	Zinc as Zn	mg/l	15.0	APHA (23rd Edition)3120B 2017	BDL(DL:0.02)
18.	Hexavalent Chromium as Cr <sup>+6</sup>	mg/l	0.05	APHA 22nd Edition, 3500 Cr.B	BDL(DL:0.01)
19.	Vanadium as V	mg/l		APHA (23rd Edition)3120B 2017 (ICP OES)	BDL(DL:0.2)
20.	Total Suspended solids	mg/l		APHA 23rd Edition, 2540D	71.0
21.	Temperature	Deg C	inen:	APHA 23rd Edin,2550 B	25.0
22.	BOD (3days at 25°C)	mg/I	3.0	APHA (23rd Edition)5210B 2017	BDL(DL:2.0)
23.	COD	mg/I		APHA 23rd Edition, 5220B 2017	BDL(DL:4.0)
24.	Oil & Grease	mg/I	0.1	APHA 23rd Edition, 5520B 2017	BDL(DL:1.4)
25.	Ammonical, Nitrogen as N	mg/l		APHA (23rd Edition) 4500-NH3-F 2017	BDL(DL:0.1)
26.	Total Kjeldal Nitrogen as N	mg/l		APHA (23rd Edition) 4500- Norg-B,2017	BDL(DL:0.3)
27.	Sulphide as S	mg/l	****	APHA (23rd Edition)4500 S2- D,2017	BDL(DL:0.01)
28.	Total Residual Chlorine	mg/l		IS 3025(Part-26)-1986 Rffin:2009	BDL(DL:0.1)
29.	Dissolved Phosphate as P	mg/l		APHA 23rd Edition.4500P, B -D 2017	BDL(DL:0.05)
30.	Ammonia as NH <sub>3</sub>	mg/l		APHA 23rd Edn 4500NH3-F 2017	BDL(DL:0.1)
31.	Nitrate Nitrogen as NO <sub>3</sub>	mg/l		APHA (23rd Edition) 4500- NO3-E, 2017	BDL(DL:0.1)
32.	Bio-assay Test		90% survival of fish after 96 hours in 100% effluent	IS 6582(Part 2)2001, Ed.2.1 (2002-12)	All Fishes are survived in 100% effluent after 96 hrs
33.	Particle Size of Suspended Solids		850 μ IS sleve	TPM/MSR/P&E/3/55	Pass through 850µm IS sieve
34:	Dissolved Oxygen	mg/l	***	APHA 23rd-2012,4500-O-C	6.4

Report Prepared by:

Mitra S. K. Private Limited

Authorized Signatory

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### TEST REPORT

Name & Address of the Customer :

THE DHAMRA PORT COMPANY LIMITED.

AT : DOSINGA, PO : DHAMRA

DIST: BHADRAK, PIN: 756171 ODISHA

Report No. : BBS/528

Date : 01.01.2022

Sample No.: MSKGL/ED/2020-21/12/01325

Sample Description : Surface Water

Sampling Location: Raw Water Reservoir

Date of Sampling : 12.12.2021

ANALYSIS RESULT

St. Na.	Test Parameters	Units	Standards as per 1S 2296	Test Method / Specification	Result
1,	Colour	Hazen	300	APHA 23rd Edition,2120B 2017	BDL(DL:1.0)
2,	Odour	****		APHA 23rd Edition,2150B	Agreeable
3.	pH at 25°C	****	6.5 - 8.5	APHA 23rd Edition, 4500-H-B	7.65
4.	Copper as Cu	mg/l	1.3	APHA (23rd Edition)3120B 2017 (ICP OES)	BDL(DL:0.02)
5.	Fluoride as F	mg/l	1.5	APHA (23rd Edition)4500 - F C/D, 2017	0.48
6.	Iron as Pe	mg/l	50.0	APHA 23rd Edition 3500 Fe B 2017	0.18
7.	Manganese as Mn	mg/l		APHA (23rd Edition)3120B 2017 (ICP OES)	BDL(DL:0.02)
8.	Phenolic Compound as C <sub>6</sub> H <sub>5</sub> OH	mg/l	0.005	APHA (23rd Edition)SS30C 2017 (Chloroform Extraction)	BDL(DL:0.001
9.	Selentum as Sc	ng/l	0.05	APHA (23rd Edition) 3120B 2017	BDL(DL:0.005
10.	Cadmium as Cd	mg/	0.01	APHA (23rd Edition)3120B 2017	BDL(DL:0.001
11.	Cyanide as CN	mg/l	0.05	APHA (23rd Edition)4500 CN- F 2017	BDL(DL:0.01)
12.	Lead as Pb	mg/l	0.1	APHA (23rd Edition)3120B 2017	BDL(DL:0.005
13.	Mercury as Hg	mg/l		18 3025(Part 48)-1994; Rffm:2014	BDL(DL:0.001)
14.	Nickel as Ni	mg/1		APHA (23rd Edition)3120B 2017	BDL(DL:0.02)
15.	Arsenic as As	mg/i	0.2	APHA (23rd Edition)3120B 2017 (ICP OES)	BDL(DL:0.005
16.	Total Chromium as Cr	mg/l	200	APHA (23rd Edition)3111 D 2017 (AAS Flame)	BDL(DL:0.01)
17.	Zinc as Zn	mg/l	15.0	APHA (23rd Edition)3120B 2017	BDL(DL:0.02)
18.	Hexavalent Chromium as Cr16	mg/l	0.05	APHA 22nd Edition, 3500 Cr.B	BDL(DL:0.01)
19.	Vanadium as V	mg/l		APHA (23rd Edition)3120B 2017 (ICP OES)	BDL(DL:0.2)
20.	Total Suspended solids	mg/l	2750	APHA 23rd Edition, 2540D	BDL(DL:2.5)
21.	Temperature	Deg C	****	APHA 23rd Edm,2550 B	25.0
22.	BOD (3days at 25°C)	mg/l	3.0	APHA (23rd Edition)5210B 2017	BDL(DL:2.0)
23.	COD	mg/l	****	APHA 23rd Edition, 5220B 2017	BDL(DL:4.0)
24.	Oil & Grease	mg/l	0.1	APHA 23rd Edition, 5520B 2017	BDL(DL:1.4)
25.	Ammonical, Nitrogen as N	mg/l	****	APHA (23rd Edition) 4500-NH3-F 2017	BDL(DL:0.1)
26,	Total Kjeldal Nitrogen as N	mg/l		APHA (23rd Edition) 4500- Norg-B,2017	BDL(DL:0.3)
27.	Sulphide as S	mg/l	****	APHA (23rd Edition)4500 S2- D,2017	BDL(DL:0.01)
28.	Total Residual Chlorine	mg/l		IS 3025(Pari-26)-1986 Rffm:2009	BDL(DL:0.1)
29.	Dissolved Phosphate as P	mg/l		APHA 23rd Edition.4500P, B -D 2017	BDL(DL:0.05)
30.	Ammonia as NH <sub>3</sub>	mg/I	****	APHA 23rd Edn 4500NH3-F 2017	BDL(DL:0.1)
31.	Nitrate Nitrogen as NO <sub>1</sub>	mg/l	war war server	APHA (23rd Edition) 4500- NO3-E, 2017	BDL(DL:0.1)
32.	Bio-assay Test	ttir	90% survival of fish after 96 hours in 100% effluent	IS 6582(Part 2)2001, Ed.2.1 (2002-12)	All Fishes are survived in 100% effluent after 96 hrs
33;	Particle Size of Suspended Solids	-	850 µ IS sleve	TPM/MSK/P&E/3/55	Pass through 850µm IS sieve
34.	Dissolved Oxygen	mg/l	****	APHA 23rd-2012,4500-O-C	6.3

Report Prepared by:

Mitra S. K. Private Limited

Authorized Signatory

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#### TEST REPORT

Name & Address of the Customer:

THE DHAMRA PORT COMPANY LIMITED.

AT : DOSINGA, PO : DHAMRA

DIST: BHADRAK, PIN: 756171 ODISHA

Report No. : BBS/551

Date : 01.01.2022

Sample No.: MSKGL/ED/2020-21/12/00521

Sample Description : Flue Gas Monitoring

Date of Sampling : 07.12.2021 Time of Sampling : 04:15 PM

#### ANALYSIS RESULT

A.	General information about stack :	18 F			
1.	Stack connected to	; Guest House DG			
2.	Emission due to	THE RESERVE OF THE PROPERTY OF	oced Diesel (HSD)		
3.	Material of construction of stack	:M.S			
4.	Shape of stack	: Circular			
5.	Generation Capacity	: 63 KvA			
B.	Physical characteristics of stack :	1-19055			
1.	Height of the stack from ground level	: 3.1 m			
2.	Diameter of the stack at sampling point	: 0.11 m			
3.	Height of the sampling point from GL	: 3.1 m	10.7		
4.	Area of Stack	: 0.0095 r	n <sup>2</sup>		
C.	Analysis/Characteristic of stack:	1			
1.	Fuel used : HSD				
2.	Fuel Consumption : NA		Western Story and the second		
D.	Results of sampling & analysis of gaseous emission	Result	Standard as per Moef & CC	METHOD	
1.	Temperature of emission (°C)	121		IS 11255 (Part III)	
2.	Barometric pressure (mm of Hg)	762.0		USEPA Part 2	
3.	Velocity of gas (m/sec.)	8.7		IS 11255 (Part III)	
4,	Quantity of gas flow (Nm3/hr.)	218.0	I SHOW YE	IS 11255 (Part III)	
5.	Concentration of Carbon monoxide (g/kw-hr)	0.188	≤3.5 (g/Kw/hr)	IS 5182 ( Part X)	
6.	Concentration of Sulphur Dioxide (mg/Nm³)	<5.0	****	IS 11255 (Part II)	
7.	Concentration of Nitrogen Dioxide (g/kw-hr)	0.266	100	IS 11255 (Part VII)	
8.	Concentration of Particulate Matters ((g/kw-hr))	0.056	≤ 0.2 (g/Kw/hr)	IS 11255 (Part I)	
9.	Concentration of Hydrocarbon (g/kw-hr)	0.034	1	USEPA Part 18	
10.	NOx + HC (g/kw-hr)	0.300	≤4.0 (g/Kw/hr)	USEPA Part 18	

S. Kamy Report Prepared by: BBSR BBSR

For Mitra S.K. Private Limited

N-5/100, Ground Floor IRC Villags, Nayapelli Bhubaneswar - 751015

(CIN: U51909WB1958PTC023037)

T: (0674) 2362916, 2360917

F: (0674) 2362918



#### TEST REPORT

Name & Address of the Customer:

THE DHAMRA PORT COMPANY LIMITED.

AT : DOSINGA, PO : DHAMRA

DIST: BHADRAK, PIN: 756171 ODISHA

Report No. : BBS/547

Date : 01.01.2022

Sample No.: MSKGL/ED/2020-21/12/00517

Sample Description: Flue Gas Monitoring

Date of Sampling : 08.12.2021 Time of Sampling : 03:05 PM

#### ANALYSIS RESULT

A.	General information about stack :				
1.	Stack connected to	: General Substation ( GSS Building DG)			
2,	Emission due to	The second secon	need Diesel (HSD)		
3.	Material of construction of stack	:M.S	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,		
4.	Shape of stack	: Circular			
5.	Generation Capacity	: 200 Kv			
B.	Physical characteristics of stack :	1.127.122.1			
1.	Height of the stack from ground level	: 2.3 m			
2.	Diameter of the stack at sampling point	: 0.06521	n		
3.	Height of the sampling point from GL	; 2.3 m			
4.	Area of Stack	: 0.00334	m <sup>2</sup>		
C.	Analysis/Characteristic of stack:				
1.	Fuel used : HSD				
2.	Fuel Consumption : NA		io.		
1:	Results of sampling & analysis of gaseous emission	Result	Standard as per Moef & CC	METHOD	
1.	Temperature of emission (°C)	111	****	IS 11255 (Part III)	
2.	Barometric pressure (mm of Hg)	762.0		USEPA Part 2	
3.	Velocity of gas (m/sec.)	11.0	1 1 1 1	IS 11255 (Part III)	
4.	Quantity of gas flow (Nm3/hr.)	99.0		IS 11255 (Part III)	
5.	Concentration of Carbon monoxide (g/kw-hr)	0.043	≤3.5 (g/Kw/hr)	IS 5182 ( Part X)	
6.	Concentration of Sulphur Dioxide (mg/Nm³)	<5.0		IS 11255 (Part II)	
7.	Concentration of Nitrogen Dioxide (g/kw-hr)	0.071		IS 11255 (Part VII)	
8.	Concentration of Particulate Matters ((g/kw-hr))	0.015	≤0.2 (g/Kw/hr)	IS 11255 (Part I)	
9.	Concentration of Hydrocarbon (g/kw-hr)	0.007		USEPA Part 18	
10.	NOx + HC (g/kw-hr)	0.078	≤4.0 (g/Kw/hr)	USEPA Part 18	

Report Prepared by:

BBSR

For Mitra S.K. Private Limited

MSK
TESTING\* INSPECTION

N-5/100, Ground Floor IRC Village, Nayapalii Bhubaneswar - 751015

[CIN: U51909WB1956PTC023037]

T: (0674) 2362916, 2360917

F: (0674) 2362918

### TEST REPORT

Name & Address of the Customer:

THE DHAMRA PORT COMPANY LIMITED.

AT : DOSINGA, PO : DHAMRA

DIST: BHADRAK, PIN: 756171 ODISHA

Report No. : BBS/548 Date : 01.01.2022

Sample No.: MSKGL/ED/2020-21/12/00518

Sample Description : Flue Gas Monitoring

Date of Sampling : 08.12.2021 Time of Sampling : 06:10 PM

#### ANALYSIS RESULT

A.	General information about stack:				
1.	Stack connected to	: Township DG			
2,	Emission due to	The second secon	eed Diesel (HSD)		
3.	Material of construction of stack	:M.S	( Land Land )		
4.	Shape of stack	: Circular			
5.	Generation Capacity	: 180 Kv.	-		
B.	Physical characteristics of stack :	1 3 4 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5		100000000000000000000000000000000000000	
1.	Height of the stack from ground level	: 3.52 m			
2.	Diameter of the stack at sampling point	: 0.125 m			
3.	Height of the sampling point from GL : 3.52 m				
4.	Area of Stack	: 0.01227	m²		
C.	Analysis/Characteristic of stack:				
1.	Firel used : HSD				
2,	Fuel Consumption : NA				
ŋ.	Results of sampling & analysis of gaseous emission	Result	Standard as per Moef & CC	METHOD	
1.	Temperature of emission (°C)	100		IS 11255 (Part III)	
2.	Barometric pressure (mm of Hg)	762.0	-	USEPA Part 2	
3.	Velocity of gas (m/sec.)	11.59		IS 11255 (Part III)	
4.	Quantity of gas flow (Nm <sup>3</sup> /hr.)	398.0	-111-	IS 11255 (Part III)	
5.	Concentration of Carbon monoxide (g/kw-hr)	0.226	≤3.5 (g/Kw/hr)	IS 5182 ( Part X)	
6.	Concentration of Sulphur Dioxide (mg/Nm³)	<5.0		IS 11255 (Part II)	
7.	Concentration of Nitrogen Dioxide (g/kw-hr)	0.372	1,000	IS 11255 (Part VII)	
8.	Concentration of Particulate Matters ((g/kw-hr))	0.083	≤ 0.2 (g/Kw/hr)	IS 11255 (Part I)	
9.	Concentration of Hydrocarbon (g/kw-hr)	0.036		USEPA Part 18	
10.	NOx + HC (g/kw-hr)	0.408	≤4.0 (g/Kw/hr)	USEPA Part 18	

S. Kamys Report Prepared by: BBSR

For Mitra S.K. Private Limited

N-5/100, Ground Floor IRC Village, Nayapalii Shubaneswar - 751015 [CIN: U51909WB1956PTC023037] TESTING NSPECTION

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F: (0674) 2362918

#### TEST REPORT

Name & Address of the Customer:

THE DHAMRA PORT COMPANY LIMITED.

AT : DOSINGA, PO : DHAMRA

DIST : BHADRAK, PIN : 756171 ODISHA

Report No. : BBS/545

Date : 01.01.2022

Sample No.: MSKGL/ED/2020-21/12/00515

Sample Description : Flue Gas Monitoring

Date of Sampling : 09.12.2021 Time of Sampling : 01:25 PM

#### ANALYSIS RESULT

A.	General information about stack:				
1.	Stack connected to	: PSS DG			
2.	Emission due to	The second secon	Speed Diesel (HSD)		
3.	Material of construction of stack	: M.S	speed Dieses (USD)		
4.	Shape of stack	: Circul	N.W.		
5.	Generation Capacity				
B.	Physical characteristics of stack :	: 160 K	VA.		
1.	Height of the stack from ground level	: 3.3 m			
2.	Diameter of the stack at sampling point	: 0.09 m			
3.	Height of the sampling point from GL	: 3.3 m			
4.	Area of Stack	: 0.0063	C 3		
C.	Analysis/Characteristic of stack:	0.0003	ош		
1.	Fuel used : HSD				
2.	Fuel Consumption ; NA		77. 77.		
	Results of sampling & analysis of gascous emission	Result	Standard as per Moef & CC	METHOD	
	Temperature of emission (°C)	114		IS 11255 (Part III)	
	Barometric pressure (mm of Hg)	762.0	desa	USEPA Part 2	
	Velocity of gas (m/sec.)	14.7		IS 11255 (Part III)	
Ğ.,	Quantity of gas flow (Nm3/hr.)	252.0		IS 11255 (Part III)	
62	Concentration of Carbon monoxide (g/kw-hr)	0.108	≤3.5 (g/Kw/hr)	10 11200 (Part III)	
	Concentration of Sulphur Dioxide (mg/Nm <sup>3</sup> )	<5.0	250 (g/Kw/III)	IS 5182 ( Part X)	
	Concentration of Nitrogen Dioxide (g/kw-hr)	0.278		IS 11255 (Pert II)	
	Concentration of Particulate Matters ((g/kw-hr))	0.039	≤0.2 (g/Kw/hr)	IS 11255 (Part VII	
	Concentration of Hydrocarbon (g/kw-hr)	0.025	20.6 (WKW/III)	IS 11255 (Part I)	
0.	NOx + HC (g/kw-hr)	0.303	≤ 4.0 (g/Kw/hr)	USEPA Part 18	
	TO STANLEY OF THE STA	0.303	= 4.0 (g/Nw/hr)	USEPA Part 18	

Report Prepared



For Mitra S.K. Private Limited

Authorized Signatory

H.O.: Shrachi Centre (5th Floor), 74B, Acharya Jagadish Chandra Bose Road, Kolkata - 700 018, West Bengal, India T: 91 33 4014 3000 / 2265 0006 / 2265 0007, F: 91 33 2265 0008, E: Info@mitresk.com, W: www.mitresk.com

N-5/100. Ground Floor IRC Village, Nayapalli Bhubaneswar - 751015

[CIN: U51909WB1956PTC023037]

T: (0874) 2362916, 2360917 F: (0674) 2362918



#### TEST REPORT

Name & Address of the Customer:

THE DHAMRA PORT COMPANY LIMITED.

AT: DOSINGA, PO: DHAMRA

DIST: BHADRAK, PIN: 756171 ODISHA

Report No.: BBS/537

: 01.01.2022

Sample No.: MSKGL/ED/2020-21/12/00507 Sample Description : Flue Gas Monitoring

Date of Sampling : 09.12.2021

Time of Sampling : 10:55 AM

#### ANALYSIS RESULT

A.	General information about stack ;	- Allert Great	15.7. 10.2. 10.2. 10.2.			
1.	Stack connected to	: MCC-I DG				
2.	Emission due to	: High Sp	eed Diesel (HSD)			
3.	Material of construction of stack	:M.S				
4.	Shape of stack	: Circular				
5.	Generation Capacity	: 160 Kv	1			
B.	Physical characteristics of stack :	-//- ///- 5/6				
1.	Height of the stack from ground level	: 3.21 m				
2.	Diameter of the stack at sampling point	: 0.08 m				
3.	Height of the sampling point from GL	: 3.21 m				
4.	Area of Stack : 0.00503 m <sup>2</sup>					
C.	Analysis/Characteristic of stack:					
1.	Fuel used : HSD					
2.	Fuel Consumption : NA					
D.	Results of sampling & analysis of gaseous emission	Result	Standard as per Moef & CC	METHOD		
400	Temperature of emission (°C)	109		IS 11255 (Part III)		
2.	Barometric pressure (mm of Hg)	762.0		USEPA Part 2		
3.	Velocity of gas (m/sec.)	10.49		IS 11255 (Part III)		
4.	Quantity of gas flow (Nm³/hr.)	144.0	metri.	IS 11255 (Part III)		
5.	Concentration of Carbon monoxide (g/kw-hr)	0.081	≤3.5 (g/Kw/hr)	IS 5182 ( Part X)		
6.	Concentration of Sulphur Dioxide (mg/Nm <sup>3</sup> )	<5.0		IS 11255 (Part II)		
7.	Concentration of Nitrogen Dioxide (g/kw-hr)	0.125	Human	IS 11255 (Part VII)		
8.	Concentration of Particulate Matters ((g/kw-hr))	0.028	≤ 0.2 (g/Kw/hr)	IS 11255 (Part I)		
9.	Concentration of Hydrocarbon (g/kw-hr)	0.010	-	USEPA Part 18		
10.	NOx + HC (g/kw-hr)	0.135	≤ 4.0 (g/Kw/hr)	USEPA Part 18		

For Mitra S.K. Private Limited

N-5/100, Ground Floor IRC Village, Navapalli Bhubaneswar - 751015

ICIN: U51909WB1956PTC023037I

T: (0674) 2362916, 2360917 F: (0674) 2362918

## TEST REPORT

Name & Address of the Customer:

THE DHAMRA PORT COMPANY LIMITED.

AT : DOSINGA, PO : DHAMRA

DIST: BHADRAK, PIN: 756171 ODISHA

Report No. : BBS/535

Date : 01.01.2022

Sample No.: MSKGL/ED/2020-21/12/00505 Sample Description: Flue Gas Monitoring

TESTING INSPECTION

Date of Sampling : 09.12.2021 Time of Sampling : 12:10 PM

#### ANALYSIS RESULT

A.	General information about stack:					
1.	Stack connected to	: Wagon Tippler DG				
2.	Emission due to	: High Speed Diesel (HSD)				
3.	Material of construction of stack	:M.S	***************************************			
4.	Shape of stack	: Circul	ar			
5.	Generation Capacity	: 160 K	νA			
B.	Physical characteristics of stack :					
1.	Height of the stack from ground level	: 1.8 m		-8-6 - N		
2.	Diameter of the stack at sampling point	: 0.1 m				
3.	Height of the sampling point from GL	: 1.8	- 80%			
4.	Area of Stack	: 0.0078 m <sup>2</sup>				
C.	Analysis/Characteristic of stack:	37 1-2				
1.	Fuel used : HSD					
2,	Fuel Consumption : NA					
D.	Results of sampling & analysis of gaseous emission	Result	Standard as per Moef & CC	METHOD		
	Temperature of emission (°C)	112		IS 11255 (Part III)		
2.	Barometric pressure (mm of Hg)	763.0		USEPA Part 2		
3.	Velocity of gas (m/sec.)	10.52	2007	IS 11255 (Part III)		
4.	Quantity of gas flow (Nm³/hr.)	223.0		IS 11255 (Part III)		
5.	Concentration of Carbon monoxide (g/kw-hr)	0.110	≤3.5 (g/Kw/hr)	IS 5182 ( Part X)		
6.	Concentration of Sulphur Dioxide (mg/Nm3)	<5.0	-	IS 11255 (Part II)		
7.	Concentration of Nitrogen Dioxide (g/kw-hr)	0.179		IS 11255 (Part VII)		
8.	Concentration of Particulate Matters ((g/kw-hr))	0.037	≤0.2 (g/Kw/hr)	IS 11255 (Part I)		
9.	Concentration of Hydrocarbon (g/kw-hr)	0.015		USEPA Part 18		
10.	NOx + HC (g/kw-hr)	0.194	≤4.0 (g/Kw/hr)	USEPA Part 18		

For Mitra S.K. Private Limited



N-5/100, Ground Floor IRC Village, Nayapatii Bhubaneswar - 751015 [CIN: U51909WB1956PTC023037]

Date: 01.01.2022

T: (0674) 2362916, 2360917

F: (0874) 2362918

## MARINE WATER QUALITY REPORT

Client Name & Address	M/s The Dhamra Port Company Limited, Dosinga, Bhadrak, Odisha
Work Order No.	4802006186
Reference No.	MSKGL/ED/2020-21/001150
Type of Sample	Marine Water
Sampling Location	Dhamra River Mouth
Date of Sampling	16.32.2021
Date of Analysis	17.12.2021 to 31.12.2021
Sampling Done by	Mr. Kunja Bihari Nayak

SL.	Purpose of the Description	Unit	Test Method	Analysis Result		
No.		158316	A COST DATEMENT	Surface Water	Bettom water	
1	Colour	Hazen	APHA (23rd Edition) 2120B 2017	<1.0	<1.0	
2	Odour		APHA (23 <sup>rd</sup> Edition) 2150B	Agreeable	Agrocable	
3	Temperature	Deg C	APHA (23 <sup>rd</sup> Edition) 2550 B	25.0	25.0	
4	Turbidity	N.T.U	APHA (23rd Edition) 2130B	70.0	75.0	
5	pH	-117	APHA (23rd Edition) 4500-H-B	7.50	7.51	
6	Electrical Conductivity	135/cm	APHA (23rd Edition) 2510 B	21828.0	19668,0	
7	Salinity	mg/l	APHA (23rd Edition) 2520B,2017	12652.0	11360.0	
8	Total Suspended Solids	mg/l	APHA (23rd Edition) 2540 D	116.0	119:0	
9	Total dissolved solids	mg/l	APHA (23rd Edition) 2540C	13970.0	12587,0	
10	Total Hardness	mg/l	APHA (23rd Edition) 2340B 2017	2192.0	2178.0	
11	Calcium Hardness	ing/l	APHA (23rd Edition) 3500-Ca B	368.0	365.0	
12	Magnesium Hardness	mg/l	APHA (23 <sup>rd</sup> Edition) 3500-Mg B	1825,0	1812.0	
13	Chloride (as Cf)	mg/l	APHA (23th Edition) 4500-Cl B	7598.0	6800.0	
14	Dissolved Oxygen	mg/l	APHA (23rd Edition)-4500-O-C/G	6.3	4.1	
15	Biochemical Oxygen Demand (3 days at 27°C)	mg/l	APHA (23rd Edition) 5210B,2017	<2.0	<2.0	
16	Chemical Oxygen Demand (COD)	mg/l	APHA (23 <sup>rd</sup> Edition) 52208,2017	<4.0	<4.0	
17	Oil & Grease	mg/l	APHA (23rd Edition) 5220B,2017	<1.4	<1,4	
18	Dissolved phosphates (as PO <sub>4</sub> )	mg/l	APHA (23rd Edition) 4500-P D	<0.15	< 0.15	
19	Sulphate (as SO <sub>4</sub> )	mg/i	APHA (23rd Edition)4500-SO4-E	1070.0	1073.0	
20	Nitrite (as NO <sub>2</sub> )	Tgm	APHA (23rd Edition)4500-NO2B	<0.01	<0.01	
21	Nitrate (as NO <sub>3</sub> )	mg/l	APHA (23rd Edition)4500-NO3-E	<0.5	<0.5	
22	Ammonical Nitrogen (as NHs-N)	mg/l	APHA (23rd Edition)4500-NH3F	<0.1	<0.1	
23	Total Nitrogen	mg/l	APHA (23rd Edition) 4500N C	<0.3	<0.3	
24	Total Chromium	mg/l	APHA (23rd Edition) 3111 D	<0.01	<0.01	
25	Phenolic Compounds (as C <sub>5</sub> H <sub>5</sub> OH)	mg/l	APHA (23rd Edition) 5530C	<0.001	<0.001	
26	Hexavalent chromium (as Cr +5)	mg/l	APHA (23rs Edition) ,3500 Cr B	<0.01	<0.01	
27	Copper	mg/l	APHA (23rd Edition) 3120B	<0.02	<0.02	
28	Cadmium	mg/l	APHA (23rd Edition) 3120B	<0.001	<0.001	
29	Mercury	Ngm	IS 3025(Part 48)-1994;Rffm;2014	<0.001	<0.001	
30	Floating material	mg/l	APHA (23rd Edition) 2530B	<2.5	<2.5	
31	Petroleum Hydrocarbon	mg/i	IS 3025(Part 39)-1994;Rffim:2014	<0.5	<0.5	

Prepared By - J. Kang

Checked By

H.O.: Shrachi Centra (5th Floor), 74B, Acharya Japanish Chahdra Bose Road, Kolkata - 700 016, West Bengal, India T: 91 33 4014 3000 / 2265 0006 / 2265 0007, F. 91 33 2265 0008, E: Info@mitrask.com, W: www.mitrask.com

N-5/100, Ground Floor IRC Village, Nayapalii Bhubaneswar - 751015

[CIN: U51909WB1956PTC023037]

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Date: 01.01.2022

## MARINE WATER QUALITY REPORT

Client Name & Address	M/s The Dhamra Port Company Limited, Dosinga, Bhadrak, Odisha
Work Order No.	4802006186
Reference No.	MSKGL/ED/2020-21/001150
Type of Sample	Marine Water
Sampling Location	Dry Bulk Cargo Berth Face
Date of Sampling	16.12.2021
Date of Analysis	17.12.2021 to 31.12.2021
Sampling Done by	Mr. Kunja Bihari Nayak

SL-		Unit	Test Method	Analysis Result		
No.		77.00	Test Parents	Surface Water	Bottom water	
1	Colour	Hassen	APHA (23rd Edition) 2120B 2017	<1.0	<1.0	
2	Odour	2000	APHA (23rd Edition) 2150B	Agreeable	Agreeable	
3	Temperature	Dog C	APHA (23rd Edition) 2550 B	25.0	25.0	
4	Turbidity	N.T.U	APHA (23 <sup>rd</sup> Edition) 2130B	94.0	90.0	
5	pH		APHA (23rd Edition) 4500-H-B	7.69	7.58	
6	Electrical Conductivity	us/cm	APHA (23 <sup>rd</sup> Edition) 2510 B	18812.0	20188.0	
7	Salinity	mg/l	APHA (23rd Edition) 2520B,2017	10870.0	11660.0	
8	Total Suspended Solids	mg/l	APHA (23rd Edition) 2540 D	158.0	85.0	
9	Total dissolved solids	mg/1	APHA (23rd Edition) 2540C	12040.0	12920.0	
10	Total Hardness	mg/l	APHA (23 <sup>rd</sup> Edition) 2340B 2017	1964.0	1973,0	
11	Calcium Hardness	mg/I	APHA (23rd Edition) 3500-Ca B	337.0	340.0	
12	Magnesium Hardness	mg/I	APHA (23rd Edition) 3500-Mg B	1566.0	1633.0	
13	Chloride (as CI)	mg/l	APHA (23rd Edition) 4500-CLB	6061.0	7145.0	
14	Dissolved Oxygen	mg/l	APHA (23rd Edition)-4500-O-C/G	6.3	4.2	
15	Biochemical Oxygen Demand (3 days at 27°C)	mg/l	APHA (23rd Edition) 5210B,2017	<2.0	<2.0	
16	Chemical Oxygen Demand (COD)	mg/l	APHA (23 <sup>rd</sup> Edition) 5220B,2017	<4.0	<4.6	
17	Oil & Grease	mg/l	APHA (23rd Edition) 5220B,2017	<1.4	<1.4	
18	Dissolved phosphates (as PO <sub>4</sub> )	mg/l	APHA (23rd Edition) 4500-P D	<0.15	< 0.15	
19	Sulphate (as SO <sub>4</sub> )	mg/l	APHA (23rd Edition)4500-SO4-E	857.0	882.0	
20	Nitrite (as NO <sub>2</sub> )	mg/l	APHA (23rd Edition)4500-NO2B	<0.01	<0.01	
21	Nitrate (as NO <sub>3</sub> )	mg/l	APHA (23rd Edition)4500-NO3-E	<0.5	<0.5	
22	Ammonical Nitrogen (as NH <sub>3</sub> -N)	mg/I	APHA (23rd Edition)4500-NH3F	<0.1	<0.1	
23	Total Nitregen	mg/I	APHA (23 <sup>rd</sup> Edition) 4500N C	<0.3	<0.3	
24	Total Chremium	mg/I	APHA (23st Edition) 3111 D	<0.01	< 0.01	
25	Phenolic Compounds (as C <sub>4</sub> H <sub>3</sub> OH)	mg/l	APHA (23rd Edition) 5530C	<0.001	<0.001	
26	Hexavalent chromium (as Cr +4)	mg/I	APHA (23th Edition) ,3500 Cr B	<0.01	<0.01	
27	Copper	mg/l	APHA (23rd Edition) 3120B	<0.02	<0.02	
28	Cadmium	mg/l	APHA (23 <sup>rd</sup> Edition) 3120B	< 0.001	<0.001	
29	Mercury	mg/l	IS 3025(Part 48)-1994;Rfflm:2014	<0.001	<0.901	
30	Floating material	mg/l	APHA (23 <sup>st</sup> Edition) 2530B	<2.5	<2.5	
31	Petroleum Hydrocarbon	mg/I	IS 3025(Part 39)-1994;Rffm:2014	<0.5	<0.5	

Prepared By - & Kaunga

Checked By-

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N-5/100, Ground Floor IRC Villaga, Nayapalli Bhubaneswar - 751015 ICIN: U61909WB1956PTC023037) TESTING INSPECTION

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Date: 01.01.2022

## MARINE WATER QUALITY REPORT

Client Name & Address	M/s The Dhamra Port Company Limited, Dosinga, Bhadrak, Odisha
Work Order No.	4802006186
Reference No.	MSKGL/ED/2020-21/001150
Type of Sample	Marine Water
Sampling Location	Liquid/Gas/Cyrogenic Berth Face
Date of Sampling	16.12.2021
Date of Analysis	17.12.2021 to 31.12.2021
Sampling Done by	Mr. Kunja Bihari Nayak

SL.	The state of the first the state of the stat	Unit	Test Method	Analysis Result	
-	V CHARLES CONTRACTOR	1,777.70	Not allaced	Surface Water	Bottom water
1	Colour	Hazen	APHA (23 <sup>rd</sup> Edition) 2120B 2017	<1.0	<1.0
2	Odour	****	APHA (23rd Edition) 2150B	Agreeable	Agreeable
3	Temperature	Deg C	APHA (23th Edition) 2550 B	25.0	25.0
4	Turbidity	N.T.U	APHA (23rd Edition) 2130B	94.0	98.0
5	pH		APHA (Z3 <sup>rd</sup> Edition) 4500-H-B	7.62	7.70
6	Electrical Conductivity	us/cm	APELA (23rd Edition) 2510 B	18036.0	16718.0
7	Salinity	mg/I	APHA (23rd Edition) 2520B,2017	10425.0	9668.0
8	Total Suspended Solids	mg/l	APHA (23 <sup>rt</sup> Edition) 2540 D	100.0	76.0
9	Total dissolved solids	mg/l	APRA (23rd Edition) 2540C	11543.0	10700.0
10	Total Hardness	mg/l	APHA (23rd Edition) 2340B 2017	2374.0	2270.0
11	Calcium Hardness	mg/l	APHA (23rd Edition) 3500-Ca B	495.0	595.0
12	Magnesium Hardness	mg/l	APHA (23rd Edition) 3500-Mg B	1879.0	1675.0
13	Chloride (as CI)	ang/l	APHA (23th Edition) 4500-Cl 8	6455.0	5815.0
14	Dissolved Oxygen	mg/l	APEA (23rd Edition)-4500-O-C/G	6.4	4.5
15	Biochemical Oxygen Demand (3 days at 27°C)	mg/l	APHA (23 <sup>rd</sup> Edition) 5210B,2017	<2.0	<2.2
16	Chemical Oxygen Demand (COD)	mg/l	APHA (23 <sup>rd</sup> Edition) 5220B,2017	<4.0	<4.0
17	Oil & Grease	Ngm	APHA (23rd Edition) 5220B-2017	<1.4	<1.4
13	Dissolved phosphates (as PO <sub>v</sub> )	mg/l	APHA (23rd Edition) 4500-P D	<0.15	< 0.15
19	Sulphate (as SO <sub>4</sub> )	mg/l	APHA (23rd Edition)4500-SO4-E	770.0	873.0
20	Nitrite (as NO <sub>2</sub> )	mg/l	APHA (23rd Edition)4500-NO2B	<0.01	<0.01
21	Nitrate (as NO <sub>3</sub> )	mg/l	APHA (23 <sup>rd</sup> Edition)4500-NO3-E	<0.5	<0.5
22	Ammonical Nitrogen (as NH3-N)	mg/l	APHA (23th Edition)4500-NH3F	<0.1	<0.1
23	Total Nitrogen	mg/l	APHA (23rd Edition) 4500N C	1.8	0.69
24	Total Chromium	mg/l	APHA (23rd Edition) 3111 D	<0.01	<0.01
25	Phenolic Compounds (as CsHsOH)	mg/I	APHA (23# Edition) 5530C	<0.001	<0.001
26	Hexavalent chromium (as Cr +6)	mg/l	APHA (23" Edition) ,3500 Cr B	<0.01	<0.01
27	Copper	mg/l	APHA (23th Edition) 3120B	<0.02	<0.02
28	Cadmirem	mg/l	APHA (23rd Edition) 3120B	<0.001	<0.001
29	Mercury	mg/l	IS 3025(Part 48)-1994;Rffm;2014	<0.001	<0.001
30	Floating material	mg/l	APHA (23rd Edition) 2530B	<2.5	<2.5
31	Petroleum Hydrocarbon	mg/I	IS 3025(Part 39)-1994;Rffm:2014	<0.5	<0.5, /

Prepared By - S. Kanny

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MSK TESTING+INSPECTION

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### MARINE WATER QUALITY REPORT

Client Name & Address	M/s The Dhamra Port Company Limited, Dosinga, Bhadrak, Odisha
Work Order No.	4802006186
Reference No.	MSKGL/ED/2020-21/001150
Type of Sample	Marine Water
Sampling Location	Along Channel at 1Km
Date of Sampling	16.12.2021
Date of Analysis	17.12.2021 to 31.12.2021
Sampling Done by	Mr. Kunja Bihari Nayak
	The state of the s

SL.	Name of the Parameters	Unit	Test Method	Analysis Result		
No.	Country sac For guickers	- CHIL	a con tractation	Surface Water	Bottom water	
1	Colour	Hazen	APHA (23rd Edition) 2120B 2017	<1.0	<1.0	
2	Odour		APHA (23 <sup>rd</sup> Edition) 2150B	Agrecable	Agrecable	
3	Temperature	Deg C	APHA (23 <sup>rd</sup> Edition) 2550 B	25.0	25.0	
4	Turbidity	N.T.U	APHA (23rd Edition) 2130B	86.0	108.0	
5	pH	****	APHA (23 <sup>rt</sup> Edition) 4500-H-B	7.83	7.76	
6	Electrical Conductivity	us/cm	APHA (23rd Edition) 2510 B	33903,0	30667.0	
7	Salinity	mg/l	APHA (23 <sup>st</sup> Edition) 2520B,2017	19590.0	17720.0	
8	Total Suspended Solids	mg/l	APHA (23 <sup>rd</sup> Edition) 2540 D	133.0	104.0	
9	Total dissolved solids	mg/l	APHA (23rd Edition) 2540C	21698.0	19627.0	
10	Total Hardness	mg/l	APHA (23 <sup>rd</sup> Edition) 2340B 2017	3936.0	3938.0	
11	Calcium Hardness	mg/I	APHA (23rd Edition) 3500-Ca B	395.0	520.0	
12	Magnesium Hardness	mg/l	APHA (23rd Edition) 3500-Mg B	3541.0	3416.0	
13	Chloride (as CI)	mg/l	APHA (23rd Edition) 4500-Cl B	12122,0	10898.0	
14	Dissolved Oxygen	mg/I	APHA (23rd Edition)-4500-O-C/G	6.5	5.0	
15	Biochemical Oxygen Demand (3 days at 27°C)	mg/l	APHA (23 <sup>rd</sup> Edition) 5210B,2017	<2.0	<2.0	
16	Chemical Oxygen Demand (COD)	ngA	APHA (23 <sup>st</sup> Edition) 5220B,2017	<4.0	<4.0	
17	Oil & Grease	mg/l	APHA (23rd Edition) 5220B,2017	≤1.4	<1.4	
18	Dissolved phosphates (as PO <sub>4</sub> )	mg/l	APHA (23rd Edition) 4500-P D	<0.15	< 0.15	
19	Sulphate (as SO <sub>4</sub> )	mg/l	APHA (23* Edition)4500-SO4-E	1491.0	1504.0	
20	Nitrite (as NO <sub>2</sub> )	mg/l	APHA (23rd Edition)4500-NO2B	<0.01	< 0.01	
21	Nitrate (as NO <sub>3</sub> )	mg/l	APHA (23 <sup>st</sup> Edition)4500-NO3-E	≤0.5	<0.5	
22	Annomical Nitrogen (as NH3-N)	mg/I	APEIA (23rd Edition)4500-NH3F	<0.1	<0.i	
23	Total Nitrogen	mg/l	APHA (23rd Edition) 4500N C	<0.3	<0.3	
24	Total Chromium	mg/l	APHA (23rd Edition) 3111 D	<0.01	< 0.01	
25	Phenotic Compounds (as CdHsOH)	пуЛ	APHA (23rd Edition) 5530C	. <0.001	<0.001	
26	Hexavalent chromium (as Cr+6)	mg/l	APHA (23rd Edition) ,3500 Cr B	<0.01	<0.01	
27	Copper	mg/l	APHA (23 <sup>rd</sup> Edition) 31208	<0.02	<0.62	
28	Codmium	mg/l	APHA (23 <sup>rd</sup> Edition) 3120B	<0.001	< 0.001	
29	Mercury	mg/l	IS 3025(Part 48)-1994;Rffm:2014	<0.001	< 0.001	
30	Floating material	mg/l	APHA (23rd Edition) 2530B	<2.5	<2.5	
31	Petroleum Hydrocarbon	mg/l	IS 3025(Part 39)-1994;Rffm:2014	<0.5	<0.5	

Prepared By - J. Konnige

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Date: 01.01.2022

## MARINE WATER QUALITY REPORT

Client Name & Address	M/s The Dhamra Port Company Limited, Dosinga, Bhadrak, Odisha
Work Order No.	4802006186
Reference No.	MSKGL/ED/2020-21/001150
Type of Sample	Marine Water
Sampling Location	Along Channel at 5Km
Date of Sampling	16.12.2021
Date of Analysis	17.12.2021 to 31.12.2021
Sampling Done by	Mr. Kunja Bihari Nayak

SL.		Unit	Test Method	Analysis Result		
No.	A COMPANY OF THE PROPERTY OF T		2301 1303000	Surface Water	Bottom water	
1	Colour	Hazen	APHA (23" Edition) 2120B 2017	<1.0	<1,0	
2	Odour		APHA (23rd Edition) 2150B	Agreeable	Agreeable	
3	Тетпрегатите	Deg C	APHA (23rd Edition) 2550 B	25.0	23.0	
4	Turbidity	N.T.U	APHA (23rd Edition) 2130B	67.0	63.0	
5	pH	****	APHA (23 <sup>rd</sup> Edition) 4500-H-B	7.96	7.95	
6	Electrical Conductivity	us/em	APHA (23rd Edition) 2510 B	36250.0	34910.0	
7	Salimity	mg/l	APHA (23 <sup>rd</sup> Edition) 2520B,2017	20951.0	20174.0	
8	Total Suspended Solids	mg/l	APHA (23th Edition) 2540 D	96.0	132.0	
9	Total dissolved solids	mg/l	APHA (23 <sup>rd</sup> Edition) 2540C	23200.0	22342.0	
10	Total Hardness	mg/l	APHA (23rd Edition) 2340B 2017	4063.0	4259.0	
11	Calcium Hardness	mg/l	APHA (23rd Edition) 3500-Ca B	992.0	792.0	
12	Magnesium Hardness	mg/I	APHA (23rd Edition) 3500-Mg B	3070.0	3467.0	
13	Chloride (as CI)	mg/l	APHA (23rd Edition) 4500-CI B	12990.0	12861.0	
14	Dissolved Oxygen	mg/l	APHA (23rd Edition)-4500-O-C/G	6.6	3.9	
13	Biochemical Oxygen Demand (3 days at 27°C)	mgA	APHA (23rd Edition) 5210B,2017	<2.0	<2.0	
16	Chemical Oxygen Demand (COD)	mg/l	APHA (23 <sup>rd</sup> Edition) 5220B,2017	<4.0	<4.0	
17	Oil & Grease	mg/i	APHA (23rd Edition) 5220B,2017	<1.4	<1.4	
18	Dissolved phosphates (as PO <sub>4</sub> )	mg/l	APHA (23rd Edition) 4500-P D	<0.15	<0.15	
19	Sulphate (as SO <sub>4</sub> )	mg/I	APHA (23rd Edition)4500-SO4-E	1505.0	1714.0	
20	Nitrite (as NO <sub>2</sub> )	mg/l	APHA (23rd Edition)4500-NO2B	<0.01	<0.01	
21	Nitrate (as NO <sub>2</sub> )	rag/l	APHA (23 <sup>rd</sup> Edition)4500-NO3-E	40.5	<0.5	
22	Ammonical Nitrogen (as NH3-N)	mg/l	APHA (23rd Edition)4500-NH3F	<0.1	<0.1	
23	Total Nitrogen	mg/I	APHA (23rd Edition) 4500N C	0,78	1.2	
24	Total Chromium	mg/l	APHA (23rd Edition) 3111 D	<0.01	<0.01	
25	Phenolic Compounds (as CeHsOH)	mg/l	APHA (23rd Edition) 5530C	<0.001	<0.001	
26	Hexavalent chromium (as Cr =6)	mg/l	APHA (23tf Edition) 3500 Cr B	<0.01	<0.01	
27	Copper	mg/l	APHA (23rd Edition) 3120B	<0.02	<0.02	
28	Cadmium	mg/l	APHA (23rs Edition) 3120B	<0.001	<0.001	
29	Mercury	mg/l	IS 3025(Part 48)-1994;Rffm:2014	< 0.001	<0.001	
30	Floating material	mg/l	APHA (23rd Edition) 2530/8	<2.5	<2.5	
31	Petroleum Hydrocarbon	mg/I	IS 3025(Part 39)-1994;Rffm;2014	<0.5	<0.5	

Prepared By - S. Kanngo

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TESTING INSPECTION

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Date: 01.01,2022

### MARINE WATER QUALITY REPORT

Client Name & Address	M/s The Dhamra Port Company Limited, Dosinga, Bhadrak, Odisha
Work Order No.	4802006186
Reference No.	MSKGL/ED/2020-21/001150
Type of Sample	Marine Water
Sampling Location	Along Channel at 10Km
Date of Sampling	16,12,2021
Date of Analysis	17,12,2021 to 31,12,2021
Sampling Done by	Mr. Kunja Bihari Nayak

SL.	Name of the Parameters	Unit	Test Method	Analysi	Analysis Result		
No.		6300	Test National	Surface Water	Bottom water		
1	Colour	Hazen	APHA (23 <sup>rd</sup> Edition) 2120E 2017	<1.0	<1.0		
2	Odour		APHA (23rd Edition) 2150B	Agrecable	Agreeable		
3	Temperature	Deg C	APHA (23rd Edition) 2550 B	25.0	25.0		
4	Turbidity	N.T.U	APHA (23 <sup>rd</sup> Edition) 2130B	92.0	63.0		
5	pHq Hq		APHA (23rd Edition) 4500-H-B	7.90	7.95		
6	Electrical Conductivity	us/cm	APHA (23rd Edition) 2510 B	38582.0	34910.0		
7	Salinity	mg/l	APHA (23rd Edition) 2520B,2017	22300.0	20172.0		
8	Total Suspended Solids	mg/l	APHA (23rd Edition) 2540 D	184.0	132.0		
9	Total dissolved solids	mg/l	APHA (23rd Edition) 2540C	24693.0	223420		
10	Total Hardness	mg/l	APHA (23# Edition) 2340B 2017	4307.0	4259.0		
11	Calcium Hardness	mg/l	APHA (23rd Edition) 3500-Ca B	770.0	792.0		
12	Magnesium Hardness	mg/l	APRA (23td Edition) 3500-Mg B	3538.0	3467.8		
13	Chloride (as CI)	mg/l	APHA (23rd Edition) 4500-CLB	14290.6	12861.0		
14	Dissolved Oxygen	mg/I	APFIA (23rd Edition)-4500-O-C/G	6.4	3.2		
15	Biochemical Oxygen Demand (3 days at 27°C)	ng/l	APHA (23rd Edition) 5210B,2017	<2.0	<2.0		
16	Chenical Oxygen Demand (COD)	mg/l	APHA (23 <sup>rd</sup> Edition) 5220B,2017	<4.0	<4.0		
17	Oil & Grease	mg/l	APHA (23 <sup>rd</sup> Edition) 5220B,2017	<1.4	<1.4		
18	Dissolved phosphates (as PO <sub>4</sub> )	mg/l	APHA (23rd Edition) 4500-P D	<0.15	<0.15		
19	Sulphate (as SO <sub>4</sub> )	mg/l	APHA (23rd Edition)4500-SO4-E	1151.0	1174.0		
20	Nitrite (as NO <sub>2</sub> )	mg/l	APHA (23rd Edition)4500-NO2B	< 0.01	<0.01		
21	Nitrate (ns NO <sub>3</sub> )	mg/I	APHA (23rd Edition)4500-NO3-E	<0.5	<0.5		
22	Ammonical Nitrogen (as NH2-N)	mg/l	APHA (23rd Edition)4500-NH3F	<0.1	<0.1		
23	Total Nitrogen	mg/l	APHA (23 <sup>rd</sup> Edition) 4500N C	<0.3	<0.3		
24	Total Chromium	mg/l	APHA (23rd Edition) 3111 D	<0.01	< 0.01		
25	Phenolic Compounds (as CaHsOH)	mg/I	APHA (23 <sup>rd</sup> Edition) 5530C	<0.001	<0.001		
26	Hexavalent chromium (as Cr +6)	mg/I	APHA (23 <sup>rd</sup> Edition) ,3500 Cr B	<0.01	<0.01		
27	Copper	mg/l	APHA (23rd Edition) 3120B	<0.02	<0.02		
28	Cadmium	mg/l	APHA (23rd Edition) 3120B	<0.001	<0.001		
29	Morcury	mg/I	IS 3025(Part 48)-1994;Rffm:2014	<0.001	<0.001		
30	Floating material	mg/l	APHA (23rd Edition) 2530B	<2.5	<2.5		
11	Petroleum Hydrocarbon	mg/l	IS 3025(Part 39)-1994;Rffm:2014	<0.5	< 0.5		

Prepared By - S. Kanngo

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[CIN: U51909WB1956PTC023637]

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Date: 01.01.2022

## MARINE WATER QUALITY REPORT

Client Name & Address	M/s The Dhamra Port Company Limited, Dosinga, Bhadrak, Odisha
Work Order No.	4802006186
Reference No.	MSKGL/ED/2020-21/001150
Type of Sample	Marine Water
Sampling Location	Near Kanika Island
Date of Sampling	16.12.2021
Date of Analysis	17.12.2021 to 31.12.2021
Sampling Done by	Mr. Kunja Bihari Navak

SL.	Name of the Parameters	Unit	Test Method	Analysis Result		
No.	7444 (1) 344 (1) 3444 (1)	2000	Test intention	Surface Water	Bottom wate	
1	Colour	Hazen	APHA (23rd Edition) 2120/3 2017	<1.0		
2	Odour	-	APHA (23 <sup>-d</sup> Edition) 2150B	Agrecable	Agrecable	
3	Temperature	Deg C	APHA (23rd Edition) 2550 B	25.0	25.0	
4	Turbidity	N.T.U	APHA (23rd Edition) 2130B	65.0	118.0	
5	pH	esta.	APHA (23rd Edition) 4500-H-B	7.81	7,74	
6	Electrical Conductivity	us/cro	APHA (23rd Edition) 2510 B	32745.0	48886.0	
7	Salinity	mg/l	APHA (23rd Edition) 2520B,2017	18920.0	28251.0	
8	Total Suspended Solids	mg/l	APHA (23rd Edition) 2540 D	207.0	195.0	
9	Total dissolved solids	mg/l	APHA (23 <sup>rd</sup> Edition) 2540C	20957.0	31287,0	
10	Total Hardness	mg/l	APHA (23 <sup>rd</sup> Edition) 2340B 2017	3647.0	3665.0	
11	Calcium Hardness	mg/I	APHA (23rd Edition) 3500-Ca B	930.0	990.0	
12	Magnesium Hardness	ing/l	APHA (23rd Edition) 3500-Mg B	2717.0	2675.0	
13	Chloride (as CI)	mg/l	APHA (23rd Edition) 4500-Cl B	11580.0	11826,0	
14	Dissolved Oxygen	mg/l	APHA (23rd Edition)-4500-Q-C/G	6.5	3.0	
15	Biochemical Oxygen Demand (3 days at 27°C)	mg/I	APHA (23rd Edition) 5210B,2017	<2.0	<2.0	
16	Chemical Oxygen Demand (COD)	mg/I	APHA (23 <sup>th</sup> Edition) 5220B,2017	<4.0	<4.0	
17	Oil & Grease	Tgm I	APHA (23th Edition) 5220B,2017	<1.4	<1.4	
18	Dissolved phosphates (as PO <sub>4</sub> )	mg/l	APHA (23rd Edition) 4500-P D	<0.15	<0.15	
19	Sulphate (as SO <sub>4</sub> )	mg/l	APHA (23 <sup>16</sup> Edition)4500-SO4-E	1460.0	1438.0	
20	Nitrite (as NO <sub>1</sub> )	mg/l	APHA (23rd Edition)4500-NO2B	< 0.01	<0.01	
21	Nitrate (as NO <sub>s</sub> )	mg/I	APHA (23rd Edition)4500-NO3-E	<0.5	<0.5	
22	Ammonical Nitrogen (as NH <sub>2</sub> -N)	mg/I	APHA (23rd Edition)4500-NH3F	<0.1	<0.1	
23	Total Nitrogen	mg/l	APHA (23td Edition) 4500N C	<0.3	<0.3	
24	Total Chromium	mg/l	APHA (23 <sup>rd</sup> Edition) 3111 D	<0.01	< 0.01	
25	Phenolic Compounds (ss C <sub>6</sub> H <sub>5</sub> OH)	mg/l	APHA (23th Edition) 5530C	<0.001	<0.001	
26	Hexavalent chromium (as Cr+6)	mg/I	APHA (23rd Edition) ,3500 Cr B	<0.01	< 0.01	
27	Copper	mg/l	APHA (23rd Edition) 3120B	<0.02	<0.02	
82	Cadmium	mg/l	APHA (23rd Edition) 3120B	<0.001	<0.001	
19	Mercury	mg/l	IS 3025(Part 48)-1994;Rffin:2014	< 0.001	< 0.001	
0	Floating material	mg/l	APHA (23rd Edition) 2530B	<2.5	<2.5	
11	Petroleum Hydrocarbon	mg/l	IS 3025(Part 39)-1994;Rffm:2014	<0.5	<0.5	

Propared By - S. Kange

Checked By

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Date: 01.01.2022

## PHYTOPLANKTONMONITORING REPORT

Client Name & Address	M/s The Dhamra Port Company	Limited, Dosinga, Bhadrak, Odisha
Work Order No.	4802006186	
Reference No.	MSKGL/ED/2020-21/001150	
Type of Sample	Marine Sample (Phytoplankton	)
Sampling Location	S1:Dhamra River Mouth S2:Dry Bulk Cargo Berth Face S5:Along Chanel at 5Km S7:Near Kanika Island	S3:Liquid/Gas/Cyrogenic Berth Face S4:Along Channel at 1Km S6: Along Channel at 10Km
Date of Sampling	16.12.2021	
Date of Analysis	17.12.2021 to 31.12.2021	
Sampling Done by	Mr. Kunja Bihari Nayak	

1000	me of the trameters	Total count	No of species	Chlorophyll-a	Major Species
Unit		The American Control of the Control			
Test	ing Method	Method APHA 10200 APHA 10200		APHA 10200H	APHA (23rd Edition) 10200
	V	v-	A	analysis Result	
5-1	Surface Water	20000	4	0.94	Navicula, Zostera
	Bottom water	18000	5	0.80	Moucotia, Enteromorpha
S-2	Surface Water	24000	6	0.97	Zostera, Phormidium
3.	Bottom water	11000	3	0.68	Fragilaria, Enteromorpha
S-3	Surface Water	15000	4	0.75	Cyclotella, Enteromorpha
3-3	Bottom water	19000	2	0.47	Vallisneria, Phormidium
8-4	Surface Water	25000	7	0.90	Moueotia, Fragilaria
O-M	Bottom water	13000	3	0.55	Nereocystis, Zostera
8-5	Surface Water	17000	4	0.61	Vallisneria, Zostera
0-0	Bottom water	21000	6	0.88	Enteromorpha, Vallisoeria
	Surface Water	14000	2	0.60	Phormidium, Nereocystis
S-6	Bottom water	25000	4	0.96	Navicula, Phormidium
S-7	Surface Water	16000	5	0.73	Cyclotella, Enteromorpha
34)	Bottom water	22000	3	0.90	Vallisneria, Calothrix

Prepared By - ( Kann

BBSR E

Checked By-

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## ZOOPLANKTONMONITORING REPORT

Client Name & Address	M/s The Dhamra Port Company Limited, Dosinga, Bhadrak, Odisha
Work Order No.	4802006186
Reference No.	MSKGL/ED/2020-21/001150
Type of Sample	Marine Sample (Zooplankton)
Sampling Location	S1:Dhamra River Mouth S2:Dry Bulk Cargo Berth Face S4:Along Channel at 1Km S5:Along Channel at 5Km S6: Along Channel at 10Km S7:Near Kanika Island
Date of Sampling	16.12.2021
Date of Analysis	17.12.2021 to 31.12.2021
Sampling Done by	Mr. Kunja Bihari Nayak

	ame of the arameters	Total count	No of species	Major Species	
	Unit Units/L		Nos.	-	
Tes	ting Method	APHA 10200	APHA 10200	APHA (23rd Edition) 10200	
			Analysis		
8-1	Surface Water	None	None	None	
- Print	Bottom water	None	None	None	
5-2	Surface Water	None	None	None	
0-2	Bottom water	None	None	None	
S-3	Surface Water	None	None	None	
2-3	Bottom water	1000	1	Daphnia	
S-4	Surface Water	None	None	None	
13=4	Bottom water	None	None	None	
8-5	Surface Water	2000	I	Daplinia	
8-5	Bettom water	None	None	None	1
	Surface Water	None	None	None	
8-6	Bottom water	None	None	None	
S-7	Surface Water	None	None	None	
3-1	Bottom water	None	None	None	

Checked By-



N-5/160, Ground Floor IRC Village, Nayapelli Bhubaneswar - 751015

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Date: 01.01.2022

## MICROBIOLOGICAL MONITORING REPORT

Client Name & Address	M/s The Dhamra Port Company Limited, Dosinga, Bhadrak, Odisha			
Work Order No.	4802006186			
Reference No.	MSKGL/ED/2020-21/001150			
Type of Sample	Marine Sample (Microbiological)			
Sampling Location	S1:Dhamra River Mouth S3:Liquid/Gas/Cyrogenic Berth Face S2:Dry Bulk Cargo Berth Face S4:Along Channel at 1Km S5:Along Channel at 5Km S6: Along Channel at 10Km S7:Near Kanika Island			
Date of Sampling	16.[2,202]			
Date of Analysis	17.12.2021 to 31.12.2021			
Sampling Done by	Mr. Kunja Bihari Nayak			

B - 50 C	ame of the prameters	Total Bacteria count	Total Coliform	Faccal Coliform	E. ooli	Enterococcus	Salmonella	Shigella	Vibrio
	Unit	CFU/ml	MPN/100ml	MPN/100ml	MPN/100mi	CFU/ml	/100ml	/100ml	/100ml
10000	Testing Method	APHA 50 Edn	APHA 9221 B	APHA 9221 E	APHA 9221 F	IS 5887(Part-II)	IS 5887(Part- III)	IS 5887(Pari-	IS 5887(Part
	12.2			An	alysis Result			VII)	(V)
s.	Surface Water	200.0	<1.8	<1.8	8.1>	<1.0	Absent	Absent	Absent
1	Bottom water	100.0	<1.8	<1.8	<1.8	<1.0	Absent	Absent	Absent
s.	Surface Water	220.0	7.8	<1.8	<1.8	<1.0	Absent	Absent	Absent
2	Bottom water	150.0	<1.8	<1.8	<1.8	<1.0	Absent	Absent	Absent
S-	Surface Water	60.0	<1.8	<1.8	<1.8	<1.0	Absent	Absent	Absent
3	Bottom water	120.0	<1.8	<1.8	<1.8	<1.0	Absent	Absent	Absent
s-	Surface Water	75.0	<1.8	<1.8	<1.8	<1.0	Absent	Absent	Absent
4	Bottom water	100.0	<1.8	<1.8	<1.8	<1.0	Absent	Absent	Absent
s-	Surface. Water	85.0	<1.8	<1.8	<1.8	<1.0	Absent	Absent	Absent
5	Bottom water	55.0	<1.8	<1.8	<1.8	<1.0	Absent	Absent	Absent
S-	Surface Water	95.0	<1.8	<1.8	<1.8	<1.0	Absent	Absent	Absent
6	Bottom water	70.0	<1.8	<1.8	<1.8	<1.0	Absent	Absent	Absent
s.	Surface Water	110.0	<1.8	<1.8	<1.8	<1.0	Absent	Absent	Absent
7	Bottom water	78.0	4,8	<1.8	<1.8	<1.0	Absent	Absent	Absent

Prepared By - S. Konnys

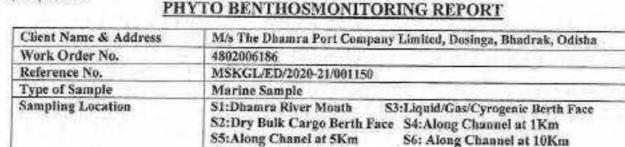
Checked By-

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[CIN: U51909WB1956PTC023037]

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| S7:Near Kanika Island | Date of Sampling | 16.12.2021 | Date of Analysis | 17.12.2021 to 31.12.2021

Sampling Done by Mr. Kunja Bihari Nayak

	me of the trameters	Fungus	Total Count	No of species	Diversity Index	Major species
Unit Testing Method		CFU/g dry wt.	50 mg wet sediment	Nos.	-	-
		APHA 9610 B	APHA 9215 B,C	APHA 10500 B	By Calculation (Shanon's Index)	APHA 10500 B
				Analysis Result		
S-1	Surface Water	1700	189	10	0,6107	Ditylum
41	Bottom water	1854	221	12	1,414	N.longsigma
S-2	Surface Water	2200	224	16	0.6802	Ctenophora
3-2	Bottom water	1650	163	9	0.4805	Podasira,
5-3	Surface Water	1300	201	- 11	0.6289	Ctenophora, Ditylum,
99	Bottom water	1870	179	12	0.5239	N.longsigma
8-4	Surface Water	2150	264	18	0.7792	Ditylum, Podasira
314	Bottom water	1180	147	8	0.4872	Ditylum, Echinodermata
S-5	Surface Water	2150	237	28	1.6472	Podasira, Copepods
3-3	Bottom water	1800	210	12	0.5723	Ditylum, Echinodermata
S-6	Surface Water	2700	290	34	1.7221	Podasira, Copepods
O-0	Bottom water	2000	224	20	0.7212	Ctenophora, Copepods
S-7	Surface Water	1160	148	4	0.3644	N.longsigma, Podasira
0-7:	Bottom water	1750	166	10	0.6117	Podasira N.longsigma

Prepared By - S. Karnge

Checked By-

TESTING + INSPECTION

Date: 01.01.2022

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Date: 01.01.2022

## PRIMARY PRODUCTIVITYMONITORING REPORT

Client Name & Address	M/s The Dhamra Port Company Limited, Dosinga, Bhadrak, Odisha
Work Order No.	4802006186
Reference No.	MSKGL/ED/2020-21/001150
Type of Sample	Marine Sample (Productivity)
Date of Sampling	16.12.2021
Date of Analysis	17.12.2021 to 31.12.2021
Sampling Done by	Mr. Kunja Bihari Nayak

SI. No.	Monitoring Location	Gross Primary productivity (O2mg/L/day)	Net Primary productivity (O2mg/L/day)	
1	SI:Dhamra River Mouth	Surface Water	1.9	0.9
22	25 The Property of State of St	Bottom water	2,1	1.4
2 S2:Dry Bulk Cargo Berth Face	Surface Water	1.7	0.7	
. 7.0	2 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 1 1 1 1	Bottom water	2.0	1.6
3	3 S3:Liquid/Gas/Cyrogenic Berth Face	Surface Water	2,4	1.9
	The same of the sa	Bottom water	1.7	1.0
4	S4:Along Channel at 1Km	Surface Water	2.1	0.6
100	7.77.70	Bottom water	1.5	0.4
5	S5:Along Chanel at 5Km	Surface Water	2.3	2.1
	Andreas Separate as Assets	Bottom water	1.9	1.2
6	S6: Along Channel at 10Km	Surface Water	2.2	1.7
~	and the same constants at Tokin	Bottom water	1.4	0.7
7	S7:Near Kanika Island	Surface Water	2.1	1.3
	STATEMENT AND ADMINISTRATION OF THE PARTY OF	Bottom water	1.9	0.6

Propared By - S. Karngt

BBSR S

Checked By-



N-5/100, Ground Floor IRC Village, Nayapsili Bhubaneswar - 751015

[CIN: U61909WB1956PT0023037]

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Date: 01,01,2022

### TOTAL FAUNA MONITORING REPORT

Client Name & Address	M/s The Dhamra Port Company Limited, Dosinga, Bhadrak, Odisha				
Work Order No.	4802006186				
Reference No.	MSKGL/ED/2020-21/001150				
Type of Sample	Marine Sample				
Sampling Location	S1:Dhamra River Mouth S3:Liquid/Gas/Cyrogenic Berth Face S2:Dry Bulk Cargo Berth Face S4:Along Channel at 1Km S5:Along Chancl at 5Km S6: Along Channel at 10Km S7:Near Kanika Island				
Date of Sampling	16.12.2021				
Date of Analysis	17.12.2021 to 31.12.2021				
Sampling Done by	Mr. Kunja Bihari Nayak				

Pa	rameters	Name of phylum	Class & No. of individuals encountered	Total no of species encountered	Total fauna per m <sup>3</sup>	
Testing Method APHA 10700		APHA 10700	APHA 10700	APHA 10700	APHA 10700	
- 0			Analysis Result		The second second	
S-1	Surface Water	Annelida, Mollusca	Plychaeta-58,Bivalvia-23	55	128	
	Bottom water	Annelida, Mollusca	Plychaeta-28,Bivalvin-08	42	101	
8-2	Surface Water	Annelida, Mollusca	Plychacta-41, Bivalvia-29	88	194	
3-4	Bottom water	Annelida, Mollusca	Plychaeta-66,Bivalvia-34	115	328	
8-3	Surface Water	Anthropoda, Annelida	Plychaeta-70,Bivalvia-48	90	210	
3-3	Bottem water	Annelida, Mollusca	Plychaeta-47,Bivalvia-20	80	320	
S-4	Surface Water	Annelida, Mollusca	Plychaeta-51,Blvalvia-23	70	261	
3-4	Bottom water	Annehda, Mollusca	Plychaeta-40,Bivalvia-15	76	158	
S-5	Surface Water	Annelida, Mollusca	Plychaeta-55,Bivalvin-22	124	540	
3-3	Bottom water	Annelida, Mollusca	Plychaeta-42,Bivalvis-17	71	359	
S-6	Surface Water	Anthropoda, Annelida	Malagostraca-33,Pelecypode-20	169	715	
340	Bottom water	Annelida, Mollusca	Plychaeta-80, Gastropoda-48	57	184	
	Surface Water	Anthropoda, Annelida	Malagostraca-12,Pelecypoda-05	47	166	
S-7	Bottom water	Anthropoda, Annelida	Plychaeta-47,Gastropoda-27	68	212	

Prepared By - S. Karryo

Checked By-

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MSK
TESTING\* INSPECTION

N-5/100, Ground Floor IRC Village, Nayapalli Bhubaneswar - 751015

[CIN: US1909WB1956PTC023037]

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## TEST REPORT

Name & Address of the Customer: THE DHAMRA PORT COMPANY LIMITED

AT: DOSINGA, PO: DHAMRA

DIST: BHADRAK, PIN: 756171 ODISHA

Report No. : BBS/560 Date : 01.01.2022

Sample No.: MSKGL/ED/2020-21/12/00104

Sample Description: Sea Sediment

Sampling Location: Dhamra River Mouth

Date of sampling : 16.12.2021

Sl. No.	<u>Parameters</u>	Unit	Test Method	Result
1.	pH value	None	IS 2720 (Part 26)-1987;Rffm:2011	7.66
2.	Electrical Conductivity	us/cm	IS 3025 (Part 14)-1984;Rffm:2006	8756.0
3.	Organic Matter	%	IS 2720 (Part 22)-1972; Rffm:2015	1.88
4.	Turbidity	N.T.U	APHA (23rd Edition) 2130B	24.0
5,	Moisture content	%	Lab Method	37.0
6.	Chloride (as C1)	mg/kg	TPM/MSK/P&E/1/10	2154.0
7.	Sulphate (as SO4)	mg/kg	IS 2720 (Part 27) 1977,RA 2015	596,0
8.	Sulphide (as S)	mg/kg	TPM/MSK/P&E/1/43	<5.0
9.	Phosphate (as PO4)	mg/kg	TPM/MSK/P&E/1/12	BDL
10.	Phosphorus	mg/kg	TPM/MSK/P&E/1/12	6.0
11.	fron (as Fa)	mg/kg	TPM/MSK/P&E/1/13	8.4
12.	Sodium (as Na)	mg/kg	TPM/MSK/P&E/1/4	2214.0
13.	Potassium (as K)	mg/kg	TPM/MSK/P&E/1/5	527.0
14.	Copper (as Cu)	mg/kg	EPA 6010D	4.5
15.	Nickel (as Ni)	mg/kg	EPA 6010D	1.78
16.	Zinc (as Zn)	mg/kg	EPA 6010D	8.15
17.	Manganese (as Mn)	mg/kg	EPA 6010D	BDL



Date-01.01.2022

18.	Lead (as Pb)	mg/kg	EPA 6010D	6.22
19.	Boron (as B)	mg/kg	IS 13428- 2005, Annex H	5.18
20.	Aluminium ( as AI )	mg/kg	EPA 6010D	BDL
21.	Total Chromium (as Cr)	mg/kg	EPA 6010D	3.56
22.	Total Nitrogen (as N)	mg/kg	IS 14684 (1999); Rffin:2014	12.0
23.	Organic Nitrogen	mg/kg	TPM/MSK/P&E/3/68	9.5
24.	Total Petroleum Hydrocarbon	mg/kg	USEPA 8015 B - Dec, 1996, 8270 D - Feb,2007	<0.05
25.	Pesticide Residue	mg/kg	USEPA 3540 C USEPA 8082	<0.5
26.	Sand	%	TPM/MSK/P&E/1/36A	37.0
27.	Silt	%	TPM/MSK/P&E/1/36A	30.0
28.	Clay	None	TPM/MSK/P&E/1/36A	33.0
29.	Texture	%	TPM/MSK/P&E/1/36A	Loam

## Biological Result

SI No.	Parameters	Unit	Results
1.	Fungus (Phytobenthos)	CFU/g dry wt.	1578
2.	Total count (Phytobenthos)	50 mg wet sediment	178
3,	No of species (Phytobenthos)	Nos.	4
4.	Diversity index (Phytobenthos)	1	0.8456
5.	Major Species (phytobenthos)		Coscinodiscuss, Pleurosigma
6.	Name of Phylum (Fauna)	_	Annelida, Mollusca
7.	Class & Number of individuals encountered (Fauna)	(1 <u>12</u> 1)	Plychaeta-28,Bivalvia-12
8.	Total no. of species encountered (Fauna)	Nos.	28
9.	Total fauna (Fauna)	per m <sup>3</sup>	187

S. Kournge Report Prepared by:



For Mitra S.K. Private Limited

TESTING \* INSPECTION

N-5/100, Ground Floor IRC Village, Navagalli Bhubaneswar - 751015

FCIN: U51909WB1956PTC023037I

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## TEST REPORT

Name & Address of the Customer: THE DHAMRA PORT COMPANY LIMITED

AT: DOSINGA, PO: DHAMRA

DIST: BHADRAK, PIN: 756171 ODISHA

Report No. : BBS/561 Date : 01.01.2022

Sample No.: MSKGL/ED/2020-21/12/00105

Sample Description : Sea Sediment

Sampling Location: Dry Bulk Cargo Berth Face

Date of sampling : 16.12.2021

Sl. No.	<u>Parameters</u>	Unit	Test Method	Result
1.	pH value	None	IS 2720 (Part 26)-1987;Rffm;2011	7.98
2.	Electrical Conductivity	us/cm	IS 3025 (Part 14)-1984;Rffm:2006	6897.0
3.	Organic Matter	%	(S 2720 (Part 22)-1972; Rffm:2015	1.64
4.	Turbidity	N.T.U	APHA (23rd Edition) 2130B	21.0
5,	Moisture content	%	Lab Method	34.0
6.	Chloride (as Cl )	mg/kg	TPM/MSK/P&E/1/10	2457.0
7.	Sulphate (as SO4)	mg/kg	IS 2720 (Part 27) 1977,RA 2015	321,0
8.	Sulphide (as S)	mg/kg	TPM/MSK/P&E/1/43	<5.0
9.	Phosphate (as PO4)	mg/kg	TPM/MSK/P&E/1/12	12.0
10.	Phosphorus	mg/kg	TPM/MSK/P&E/1/12	14.0
11.	Iron (as Fe)	mg/kg	TPM/MSK/P&E/1/13	7.21
12.	Sodium (as Na)	mg/kg	TPM/MSK/P&E/1/4	2014.0
13.	Potassium (as K)	mg/kg	TPM/MSK/P&E/1/5	363.0
14.	Copper (as Cu)	mg/kg	EPA 6010D	2.97
15.	Nickel (as Ni)	mg/kg	EPA 6010D	1.87
16.	Zinc (as Zn)	mg/kg	EPA 6010D	7.81
17.	Manganese (as Mn)	mg/kg	EPA 6010D	BDL



#### Date- 01.01.2022

18.	Lead (as Pb)	mg/kg	EPA 6010D	2.89
19.	Boron (as B)	mg/kg	IS 13428- 2005, Annex H	7.0
20.	Aluminium (as Al)	mg/kg	EPA 60 (0D	BDL
21.	Total Chromium (as Cr)	mg/kg	EPA 6010D	2.27
22.	Total Nitrogen (as N)	mg/kg	IS 14684 (1999); Rffm:2014	11.0
23.	Organic Nitrogen	mg/kg	TPM/MSK/P&E/3/68	7.45
24.	Total Petroleum Hydrocarbon	mg/kg	USEPA 8015 B - Dec, 1996, 8270 D - Feb,2007	<0.05
25.	Pesticide Residue	mg/kg	USEPA 3540 C USEPA 8082	<0,5
26.	Sand	%	TPM/MSK/P&E/I/36A	40.0
27.	Silt	%	TPM/MSK/P&E/1/36A	32.0
28.	Clay	None	TPM/MSK/P&E/1/36A	28.0
29.	Texture	%	TPM/MSK/P&E/1/36A	Clay Loam

### **Biological Result**

SI No.	Parameters	Unit	Results
1.	Fungus (Phytobenthos)	CFU/g dry wt.	2127
2.	Total count (Phytobenthos)	50 mg wet sediment	280
3.	No of species (Phytobenthos)	Nos.	4
4.	Diversity index (Phytobenthos)		0.7845
5.	Major Species (phytobenthos)	7444	Navicula, Coscinodiscuss,
6.	Name of Phylum (Fauna)		Annelida, Mollusca
7.	Class & Number of individuals encountered (Fauna)	-	Plychseta-50,Bivalvia-16
8.	Total no. of species encountered (Fauna)	Nos.	38
9.	Total fauna (Fauna)	per m <sup>3</sup>	210

Report Prepared by:

For Mitra S.K. Private Limited



N-5/100, Ground Floor IRC Village, Nayapali Bhubaneswar - 751015 ICIN: U51909WB1958PT00230371

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## TEST REPORT

Name & Address of the Customer: THE DHAMRA PORT COMPANY LIMITED

AT: DOSINGA, PO: DHAMRA

DIST: BHADRAK, PIN: 756171 ODISHA

Report No. : BBS/562 Date : 01.10.2022

Sample No.: MSKGL/ED/2020-21/12/00106

Sample Description: Sea Sediment

Sampling Location: Liquid/Gas/Cyrogenic Berth

Face

Date of sampling : 16.12.2021

Sl. No.	<u>Parameters</u>	Unit	Test Method	Result
1,	pH value	None	IS 2720 (Part 26)-1987;Rffm:2011	7.89
2.	Electrical Conductivity	us/cm	1S 3025 (Part 14)-1984;Rffm:2006	5647.0
3.	Organic Matter	%	IS 2720 (Part 22)-1972; Rffm:2015	1.56
4.	Turbidity	N.T.U	APHA (23rd Edition) 2130B	22.0
5.	Moisture content	%	Lab Method	36.0
6.	Chloride (as Cl.)	mg/kg	TPM/MSK/P&E/1/10	1645.0
7.	Sulphate (as SO4)	mg/kg	IS 2720 (Part 27) 1977,RA 2015	879.0
8.	Sulphide (as S)	mg/kg	TPM/MSK/P&E/1/43	<5.0
9.	Phosphate (as PO4)	mg/kg	TPM/MSK/P&E/1/12	BDL
10.	Phosphorus	mg/kg	TPM/MSK/P&E/1/12	BDL
11.	fron (as Fe)	mg/kg	TPM/MSK/P&E/1/13	3.87
12.	Sodium (as Na)	mg/kg	TPM/MSK/P&E/1/4	2124.0
13.	Potassium (as K)	mg/kg	TPM/MSK/P&E/1/5	260.0
14.	Copper (as Cu)	mg/kg	EPA 6010D	3.01
15.	Nickel (as NI)	mg/kg	EPA 6010D	2.67
16.	Zinc (as Zn)	mg/kg	EPA 6010D	9.45
17.	Manganese (as Mn)	mg/kg	EPA 6010D	BDL



#### Date- 01.01,2022

18.	Lead (as Pb)	mg/kg	EPA 6010D	9.0
19.	Boron (as B)	mg/kg	IS 13428- 2005, Annex H	3.45
20.	Aluminium ( as Al )	mg/kg	EPA 6010D	BDL
21.	Total Chromium (as Cr)	mg/kg	EPA 6010D	2.63
22.	Total Nitrogen (as N)	mg/kg	IS 14684 (1999); Rffm:2014	9.21
23.	Organic Nitrogen	mg/kg	TPM/MSK/P&E/3/68	3.69
24.	Total Petroleum Hydrocarben	mg/kg	USEPA 8015 B - Dec, 1996, 8270 D - Feb,2007	<0.05
25.	Pesticide Residue	mg/kg	USEPA 3540 C USEPA 8082	<0.5
26.	Sand	%	TPM/MSK/P&E/1/36A	45.0
27.	Silt	%	TPM/MSK/P&E/1/36A	37.0
28.	Clay	None	TPM/MSK/P&E/1/36A	32.0
29.	Texture	%	TPM/MSK/P&E/1/36A	Clay Loam

#### Biological Result

SI No.	Parameters	Unit	Results
1.	Fungus (Phytobenthos)	CFU/g dry wt.	1622
2.	Total count (Phytobenthos)	50 mg wet sediment	258
3.	No of species (Phytobenthos)	Nos.	6
4.	Diversity index (Phytobenthos)		0.9140
5.	Major Species (phytobenthos)		Bidulphia, Pleurosigma ,
6.	Name of Phylum (Fauna)	1000	Annelida, Mollusca
7.	Class & Number of individuals encountered (Fauna)	954	Plychaeta-66,Bivalvia-20
8.	Total no. of species encountered (Fauna)	Nos.	30
9.	Total fauna (Fauna)	per m <sup>3</sup>	248

Report Prepared by:



For Mitra S.K. Private Limited

TESTING INSPECTION

N-5/100, Ground Floor IRC Village, Navapalli Bhubaneswar - 751015 [CIN: U51909WB1956PTC023037]

T: (0574) 2352915, 2350917

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## TEST REPORT

Name & Address of the Customer: THE DHAMRA PORT COMPANY LIMITED

AT: DOSINGA, PO: DHAMRA

DIST: BHADRAK, PIN: 756171 ODISHA

Report No. : BBS/555 Date : 01.01.2022

Sample No. : MSKGL/ED/2020-21/12/00101

Sample Description : Sea Sediment Sampling Location: Dredging Area Date of sampling : 09.12.2021

Sl. No.	<u>Parameters</u>	Unit	Test Method	Result
1.	pH value	None	IS 2720 (Part 26)-1987;Rffm:2011	7.96
2.	Electrical Conductivity	us/cm	IS 3025 (Part 14)-1984;Rffm:2006	5226.0
3.	Organic Matter	%	IS 2720 (Part 22)-1972; Rffm:2015	0.74
4.	Turbidity	N.T.U	APHA (23rd Edition) 2130B	22.0
5.	Moisture content	%	Lab Method	26.0
6.	Chloride (as Cl.)	mg/kg	TPM/MSK/P&E/1/10	5641.0
7.	Sulphate (as SO4)	mg/kg	IS 2720 (Part 27) 1977,RA 2015	1100.0
8.	Sulphide (as S)	mg/kg	TPM/MSK/P&E/1/43	<5.0
9.	Phosphate (as PO4)	mg/kg	TPM/MSK/P&E/1/12	14.0
10.	Phosphorus	mg/kg	TPM/MSK/P&E/1/12	228.0
11.	Iron (as Fe)	mg/kg	TPM/MSK/P&E/1/13	498.0
12.	Sodium (as Na)	mg/kg	TPM/MSK/P&E/1/4	4785.0
13.	Potassium (as K)	mg/kg	TPM/MSK/P&E/I/5	166.0
14.	Copper (as Cu)	mg/kg	EPA 6010D	19.0
15.	Nickel (as Ni)	mg/kg	EPA 6010D	52,0
16.	Zinc (as Zn)	mg/kg	EPA 6010D	17.0
17.	Manganese (as Mn)	mg/kg	EPA 6010D	268.0



### Date-01.01.2022

18.	Lead (as Pb)	mg/kg	EPA 6010D	13.0
19.	Boron (as B)	mg/kg	IS 13428- 2005, Annex H	<5.0
20.	Aluminium ( as AI )	mg/kg	EPA 6010D	2600.0
21.	Total Chromium (as Cr)	mg/kg	EPA 6010D	14.5
22.	Total Nitrogen (as N)	mg/kg	IS 14684 (1999); Rffin:2014	550.0
23.	Organic Nitrogen	mg/kg	TPM/MSK/P&E/3/68	464.
24.	Total Petroleum Hydrocarbon	mg/kg	USEPA 8015 B - Dec, 1996, 8270 D - Feb,2007	<0.05
25.	Pesticide Residue	mg/kg	USEPA 3540 C USEPA 8082	<0.5
26.	Sand	96	TPM/MSK/P&E/1/36A	40.0
27.	Silī	%	TPM/MSK/P&E/1/36A	36.0
28.	Clay	None	TPM/MSK/P&E/1/36A	24.0
29.	Texture	%	TPM/MSK/P&E/1/36A	Loam

### **Biological Result**

SI No.	<u>Parameters</u>	Unit	Results
1.	Fungus (Phytobenthos)	CFU/g dry wt.	1524
2.	Total count (Phytobenthos)	50 mg wet sediment	301
3.	No of species (Phytobenthos)	Nos.	5
4.	Diversity index (Phytobenthos)		1.78
5.	Major Species (phytobenthos)		Coscinodiscus sp
6.	Name of Phylum (Fauna)		Annelida, Mollusca
7.	Class & Number of individuals encountered (Fauna)	-	Plychaeta-40,Bivalvia-10
8.	Total no. of species encountered (Fauna)	Nos.	20
9.	Total fauna (Fauna)	per m <sup>3</sup>	140

S. Konngo Report Prepared by:

BBSR B

For Mitra S.K. Private Limited

N-5/100, Ground Floor IRC Village, Nayapalli Bhubaneswar - 751015

(CIN: U51909WB1956PTC023037)

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## TEST REPORT

Name & Address of the Customer: THE DHAMRA PORT COMPANY LIMITED

AT: DOSINGA, PO: DHAMRA

DIST: BHADRAK, PIN: 756171 ODISHA

Report No. : BBS/554 Date : 01.01.2022

Sample No.: MSKGL/ED/2020-21/12/00100

Sample Description: Sea Sediment

Sampling Location: Dredging Disposal Site

Date of sampling : 09.12.2021

Sl. No.	<u>Parameters</u>	Unit	Test Method	Result
1.	pH value	None	IS 2720 (Part 26)-1987;Rffm:2011	7.84
2.	Electrical Conductivity	us/cm	IS 3025 (Part 14)-1984;Rffin:2006	5478.0
3.	Organic Matter	%	IS 2720 (Part 22)-1972; Rffin:2015	0.87
4.	Turbidity	N.T.U	APHA (23th Edition) 2130B	32.0
5.	Moisture content	%	Lab Method	40.0
6.	Chloride (as Cl.)	mg/kg	TPM/MSK/P&E/I/10	7550:0
7.	Sulphate (as SO4)	mg/kg	IS 2720 (Part 27) 1977,RA 2015	698.0
8,	Sulphide (as S)	mg/kg	TPM/MSK/P&E/1/43	<5.0
9.	Phosphate (as PO4)	mg/kg	TPM/MSK/P&E/1/12	16,0
10.	Phosphorus	mg/kg	TPM/MSK/P&E/1/12	212.0
11.	Iron (as Fe)	mg/kg	TPM/MSK/P&E/1/13	320.0
12,	Sodium (as Na)	mg/kg	TPM/MSK/P&E/1/4	2715.0
13.	Potassium (as K)	mg/kg	TPM/MSK/P&E/1/5	202.0
14.	Copper (as Cu)	mg/kg	EPA 6010D	18.0
15.	Nickel (as Ni)	mg/kg	EPA 6010D	47.0
16,	Zinc (as Zn)	mg/kg	EPA 6010D	30.0
17.	Manganese (as Mn)	mg/kg	EPA 6010D	346.0



#### Date- 01.01.2022

18.	Lead (as Pb)	mg/kg	EPA 6010D	10.0
19.	Boron (as B)	mg/kg	IS 13428-2005,Annex H	<5.0
20.	Aluminium ( as Al )	mg/kg	EPA 6010D	2964.0
21.	Total Chromium (as Cr)	mg/kg	EPA 6010D	13.2
22.	Total Nitrogen (as N)	mg/kg	IS 14684 (1999); Rffin:2014	610.0
23.	Organic Nitrogen	mg/kg	TPM/MSK/P&E/3/68	627.0
24.	Total Petroleum Hydrocarbon	mg/kg	USEPA 8015 B - Dec, 1996, 8270 D - Feb,2007	<0.05
25.	Pesticide Residuc	mg/kg	USEPA 3540 C USEPA 8082	<0.5
26.	Sand	%	TPM/MSK/P&E/1/36A	36.0
27.	Silt	96	TPM/MSK/P&E/1/36A	24.00
28.	Clay	None	TPM/MSK/P&E/1/36A	40,00
29.	Texture	96	TPM/MSK/P&E/1/36A	Clay Loam

### **Biological Result**

SI No.	Parameters	Unit	Results
1.	Fungus (Phytobenthos)	CFU/g dry wt.	1488
2,	Total count (Phytobenthos)	50 mg wet sediment	274
3.	No of species (Phytobenthos)	Nos.	6
4.	Diversity index (Phytobenthos)		1.87
5.	Major Species (phytobenthos)	7117	Coscinodiscus sp., Biddulphia mobilensis
6.	Name of Phylum (Fauna)		Annelida, Mollusca
7.	Class & Number of individuals encountered (Fauna)		Plychaeta-50,Bivalvia-21
8.	Total no. of species encountered (Fauna)	Nos.	24
9.	Total fauna (Fauna)	per m <sup>3</sup>	195

Report Prepared by:



For Mitra S<sub>i</sub>K. Private Limited

MSK TESTING INSPECTION

N-5/100, Ground Floor IRC Village, Nayapalli Bhubanaswar - 751015

[CIN: U51909WB1956PTC023037]

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## TEST REPORT

Name & Address of the Customer: THE DHAMRA PORT COMPANY LIMITED

AT: DOSINGA, PO: DHAMRA

DIST: BHADRAK, PIN: 756171 ODISHA

Report No. : BBS/558 Date : 01.01.2022

Sample No. : MSKGL/ED/2020-21/12/00103

Sample Description: Sea Sediment Sampling Location: Dredging Area Date of sampling: 16.12.2021

SL No.	<u>Parameters</u>	Unit	Test Method	Result
1.	pH value	None	IS 2720 (Part 26)-1987;Rffm:2011	8,10
2.	Electrical Conductivity	us/cm	IS 3025 (Part 14)-1984;Rffm:2006	5214.0
3.	Organic Matter	96	1S 2720 (Part 22)-1972; Rfflm:2015	0.97
4.	Turbidity	N.T.U	APHA (23rd Edition) 2130B	28.0
5.	Moisture content	%	Lab Method	32.0
6,	Chloride (as Cl.)	mg/kg	TPM/MSK/P&E/1/10	5671,0
7.	Sulphate (as SO4)	mg/kg	IS 2720 (Part 27) 1977,RA 2015	119.0
8.	Sulphide (as S)	mg/kg	TPM/MSK/P&E/1/43	<5.0
9.	Phosphate (as PO4)	mg/kg	TPM/MSK/P&E/1/12	<3.0
10.	Phosphorus	mg/kg	TPM/MSK/P&E/1/12	11,0
11.	Iron (as Fe)	mg/kg	TPM/MSK/P&E/1/13	14.0
12.	Sodium (as Na)	mg/kg	TPM/MSK/P&E/1/4	1647.0
13.	Potassium (as K)	mg/kg	TPM/MSK/P&E/1/5	174.0
14.	Copper (as Cu)	mg/kg	EPA 6010D	15.0
15.	Nickel (as Ni)	mg/kg	EPA 6010D	8.0
16.	Zinc (as Zn)	mg/kg	EPA 6010D	20.0
17.	Manganese (as Mn)	mg/kg	EPA 6010D	141.0



Date- 01.01.2022

18.	Lead (as Pb)	mg/kg	EPA 6010D	9.0
19.	Boron (as B)	mg/kg	IS 13428- 2005, Annex H	<5.0
20.	Aluminium ( as AI )	mg/kg	EPA 6010D	2918,00
21.	Total Chromium (as Cr)	mg/kg	EPA 6010D	41.0
22.	Total Nitrogen (as N)	mg/kg	1S 14684 (1999); Rffin:2014	259.0
23.	Organic Nitrogen	mg/kg	TPM/MSK/P&E/3/68	224.0
24.	Total Petroleum Hydrocarbon	mg/kg	USEPA 8015 B - Dec, 1996, 8270 D - Feb, 2007	<0.05
25.	Pesticide Residue	mg/kg	USEPA 3540 C USEPA 8082	<0.5
26,	Sand	%	TPM/MSK/P&E/1/36A	44.0
27.	Silt	%	TPM/MSK/P&E/1/36A	30.0
28.	Clay	None	TPM/MSK/P&E/1/36A	26.0
29.	Texture	%	TPM/MSK/P&E/1/36A	Clay

### Biological Result

SI No.	Parameters	Unit	Results
1.	Fungus (Phytobenthos)	CFU/g dry wt.	1296
2.	Total count (Phytobenthos)	50 mg wet sediment	366
3.	No of species (Phytobenthos)	Nos.	4
4.	Diversity index (Phytobenthos)	-	2.24
5,	Major Species (phytohenthos)	L M	Biddulphia mobilensis, Nizschia distans
6.	Name of Phylum (Fauna)		Annelida, Mollusca
7.	Class & Number of individuals encountered (Fauna)		Plychaeta-70,Bivalvia-26
8.	Total no. of species encountered (Fauna)	Nos.	21
9.	Total fauna (Fauna)	per m <sup>3</sup>	190

Report Prepared by:

For Mitra S.K. Private Limited



N-5/100, Ground Floor IRC Village, Nayapalli Bhubaneswar - 751015 [CIN: U51909WB1956PTC023037]

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## TEST REPORT

Name & Address of the Customer: THE DHAMRA PORT COMPANY LIMITED

AT: DOSINGA, PO: DHAMRA

DIST: BHADRAK, PIN: 756171 ODISHA

Report No. : BBS/556 Date : 01.01.2022

Sample No. : MSKGL/ED/2020-21/12/00102

Sample Description: Sea Sediment

Sampling Location : Dredging Disposal Site

Date of sampling : 16.12.2021

SL No.	Parameters	Unit	Test Method	Result
1.	pH value	None	IS 2720 (Part 26)-1987;Rffm:2011	8.12
2.	Electrical Conductivity	us/cm	IS 3025 (Part 14)-1984;Rffm:2006	5245.0
3.	Organic Matter	%	IS 2720 (Part 22)-1972; Rffm:2015	0.64
4.	Turbidity	N.T.U	APHA (23rd Edition) 2130B	28.0
S	Moisture content	%	Lab Method	33.0
6.	Chloride (as Cl )	mg/kg	TPM/MSK/P&E/1/10	1550.0
7.	Sulphate (as SO4)	mg/kg	IS 2720 (Part 27) 1977,RA 2015	218.0
8.	Sulphide (as S)	mg/kg	TPM/MSK/P&E/1/43	≺5.0
9,	Phosphate (as PO4)	mg/kg	TPM/MSK/P&E/1/12	13.0
10.	Phosphorus	mg/kg	TPM/MSK/P&E/1/12	16.0
11.	Iron (as Fe)	mg/kg	TPM/MSK/P&E/1/13	12.0
12.	Sodium (as Na)	mg/kg	TPM/MSK/P&E/1/4	1622.0
13.	Potassium (as K)	mg/kg	TPM/MSK/P&E/1/5	164.0
14.	Copper (as Cu)	mg/kg	EPA 6010D	18.0
15.	Nickel (as Ni)	mg/kg	EPA 6010D	10,0
16.	Zinc (as Zn)	mg/kg	EPA 6010D	21.0
17.	Manganese (as Mn)	mg/kg	EPA 6010D	127.0



#### Date- 01.01.2022

18.	Lead (as Pb)	mg/kg	EPA 6010D	14.0
19.	Boron (as B)	mg/kg	IS 13428- 2005,Annex H	<5.0
20.	Aluminium ( as Al )	mg/kg	EPA 6010D	2325.0
21.	Total Chromium (as Cr)	mg/kg	EPA 6010D	18.0
22.	Total Nitrogen (as N)	mg/kg	IS 14684 (1999); Rffm:2014	380.0
23.	Organic Nitrogen	mg/kg	TPM/MSK/P&E/3/68	264.0
24.	Total Petroleum Hydrocarbon	mg/kg	USEPA 8015 B - Dec, 1996, 8270 D - Feb,2007	<0.05
25.	Pesticide Residue	mg/kg	USEPA 3540 C USEPA 8082	<0.5
26.	Sand	%	TPM/MSK/P&E/1/36A	36.0
27.	Silt	%	TPM/MSK/P&E/1/36A	38.0
28.	Clay	None	TPM/MSK/P&E/1/36A	26.0
29.	Texture	%	TPM/MSK/P&E/1/36A	Clay Loam

### **Biological Result**

SI No.	Parameters	Unit	Results
l.	Fungus (Phytobenthos)	CFU/g dry wt.	1466
2.	Total count (Phytobenthos)	50 mg wet sediment	274
3.	No of species (Phytobenthos)	Nos.	4
4.	Diversity index (Phytobenthos)	-	1.48
5.	Major Species (phytobenthos)		Biddulphia mobilensis, Spirulina aeruginea
6.	Name of Phylum (Fauna)		Annelida, Mollusca
7.	Class & Number of individuals encountered (Fauna)		Plychaeta-57,Bivalvia-19
8.	Total no. of species encountered (Fauna)	Nos.	20
9.	Total fauna (Fauna)	per m <sup>3</sup>	237

Report Prepared by:



For Mitra S.K. Private Limited

N-5/100, Ground Floor IRG Village, Nayapatti Bhubaneswar - 751015

[CIN: U51909WB1956PTC023037]

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## TEST REPORT

Name & Address of the Customer:

THE DHAMRA PORT COMPANY LIMITED

AT: DOSINGA, PO: DHAMRA

DIST: BHADRAK, PIN: 756171 ODISHA

Report No. : BBS/563

: 01.01.2022 Date

Sample No.: MSKGL/ED/2020-21/12/00107

Sample Description : Sea Sediment

Sampling Location: Along Channel at 1 km

Date of sampling : 16.12.2021

Sl. No.	<u>Parameters</u>	Unit	Test Method	Result
1.	pH value	None	IS 2720 (Part 26)-1987;Rffm:2011	8.12
2.	Electrical Conductivity	us/cm	IS 3025 (Part 14)-1984;Rffm:2006	8745.0
3.	Organic Matter	%	IS 2720 (Part 22)-1972; Rffm:2015	2.88
4.	Turbidity	N.T.U	APHA (23rd Edition) 2130B	28.0
5.	Moisture content	%	Lab Method	45.0
6.	Chloride (as Cl )	mg/kg	TPM/MSK/P&E/1/10	1621.0
7.	Sulphate (as SO4)	mg/kg	IS 2720 (Part 27) 1977,RA 2015	786.0
8.	Sulphide (as S)	mg/kg	TPM/MSK/P&E/1/43	<5.0
9.	Phosphate (as PO4)	mg/kg	TPM/MSK/P&E/1/12	12.0
10.	Phosphorus	mg/kg	TPM/MSK/P&E/1/12	6.44
11.	Iron (as Fe)	mg/kg	TPM/MSK/P&E/1/13	19.8
12.	Sodium (as Na)	mg/kg	TPM/MSK/P&E/1/4	3002.0
13.	Potassium (as K)	mg/kg	TPM/MSK/P&E/1/S	288.0
14.	Copper (as Cu)	mg/kg	EPA 6010D	1,66
15.	Nickel (as NI)	mg/kg	EPA 6010D	1.89
16.	Zinc (as Zn)	mg/kg	EPA 6010D	7.14
17.	Manganese (as Mn)	mg/kg	EPA 6010D	BDL



### Date- 01.01.2022

18.	Lead (as Pb)	mg/kg	EPA 6010D	1.98
19.	Boron (as B)	mg/kg	IS 13428-2005,Annex H	3,39
20.	Aluminium ( as AI )	mg/kg	EPA 6010D	BDL
21.	Total Chromium (as Cr)	mg/kg	EPA 6010D	1.78
22.	Total Nitrogen (as N)	mg/kg	1S 14684 (1999); Rffm:2014	11.2
23.	Organic Nitrogen	mg/kg	TPM/MSK/P&E/3/68	10.2
24.	Total Petroleum Hydrocarbon	mg/kg	USEPA 8015 B - Dec, 1996, 8270 D - Feb,2007	<0.05
25.	Pesticide Residue	mg/kg	USEPA 3540 C USEPA 8082	<0.5
26.	Sand	%	TPM/MSK/P&E/1/36A	48.0
27.	Silt	%	TPM/MSK/P&E/1/36A	32.0
28.	Clay	None	TPM/MSK/P&E/1/36A	20.0
29.	Texture	%	TPM/MSK/P&E/1/36A	Clay Loam

### Biological Result

SI No.	Parameters	Unit	Results
1,	Fungus (Phytobenthos)	CFU/g dry wt.	1678
2.	Total count (Phytobenthos)	50 mg wet sediment	199
3.	No of species (Phytobenthos)	Nos.	4
4.	Diversity index (Phytobenthos)		0.7081
5.	Major Species (phytobenthos)	- 02	Bidulphia, Gyrosigma
6.	Name of Phylum (Fauna)		Annelida, Moilusca
7.	Class & Number of individuals encountered (Fauns)	125	Plychacta-78,Bivalvia-41
8.	Total no. of species encountered (Fauna)	Nos.	21
9.	Total fauna (Fauna)	per m <sup>3</sup>	255

S Koungo Report Prepared by:



For Mitta S.K. Private Limited

MSK MSK

N-5/100, Ground Floor IRC Village, Nayapati Shubaneswar - 751015 [CIN: U51909WB1956PTC023037]

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## TEST REPORT

Name & Address of the Customer:

THE DHAMRA PORT COMPANY LIMITED

AT: DOSINGA, PO: DHAMRA

DIST: BHADRAK, PIN: 756171 ODISHA

Report No. : BBS/565 Date : 01.01,2022

Sample No. : MSKGL/ED/2020-21/12/00108

Sample Description : Sea Sediment

Sampling Location: Along Channel at 5 km

Date of sampling : 16.12.2021

St. No.	<u>Parameters</u>	Unit	Test Method	Result
1.	pH value	None	IS 2720 (Part 26)-1987;Rffm:2011	8.45
2.	Electrical Conductivity	us/cm	IS 3025 (Part 14)-1984;Rffm:2006	9645.0
3.	Organic Matter	%	IS 2720 (Part 22)-1972; Rffm;2015	1.88
4.	Turbidity	N.T.U	APHA (23 <sup>rd</sup> Edition) 2130B	21.0
5.	Moisture content	%	Lab Method	30.0
6.	Chloride (as CI)	mg/kg	TPM/MSK/P&E/1/10	842.0
7.	Sulphate (as SO4)	mg/kg	IS 2720 (Part 27) 1977,RA 2015	621.0
8.	Sulphide (as 8)	mg/kg	TPM/MSK/P&E/1/43	<5.0
9.	Phosphate (as PO4)	mg/kg	TPM/MSK/P&E/1/12	BDL
10.	Phosphorus	mg/kg	TPM/MSK/P&E/1/12	2.64
11.	Iron (as Fe)	mg/kg	TPM/MSK/P&E/1/13	18.2
12.	Sodium (as Na)	mg/kg	TPM/MSK/P&E/1/4	2036.0
13.	Potassium (as K)	mg/kg	TPM/MSK/P&E/1/5	302.0
14.	Copper (as Cu)	mg/kg	EPA 6010D	1.90
15.	Nickel (as Ni)	mg/kg	EPA 6010D	1.66
16.	Zine (as Zn)	mg/kg	EPA 6010D	10.2
17.	Manganese (as Mn)	mg/kg	EPA 6010D	BDL



### Date-01.01.2022

18.	Lead (as Pb)	mg/kg	EPA 6010D	1.79
19.	Boron (as B)	mg/kg	1S 13428- 2005, Annex H	1.61
20.	Aluminium ( as Al )	mg/kg	EPA 6010D	BDL
21.	Total Chromium (as Cr)	mg/kg	EPA 6010D	3.96
22.	Total Nitrogen (as N)	mg/kg	IS 14684 (1999); Rffm:2014	12.0
23.	Organic Nitrogen	mg/kg	TPM/MSK/P&E/3/68	6.87
24.	Total Petroleum Hydrocarbon	mg/kg	USEPA 8015 B - Dec, 1996, 8270 D - Feb, 2007	<0.05
25.	Pesticide Residue	mg/kg	USEPA 3540 C USEPA 8082	<0.5
26.	Sand	%	TPM/MSK/P&E/1/36A	40.0
27.	Silt	%	TPM/MSK/P&E/1/36A	36.0
28.	Clay	None	TPM/MSK/P&E/1/36A	24.0
29.	Texture	%	TPM/MSK/P&E/1/36A	Clay Loam

### **Biological Result**

SI No.	Parameters	Unit	Results
1.	Fungus (Phytobenthos)	CFU/g dry wt.	1879
2.	Total count (Phytobenthos)	50 mg wet sediment	266
3.	No of species (Phytobenthos)	Nos.	8
4.	Diversity index (Phytobenthos)		1.8431
5.	Major Species (phytobenthos)		Navicula Gyrosigma
6.	Name of Phylum (Fauna)		Annelida, Mollusca
7.	Class & Number of individuals encountered (Fauna)		Plychaeta-50.Bivalvia-20
8,	Total no. of species encountered (Fauna)	Nos.	60
9.	Total fauna (Fauna)	per m <sup>3</sup>	220

Report Propared by:

BBSR B

For Mitra S.K. Private Limited



N-5/100, Ground Floor IRC Village, Nayapalli Bhubaneswer - 751015 [CIN: U51909WB1956PTC023037]

T: (0674) 2362916, 2360917

F: (0674) 2362918

## TEST REPORT

Name & Address of the Customer: THE DHAMRA PORT COMPANY LIMITED

AT: DOSINGA, PO: DHAMRA

DIST: BHADRAK, PIN: 756171 ODISHA

Report No.: BBS/566 Date: 01.01.2022

Sample No.: MSKGL/ED/2020-21/12/00109

Sample Description: Sea Sediment

Sampling Location ; Along Channel at 10 km

Date of sampling : 16.12.2021

St No.	<u>Parameters</u>	Unit	Test Method	Result
1.	pH value	None	IS 2720 (Part 26)-1987;Rffm:2011	8.38
2.	Electrical Conductivity	us/cm	IS 3025 (Part 14)-1984;Rffm:2006	9780.0
3.	Organic Matter	%	IS 2720 (Part 22)-1972; Rffm:2015	5.6
4.	Turbidity	N.T.U	APHA (23rd Edition) 2130B	28.0
5,	Moisture content	96	Lab Method	42.0
6.	Chloride (as Cl )	mg/kg	TPM/MSK/P&E/1/10	1688.0
7.	Sulphate (as SO4)	mg/kg	IS 2720 (Part 27) 1977,RA 2015	587.0
8.	Sulphide (as S)	mg/kg	TPM/MSK/P&E/1/43	<5.0
3.	Phosphate (as PO4)	mg/kg	TPM/MSK/P&E/1/12	BDL
10.	Phosphorus	mg/kg	TPM/MSK/P&E/1/12	BDL
11,	Iron (as Fe)	mg/kg	TPM/MSK/P&E/1/13	26.1
12.	Sodium (as Na)	mg/kg	TPM/MSK/P&E/1/4	2687.
13.	Potassium (as K)	mg/kg	TPM/MSK/P&E/1/5	1322.0
14.	Copper (as Cu)	mg/kg	EPA 6010D	2.1
15.	Nickel (as Ni)	mg/kg	EPA 6010D	2.89
16.	Zīnc (as Zn)	mg/kg	EPA 6010D	10.0
17,	Manganese (as Mn)	mg/kg	EPA 6010D	BDL



### Date-01.01.2022

18.	Lead (as Pb)	mg/kg	EPA 6010D	2.0
19.	Boron (as B)	mg/kg	IS 13428- 2005, Annex H	3.2
20.	Aluminium (as Al)	mg/kg	EPA 6010D	BDL
21.	Total Chromium (as Cr)	mg/kg	EPA 6010D	4.2
22.	Total Nitrogen (as N)	mg/kg	IS 14684 (1999); Rffm:2014	9.0
23.	Organic Nitrogen	mg/kg	TPM/MSK/P&E/3/68	5.4
24.	Total Petroleum Hydrocarbon	mg/kg	USEPA 8015 B - Dec, 1996, 8270 D - Feb, 2007	<0.05
25.	Pesticide Residue	mg/kg	USEPA 3540 C USEPA 8082	<0.5
26.	Sand	%	TPM/MSK/P&E/1/36A	47.0
27.	Silt	%	TPM/MSK/P&E/1/36A	28.0
28.	Clay	None	TPM/MSK/P&E/1/36A	25.0
29.	Texture	%	TPM/MSK/P&E/1/36A	Clay Loam

## **Biological Result**

SI No.	Parameters	Unit	Results
1.	Fungus (Phytobenthos)	CFU/g dry wt.	1887
2.	Total count (Phytobenthos)	50 mg wet sediment	278
3.	No of species (Phytobenthos)	Nos.	10
4.	Diversity index (Phytobenthos)	****	1.6229
5.	Major Species (phytobenthos)		Synedra, Coscinodiscuss sp.,
6.	Name of Phylum (Fauna)		Anthropoda, Annelida
7,	Class & Number of individuals encountered (Fauna)		Plychaeta-69,Bivalvia-32
8.	Total no. of species encountered (Fauna)	Nos.	40
9.	Total fauna (Fauna)	per m <sup>3</sup>	250

Report Propared by:



For Mitra S.K. Private Limited

MSK TESTING\* INSPECTION

N-5/100, Ground Floor IRC Village, Nayapalli Bhubaneswar - 751015 [CIN: U51909WB1956PTC023037]

T: (0674) 2362916, 2360917

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## TEST REPORT

Name & Address of the Customer: THE DHAMRA PORT COMPANY LIMITED

AT: DOSINGA, PO: DHAMRA

DIST: BHADRAK, PIN: 756171 ODISHA

Report No. : BBS/567 Date : 01.01.2022

Sample No.: MSKGL/ED/2020-21/12/00110

Sample Description: Sea Sediment Sampling Location: Near Kanika Island

Date of sampling : 21,09,2021

Sl. No.	Parameters	Unit	Test Method	Result
1.	pH value	None	IS 2720 (Part 26)-1987;Rffm:2011	8.20
2.	Electrical Conductivity	us/cm	IS 3025 (Part 14)-1984;Rffm:2006	7450.0
3.	Organic Matter	%	IS 2720 (Part 22)-1972; Rffm:2015	3.2
4.	Turbidity	N.T.U	APHA (23rd Edition) 2130B	25.0
5.	Moisture content	96	Lab Method	32.0
6.	Chloride (as Cl )	mg/kg	TPM/MSK/P&E/1/10	722.0
7.	Sulphate (as SO4)	mg/kg	IS 2720 (Part 27) 1977,RA 2015	2210.0
8.	Sulphide (as S)	mg/kg	TPM/MSK/P&E/1/43	<5.0
9.	Phosphate (as PO4)	mg/kg	TPM/MSK/P&E/1/12	BDL
10.	Phosphorus	mg/kg	TPM/MSK/P&E/1/12	BDL
11.	Iron (as Fe)	mg/kg	TPM/MSK/P&E/1/13	6.0
12.	Sodium (as Na)	mg/kg	TPM/MSK/P&E/1/4	2612.0
13.	Potassium (as K)	mg/kg	TPM/MSR/P&P/1/5	366.0
14.	Copper (as Cu)	mg/kg	EPA 6010D	3.2
15.	Nickel (as Ni)	mg/kg	EPA 6010D	2.0
16.	Zinc (as Zn)	mg/kg	EPA 6010D	7.8
17.	Manganese (as Mn)	mg/kg	EPA 6010D	BDL



## Date- 01.01.2022

18.	Lead (as Pb)	mg/kg	EPA 6010D	1.90
19.	Boron (as B)	mg/kg	IS 13428- 2005,Annex H	3.52
20.	Aluminium ( as Al )	mg/kg	EPA 6010D	BDL
21.	Total Chromium (as Cr)	mg/kg	EPA 6010D	4.10
22.	Total Nitrogen (as N)	mg/kg	1S 14684 (1999); Rffm:2014	9.22
23.	Organic Nitrogen	mg/kg	TPM/MSK/P&E/3/68	5.04
24.	Total Petroleum Hydrocarbon	mg/kg	USEPA 8015 B - Dec, 1996, 8270 D - Feb,2007	<0.05
25.	Pesticide Residue	mg/kg	USEPA 3540 C USEPA 8082	<0.5
26.	Sand	%	TPM/MSK/P&E/i/36A	40.0
27.	Silt	%	TPM/MSK/P&E/1/36A	33.0
28.	Clay	None	TPM/MSK/P&E/1/36A	37.0
29.	Texture	%	TPM/MSK/P&E/1/36A	Clay

## Biological Result

SI No.	Parameters	Unit	Results
1.	Fungus (Phytobenthos)	CFU/g dry wt.	1678
2.	Total count (Phytobenthos)	50 mg wet sediment	280
3.	No of species (Phytobenthos)	Nos.	10
4.	Diversity index (Phytobenthos)		1.5015
5.	Major Species (phytobenthos)		Bidulphta,Navicula
6.	Name of Phylum (Fauna)		Anthropoda, Annelida
7.	Class & Number of individuals encountered (Fauna)		Malagostraca-20,Pelecypoda-08
8.	Total no. of species encountered (Fauna)	Nos.	32
9.	Total fauna (Fauna)	per m <sup>3</sup>	388

Report Prepared by:

BBSR

For Mitra S.K. Private Limited



Ref: MSKGL/ED/BHU-2021/00630

Date: 01.01.2022

## Site Specific Monitored Meteorological Data

For: The Dhamra Port Company Limited, Dosinga, Bhadrak, Odisha

Sr. No.	Pa	rameters	December.21
		Minimum	14.1
1.	Temperature ( °C)	Maximum	27.1
		Average	22.3
	CONTROL SELO CANONICA MONTO	Minimum	33,5
2.	Relative Humidity (%)	Maximum	99,6
	III - Company Company	Average	67.1
	5.0 (2) (2) (2) (4) (4)	Minimum	0.0
3.	Wind Speed (m/s)	Maximum	12.7
		Average	3.47
4.	Wind Direction (%)	N	2.88
	A STATE OF S	NNE	6.47
		NE	11.54
		ENE	18.7
		E	5.46
- 7		ESE	6.62
		SE	4.8
		SSE	3.2
		S	2.4
		SSW	12.3
		SW	6.5
		WSW	4.23
		W	2.3
-		WNW	12.6
		CALM	1.88
	SEE SECTION OF THE SE	Total	75.7
5.	Rainfall (mm)	Minimum Day Wise	0.0
		Maximum Day Wise	12.7
		Average	0.10
2020		Minimum	746.8
	Ambient Pressure (mm Hg)	Maximum	758.7
	Site Specific Data)	Average	752.0

(Source - Site Specific Data)

Propored By S. Korngy



Verified By

# 

Directed by

# THE DHAMRA PORT COMPANY LIMITED



AT : DOSINGA, PO : DHAMRA DIST- BHADRAK, PIN : 756171 ODISHA

Conducted by

M/s. Mitra S. K. Private Limited



Shrachi Centre (5th Floor) 74B, Acharya Jagadish Chandra Bose Road Kolkata - 700016 (West Bengal)

N-5/100, Ground Floor IRC Village, Nayapali Shubaneswar - 751015

[CIN: U51909WB1956PTC023037]

T: (0674) 2382916, 2360917

F: (0674) 2382918

Report No: BBS/900A



Date: 01.12.2021

## AMBIENT AIR QUALITY MONITORING REPORT

Client Name & Address	M/s The Dhamra Port Company Limited, Dosinga, Bhadrak, Odisha
Work Order No.	4802006186
Reference No.	MSKGL/ED/2020-21/002200
Type of Sample	Ambient Air Sample
Sampling Location	Colony Area
Sampling Done by	Mr. Kunja Bihari Nayak
Sampling Duration	24hrs
Monitoring Instrument	RDS (APM 860), FPS (APM 154) Lata Envirotech, CO Analyzer & VOC Sempler

					G	PAI	RAMETER	S	V-10		1-3-11-	in's
Date	PM <sub>00</sub> (pg/m <sup>2</sup> )	9М <sub>13</sub> (µg/m³)	SO <sub>1</sub> (µg/m <sup>2</sup> )	NOx (µg/m²)	CO (mg/m²)	Nili- (µg/m³)	$O_{\tau}$ $\langle pq/m^2 \rangle$	Ph (pg/m²)	Ni (ng/m²)	As (ng/m²)	C <sub>c</sub> H <sub>c</sub> (µg/m <sup>2</sup> )	BaP (ng/m³)
01.11.2021	44,12	20.24	6.45	23.52	0.77	22.63	<20.0	< 0.01	<5.0	<1.0	<4.2	<0.5
03.13.2021	43.00	21.80	6.94	18.14	0.82	19.45	<20.0	<0.61	<5.0	<1.0	<4.2	<0.5
07.11.2021	41.80	23.00	6.86	23.12	0.88	20.26	<20.0	<0.01	<5.0	<1.0	<4.2	<0.5
10.11.2021	41.00	21.90	6.87	24.78	0.64	20.12	<20.0	< 0.01	<5.0	<1.0	<4.2	<0.5
15.11.2021	44.20	22.86	6.91	22.52	0.57	18.41	<20.0	< 0.01	<5.0	<1.0	<4.2	<0.5
17.11.2021	42.64	24.14	7.66	21.14	0.69	23,49	<20.0	< 0.01	<5.0	<1.0	<4.2	<0.5
21.11.2624	40.80	23.24	7.45	19.75	0.71	21.28	<20.0	<0.01	<5.0	<1.0	<4.2	<0.5
24.11.2021	44.28	23.00	6.96	23,45	0.55	13,45	<20.0	<0.01	<5.0	<1.0	<4.2	<0.5
28.11.2021	42.86	22.90	6.75	21.12	0.48	20.41	<20.0	< 0.01	<5.0	<1.0	<4.2	<0.5
Monthly Average	42.74	22.56	6.98	21.94	0.68	19,94	<20.0	<0.01	<5.0	<1.0	<4.2	<0.5
CPCB, New Delbi AAQ Standard	100	60	80	80	4	400	180	1	20	6	5	1
Time Weighted Average (hrs.)	24	24	24	24	1	24	1	24	Annual	Annual	Annual	Annual
TEST METHOD	18 5182: Part 23:20 66 (Reaff , 2012	IS 5182: Part 24:201 9	IS 5182 : Part 2 :260 1 (Realf. 2012	IS 5182: Part 6:200 6 (Reaff, 2012)	IS 5182 : Part 10 :1999 (Reaff.20 14)	IS 5182: Part 25:201	IS 5182: Part 09:197	EPA - IO3.43 use,19 99	EPA - 103.4Ju ne,1999	EPA - 103.43u sc,1999	IS:5182( Part- 11):2006 Reaff,20 12	(S:5)82; Part- 12):2004 Reaff,: 2014

N.B. \*NAAQ-National Ambient Air Quality Standard as per 18th Nov. 2009 Gatt. Notification

S. Konney

Checked By-





N-5/100, Ground Floor IRC Village, Nayapalli Bhubaneswar - 751015 [CIN: U51909WB1956PTC023037]

T: (0874) 2382916, 2360917

F: (0674) 2382918

Report No: BBS/900B

Date: 01.12.2021

## AMBIENT AIR QUALITY MONITORING REPORT

Client Name & Address	M/s The Dhamra Port Company Limited, Dosingu, Bhadrak, Odisha
Work Order No.	4802006186
Reference No.	MSKGL/ED/2020-21/062200
Type of Sample	Ambient Air Sample
Sampling Location	Kanak Prasad Village
Sampling Done by	Mr. Kunja Bihari Nayak
Sampling Duration	24hrs
Monitoring Instrument	RDS (APM 860), FPS (APM 154) Lata Envirotech, CO Analyzer & VOC Sampler

	-	-	-			PAI	RAMETER	5	935	0.7	On the same	7.1
Date	PM <sub>B</sub> (pg/m²)	PM <sub>2.5</sub> (µg/m <sup>3</sup> )	SO <sub>2</sub> (µg/m <sup>3</sup> )	NOv (pg/m²)	CO (mg/m²)	NH <sub>3</sub> (og/m <sup>3</sup> )	( <sup>(</sup> milga)	Pb (stp/m²)	Ni (ng/m²)	As (tog/m²)	C <sub>6</sub> H <sub>6</sub> (µg/m²)	BaP (ng/m²)
01.11.2021	43.00	16.89	7.84	19.66	0.77	25.40	<20.0	<0.01	<5.0	<1.0	<4.2	<0.5
03.11.2021	42.90	22,56	5.88	24.31	0.64	20.19	<20.0	<0.01	<5.0	<1.0	<4.2	<0.5
07.11.2021	45.24	24.66	7.45	26.44	0.87	22.48	<20.0	<0.01	<5.0	<1.0	K4.2	<0.5
10.11.2021	44.06	25.23	5.04	31.65	0.94	28.79	<20.0	<0.01	<5.0	<1.0	<4.2	<0.5
15.11.2021	41.86	23.21	6.45	23.15	0.48	19.74	<20.0	<0.01	<5.0	<1.0	<4.2	<0.5
17.11.2021	41.08	22.74	6.97	21.63	0.67	17.80	<20.0	<0.01	<5.0	<1.0	<4.2	<0.5
21.11,2021	42.75	25.32	7.66	27.89	0.74	24.13	<20.0	< 0.01	<5.0	<1.0	<4.2	<0.5
24.11.2021	43,66	18,66	7.81	25.41	0.97	20.11	<20.0	< 0.01	<5.0	<1.0	<4.2	<0.5
28.11.2021	40.42	24.56	7.02	21.89	0.63	26.22	<20.0	<0.01	<5.0	<1.0	<4.2	<0.5
Monthly Average	43.06	22.40	6.88	24.67	0.74	22.76	<20.0	< 0.01	<5.0	<1.0	<4.2	<0.5
CPCB, New Delhi AAQ Standard	100	60	80	80	4	480	180	1	20	6	5	1
Time Weighted Average (hrs.)	24	24	24	24	1	24	1	24	Annual	Annual	Annual	Aonual
TEST METHOD	IS 5182: Part 23:20 96 (Reaff , 2012	1S 5182: Part 24:201 9	18 5182 : Part 2 :200 1 (Reaff, 2012	IS 5182 : Part 6 :200 6 (Reast. 2012)	IS 5182 : Part 10 :1999 (Reaff,29 14)	IS 5182; Part 25:201 8	IS 5182: Part 09:197	EPA - 103.4J une,19 99	EPA - 103.4Jn ne,1999	EPA - 103.4J <sub>m</sub> nc,1999	18:5182( Part- 11):2606 Renff,20 12	IS:5182( Part- 12):2064 Reaff;: 2014

N.B. \*NAAQ- National Ambient Air Quality Standard as per 18th Nov. 2009 Gatt. Notification

S. Karrya Prepared By - J

Checked By- Bolal



N-5/100, Ground Floor IRC VIllage, Nayagalli Shubaneswar - 751015 (CIN: U51909WB1956PTC023037)

T: (0674) 2362916, 2360917

F: (0674) 2362918

Report No: BBS/900C

Date: 01.12.2021

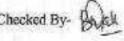
#### AMBIENT AIR QUALITY MONITORING REPORT

Client Name & Address	M/s The Dhamra Port Company Limited, Dosinga, Bhadrak, Odisha
Work Order No.	4802006186
Reference No.	MSKGL/ED/2020-21/002200
Type of Sample	Ambient Air Sample
Sampling Location	Near BMH
Sampling Done by	Mr. Kunja Bihari Nayak
Sampling Duration	24hrs
Monitoring Instrument	RDS (APM 860), FPS (APM 154) Lata Envirotech, CO Analyzer & VOC Sampler

					X	PAR	RAMETER	5		Ni As C <sub>1</sub> H <sub>1</sub> HaP (ng/m²) (ng		
Date	2'M <sub>10</sub> (µg/m²)	PM(25 (pg/m²)	5O <sub>1</sub> (m/m²)	NO <sub>λ</sub> (μg/m <sup>2</sup> )	CO (mg/m²)	NH <sub>1</sub> (µg/m²)	Or (mp/m <sup>3</sup> )	Pb (µg/m²)	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1			Contract Contract Contract
01.11.2021	56.54	36.12	7.84	27.19	0.69	24.36	<20.0	<0.01	<5.0	-	<4.2	<0.5
03.11.2021	60.12	27.23	8.16	30.17	0.94	37.25	<20.0	<0.01	<5.0	<1.0		The second second
07.11.2021	57.48	22.69	7.62	25.36	0.71	23.40	<20.0	< 0.01	Commence State Sections	<1.0		
10.11.2021	54.23	30.23	8.79	32.58	0.84	30.47	<20.0	< 0.01		<1.0		
15.11.2021	58.55	32.66	7.32	23.56	0.49	18.79	<20.0	<0.01	The second second			
17.11.2021	51.56	34.17	8.97	36,22	0.98	33.26	<20.0	<0.01			Branch McGradeler	
21.11.2021	54.36	30.76	7.32	24.19	0.45	20.36	<20.0	< 0.01		Charles Street Service	Employed At 14 August	
24.11.2021	53.23	35.91	8.01	19.58	0.71	26.23	<20.0	<0.01		The second second	The second second second	
28.11.2021	53,45	23.11	8.90	30.78	0.80	28.46	<20.0	< 0.01		A CONTRACTOR OF THE PARTY OF TH	Committee of the Commit	
Monthly Average	55.50	30.32	8.10	27.73	0.73	26.95	<20.0	<0.01		111.00		
CPCB, New Delhi AAQ Standard	100	60	80	80	4	400	180	1	20	6	5	1
Time Weighted Average (hrs.)	24	24	24	24	1	24	1	24	Annual	Annual	Annual	Annual
TEST METHOD	IS 5182: Part 23:20 96 (Reaf £. 2012	15 5182: Part 24:20 19	IS 5182: Part 2:200 1 (Reaff 2012	IS 5182: Part 6:200 6 (Reaff :2012)	IS 5182 : Part 10 :199 9 (Reaff.2 014)	IS 5182: Part 25:20 18	IS 5182: Part 09:19 74	EPA - IO3.4 June, 1999	EPA - 103.4Ju ne,1999	EPA - 103.4Ju ne,1999	IS:5182 (Part- 11):200 6 Reaff,2 012	IS:5182 (Part- 12):200 4 Reaff,: 2014

N.B. \*NAAQ- National Ambient Air Quality Standard as per 18th Nov. 2009 Gart. Notification

Checked By-



MSK (MSTINGSINSPECTION

N-5/100, Ground Floor IRC Village, Nayapalli 8hubanaswar - 751015 [CIN: U51909WB1956PTC023037]

T: (0674) 2362916, 2360917

F: (0574) 2352918

Report No: BBS/900D

Date: 01.12.2021

## AMBIENT AIR QUALITY MONITORING REPORT

Client Name & Address	M/s The Dhamra Port Company Limited, Dosinga, Bhadrak, Odisha
Work Order No.	4802006186
Reference No.	MSKGL/ED/2020-21/002200
Type of Sample	Ambient Air Sample
Sampling Location	Near Jetty
Sampling Done by	Mr. Kunja Bihari Nayak
Sampling Duration	24hrs
Monitoring Instrument	RDS (APM 860), FPS (APM 154) Lata Envirotech, CO Analyzer & VOC Sampler

	PARAMETERS											
Date	PMa (pg/m²)	PM <sub>2.5</sub> (seg/m <sup>2</sup> )	50 <sub>1</sub> (pg/m²)	NOx (µg/m²)	CO (mg/m²)	NB <sub>3</sub> (pg/m³)	On (pagina <sup>3</sup> )	Pb (pg/m²)	Ni (ng/m²)	As (ug/or <sup>3</sup> )	Celle (ug/m²)	BaP (ng/m²)
01.11.2021	61.08	35.23	10.8	22.56	0.87	39.78	<20.0	<0.01	<5.0	<1.0	<4.2	<0.5
03.11.2021	51.63	32.16	8.86	28.51	0.64	34.23	<20.0	<0.01	<5.0	<1.0	<4.2	<0.5
07.11.2021	59.66	37.60	8.45	35.12	0.79	32.19	<20.0	< 0.01	<5.0	<1.0	<4.2	<0.5
10.11.2021	61.29	30.70	8.93	27.59	0.95	35.41	<20.0	< 0.01	<5.0	<1.0	<4.2	<0.5
15.11.2021	55.48	38.13	8.22	34.23	0.78	32.33	<20.0	< 0.01	<5.0	<1.0	<4.2	<0.5
17.11.2021	56.52	26.79	7.88	32.88	0.64	29.71	<20.0	<0.01	<5.0	<1.0	<4.2	<0.5
21,11,2021	58.26	32.15	5.23	27.46	0.57	24.39	<20.0	<0.01	<5.0	<1.0	<4.2	<0.5
24.11.2021	39.66	34.56	8.98	33.12	0.74	40.63	<20.0	<0.01	<5.0	<1.0	<4.2	<0.5
28.11.2021	67.83	29.45	8.01	26.14	0.89	33.69	<20.0	<0.01	<5.0	<1.0	<4.2	<0.5
Monthly Average	59.04	32.97	8.06	29.73	0.76	33.59	<20.0	<0.01	<5.0	<1.0	<4.2	<0.5
CPCB, New Delhi AAQ Standard	100	60	80	80	4	400	180	1	29	6	5	1
Time Weighted Average (hrs.)	24	24	24	24	1	24	1	24	Annual	Annual	Annual	Annual
TEST METHOD	IS 5182: Part 23:29 06 (Reaf f. 2012	IS 5182: Part 24:20 19	1S 5182 : Part 2 :200 1 (Reaff 2012	IS 5182 : Part 6 :200 6 (Reaff -2012)	IS 5182 : Part 10 :199 9 (Reaff.2 014)	IS 5182: Part 25:20 18	IS 5182: Part 09:19 74	EPA - IO3.4 June, 1999	EPA - 103.4Ju no,1999	EPA - 103.4Ju nc,1999	IS:S182 (Part- 11):200 6 Reaff,2 012	IS:5182 (Part- 12):200 4 Reaff,: 2014

N.B. \*NAAQ- National Ambient Air Quality Standard as per 18th Nov. 2009 Gatt. Notification

S. Karrigo Prepared By - F

A A

Checked By- Bogs

N-5/100, Ground Floor IRC Village, Nayapelfi Bhubaneswar - 751015

[CIN: U51909WB1956PTC023037]

T: (0674) 2362918, 2360917

F: (0674) 2362918

Report No: BBS/900E



Date: 01.12.2021

## AMBIENT AIR QUALITY MONITORING REPORT

Client Name & Address	M/s The Dhamra Port Company Limited, Dosinga, Bhadrak, Odisha
Work Order No.	4802006186
Reference No.	MSKGL/ED/2020-21/001300
Type of Sample	Ambient Air Sample
Sampling Location	Dosinga Village
Sampling Done by	Mr. Kunja Bihari Nayak
Sampling Duration	24hrs
Monitoring Instrument	RDS (APM 860), FPS (APM 154) Lata Envirotech, CO Analyzer & VOC Sampler

The same	-					PAI	RAMETER	5	V		and the second	villa consti
Date	PM <sub>et</sub> (µg/m²)	PM <sub>13</sub> (np/m²)	SO <sub>1</sub> (sug/m <sup>3</sup> )	NOx (pg/m³)	CO (mg/m²)	NH <sub>2</sub> (jug/m²)	05 (pq/m²)	Pb (µg/m²)	Ni (ng/m²)	As (og/m²)	CoHe (pg/m²)	BaP (ug/m²)
01.11.2021	45.47	19.26	6.89	26.45	0.78	23.33	<20.0	<0.01	<5.0	<1.0	<4.2	<0.5
93.11.2021	43.65	28.71	7.51	22.21	0.61	29.72	<20.0	< 0.01	<5.0	<1.0	<4.2	< 0.5
07.11.2021	46.32	25.64	7.88	24.49	0.83	27.41	<20.0	< 0.01	<5.0	<1.0	<4.2	<0.5
10.11.2021	39.65	24.20	6,98	26.44	0.69	21.53	<20.0	< 0.01	<5.0	<1.0	<4.2	< 0.5
15.11.2021	42.13	22.62	6.12	23.47	0.49	19.64	<20.0	< 0.01	<5.0	<1.0	<4.2	<0.5
17.11.2021	40,19	19.77	6.09	17.33	9.40	13.63	<20.0	< 0.01	<5.0	<1.0	<4.2	40.5
21.11.2021	38.23	34.29	7.55	24.96	0.87	20.74	<20.0	< 0.01	<5.0	<1.0	<4.2	< 0.5
24.11.2021	46.75	20.18	7.02	25.71	0.62	23.29	<20.0	<0.01	<5.0	<1.0	<4.2	<0.5
28.11.2021	43,27	22.39	6.22	19.78	0.55	15.43	<20.0	<0.01	<5.0	<1.0	<4.2	<0.5
Monthly Average	42.85	24.11	6.92	23.43	0.65	21.63	<20.0	<0.01	<5.0	<1.0	<4.2	<0.5
CPCB, New Delhi AAQ Standard	100	60	88	80	4	400	180	1	20	6	5	1
Time Weighted Average (hrs.)	24	24	24	24	1	24	ı	24	Annual	Annual	Annual	Annual
TEST METHOD	IS 5182: Part 23:20 06 (Reaf L 2012	IS 5182: Part 24:20 19	IS 5182: Part 2:200 1 (Reaff .2012	IS 5182 : Part 6 :200 6 (Reaff .2012)	1S 5182 : Part 10 :199 9 (Resft.2 614)	IS 5182: Part 25:20 I8	1S 5182: Part 09:19 74	EPA - 103.4 June, 1999	EPA - IO3.4Ju ne,1999	EPA - 103,4Ju no,1999	IS:5182 (Part- 11):260 6 Reaff,2 012	IS:5182 (Part- 12):200 4 Reaff;: 2014

N.B. \*NAAQ- National Ambient Air Quality Standard as per 18th Nov. 2009 Gatt. Notification

J. Karngo Prepared By - J

Checked By- Boats

N.5/100, Ground Floor IRC Village, Nayapelli Bhubaneswar - 781015

[CIN: U51909WB1956PTC023037]

T: (0674) 2362916, 2360917

F: (0674) 2362918

Report No: BBS/900F



Date: 01.12.2021

## AMBIENT AIR QUALITY MONITORING REPORT

Client Name & Address	M/s The Dhamra Port Company Limited, Dosinga, Bhadrak, Odisha
Work Order No.	4802006186
Reference No.	MSKGL/ED/2020-21/002200
Type of Sample	Ambient Air Sample
Sampling Location	Near Bhitarkanika
Sampling Done by	Mr. Kuuja Bihari Nayak
Sampling Duration	24brs
Monitoring Instrument	RDS (APM 860), FPS (APM 154) Lata Envirotech, CO Analyzer & VOC Sampler

DAYS C	-	,				PAI	RAMETER	S			7-2-	
Date	PM <sub>11</sub> (µg/m²)	PM <sub>2.5</sub> (µg/m <sup>3</sup> )	SO <sub>2</sub> (µg/m³)	NOs (µg/m²)	CO (mg/m²)	NB) (m/m²)	(ng/m²)	Pb (pg/m²)	Ni (ag/m²)	As (ag/m²)	Callle (pg/m²)	BaP (ng/m²)
01.11.2021	49.63	25.40	6.75	20.69	0.44	17.86	<20.0	<0.01	<5.0	<1.0	<4.2	<0.5
03.11.2021	46.12	19.64	7.23	23.47	0.51	20.79	<20.0	<0.01	<5.0	<1.0	<4.2	<0.5
07.11.2021	39.56	24.25	7.46	26.98	0.67	24.33	<20.0	<0.01	<5.0	<1.0	<4.2	<0.5
10.11.2021	41.40	17.86	8.09	33.61	0.73	30.27	<20.0	<0.01	<5.0	<1.0	<4.2	<0.5
15,11,2021	40.79	23.61	6.23	17.56	0.41	12.63	<20.0	< 0.01	<5.0	<1.0	<4.2	<0.5
17.11.2021	39.78	28.23	5.76	37.56	0.91	35.12	<20.0	<0.01	<5.0	<1.0	<4.2	<0.5
21.11.2021	40.23	25.47	6.88	22.44	0,48	18.61	<20.0	<0.01	<5.0	<1.0	<4.2	<0.5
24.11.2021	43.67	23.63	7.66	30.47	0.63	25.12	<20.0	<0.01	<5.0	<1.0	≺4.2	<0.5
28.11.2021	48.79	26.74	6.62	21.39	0.47	16.39	<20.0	<0.01	<5.0	<1.0	<4.2	<0.5
Monthly Average	43.33	23.87	6.96	26.02	0.58	22.34	<20.0	<0.01	<5.0	<1.0	<4.2	<0.5
CPCB, New Delhi AAQ Standard	100	60	80	80	4	400	180	1	20	6	5	1
Time Weighted Average (hrs.)	24	24	24	24	Ĭ	24	1	24	Annual	Annual	Annual	Annual
TEST METHOD	IS 5182: Part 23:20 06 (Reaf f. 2012	IS 5182: Part 24:20 19	IS 5182 : Part 2 :200 1 (Reaff .2012	IS 5182: Part 6:200 6 (Reaff :2012)	IS 5182 : Part 10 :199 9 (Reaff.2 014)	18 5182: Part 25:20 18	IS 5182: Part 99:19 74	EPA - 103.4 June, 1999	EPA - IO3,4Ju ne,1999	EPA - 103.4Ju nc,1999	IS:5182 (Part- 11):200 6 Reaff,2 012	IS:5182 (Part- 12):200 4 Reaff,: 2014

N.B- \*NAAQ- National Ambient Air Quality Standard as per 18th Nov. 2009 Gatt. Notification

S. Karnes Propared By - J

Checked By-



N-5/100, Ground Floor IRC Villege, Neyspall Bhubaneswar - 751015 [CIN: U51909WB1956PTC023037]

T: (0674) 2362916, 2360917

F: (0674) 2362918

## TEST REPORT

Name & Address of the Customer:

THE DHAMRA PORT COMPANY LIMITED.

AT: DOSINGA, PO: DHAMRA

DIST: BHADRAK, PIN:756171 ODISHA

Report No.: BBS/905 Date : 01.12.2021

Sample No.: MSKGL/ED/2020-21/11/00480

Sample Description : Ambient Noise

## Noise Level Monitoring Data

SI.	Sampling	Sampling	Day Leq. Time	dB(A)	Night Time Le	q. dB(A)
No	Date	Location	Results	LIMIT	Results	LIMIT
1.	02.11.2021	Colony Area (R)	44.2	55	40.6	45
2.	06.11.2021	Kanak Prasad Village (R)	50.1	55	42.0	45
3,	08.11.2021	Near BMH (I)	62.4	75	54.8	70
4.	09.11.2021	Near Jetty (1)	67.2	75	60.4	70
5.	13.11.2021	Dosinga Village (R)	51,4	55	42.1	45
ŝ.	25,11,2021	Near Bhitarkanika ( Eco Sensitive Zone)	45.3	50	37.3	40

		Noise Limit as per CP	CB
Category of Area/Zone	Leq dB(A) Day Time	Leq dB(A) Night Time	NOTE:
Industrial Area	75	70	Day Time: 06.00 Hr22.00 Hr.
Commercial Area	65	55	Night Time:22.00 Hr06.00 Hr.
Residential Area	55	45	
Silence Zone	50	40	

S. Kanny.
Report Prepared by:

For Mitra S. K. Private Limited

N-5/100, Ground Floor IRC Village, Nayapalli Bhubansswar - 751015 [CIN: U51909WB1956PTC023037]

TESTING . INSPECTION

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## TEST REPORT

Name & Address of the Customer:

THE DHAMRA PORT COMPANY LIMITED.

AT : DOSINGA, PO : DHAMRA

DIST: BHADRAK, PIN: 756171 ODISHA

Report No. : BBS/906

Date : 01.12.2021

Sample No.: MSKGL/ED/2020-21/11/00489 Sample Description: Noise (Work Zone)

#### Noise Level Monitoring Data

SL No	Sampling Date	Sampling Location	Z Location MAX		Results in Avg. dB(A)
1.	01.11.2021	Stack Yard	84.6	42.1	73.4
2.	04.11.2021	Wagon Tippler	89,3	46.4	77.6
3,	07.11.2021	Near Silo	78,8	39.2	67.5
4.	11.11.2021	Near Stacker & Reclaimer	70.2	38.1	60.7
5.	15.11.2021	Project Area	79.2	37.9	63.4
6.	16.11.2021	Transfer Point	80.6	40.5	69,3
7.	17.11.2021	Workshop	88.2	44.3	86,7
8.	18.11.2021	Steel Yard	89.8	53.9	79.2
9.	20.11.2021	FCC Shed	77.3	42.3	70.5
10.	21.11.2021	Near Port Canteen	72.6	43.1	62.8

OSHA'S Permissible N	oise Exposure Limits
Noise Level	Exposure Limit
90 dBA	8.0 hours

arrigo Report Prepared by

For Mitra S.K. Private Limited

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TESTINGPINSPECTION

N-5/100, Ground Floor IRC Village, Nayapalli Bhubaneswar - 751015 ICIN- US1000MR1056DTC

[CIN: U51909WB1956PTC023037]

T : (0674) 2362916, 2360917

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## TEST REPORT

Name & Address of the Customer: THE DHAMRA PORT COMPANY LIMITED

AT : DOSINGA, PO : DHAMRA

6DIST: BHADRAK, PIN: 756171 ODISHA

Report No.: BBS/907 Date: 01.12.2021

Sample No.: MSKGL/ED/2020-21/11/00701 Sample Description: EFFLUENT WATER

Sampling Location : STP 150KLD Date of sampling : 02.11.2021

#### ANALYSIS RESULT

SL.	Test Parameters	Units	Limit	Test Specification	Result		
No.			223	Test especialism	Inlet	Outlet	
1.	Colour	Hazen	*	APHA (23rd Edition) 2120B 2017	Blackish	Clear	
2.	Odour	HA-	100	APHA (23rd Edition) 2150B	Disagreeable	Agreeable	
3.	pH value at 26°C	799	6.5 - 9.0	APHA (23rd Edition) 4500 H-B	6.85	7.42	
4.	Appearance		-	Lab Method	Turbid	Clear	
5.	TSS	mg/l	<20.0	APHA (23rd Edition) 2540D	321.0	<2.5	
6.	BOD	mg/I	<10.0	APHA (23rd Edition) 5210B 2017	58.0	<2.0	
7.	COD	mg/l	<50.0	APHA (23rd Edition) 5220B 2017	236.0	4.0	
8.	Oil & Grease	mg/l	<10.0	APHA (23rd Edition) 5220B 2017	9.0	<1.4	
9.	Ammonical Nitrogen	mg/I	<5.0	APHA (23rd Edition) 4500-NH3-F 2017	5.8	5.6	
10.	Total Nitrogen (as N)	mg/l	<10.0	IS 14684 (1999); Rffm:2014	6.3	14.0	
11,	Fascal Coliform	MPN/ 100ml	<1000.0	APHA (23rd Edition) 9221 E	7900.0	200.0	

S. Karryv Report Prepared by: 1607

For Mitra S. K. Private Limited

N-5/100, Ground Floor IRC Village, Neyapalil Bhubanaswar - 751015

[CIN: U51909WB1956PTC023037]

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## TEST REPORT

Name & Address of the Customer:

THE DHAMRA PORT COMPANY LIMITED

AT: DOSINGA, PO: DHAMRA

DIST: BHADRAK, PIN: 756171 ODISHA

Report No.: BBS/908

Date : 01.12.2021

Sample No.: MSKGL/ED/2020-21/10/01324 Sample Description: EFFLUENT WATER

Sampling Location : STP 150KLD Date of sampling : 18.11.2021

#### ANALYSIS RESULT

SL.	Test Parameters	Units	Limit	Test Specification	Resi	ult
No.	1000	-		Assessmenton	Inlet	Outlet
I.	Colour	Hazen	*	APHA (23rd Edition) 2120B 2017	Blackish	Clear
2.	Odour		*	APHA (23td Edition) 2150B	Disagreeable	Agreeable
3.	pH value at 26°C		6.5 - 9.0	APHA (23rd Edition) 4500 H-B	6.98	7.43
4.	Appearance	1442	-	Lab Method	Turbid	Clear
5.	TSS	mg/l	<20.0	APHA (23rd Edition) 2540D	240.0	<2.5
6.	BOD	mg/l	<10.0	APHA (23st Edition) 5210B 2017	86.0	<2.0
7.	COD	mg/l	<50.0	APHA (23rd Edition) 5220B 2017	320.0	<4.0
8.	Oil & Grease	mg/l	<10.0	APHA (23 <sup>rd</sup> Edition) 5220B 2017	10.8	<1,4
9.	Ammonical Nitrogen	mg/l	<5.0	APHA (23rd Edition) 4500-NH3-F 2017	10.0	<0.1
10.	Total Nitrogen (as N)	mg/l	<10.0	IS 14684 (1999); Rffm:2014	13.0	2,1
11.	Faecal Coliform	MPN/ 100ml	<1000.0	APHA (23 <sup>rd</sup> Edition) 9221 E	4900.0	560.0

S. Kango Report Prepared by: A STATE OF THE STA

For Mitra S. K. Private Limited

N-5/100, Ground Floor IRC Village, Nayapalli Bhubaneswar - 751015 [CIN: U51909WB1956PTC023037] TESTING=INSPECTION

T: (0674) 2362916, 2380917

F: (0674) 2362918

## TEST REPORT

Name & Address of the Customer :

THE DHAMRA PORT COMPANY LIMITED

AT : DOSINGA, PO : DHAMRA

6DIST: BHADRAK, PIN: 756171 ODISHA

Report No.: BBS/902 Date: 01.12.2021

Sample No.: MSKGL/ED/2020-21/11/00699 Sample Description: EFFLUENT WATER

Sampling Location : STP 140KLD Date of sampling : 02.11.2021

#### ANALYSIS RESULT

SL.	tr m	Prode-	Limit	Test Consideration	Rest	alt
No.	Test Parameters	Units	Linuit	Test Specification	Inlet	Outlet
1.	Colour	Hazen		APHA (23 <sup>rd</sup> Edition) 2120B 2017	Blackish	Clear
2.	Odour		14	APHA (23 <sup>rd</sup> Edition) 2150B	Disagrecable	Agreeable
3.	pH value at 26°C		6.5 - 9.0	APHA (23 <sup>rd</sup> Edition) 4500 H-B	7.04	7.51
4.	Appearance		-	Lab Method	Turbid	Clear
5.	TSS	mg/l	<20.0	APHA (23 <sup>rd</sup> Edition) 2540D	213.0	<2.5
6.	BOD	mg/l	<10.0	APHA (23 <sup>rd</sup> Edition) 5210B 2017	54.0	<2.0
7.	COD	mg/l	<50.0	APHA (23rd Edition) 5220B 2017	210.0	5.0
8.	Oil & Grease	mg/l	<10.0	APHA (23 <sup>rd</sup> Edition) 5220B 2017	8.0	<1.4
9.	Ammonical Nitrogen	mg/l	<5,0	APHA (23 <sup>rd</sup> Edition) 4500-NH3-F 2017	71.0	<0.1
10.	Total Nitrogen (as N)	mg/l	<10.0	IS 14684 (1999); Rffm:2014	78.0	2.1
11.	Faccal Coliform	MPN/ 100ml	<1000.0	APHA (23rd Edition) 9221 E	7400.0	210.0

S. Konnyl Report Prepared by: - · · ·

For Mitra S. K. Private Limited

N-5/100, Ground Floor IRC Village, Nayspalli Bhubaneswar - 751015

[CIN: U51909WB1956PTC023037]

T : (0674) 2362916, 2360917

F: (0674) 2362918



## TEST REPORT

Name & Address of the Customer:

THE DHAMRA PORT COMPANY LIMITED

AT: DOSINGA, PO: DHAMRA

DIST: BHADRAK, PIN: 756171 ODISHA

Report No.: BBS/904

Date : 01.12.2021

Sample No.: MSKGL/ED/2020-21/11/01322 Sample Description: EFFLUENT WATER

Sampling Location : STP 140KLD Date of sampling : 18.11.2021

## ANALYSIS RESULT

SL.	Test Parameters	Units	Limit	Test Specification	Result		
No.	Test Laramentia	Cares	Linne	1 est opecinication	Inlet	Outlet	
1.	Colour	Hazen		APHA (23rd Edition) 2120B 2017	Blackish	Clear	
2.	Odour		4	APHA (23rd Edition) 2150B	Disagreeable	Agreeable	
3.	pH value at 26°C		6.5 - 9.0	APHA (23 <sup>rd</sup> Edition) 4500 H-B	6.65	7.31	
4.	Appearance	44	-	Lab Method	Turbid	Clear	
5.	TSS	mg/l	<20.0	APHA (23 <sup>rd</sup> Edition) 2540D	220.0	<2.5	
6.	BOD	mg/l	<10.0	APHA (23rd Edition) 5210B 2017	46.0	<2.0	
7.	COD	mg/l	<50.0	APHA (23rd Edition) 5220B 2017	204.0	4.0	
8.	Oil & Grease	mg/I	<10.0	APHA (23 <sup>e)</sup> Edition) 5220B 2017	9.2	<1.4	
9,	Ansmonical Nitrogen	mg/I	<5.0	APHA (23 <sup>rd</sup> Edition) 4500-NH3-F 2017	12.0	<0.1	
10.	Total Nitrogen (as N)	mg/l	<10.0	IS 14684 (1999); Rffm:2014	15.0	1.8	
11.	Faecal Coliform	MPN/ 100ml	<1000.0	APHA (23 <sup>rd</sup> Edition) 9221 E	3300.0	180.0	

S. Konney D. Report Prepared by: For Mitra S. K. Private Limited

N-5/100, Ground Floor IRC Village, Navapatii Bhubaneswar - 751015

[CIN: U51909WB1956PTC023037]

F: (0674) 2362918

T: (0874) 2362916, 2360917

## TEST REPORT

Name & Address of the Customer:

THE DHAMRA PORT COMPANY LIMITED

AT : DOSINGA, PO : DHAMRA

DIST: BHADRAK, PIN: 756171 ODISHA

Report No.: BBS/913 Date : 01.12.2021

Sample No.: MSKGL/ED/2020-21/11/00697 Sample Description: EFFLUENT WATER

TESTING INSPECTION

Sampling Location : STP 25KLD Date of sampling : 02.11.2021

## ANALYSIS RESULT

SL.	Test Parameters	Units	Limit	Test Specification	Res	ult
100	1 .011111.	J-4000.500			Inlet	Outlet
1.	Colour	Hazen	-	APHA (23 <sup>st</sup> Edition) 2120B 2017	Blackish	Clear
2,	Odour	-	***	APHA (23rd Edition) 2150B	Disagrecable	Agreeable
3,	pH value at 26°C	disse	6.5 - 9.0	APHA (23st Edition) 4500 H-B	6.66	7.31
4-	Appearance	****	-	Lab Method	Turbid	Clear
5.	TSS	mg/l	<20.0	APHA (23rd Edition) 2540D	96.0	<2.5
6.	BOD	mg/l	<10.0	APHA (23rd Edition) 5210B 2017	34.0	<2.0
7.	COD	mg/I	<50.0	APHA (23rd Edition) 5220B 2017	144.0	7.0
8.	Oil & Grease	mg/l	<10.0	APHA (23rd Edition) 5220B 2017	6.0	<1.4
9.	Ammonical Nitrogen	mg/l	<5.0	APHA (23 <sup>rd</sup> Edition) 4500-NH3-F 2017	220.0	<0.1
10.	Total Nitrogen (as N)	mg/l	<10.0	IS 14684 (1999); Rffin:2014	310.0	1.9
11.	Faecal Coliform	MPN/ 100ml	<1000.0	APHA (23rd Edition) 9221 E	1700.0	140.0

Report Prepared by

For Mitra S. K. Private Limited

MSK TESTING INSPECTION

N-5/100, Ground Floor IRC Village, Nayapalli Bhubaneswar - 751015 [CIN: U51909WB1956PTC023037]

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F: (0574) 2362918

## TEST REPORT

Name & Address of the Customer:

THE DHAMRA PORT COMPANY LIMITED

AT : DOSINGA, PO : DHAMRA

DIST: BHADRAK, PIN: 756171 ODISHA

Report No.: BBS/914

Date : 01.12.2021

Sample No.: MSKGL/ED/2020-21/11/01320 Sample Description: EFFLUENT WATER

Sampling Location: STP 25KLD Date of sampling: 18.11.2021

#### ANALYSIS RESULT

SL.	Test Parameters	Units	Limit	Test Specification	Resi	Outlet Clear Agreeable 7.46 Clear
No.				Inlet	Outlet	
1.	Colour	Hazen	-	APHA (23rd Edition) 2120B 2017	Blackish	
2.	Odour		-	APHA (23rd Edition) 2150B	Disagrecable	Agrecable
3.	pH value at 26°C	7	6.5 - 9.0	APHA (23rd Edition) 4500 H-B	7.01	7.46
4.	Appearance		-	Lab Method	Turbid	Clear
5.	TSS	mg/l	<20.0	APHA (23rd Edition) 2540D	185.0	<2.5
6.	BOD	mg/l	<10.0	APHA (23 <sup>rd</sup> Edition) 5210B 2017	44.0	<2.0
7.	COD	mg/I	<50.0	APHA (23rd Edition) 5220B 2017	140.0	9.0
8.	Oil & Grease	mg/l	<10.0	APHA (23rd Edition) 5220B 2017	4.6	<1.4
9.	Ammonical Nitrogen	mg/I	<5.0	APHA (23 <sup>rd</sup> Edition) 4500-NH3-F 2017	11.0	<0.1
10.	Total Nitrogen (as N)	mg/l	<10.0	IS 14684 (1999); Rffin:2014	14.0	1.5
11.	Faecal Coliform	MPN/ 100ml	<1000.0	APHA (23 <sup>rd</sup> Edition) 9221 E	840.0	45.0

S. Karner Report Prepared by:

For Mitra S. K. Private Limited

N-5/100, Ground Floor IRC Villege, Nayapali Bhubaneswar - 751015

[CIN: U51909WB1956PTC023037]

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## TEST REPORT

Name & Address of the Customer:

THE DHAMRA PORT COMPANY LIMITED

AT : DOSINGA, PO : DHAMRA

DIST: BHADRAK, PIN: 756171 ODISHA

Report No.: BBS/901

Date : 01.12.2021

Sample No.: MSKGL/ED/2020-21/11/00695 Sample Description: EFFLUENT WATER

Sampling Location: STP 15 KLD Date of sampling: 02.11.2021

#### ANALYSIS RESULT

SL.	Test Parameters	Units	Limit	Test Specification	Resi	ult
No.	Test rarameters	Lines	Lanni	rest specification	Inlet	Outlet
1.	Colour	Hazen	7-2	APHA (23 <sup>to</sup> Edition) 2120B 2017	Blackish	Clear
2.	Odour		-	APHA (23 <sup>rd</sup> Edition) 2150B	Disagreeable	Agrecable
3.	pH value at 26°C		6.5 - 9.0	APHA (23rd Edition) 4500 H-B	6.94.	7.12
4.	Appearance		-	Lab Method Turbio		Clear
5.	TSS	mg/l	<20.0	APHA (23rd Edition) 2540D	104.0	<2.5
6.	BOD	mg/l	<10.0	APHA (23 <sup>rd</sup> Edition) 5210B 2017	40.0	<2.0
7.	COD	mg/l	<50.0	APHA (23rd Edition) 5220B 2017	162.0	8.0
8.	Oil & Grease	mg/l	<10.0	APHA (23 <sup>rd</sup> Edition) 5220B 2017	7.0	<1.4
9.	Ammonical Nitrogen	mg/l	<5.0	APHA (23 <sup>rd</sup> Edition) 4500-NH3-F 2017	31.0	<1.4
10.	Total Nitrogen (as N)	mg/l	<10.0	IS 14684 (1999); Rffm:2014	45.0	2.1
11.	Faecal Coliform	MPN/ 100ml	<1000.0	APHA (23rd Edition) 9221 E 3500		200,0

Report Prepared by:

n à

For Mitra S. K. Private Limited

N-5/100, Ground Floor IRC Village, Nayapall Bhubaneswar - 751015

[CIN: U51909WB1956PTC023037]

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## TEST REPORT

Name & Address of the Customer:

THE DHAMRA PORT COMPANY LIMITED

AT: DOSINGA, PO: DHAMRA

DIST: BHADRAK, PIN:756171 ODISHA

Report No.: BBS/903

Date : 01.12.2021

Sample No.: MSKGL/ED/2020-21/11/01318 Sample Description: EFFLUENT WATER

Sampling Location: STP 15 KLD

Date of sampling : 18.11.2021

## ANALYSIS RESULT

SL.	Test Parameters	Units	Limit	Test Specification	Resi	Outlet Clear Agreeable 7.23 Clear <2.5 <2.0 8.0 <1.4 <0.1
No.	ACOS A BIBLIOSCIO	Sints	Linne	Test opermeation	Inlet	
1.	Colour	Hazen	-	APHA (23 <sup>rd</sup> Edition) 2120B 2017	Blackish	Clear
2.	Odour		-	APHA (23rd Edition) 2150B	Disagrecable	Agreeable
3.	pH value at 26°C	vote:	6.5 - 9.0	APHA (23 <sup>rd</sup> Edition) 4500 H-B 6.98		7.23
4,	Appearance		- 4	Lab Method Turbid		Clear
5.	TSS	mg/l	<20.0	APHA (23 <sup>rd</sup> Edition) 2540D	146.0	<2.5
6.	BOD	mg/l	<10.0	APHA (23 <sup>rd</sup> Edition) 5210B 2017	50.0	<2.0
7.	COD	mg/l	<50.0	APHA (23rd Edition) 5220B 2017	172.0	8.0
8.	Oil & Grease	mg/l	<10.0	APHA (23 <sup>sd</sup> Edition) 5220B 2017	9.1	<1.4
9.	Ammonical Nitrogen	mg/I	<5.0	APHA (23 <sup>rd</sup> Edition) 4500-NH3-F 2017	9.3	<0.1
10.	Total Nitrogen (as N)	mg/l	<10.0	IS 14684 (1999); Rffm:2014	11.0	2.0
11.	Faecal Coliform	MPN/ 100ml	<1000.0	APHA (23rd Edition) 9221 E	2200.0	90.0

S. Karnifa\_ Report Prepared by:

1 4

For Mitra S. K. Private Limited

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[CIN: U51909WB1956PTC023037]

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## TEST REPORT

Name & Address of the Customer:

THE DHAMRA PORT COMPANY LIMITED

AT: DOSINGA, PO: DHAMRA DIST: BHADRAK, 756171 ODISHA Report No. : BBS/910 Date : 01.12.2021

Sample No.: MSKGL/FD/2020-21/11/01353

Date of sampling : 15.11.2021

Sampling Description: Ground Water (Piezometric)
Sampling Location: Township Pump House
Sampling Done By: Mr. Kunja Bihari Nayak

#### BACTERIOLOGICAL ANALYSIS RESULT AS PER IS: 10500 - 2012

L No	Test Parameters	Units	Limit	Test Method / Specification	Result
I,	E. Coli	/100ml	Not Detectable	IS: 15185 : 2016	Not Detected
2.	Total Coliform Organism	/100ml	Not Detectable	IS: 15185 : 2016	Not Detected

CHEMICAL ANALYSIS RESULT AS PER IS: 10500 - 2012

SI.	Test Parameter	Units	Requirement (Acceptable Limit)	Permissible limit in the absence of alternate Source	Test Method / Specification	Result
J.	pH ( at 26° C)	700	6.5 - 8.5	No Relaxation	IS 3025 (Part 11)-1984 Riffin: 2012	7.78
2.	Sulphate (as SO <sub>0</sub> )	mg/l	200	400	IS 3025 (Part 24)- 1986 Rffin: 2014	32.0
3.	Calcium (as Ca)	mg/l	75	200	IS 3025 (Part 40)- 1991 Rffm: 2014	38.0
4.	Arsenic (as As)	mg/I	0.01	0.05	IS 3025 (Part 2) 2004 RA 2014	BDL(DL:0.005)
5.	Lead (as Pb)	mg/i	0.01	No Relaxation	IS 3025 (Part 2) 2004 RA 2014	BDL(DL:0.005)
6.	Zinc (as Zn)	mg/l	5.0	15.0	IS 3025 (Part 2) 2004 RA 2014	BDL(DL:0.02)
7.	Copper (as Cu)	mg/l	0.05	1.5	TS 3025 (Part 2) 2004 RA 2014	BDL(DL:0.02)
8.	Mercury (as Hg)	mg/l	0.001	No Relaxation	IS 3025 (Part 48)-1994 Riffm: 2014	BDL(DL:0.0002)
9.	Codmium (as Cd)	mg/I	0.003	No Relaxation	IS 3025 (Part 2) 2004 RA 2014	BDL(DL:0.001)
10.	Mineral Oil	mg/l	0.5	No Relaxation	IS 3025 (Part 39)-1991 Rffin: 2014	BDL(DL:0.5)
11.	Fluoride (as F)	mg/l	1.0	1.5	IS 3025 (Part 60)- 2008 R.ffm: 2013	BDL(DL:0.2)
12.	Colour	Hazen	5	15	3025 (Part 4)-1983; Rffm:2012	BDL(DL:1.0)
13.	Odeur	****	Agrecable	Agreeable	1S 3025 (Part 5)-1983 Rffm: 2012	Agreeable
14.	Turbidity	N.T.U	1	5	IS 3025 (Part 10)-1984 Rffin; 2012	BDL(DL:1.0)
15.	Residual free Chlorine	mg/l	0.2	1.0	IS 3025 (Part 26)- 1986 Rffm:2014	BDL(DL:0.1)
16.	Iron (as Fe)	mg/1	0.3	No Relaxation	IS 3025 (Part 53)-1988 Rffm: 2014	BDL(DL:0.05)
17.	Chloride (as C1)	mg/l	250	1600	IS 3025 (Part 32)-1988 Rffin: 2014	75.0
18.	Total Dissolved Solids	mg/l	500	2000	IS 3025 (Part 16)-1984; Rffm:2012	277.0
19.	Alkalinity (as CaCOs)	mg/l	200	600	IS 3025 (Part 23)- 1986 Rffm: 2009	181.0
20.	Aluminium (as Al)	mg/I	0.03	0.2	IS 3025 (Part 2) 2004 RA 2014	BDL(DL:0.01)
21.	Magnesium (as Mg)	mg/i	36	100	IS 3025 (Part 46)-1994 Rffin: 2014	24.0
22.	Total Hardness (as CaCO <sub>2</sub> )	mg/i	200	600	1S 3025 (Part 21)-2013	167.0
23.	Boron (as B)	mg/I	0.5	1.0	1S 3025 (Part 2) 2004 RA 2014	BDL(DL:0.3)
24.	Manganese (as Min)	mg/l	0.1	0.3	IS 3025 (Part 2) 2004 RA 2014	BDL(DL:0.02)
25.	Nitrate (as NO <sub>2</sub> )	mg/l	45	No Relaxation	IS 3025 (Part 34)-1988 Rffins: 2014	BDL(DL:0.4)
26.	Phenolic Compounds (as C <sub>6</sub> H <sub>9</sub> OH)	mg/l	0,001	0.002	IS 3025 (Part 43)- 1992; Riffin: 2014	BDL(DL:0.001)
27.	Selenium (as Se)	mg/l	10.0	No Relaxation	IS 3025 (Part 2) 2004 RA 2014	BDL(DL:0.005)
28	Total Chromium ( as Cr)	mg/I	0.05	No Relaxation	IS 3025 (Part 2) 2004 RA 2014	BDL(DL:0.01)
29.	Silver (as Ag)	mg/l	0.1	No Relaxation	IS 3025 (Part 2) 2004 RA 2014	BDL(DL:0.005)
30.	Barium (as Ba)	mg/l	0.7	No Relaxation	IS 3025 (Part 2) 2864 RA 2014	BDL(DL:0.1)
31.	Salinity	mg/l	-	****	IS 3025 (Part 14)- 2013	48.0



Date- 01.12.2021

32.	Sulphide (as H2S)	mg/l	0.05	No Relaxation	IS 3025 (Part 29)- 1991; Rffm: 2014	BDL(DL:0.02)
33.	Ammonia ( as total ammonia-N)	mg/I	0,5	No Relaxation	IS 3025 (Part 34)- 1988; Rffm: 2014	BDL(DL:0.1)
34.	Chloramines	mg/l	4.0	No Relevation	IS 3025 (Part 26)- 1986; Rffm: 2014	BDL(DL:0.1)
35.	Nickel (as Ni)	mg/l	0.02	No Relaxation	IS 3025 (Part 2) 2004 RA 2014	BDL(DL:0.01)
36.	Cyanide (as CN)	mg/l	0.05	No Relaxation	IS 3025 (Part 27)- 1986 Rffin: 2014	BDL(DL:0.01)
37.	Anionic Detergents (as MBAS)	mg/l	0.2	1.0	IS 13428(Annex K)- 2005	BDL(DL:0.05)
38.	Polynuclear Aromatic Hydrocarbons (as PAH)	rem	1000.0	No Relexation	APHA ( 23rd Edin.) 6440C	BDL(DL:0.0001)
39.	Polychlorinated Biphenyls (PCB)	mg/l	0.0005	No Relaxation	US EPA 8082	BDL(DL:0.0005)

S. Karnett Report Prepared by:

For Mitra S. K. Private Limited.

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TEST REPORT

Name & Address of the Customer: THE DHAMRA PORT COMPANY LIMITED

AT : DOSINGA, PO : DHAMRA

DIST: BHADRAK, PIN: 756171 ODISHA

Report No. : BBS/911 Date : 01.12.2021

Sample No.: MSKGL/FD/2020-21/11/00863

Date of sampling : 15.11.2021

Sampling Description: Ground Water (Piezometric)

TESTING INSPECTION

Sampling Location: Pump House WTP Sampling Done By: Mr. Kunja Bihari Nayak

#### BACTERIOLOGICAL ANALYSIS RESULT AS PER IS: 10500 - 2012

SL No	Test Parameters	Units	Limit	Test Method / Specification	Result
1.	E. Coli	/100ml	Not Detectable	IS: 15185 : 2016	Not Detected
2.	Total Coliform Organism	/100ml	Not Detectable	IS: 15185 : 2016	Not Detected

#### CHEMICAL ANALYSIS RESULT AS PER IS: 10500 - 2012

SL No.	Test Parameter	Units	Requirement (Acceptable Limit)	Permissible limit in the absence of alternate Source	Test Method / Specification	Result
1.	pH ( at 26° C)		6.5 - 8.5	No Relaxation	IS 3025 (Part 11)-1984 Rffin: 2012	7.52
2.	Sulphate (as SO <sub>4</sub> )	mp/l	200	400	IS 3025 (Part 24)- 1986 Rffm: 2014	32.0
3.	Calcium (as Ca)	mg/I	75	200	IS 3025 (Part 40)- 1991 Rffm: 2014	38.0
4.	Arsenic (as As)	mg/l	0.01	0.05	IS 3025 (Part 2) 2004 RA 2014	BDL(DL:0.005)
5.	Lead (as Pb)	mg/l	0.01	No Relaxation	IS 3025 (Part 2) 2004 RA 2014	BDL(DL:0.005)
6.	Zinc (as Zn)	mg/l	5.0	15.0	IS 3025 (Part 2) 2004 RA 2014	BDL(DL:0.02)
7.	Copper (as Cu)	mg/l	0.05	1.5	IS 3025 (Part 2) 2004 RA 2014	BDL(DL:0.02)
8.	Mercury (as Hg)	mg/l	0.001	No Relaxation	IS 3025 (Part 48)-1994 Riffin: 2014	BDL(DL:0.0002)
9.	Cadmium (as Cd)	mg/l	0.003	No Relaxation	IS 3025 (Part 2) 2004 RA 2014	BDL(DL:0.001)
10.	Mineral Oil	mg/I	0.5	No Relaxation	15 3025 (Part 39)-1991 Rffm: 2014	BDL(DL:0.5)
11.	Fluoride (as F)	mg/I	1.0	1.5	IS 3025 (Part 60)- 2008 Riffm; 2013	BDL(DL:0.2)
12.	Colour	Hazen	5	15	3025 (Part 4)-1983; Riffin:2012	BDL(DL:1.0)
13.	Odour	THEFT	Agreeable	Agrecable	IS 3025 (Part 5)-1983 Rffin:2012	Agreeable
14.	Turbidity	N.T.U	1	5	IS 3025 (Part 10)-1984 Rffm; 2012	BDL(DL:1.0)
15.	Residual free Chlorine	mg/l	0.2	1.0	IS 3025 (Part 26)- 1986 Rffm: 2014	BDL(DL:0.1)
16.	Iron (as Fe)	mg/l	0.3	No Relaxation	IS 3025 (Part 53)-1988 Rffm: 2014	BDL(DL:0.05)
17.	Chloride (as Cl)	mg/l	250	1000	IS 3025 (Part 32)-1988 Rffm: 2014	77,0
18.	Total Dissolved Solids	mg/l	500	2000	IS 3025 (Part 16)-1984; Rffm:2012	295.0
19.	Alkalinity (as CaCO <sub>2</sub> )	mg/l	200	600	1S 3025 (Part 23)- 1986 Rffm: 2009	173.0
20.	Aluminium (as Al)	mg/l	0.03	0.2	IS 3025 (Part 2) 2004 RA 2014	BDL(DL:0.01)
21.	Magnesium (as Mg)	mg/l	30	100	IS 3025 (Part 46)-1994 Riffm: 2014	22.0
22.	Total Hardness (as CaCO <sub>2</sub> )	rag/I	200	600	IS 3025 (Part 21)-2013	154.0
23.	Boron (as B)	mg/I	0.5	1.0	IS 3025 (Part 2) 2004 RA 2014	BDL(DL:0,3)
24.	Manganese (as Mn)	mg/l	0.1	0.3	IS 3025 (Part 2) 2004 RA 2014	BDL(DL:0.02)
25.	Nitrate (as NO <sub>3</sub> )	mg/I	45	No Relaxation	IS 3025 (Part 34)-1988 Rffin: 2014	BDL(DL:0.4)
26.	Phenolic Compounds (as CaHrOH)	mg/I	0.001	0.002	IS 3025 (Part 43)- 1992; Rffm: 2014	BDL(DL:0.001)
27.	Selenium (as Se)	mg/I	0.01	No Relaxation	IS 3025 (Part 2) 2004 RA 2014	BDL(DL:0.005)
28.	Total Chromium (as Cr)	mg/l	0.05	No Relaxation	IS 3025 (Part 2) 2004 RA 2014	BDL(DL:0.01)
29.	Silver ( as Ag)	mg/I	0.1	No Relaxation	1S 3025 (Part 2) 2004 RA 2014	BDL(DL:0.005)
30.	Barium (as Ba)	mg/l	0.7	No Relaxation	IS 3025 (Part 2) 2004 RA 2014	BDL(DL:0.1)
31	Salinity	mg/l	7 2		IS 3025 (Part 14)- 2013	50.0



#### Date- 01.12.2021

39.	Polychlorinated Biphenyls (PCB)	mg/l	0.0005	No Relaxation	US EPA 8082	BDL(DL:0.0005)
38.	Polynuclear Aromatic Hydrocarbons (as PAH)	mg/l	1000,0	No Relexation	APHA ( 23 <sup>rd</sup> Edus.) 6440C	BDL(DL:0.0001)
37.	Anionic Detergents (as MBAS)	mg/l	0.2	1,0	IS 13428(Annex K)- 2005	BDL(DL:0.05)
36.	Cyanida (na CN)	mg/l	0.05	No Relaxation	IS 3025 (Part 27)- 1986 Rffm: 2014	BDL(DL:0.01)
35.	Nickel (as Ni)	mg/l	0.02	No Relaxation	IS 3025 (Part 2) 2004 RA 2014	BDL(DL:0.01)
34.	Chloramines	mg/l	4.0	No Relaxation	IS 3025 (Part 26)- 1986; Rffm: 2014	BDL(DI;:0.1)
33.	Ammonia ( as total ammonia-N)	mg/l	0.5	No Relocation	IS 3025 (Part 34)- 1988; Rffm: 2014	BDL(DL:0.1)
32.	Sulphide ( as H2S)	mg/l	0.03	No Relaxation	IS 3025 (Part 29)- 1991; Rffin: 2014	BDL(DL:0.02)

S. Hours

EDEP E

For Mitra S. K. Private Limited.

N-5/100, Ground Floor IRC Village, Nayspelli Bhubaneswar - 751015

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Result

## TEST REPORT

Name & Address of the Customer:

THE DHAMRA PORT COMPANY LIMITED

AT; DOSINGA, PO: DHAMRA

DIST: BHADRAK, PIN: 756171 ODISHA

Report No. : BBS/912 Date : 01.12.2021

Sample No.: MSKGL/FD/2020-21/11/01355

Date of sampling : 15.11.2021

Sampling Description: Ground Water (Piezometric)

Sampling Location: Running Room

Sampling Done By : Mr. Kunja Bihari Nayak

#### BACTERIOLOGICAL ANALYSIS RESULT AS PER IS: 10500 - 2012

Sl. No	Test Parameters	Units	Limit	Test Method / Specification	Result
1.	E. Coli	/100ml	Not Detectable	IS: 15185 : 2016	Not Detected
2.	Total Coliform Organism	/100ml	Not Detectable	IS: 15185 : 2016	Not Detected

CHEMICAL ANALYSIS RESULT AS PER IS: 10500 - 2012

	1000770-000		Limit)	alternate Source		100000000000000000000000000000000000000
1.	pH (at 26°C)	****	6.5 - 8.5	No Relaxation	IS 3025 (Part 11)-1984 Rffm: 2012	7.59
2.	Sulphate (as SO <sub>4</sub> )	mg/l	200	400	IS 3025 (Part 24)- 1986 Rffm: 2014	27.0
3.	Calcium (as Ca)	mg/l	75	200	15 3025 (Part 40)- 1991 Rffin: 2014	44.0
4.	Arsenic (as As)	mg/l	0.01	0.05	IS 3025 (Part 2) 2004 RA 2014	BDL(DL:0.005)
5.	Lead (as Pb)	mg/I	0.01	No Relaxation	IS 3025 (Part 2) 2004 RA 2014	BDL(DL:0.005)
6.	Zinc (as Zn)	mg/I	5.0	15.0	IS 3025 (Part 2) 2004 RA 2014	BDL(DL:0.02)
7.	Copper (as Cu)	mg/l	0.05	1.5	IS 3025 (Part 2) 2004 RA 2014	BDL(DL:0.02)
8.	Mercury (as Hg)	mg/l	0.001	No Relaxation	IS 3025 (Part 48)-1994 Rffln; 2014	BDL(DL:0.0002)
9_	Cadmium (as Cd)	mg/l	0.603	No Relaxation	IS 3025 (Part 2) 2004 RA 2014	BDL(DL:0.001)
10.	Mineral Oil	mg/l	0.5	No Relaxation	IS 3025 (Part 39)-1991 Rffm: 2014	BDL(DL:0.5)
11.	Fluoride (as F)	mg/l	1.0	1.5	IS 3025 (Part 60)- 2008 Rffin: 2013	BDL(DL:0.2)
2	Colour	Hazen	5	15	3025 (Part 4)-1983; Rffin:2012	BDL(DL:1.0)
13.	Odour	-	Agreeable	Agreeable	IS 3025 (Part 5)-1983 Rffm:2012	Agrecable
14,	Turbidity	N.T.U	1	5	IS 3025 (Part 10)-1984 Rffm: 2012	BDL(DL:1.0)
15.	Residual free Chlorine	mg/l	0.2	1.0	IS 3025 (Part 26)- 1986 Rffin: 2014	BDL(DL:0.1)
16.	Iron (as Fe)	mg/l	0.3	No Relaxation	IS 3025 (Part 53)-1988 Rffm; 2014	BDL(DL:0.05)
17.	Chloride (as Cl)	mg/l	250	1000	IS 3025 (Part 32)-1988 Riffm: 2014	69.0
18.	Total Dissolved Solids	mg/l	500	2000	1S 3025 (Part 16)-1984; Rffm:2012	246.0
19.	Alkalinity (as CaCO <sub>3</sub> )	mg/i	200	600	IS 3025 (Part 23)- 1986 Rffm: 2009	165.0
20,	Aluminium (as Al)	mg/l	0.03	0.2	IS 3025 (Part 2) 2004 RA 2014	BDL(DL:0.01)
21.	Magnesium (as Mg)	I mg/I	30	100	IS 3025 (Part 46)-1994 Rffin: 2014	20.0
22.	Total Hardness (as CaCO <sub>f</sub> )	mg/I	200	600	IS 3025 (Part 21)-2013	153.0
23.	Boron (as B)	mg/l	0.5	1.0	IS 3025 (Part 2) 2004 RA 2014	BDL(DL:0.3)
24.	Manganese (as Mn)	mg/l	0.1	0.3	IS 3025 (Part 2) 2004 RA 2014	BDL(DL:0.02)
25.	Nitrate (as NO <sub>1</sub> )	rng/1	45	No Relaxation	IS 3025 (Part 34)-1988 Rffm: 2014	BDL(DL-0.4)
26.	Phenolic Compounds (as Call-OH)	rog/1	0.001	0.002	IS 3025 (Part 43)- 1992; Rffin: 2014	BDL(DL:0.001)
27.	Selenium (as Se)	mg/l	0.01	No Relaxation	IS 3025 (Part 2) 2004 RA 2014	BDL(DL:0.005)
28.	Total Chromium ( as Cr)	rag/l	0.05	No Relacation	IS 3025 (Part 2) 2004 RA 2014	BDL(DL:0.01)
29.	Silver (as Ag)	mg/l	0.1	No Relaxation	IS 3025 (Part 2) 2004 RA 2014	BDL(DL:0.005)
30.	Barium (as Ba)	mg/l	0.7	No Relaxation	IS 3025 (Part 2) 2004 RA 2014	BDL(DL:0.1)
31.	Salinity	mg/l		****	IS 3025 (Part 14)- 2013	47.0



#### Date-01.12.2021

32.	Sulphide (as H2S)	mg/l	0.05	No Relaxation	IS 3025 (Part 29)- 1991; Riffin: 2014	BDL(DL:0.02)
33.	Ammonia ( as total ammonio-N)	mg/l	0.5	No Relacation	IS 3025 (Part 34)- 1988; Rffm: 2014	BDL(DL:0,1)
34.	Chloramines	mg/l	4.0	No Relocation	IS 3025 (Part 26)- 1986; Rffm: 2014	BDL(DL:0.1)
35.	Nickel (as Ni)	mg/l	0.02	No Relaxation	IS 3025 (Part 2) 2004 RA 2014	BDL(DL:0.01)
36.	Cyanide (as CN)	mg/l	0.05	No Relaxation	IS 3025 (Part 27)- 1986 Rffin: 2014	BDL(DL:0.01)
37.	Anionie Detergents (as MBAS)	mg/l	0.2	1.0	IS 13428(Annex K)- 2005	BDL(DL:0.05)
38.	Polynuclear Aromatic Hydrocarbons (ns PAH)	mg/l	0.0001	No Relaxation	APHA ( 23 <sup>rd</sup> Edin.) 6440C	BDL(DL;0,0001)
39.	Polychlorinated Biphenyls (PCB)	mg/l	0.0005	No Relaxation	US EPA 8082	BDL(DL:0.0005)

S. Kange Report Prepared by:

BREIN

For Mitra S. K. Private Limited.

N-5/100, Ground Floor IRC Village, Nayapali Bhubaneswar - 751015

[CIN: U51909WB1956PTC023037]

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## TEST REPORT

Name & Address of the Customer: THE DHAMRA PORT COMPANY LIMITED

AT: DOSINGA, PO: DHAMRA

DIST: BHADRAK, PIN: 756171 ODISHA

Report No. : BBS/915 Date : 01.12.2021

Sample No.: MSKGL/ED/2020-21/11/00740

Sample Description: Sea Sediment Sampling Location: Dredging Area Date of sampling: 03.11,2021

#### ANALYSIS RESULT

SL No.	<u>Parameters</u>	Unit	Test Method	Result
1.	pH value	None	IS 2720 (Part 26)-1987;Rffm:2011	7.64
2.	Electrical Conductivity	us/cm	IS 3025 (Part 14)-1984;Rffm:2006	5760.0
3.	Organic Matter	%	IS 2720 (Part 22)-1972; Rffm:2015	1.0
4.	Turbidity	N.T.U	APHA (23 <sup>rd</sup> Edition) 2130B	266.0
5.	Moisture content	%	Lab Method	38.0
6.	Chloride (as Cl.)	mg/kg	TPM/MSK/P&E/1/10	2440.0
7.	Sulphate (as SO4)	mg/kg	IS 2720 (Part 27) 1977,RA 2015	742.0
8.	Sulphide (as S)	mg/kg	TPM/MSK/P&E/1/43	<5.0
9.	Phosphate (as PO4)	mg/kg	TPM/MSK/P&E/1/12	35.0
10.	Phosphorus	mg/kg	TPM/MSK/P&E/1/12	378.0
11,	Iron (as Fe)	mg/kg	TPM/MSK/P&E/1/13	498.0
12.	Sodium (as Na)	mg/kg	TPM/MSK/P&E/1/4	3447.0
13.	Potassium (as K)	mg/kg	TPM/MSK/P&E/1/5	844.0
14.	Copper (as Cu)	mg/kg	EPA 6010D	23.0
15.	Nickel (as Ni)	mg/kg	EPA 6010D	18,0
16.	Zinc (as Zn)	mg/kg	EPA 6010D	26.0
17.	Manganese (as Mn)	mg/kg	EPA 6010D	422.0



Date- 01.12.2021

18.	Lead (as Pb)	mg/kg	EPA 6010D	8.2
19.	Boron (as B)	mg/kg	IS 13428- 2005, Annex H	<5.0
20.	Aluminium ( as Al )	mg/kg	EPA 6010D	2145.0
21.	Total Chromium (as Cr)	mg/kg	EPA 6010D	42.0
22.	Total Nitrogen (as N)	mg/kg	IS 14684 (1999); Rffm:2014	510.0
23.	Organic Nitrogen	mg/kg	TPM/MSK/P&E/3/68	476.0
24.	Total Petroleum Hydrocarbon	mg/kg	USEPA 8015 B - Dec, 1996, 8270 D - Feb.2007	<0.05
25.	Pesticide Residue	mg/kg	USEPA 3540 C USEPA 8082	<0.5
26.	Sand	%	TPM/MSK/P&E/1/36A	38.0
27.	Silt	%	TPM/MSK/P&E/1/36A	20.0
28.	Texture	None	TPM/MSK/P&E/1/36A	Clay
29.	Clay	%	TPM/MSK/P&E/1/36A	42.0

## **Biological Result**

SI No.	Parameters	Unit	Results
1,	Fungus (Phytobenthos)	CFU/g dry wt.	1289
2.	Total count (Phytobenthos)	50 mg wet sediment	241
3.	No of species (Phytobenthos)	Nos.	4
4.	Diversity index (Phytobenthos)		1.78
5.	Major Species (phytobenthos)		Biddulphia mobilensis, Gyrosigma sp
6.	Name of Phylum (Fauna)		Annelida, Mollusca
7.	Class & Number of individuals encountered (Fauna)		Plychaeta-44,Bivalvia-17
8.	Total no. of species encountered (Fauna)	Nos.	24
9.	Total fauna (Fauna)	per m <sup>3</sup>	172

S. Kamgy\_ Report Prepared by:

1995 1995 For Mitra S.K. Private Limited
Authorized Signatory

MSK MSK TESTING INSPECTION

N-5/100, Ground Floor IRC Village, Nayapalii Bhubaneswar - 751015

[CIN: U51909WB1956PTC023037]

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## TEST REPORT

Name & Address of the Customer:

THE DHAMRA PORT COMPANY LIMITED

AT: DOSINGA, PO: DHAMRA

DIST: BHADRAK, PIN: 756171 ODISHA

Report No. : BBS/916 Date : 01.12.2021

Sample No. : MSKGL/ED/2020-21/11/00741

Sample Description : Sea Sediment

Sampling Location: Dredging Disposal Site

Date of sampling : 03.11.2021

#### ANALYSIS RESULT

St. No.	Parameters	Unit	Test Method	Result
1,	pH value	None	IS 2720 (Part 26)-1987;Rffm:2011	7.92
2.	Electrical Conductivity	us/cm	IS 3025 (Part 14)-1984;Rffm:2006	5881.0
3.	Organic Matter	%	IS 2720 (Part 22)-1972; Rffm:2015	1.1
4.	Turbidity	N.T.U	APHA (23rd Edition) 2130B	234.0
5.	Moisture content	%	Lab Method	42.0
6.	Chloride (as Cl )	mg/kg	TPM/MSK/P&E/1/10	2210.0
7.	Sulphate (as SO4)	mg/kg	IS 2720 (Part 27) 1977,RA 2015	688.0
8.	Sulphide (as S)	mg/kg	TPM/MSK/P&E/1/43	<5.0
9.	Phosphate (as PO4)	mg/kg	TPM/MSK/P&E/1/12	<3.0
10.	Phosphorus	mg/kg	TPM/MSK/P&E/1/12	336.0
11,	Iron (as Fe)	mg/kg	TPM/MSK/P&E/1/13	552.0
12.	Sodium (as Na)	mg/kg	TPM/MSK/P&E/1/4	3386.0
13.	Potassium (as K)	mg/kg	TPM/MSK/P&E/1/5	852.0
14.	Copper (as Cu)	mg/kg	EPA 6010D	48.0
15.	Nickel (as Ni)	mg/kg	EPA 6010D	23.0
16.	Zinc (as Zn)	mg/kg	EPA 6010D	21.0
17.	Manganese (as Mn)	mg/kg	EPA 6010D	453.0



Date- 01.12.2021

18.	Lead (as Pb)	mg/kg	EPA 6010D	9.9
19.	Boron (as B)	mg/kg	IS 13428- 2005, Annex H	<5.0
20.	Aluminium ( as Al )	mg/kg	EPA 6010D	2567.0
21.	Total Chromium (as Cr)	mg/kg	EPA 6010D	51.0
22.	Total Nitrogen (as N)	mg/kg	IS 14684 (1999); Rffm:2014	549.0
23.	Organic Nitrogen	mg/kg	TPM/MSK/P&E/3/68	521.0
24.	Total Petroleum Hydrocarbon	mg/kg	USEPA 8015 B - Dec, 1996, 8270 D - Feb,2007	<0.05
25.	Pesticide Residua	mg/kg	USEPA 3540 C USEPA 8082	<0.5
26.	Sand	%	TPM/MSK/P&E/L/36A	39.0
27.	Silt	%	TPM/MSK/P&E/1/36A	16.0
28.	Texture	None	TPM/MSK/P&E/1/36A	Clay
29.	Clay	%	TPM/MSK/P&E/1/36A	45.0

## Biological Result

SI No.	Parameters	Unit	Results
I.	Fungus (Phytobenthos)	CFU/g dry wt.	1399
2.	Total count (Phytobenthos)	50 mg wet sediment	284
3.	No of species (Phytobenthos)	Nos.	5
4.	Diversity index (Phytobenthos)	10.755	1.45
Ś.	Major Species (phytobenthos)		Biddulphia mobilensis, Navicula closterium
6.	Name of Phylum (Fauna)		Annelida, Mollusca
7.	Class & Number of individuals encountered (Fauna)	-	Phychaeta-52,Bivalvia-21
8.	Total no. of species encountered (Fauna)	Nos.	10
9.	Total fauna (Fauna)	per m <sup>3</sup>	186

For Mitra S.K. Private Limited Authorized Signatory

M5K

N-5/100, Ground Floor IRC Village, Nayapalli Bhubaneswar - 751015

[CIN: U51909WB1956PTC023037]

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## TEST REPORT

Name & Address of the Customer: THE DHAMRA PORT COMPANY LIMITED

AT: DOSINGA, PO: DHAMRA

DIST: BHADRAK, PIN: 756171 ODISHA

Report No. : BBS/918 Date : 01.12,2021

Sample No. : MSKGL/ED/2020-21/11/00801

Sample Description: Sea Sediment Sampling Location: Dredging Area Date of sampling: 23.11.2021

#### ANALYSIS RESULT

SL No.	<u>Parameters</u>	Unit	Test Method	Result
1.	pH value	None	IS 2720 (Part 26)-1987;Rffm:2011	8,26
2.	Electrical Conductivity	us/cm	IS 3025 (Part 14)-1984;Rffm:2006	5660.0
3.	Organic Matter	%	IS 2720 (Part 22)-1972; Rffm:2015	1.4
4,	Turbidity	N.T.U	APHA (23rd Edition) 2130B	278.0
5.	Moisture content	%	Lab Method	36.0
6.	Chloride (as Cl.)	mg/kg	TPM/MSK/P&E/1/10	3450.0
7.	Sulphate (as SO4)	mg/kg	IS 2720 (Part 27) 1977,RA 2015	690.0
8.	Sulphide (as S)	mg/kg	TPM/MSK/P&E/1/43	<5.0
9.	Phosphate (as PO4)	mg/kg	TPM/MSK/P&E/1/12	<3.0
10.	Phosphorus	mg/kg	TPM/MSK/P&E/1/12	210.0
11,	Iron (as Fe)	mg/kg	TPM/MSK/P&E/1/13	310.0
12.	Sodium (as Na)	mg/kg	TPM/MSK/P&E/1/4	1987.0
13.	Potassium (as K)	mg/kg	TPM/MSK/P&E/1/5	258.0
14.	Copper (as Cu)	mg/kg	EPA 6010D	28.0
15.	Nickel (as Ni)	mg/kg	EPA 6010D	7.8
16.	Zinc (as Zn)	mg/kg	EPA 6010D	22.0
17.	Manganese (as Mn)	mg/kg	EPA 6010D	196.0



Date- 01.12.2021

18.	Lead (as Pb)	mg/kg	EPA 6010D	
19.	Boron (as B)	mg/kg	- 100 Carlotter	7,5
20.			IS 13428- 2005, Annex H	<5.0
	Aluminium ( as Al )	mg/kg	EPA 6010D	2149.0
21.	Total Chromium (as Cr)	mg/kg	EPA 6010D	14.6
22.	Total Nitrogen (as N)	mg/kg	IS 14684 (1999); Rffm:2014	245.0
23.	Organic Nitrogen	mg/kg	TPM/MSK/P&E/3/68	218.0
24.	Total Petroleum Hydrocarbon	mg/kg	USEPA 8015 B - Dec, 1996, 8270 D - Feb, 2007	<0.05
25.	Pesticide Residue	mg/kg	USEPA 3540 C USEPA 8082	<0.5
26,	Sand	%	TPM/MSK/P&E/1/36A	40.0
27.	Silt	%	TPM/MSK/P&E/1/36A	35.0
28.	Texture	None	TPM/MSK/P&E/1/36A	Clay Loam
19.	Clay	%	TPM/MSK/P&E/1/36A	25.0

## Biological Result

SI No.	Parameters	Unit	P
1.	Fungus (Phytobenthos)	CFU/g dry wt	Results 1356
2.	Total count (Phytobenthos)	50 mg wet sediment	279
3.	No of species (Phytobenthos)	Nos.	8
4.	Diversity index (Phytobenthos)		1.78
5.	Major Species (phytobenthos)	-	Nizschia distans, Coscinodiscus sp
6.	Name of Phylum (Fauna)		Annelida, Mollusca
7.	Class & Number of individuals encountered (Fauna)		Plychaeta-53,Bivalvia-17
8.	Total no. of species encountered (Fauna)	Nos.	16
9.	Total fauna (Fauna)	per m <sup>3</sup>	179

Report Prepared by:

For Mitra S.K. Private Limited

N-5/100, Ground Floor
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## TEST REPORT

Name & Address of the Customer:

THE DHAMRA PORT COMPANY LIMITED

AT: DOSINGA, PO: DHAMRA

DIST: BHADRAK, PIN: 756171 ODISHA

Report No. : BBS/917 Date : 01.12.2021

Sample No.: MSKGL/ED/2020-21/11/00800

Sample Description : Sea Sediment

Sampling Location: Dredging Disposal Site

Date of sampling : 23.11.2021

#### ANALYSIS RESULT

SI. No.	<u>Parameters</u>	Unit	Test Method	Result
I.	pH value	None	IS 2720 (Part 26)-1987;Rffm:2011	8.02
2.	Electrical Conductivity	us/cm	IS 3025 (Part 14)-1984;Rffm:2006	5148.0
3.	Organic Matter	%	IS 2720 (Part 22)-1972; Rffin:2015	0.97
4.	Turbidity	N.T.U	APHA (23rd Edition) 2130B	210.0
5.	Moisture content	%	Lab Method	32.0
6.	Chloride (as Cl )	mg/kg	TPM/MSK/P&E/1/10	2654.0
7.	Sulphate (as SO4)	mg/kg	IS 2720 (Part 27) 1977,RA 2015	645.0
8,	Sulphide (as S)	mg/kg	TPM/MSK/P&E/1/43	<5.0
9.	Phosphate (as PO4)	mg/kg	TPM/MSK/P&E/1/12	16.0
10.	Phosphorus	mg/kg	TPM/MSK/P&E/1/12	198.0
11.	Iron (as Fe)	mg/kg	TPM/MSK/P&E/1/13	267.0
12.	Sodium (as Na)	mg/kg	TPM/MSK/P&E/1/4	2879.0
13.	Potassium (as K)	mg/kg	TPM/MSK/P&E/1/5	157.0
14.	Copper (as Cu)	mg/kg	EPA 6010D	15.0
15.	Nickel (as Ni)	mg/kg	EPA 6010D	34.0
16.	Zine (as Zn)	mg/kg	EPA 6010D	12.0
17.	Manganese (as Mn)	mg/kg	EPA 6010D	237.0



#### Date- 01.12.2021

18.	Lead (as Pb)	mg/kg	EPA 6010D	5.8
19.	Boron (as B)	mg/kg	IS 13428- 2005, Annex H	<5.0
20.	Aluminium ( as Al )	mg/kg	EPA 6010D	2300.0
21,	Total Chromium (as Cr)	mg/kg	EPA 6010D	87.0
22.	Total Nitrogen (as N)	mg/kg	IS 14684 (1999); Rffin:2014	324.0
23.	Organic Nitrogen	mg/kg	TPM/MSK/P&E/3/68	312.0
24.	Total Petroleum Hydrocarbon	mg/kg	USEPA 8015 B - Dec, 1996, 8270 D - Feb, 2007	<1.0
25.	Pesticide Residue	mg/kg	USEPA 3540 C USEPA 8082	<0.5
26.	Sand	%	TPM/MSK/P&E/1/36A	39.0
27.	Silt	%	TPM/MSK/P&E/1/36A	29.0
28.	Texture	None	TPM/MSK/P&E/1/36A	Loam
9.	Clay	%	TPM/MSK/P&E/1/36A	32.0

## Biological Result

SI No.	Parameters	Unit	Results
1.	Fungus (Phytobenthos)	CFU/g dry wt.	1789
2.	Total count (Phytobenthos)	50 mg wet sediment	237
3.	No of species (Phytobenthos)	Nos.	5
4.	Diversity index (Phytobenthos)	100	1.54
5.	Major Species (phytobenthos)		Coscinodiscus sp. Biddulphia mohilensis
6.	Name of Phylum (Fauna)		Annelida, Mollusca
7.	Class & Number of individuals encountered (Fauna)		Plychaeta-66,Bivalvia-31
8.	Total no. of species encountered (Fauna)	Nos.	24
9.	Total fauna (Fauna)	per m³	260

S. Kango Report Prepared by:

289X F

For Mitra S.K. Private Limited



Ref: MSKGL/ED/BHU-2021/00100

Date: 01.12.2021

# Site Specific Monitored Meteorological Data

For: The Dhamra Port Company Limited, Dosinga, Bhadrak, Odisha

Sr. No.	The state of the s	Parameters		
1.		Minimum	19.1	
	Temperature (°C)	Maximum	31.6	
	NI NI	Average	26.2	
skee	Land to the second of	Minimum	33.5	
2.	Relative Humidity (%)	Maximum	99.3	
-		Average	65.6	
	****	Minimum	9.30	
3.	Wind Speed (m/s)	Maximum	10.5	
,	1200	Average	18.2	
4.	Wind Direction (%)	N	3.8	
1		NNE	2.8	
		NE	9,44	
		ENE	8.7	
		E	3.45	
		ESE	3.8	
		SE	3.63	
		SSE	7.45	
		S	8.66	
		SSW	13.2	
		SW	2.1	
		WSW	13.1	
- 20		W	9.6	
		WNW	6.7	
		CALM	3.47	
	2000	Total	107.8	
	Rainfall (mm)	Minimum Day Wise	0.0	
		Maximum Day Wise	26.1	
-		Average	0.15	
		Minimum	748.0	
	Ambient Pressure (mm Hg)	Maximum	758.7	
	Sile Specific Dataj	Average	752.1	

Prepared By S. Karingo



Verified By Wall

# MUNITALY ENVIRONMENT MONITORING REPORT OCTOBER- 2021

Of



## THE DHAMRA PORT COMPANY LIMITED

AT : DOSINGA, PO : DHAMRA DIST- BHADRAK, PIN : 756171 ODISHA

## Conducted by:

M/s. Mitra S. K. Private Limited



Shrachi Centre (5th Floor) 74B, Acharya Jagadish Chandra Bose Road Kolkata – 700016 (West Bengal)



N-5/100, Ground Floor IRC Village, Nayapalli Shubaneawar - 751015

[CIN: U51909WB1966PTC023037]

T: (0674) 2862916, 2380917

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Report No: BBS/700A

Date: 01.11.2021

## AMBIENT AIR QUALITY MONITORING REPORT

Client Name & Address	M/s The Dhamra Port Company Limited, Dosinga, Bhadrak, Odisha
Work Order No.	4802006186
Reference No.	MSKGL/ED/2020-21/001300
Type of Sample	Amblent Air Sample
Sampling Location	Colony Area
Sampling Done by	Mr. Kunja Bihari Nayak
Sampling Deration	24hrs
Monitoring Instrument	RDS (APM 860), FPS (APM 154) Lata Envirotech, CO Analyzer & VOC Sampler

Date	PARAMETERS											
	PM <sub>ss</sub> (µg/m²)	PM <sub>2.8</sub> (µg/m <sup>3</sup> )	SO <sub>1</sub> (µg/m²)	NOs (µg/m²)	(mg/m²)	NHa (µg/m²)	O; (ng/m²)	Pb (ag/m²)	Ni (ng/m²)	As (ng/m²)	Celle (mg/m²)	BaP (ng/m²)
03.10.2021	44.00	22.08	6.64	23.45	0.76	20.66	<20.0	< 0.01	<5.0	<1.0	<4.2	< 0.5
06.10.2021	42.12	22.90	7.34	24.88	0.59	26.30	<20.0	<0.01	<5.0	<1.0	<4.2	<0.5
10.10.2021	42.86	21.44	6.22	18.47	0.44	14.49	<20.0	< 0.01	<5.0	<1.0	<4.2	<0.5
13.10.2021	40.14	21.86	6.48	20.27	0.62	18.44	<20.0	<0.01	<5.0	<1.0	<4.2	<0.5
17,10,2021	41.26	22.37	6.19	15.78	0.41	12.51	<20.0	<0.01	<5.0	×1.0	<4.2	
20.10.2021	43.54	23.12	6.54	22.40	0.69	19.44	<20.0	<0.01	<5.0	<1.0	<4.2	<0.5
24.10.2021	42.64	22.86	7.10	21.71	0.81	25,32	<20.0	<0.01	<5.0	<1.0	<4.2	<0.5
27.10.2021	41.08	24.14	6.39	19.43	9.61	17.22	<20.0	<0.01	<5.0	<1.0	-	<0.5
30 10.2021	42.10	22.00	7.22	26.41	0.79	23.63	<20.0	<0.01	<5.0		<4.2	<0.5
Monthly Average	42.19	22.53	6.68	21.42	9,63	19.77	<20.0	<0.01	<5.0	<1.0	<4.2	<0.5
CPCB, New Delhi AAQ Standard	100	60	80	80	4	400	180	i	20	6	5	1
Time Weighted Average (hrs.)	24	24	24	24	1	24	1	24	Annual	Annual	Annual	Annual
TEST METHOD	IS 5182: Part 23:20 06 (Reaff . 2012	IS 5182; Part 24:261 9	IS 5182 : Part 2 :200 1 (Reaff, 2012	IS 5182 : Part 6 :200 6 (Reaff, 2012)	IS 5182 ; Part 10 :1999 (Reaft.20 14)	1S 5182: Part 25:201 8	1S 5182: Part 09:197	EPA - 103.4J une,19 99	EPA - 105.4Ju sc,1999	EPA - 103.4Ju nc,1999	IS:5182( Part- 11):2006 Reaff,20	18:5182( Part- 12):2004 Reaff,: 2014

N.B- \*NAAQ- National Ambient Air Quality Standard as per 18th Nov. 2009 Gatt. Notification

S Kanga Propared By



Checked By-



N-5/100, Ground Floor IRC Village, Nayspall Bhubeneswar - 751015

[CIN: U51909WB1958PTC023037]

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Report No: BBS/700B

Date: 01.11.2021

## AMBIENT AIR QUALITY MONITORING REPORT

Client Name & Address	M/s The Dhamra Port Company Limited, Dosinga, Bhadrak, Odisha
Work Order No.	4802006186
Reference No.	MSKGL/ED/2020-21/001300
Type of Sample	Ambient Air Sample
Sampling Location	Kanak Prasad Village
Sampling Done by	Mr. Kunja Bihari Nayak
Sampling Duration	24hrs
Monitoring Instrument	RDS (APM 860), FPS (APM 154) Lata Envirotech, CO Analyzer & VOC Sampler

	-		COORTE		-	PAI	RAMETER	5		V		
Date	PMw (ug/m²)	PMas (ag/m²)	SO <sub>2</sub> (µg/m <sup>2</sup> )	NOx (pg/or²)	CO (mg/m²)	NH <sub>3</sub> (arg/m <sup>2</sup> )	Os (pg/m³)	Pb (pg/m²)	Ni (ng/m³)	As (leg/se <sup>2</sup> )	C <sub>6</sub> H <sub>6</sub> (µg/m²)	BaP (ng/m²)
03.10.2021	42.18	22.80	6.84	24.17	0.62	19.74	<20.0	< 0.01	<5.0	<1.0	<4.2	<0.5
06.10,2021	42.06	20.84	6.28	18.62	0.47	13.36	<20.0	<0.01	<5.0	<1.0	<4.2	<0.5
10.10.2021	45.64	22.18	6.51	20.44	0.56	17.87	<20.0	<0.01	<5.0	<1.0	<4.2	<0.5
13.10.2021	41.28	20.42	6.67	21.53	0.70	18.62	<20.0	< 0.01	<5.0	<1.0	<4.2	<0.5
17.10.2021	40.16	23.00	7.12	26.10	0.81	24.70	<20.0	<0.01	<5.0	<1.0	<4.2	<0.5
20.10.2021	42.34	22.62	6.14	16.74	0.41	12.26	<20.0	<0.01	<5.0	<1.0	<4.2	50.5
24.10.2021	43.12	21.12	6.72	23.57	0.63	21.33	<20.0	<0.01	<5.0	<1.0	The second second	The second second
27.10.2021	42.94	23.52	7.45	28.61	0.79	25.38	<20.0	<0.01	<5.0	<1.0	<4.2	<0.5
30.10.2021	41.46	24.74	6.44	19.88	0.55	14.33	<20.0	< 0.01	<5.0	<1.0	<4.2	<0.5
Mosthly Average	42.35	22.36	6.68	22.18	0.61	18.62	<20.0	<0.01	<5.0	<1.0	<4.2	<0.5
CPCB, New Delhi AAQ Standard	100	60	80	80	4	490	180	1	20	6	5	1
Time Weighted Average (hrs.)	24	24	24	24	1	24	1	24	Annual	Annual	Annual	Annual
TEST METHOD	IS 5182: Part 23:20 66 (Reaff . 2012	IS 5182: Fart 24:201 9	IS 5182 : Part 2 :200 1 (Reaff, 2012	IS 5182 : Part 6 :200 6 (Rests. 2012)	IS 5182 : Part 10 :1999 (Reaff.20 14)	18 5182: Part 25:201 8	IS 5182; Part 09:197	EPA - 103.4J une,19 99	EPA - 103.4Ju nc,1999	EPA - IO3.4Ju nc,1999	IS:5182( Part- 11):2005 Reaff.20 12	18:5182( Part- 12):2004 Renff <sub>2</sub> : 2014

N.B. \*NAAQ- National Ambient Air Quality Standard as per 18th Nov. 2009 Gatt. Notification

Prepared By = }





N-5/100, Ground Floor IRC Village, Nayapalii Bhubanaswar - 751815 ICIN: U51908WB1956PTC

(CIN: U51909WB1956PTC023037)

T : (0674) 2362918, 2360917 F : (0674) 2362916

Report No: BBS/700C

Date: 01.11.2021

### AMBIENT AIR QUALITY MONITORING REPORT

Client Name & Address	M/s The Dhamra Port Company Limited, Dosinga, Bhadrak, Odisha
Work Order No.	4802006186
Reference No.	MSKGL/ED/2020-21/001300
Type of Sample	Ambient Air Sample
Sampling Location	Near BMH
Sampling Done by	Mr. Kunja Bihari Nayak
Sampling Duration	24hrs
Monitoring Instrument	RDS (APM 860), FPS (APM 154) Lata Envirotech, CO Analyzer & VOC Sampler

	-					PAI	RAMETER	S				
Date	PM <sub>10</sub> (ug/m <sup>3</sup> )	PM <sub>2,i</sub> (ug/m <sup>3</sup> )	SO <sub>2</sub> (jag/m²)	NOx (jig/m²)	CO (tog/m²)	NH <sub>3</sub> (pg/m <sup>3</sup> )	Ou (jug/m <sup>2</sup> )	26 (µg/m²)	Ni (ng/m²)	As (ng/m²)	CeHs (pg/m²)	BaP (ag/m²)
03.10.2021	56.82	26.89	7.45	26.58	0.72	22.11	<20.0	<0.01	<5.0	<1.0	<4.2	<0.5
06.10.2021	59.34	25.38	6.98	25.77	0.69	23.36	<20.0	< 0.01	<5.0	<1.0	<4.2	<0.5
10.10.2021	55.12	24.72	6.52	21.80	0.76	18.56	<20.8	< 0.01	<5.0	<1.0	<4.2	<0.5
13.10.2021	55.74	28.12	7.64	20.16	0.87	27.52	<20.0	<0.01	<5.0	<1.0	<4.2	<0.5
17.10.2021	53.82	25.19	7.27	23.23	0.80	26.02	<20.0	< 0.01	<5.0	<1.0	<4.2	<0.5
20.10.2021	52.18	24.32	6.69	19.38	0.52	15.30	<20.0	< 0.01	<5.0	<1.0	<4.2	<0.5
24.10.2021	53.08	26.94	6.21	20.49	0.76	17.77	<20.0	< 0.01	<5.0	<1.0	<4.2	<0.5
27.10.2021	54.27	27.00	7.38	27.51	0.79	24.88	<20.0	<0.01	<3.0	<1.0	<4.2	<0.5
30.10.2021	54.62	25.46	6,59	22.71	0.44	20.06	<20.0	<0.01	<5.0	<1.0	<4.2	<0.5
Monthly Average	54.10	26.00	6.97	23,07	0.70	21.73	<20.0	<0.01	<5.0	<1.0	<4.2	<0.5
CPCB, New Delhi AAQ Standard	190	60	80	80	4	498	180	1	20	6	5	1
Time Weighted Average (hrs.)	24	24	24	24	1	24	1	24	Annual	Annual	Annual	Annual
TEST METHOD	IS 5182; Part 23:20 06 (Reaf f. 2012	IS 5182: Part 24:20 19	IS 5182 : Part 2 :200 1 (Reaff 2012	1S 5182 : Part 6 :206 6 (Reuff .2012)	IS 5182: Part 10:199 9 (Renff.2 014)	IS 5182: Part 25:20 IS	IS 5182: Part 09:19 74	EPA - 103.4 June, 1999	EPA - IO3.4Ju ne,1999	EPA - IO3.4Ju ne,1999	IS:5182 (Part- 11):200 6 Reaff,2 012	IS:5182 (Part- 12):200 4 Reaff,: 2014

N.B- \*NAAQ-National Ambient Air Quality Standard as per 18th Nov. 2009 Gutt. Notification

S. Karry

BESR E



N-5/100, Ground Floor IRC Village, Nayapalli Shubaneswar - 751015

[CIN: U51909WB1956PTC023037]

T: (0874) 2382916, 2380917 F: (0874) 2382918

Report No: BBS/700D

Date: 01.11.2021

## AMBIENT AIR QUALITY MONITORING REPORT

M/s The Dhamra Port Company Limited, Dosinga, Bhadrak, Odisha
4802006186
MSKGL/ED/2020-21/001300
Ambient Air Sample
Near Jetty
Mr. Kunja Bihari Nayak
24hrs
RDS (APM 860), FPS (APM 154) Lata Envirotech, CO Analyzer & VOC Sampler

	-	7.5				PA	RAMETER	S	W. Carlo	W-75-	The state of	100
Date	PMm (jug/m <sup>3</sup> )	PM <sub>2,5</sub> (pig/m <sup>2</sup> )	SO <sub>2</sub> (pig/m²)	NO: (µg/m²)	(mp/m²)	NH <sub>3</sub> (ug/m <sup>3</sup> )	O <sub>5</sub> (µg/m³)	P6 (µg/m²)	Ni (ng/m²)	As (ng/m²)	C <sub>4</sub> H <sub>4</sub> (pg/m²)	BaP (og/m²)
03.10.2021	58,84	29.00	7.98	27,62	0.78	24.78	<20.0	<0.01	<5.0	<1.0	<4.2	<0.5
06.10.2021	58.00	27.88	8.09	30.28	0.82	23.14	<20.0	<0.01	<5.0	<1.0	<4.2	<0.5
10.10.2021	56.78	29.62	7.89	26.11	0.77	23.15	<20.0	<0.01	<5.0	<1.0	<4.2	<0.5
13.10.2021	60.12	28.94	8.58	24.12	0.69	30.97	<20.0	< 0.01	<5.0	<1.0	<4.2	<0.5
17.10.2021	59.88	27.42	7.54	25.33	0.62	22.12	<20.0	< 0.01	<5.0	<1.0	<4.2	<0.5
20.10.2021	61.34	28.52	7,38	24.62	0.75	25.68	<20.0	< 0.01	<5.0	<1.0	<4.2	<0.5
24.10,2021	57.12	30.12	6.97	22.32	0.69	20.27	<20.0	<0.01	<5.0	<1.0	<4.2	<0.5
27.10.2021	58.33	28.46	8.77	27.97	0.74	25.64	<20.0	<0.01	<5.0	<1.0	<4.2	<0.5
30.10.2021	64.72	31.45	6.82	18.56	0.40	14.78	<20.0	< 0.01	<5.0	<1.0	<4.2	< 9.5
Monthly Average	59.45	29.04	7.78	25.21	0.69	23.39	<20.0	<0.01	<5.0	<1.0	<4.2	<0.5
CPCB, New Delhi AAQ Standard	100	60	80	80	4	400	180	1	20	6	5	i
Time Weighted Average (hrs.)	24	24	24	24	1	24	1	24	Annual	Annual	Anneal	Annual
TEST METHOD	IS 5182: Part 23:20 06 (Reaf f. 2012	IS 5182: Part 24:20 19	1S 5182 : Part 2 :200 1 (Reaff .2012	IS 5182 : Part 6 :200 6 (Reaff .2012)	1S 5182: Part 10:199 9 (Reaff.2 014)	IS 5182: Part 25:20 18	1S 5182: Part 09:19 74	EPA - IO3.4 June, 1999	EPA - 103.4Ju ne,1999	EPA - 103.4Ju ne,1999	IS:5182 (Part- 11):200 6 Reaff,2 012	IS:5182 (Part- 12):200 4 Reaft;: 2014

N.B. \*NAAQ- National Ambient Air Quality Standard as per 18th Nov. 2009 Gatt. Notification

S. Karingo Prepared By





N-5/190, Ground Floor IRC Village, Nayspelli Shubaneswar - 751015 ICIN-11519/19WID1956PTC0

[CIN: U51909WB1956PTC023037]

T: (0874) 2362918, 2360917

F; (0674) 2382918

Report No: BBS/700E

Date: 01.11.2021

## AMBIENT AIR QUALITY MONITORING REPORT

Client Name & Address	M/s The Dhamra Port Company Limited, Dosinga, Bhadrak, Odisha
Work Order No.	4802006186
Reference No.	MSKGL/ED/2020-21/001300
Type of Sample	Ambient Air Sample
Sampling Location	Dosinga Village
Sampling Done by	Mr. Kunja Bihari Navak
Sampling Duration	24hrs
Monitoring Instrument	RDS (APM 860), FPS (APM 154) Lata Envirotech, CO Analyzer & VOC Sampler

1500		-		1	W - 3	PAI	RAMETER	S	W. Commission			
Dute	PM <sub>to</sub> (µg/m²)	PM25 (µg/m²)	SO <sub>2</sub> (µg/m²)	NOx (ug/m²)	CO (mp/m²)	NH <sub>3</sub> (µg/m <sup>3</sup> )	O <sub>2</sub> (pg/or <sup>2</sup> )	Ph (pp/m²)	Ni (ng/m²)	As (ng/m²)	Califa (jig/m²)	BaP (ng/m²)
03.10.2021	42.74	21.98	6.49	20.78	0.45	16.38	<20.0	<0.01	<5.0	<1.0	<4.2	<0.5
06.10.2021	42.86	22.85	6.31	17.56	0.56	14.42	<20.0	< 0.01	<5.0	<1.0	<4.2	
10.10.2021	45.46	21.08	6.78	25.33	0.70	22.19	<20.0	<0.01	<5.0	<1.0	54.2	<0.5
13.10.2021	43.74	21.00	6.41	18.62	0.41	15.47	<20.0	<0.01	<5.0	<1.0	K4.2	**************************************
17.10.2021	41.28	22.16	6.78	22.36	9.62	19.54	<20.0	< 0.01	<5.0	<1.0	<4.2	<0.5
20.10.2021	44.42	24.40	7.34	28.42	0.75	26.72	<20.0	< 0.01	<5.0	<1.0		<0.5
24,10.2021	44.38	25.16	7.09	26.52	0.64	21.18	<20.0	<0.01	<5.0	<1.0	<4.2	<0.5
27.10.2021	43.08	23,62	6.19	16.62	0.45	13.41	<20.0	<0.01	<5.0		<4.2	<0.5
30.10.2021	46.08	25.23	6.52	27.22	0.69	23.55	<20.0	<0.01	<5.0	<1.0	<4.2	<0.5
Monthly Average	43.78	23.05	6.65	22.60	0.58	19.20	<20.0	<0.01	<5.0	<1.0	<4.2	<0.5
CPCB, New Delhi AAQ Standard	100	60	80	80	4	400	180	1	20	6	5	1
Time Weighted Average (hrs.)	24	24	24	24	1	24	1	24	Annual	Annual	Annual	Annual
TEST METHOD	IS 5182: Part 23:20 06 (Reaf £ 2012	IS 5182; Part 24:20 19	IS 5182 : Part 2 :200 1 (Reuff 2012	IS 5182 : Part 6 :200 6 (Reaff .2012)	IS 5182 : Part 10 :199 9 (Reaff.2 014)	1S 5182: Part 25:20 18	IS 5182: Part 09:19 74	EPA - IO3.4 June, 1999	EPA - 103.4Ju ne,1999	EPA - 103.4Ju ne,1999	IS:5182 (Part- 11):200 6 Reaff,2 012	IS:5182 (Part- 12):200 4 Reaff,: 2014

N.B. \*NAAQ- National Ambient Air Quality Standard as per 18th Nov. 2009 Gan. Notification

S-Konngs Prepared By - T BBSR B



N-5/100, Ground Floor IRC Village, Nayapali Bhubaneswar - 751015 [CIN: U51909WB1956PTC023037]

T: (0674) 2362916 2360917 F: (0674) 236297 No: BBS/700F

Date: 01.11,2021

### AMBIENT AIR QUALITY MONITORING REPORT

Client Name & Address	M/s The Dhamra Port Company Limited, Dosinga, Bhadrak, Odisha
Work Order No.	4802006186
Reference No.	MSKGL/ED/2020-21/001300
Type of Sample	Ambient Air Sample
Sampling Location	Near Bhitarkanika
Sampling Done by	Mr. Kunja Bihari Nayak
Sampling Duration	24hrs
Monitoring Instrument	RDS (APM 860), FPS (APM 154) Lata Envirotech, CO Analyzer & VOC Sampler

2057	-			The second	-	PAI	RAMETER	S	105	20	V - 22 - 23	
Date	PM <sub>00</sub> (µg/m <sup>2</sup> )	PM <sub>20</sub> (яв/ш³)	50; (ug/ur <sup>3</sup> )	NOx (eg/m²)	CO (mg/m²)	NH <sub>3</sub> (µg/m <sup>2</sup> )	O <sub>3</sub> (µg/m³)	Pb (µp/m²)	Ni (ng/m²)	As (ng/m²)	CaBa (ug/m²)	BaP (ng/m)
03.10,2021	40.10	20.36	6.37	19.85	0.48	15.51	<20.0	<0.01	<5.6	<1.0	<4.2	<0.5
06.10.2021	41.57	21.86	6.44	20.10	0.66	17,73	<20.0	<0.01	<5.0	<1.0	<4.2	<0.5
10.10.2021	41.62	22.00	6.77	23.31	0.59	20.37	<20.0	< 0.03	<5.0	<1.0	<4.2	<0.5
13.10.2021	43,28	20.15	7.25	26.52	0.63	22.41	<20.0	<0.01	<5.0	<1.0	<4.2	<0.5
17.10.2021	42.86	21.70	6.35	18.71	0.58	12.32	<20.0	<0.01	<5.0	<1.0	<4.2	<0.5
20.10.2021	44.52	22.08	6.88	23.11	0.63	19.12	<20.0	<0.01	<5.0	<1.0	<4.2	<0.5
24.10.2021	41.72	22.76	6.47	17.88	0.52	14.93	<20.8	< 0.01	<5.0	<1.0	<4.2	<0.5
27.10.2021	42.11	23,45	7.21	25.63	0.66	22.31	<20.0	< 0.01	<5.0	<1.0	<4.2	<0.5
30.10.2021	41.24	21.80	6.24	18.66	0.47	14.56	<20.0	<0.01	<5.0	<1.0	<4.2	THE RESERVE AND ADDRESS OF THE PERSON NAMED IN
Monthly Average	42.11	21.79	6.66	21.53	0.58	17,69	<20.0	< 0.01	<5.0	<1.0	<4.2	<0.5
CPCB, New Delhi AAQ Standard	100	60	80	80	4	400	180	1	20	6	5	1
Time Weighted Average (hrs.)	24	24	24	24	1	24	1	24	Annual	Anoual	Annual	Annual
TEST MÉTHOD	1S 5182: Part 23:20 06 (Reaf f. 2012	IS 5182: Part 24:20 19	IS 5182 : Part 2 :200 1 (Reaff 2012	IS 5182 : Part 6 :200 6 (Reaff .2012)	IS 5182 : Part I0 :199 9 (Reaff.2 014)	IS 5182: Part 25:20 18	IS 5182: Part 09:19 74	EPA - 1O3.4 June, 1999	EPA - 103.4Ju ne,1999	EPA - 103.4Ju ne,1999	IS:5181 (Part- 11):200 6 Reaff,2 012	IS:5182 (Part- 12):209 4 Reaff,: 2014

N.B. \*NAAQ- National Ambient Air Quality Standard as per 18th Nov. 2009 Gatt. Notification

Prepared By -

BBSR A

MSK TESTING INSPECTION

N-5/100, Ground Floor IRC Village, Nayapelli Bhubaneswar - 751015 [CIN: U51909WB1956PTC023037]

T: (0674) 2362916, 2360917

F; (0674) 2362918

## TEST REPORT

Name & Address of the Customer:

THE DHAMRA PORT COMPANY LIMITED.

AT : DOSINGA, PO : DHAMRA

DIST: BHADRAK, PIN:756171 ODISHA

Report No.: BBS/705 Date : 01.11.202

Date : 01.11.2021 Sample No. : MSKGL/ED/2020-21/10/00269

Sample Description: Ambient Noise

### Noise Level Monitoring Data

SI.	Sampling	Sampling	Day Leq. Time	e dB(A)	Night Time Le	q. dB(A)
No	Date	Location	Results	LIMIT	Results	LIMIT
1.	02.10.2021	Colony Area (R)	48.4	55	40.6	45
2.	04.10,2021	Kanak Prasad Village (R)	40.8	55	37,3	45
3.	05.10,2021	Near BMH (I)	59.3	75	49.6	70
4,	09.10.2021	Near Jetty (I)	71.8	75	63.1	70
5.	11.10.2021	Dosinga Village (R)	44.2	55	38.8	45
6.	12.10.2021	Near Bhitarkanika ( Eco Sensitive Zone)	42.7	50	36.8	40

		Noise Limit as per CP	CB			
Category of Area/Zone	Leq dB(A) Day Time	Leq dB(A) Night Time	NOTE:			
Industrial Area	75	70	Day Time : 06.00 Hr22.00 Hr.			
Commercial Area	65	55	Night Time: 22.00 Hr06.00 Hr.			
Residential Area	55	45	5			
Silence Zone	50	40				

Report Prepared by:

BBSR

For Mitra S. K. Private Limited



N-5/100, Ground Floor IRC Village, Nayapelil Shubaneswar - 751015 [CIN: U51909WB1956PTC023037]

T: (0674) 2362916, 2360917

F: (0674) 2362918

### TEST REPORT

Name & Address of the Customer:

THE DHAMRA PORT COMPANY LIMITED.

AT: DOSINGA, PO: DHAMRA

DIST: BHADRAK, PIN: 756171 ODISHA

Report No.: BBS/706 Date: 01.11.2021

Sample No.: MSKGL/ED/2020-21/10/00220

Sample Description: Noise (Work Zone)

### Noise Level Monitoring Data

SL No	Sampling Date	Sampling Location	MAX	MIN	Results in Avg. dB(A)
1	93.10.2021	Stack Yard	80.2	40.6	70.9
2,	06.10.2021	Wagon Tippler	87.5	43.5	74.2
3.	07.10.2021	Near Silo	87.8	75.0	83.7
4.	10.10.2021	Near Stacker & Reclaimer	74.6	37.1	62.8
5.	13.10.2021	Project Area	82.1	42.9	67.5
6.	14.10.2021	Transfer Point	84.4	51.6	65.3
7.	16.10.2021	Workshop	88.6	40.3	84.7
8.	17.10.2021	Steel Yard	89.3	51.9	71.8
9.	18.10.2021	FCC Shed	87.1	44.7	75.2
0.	19.10.2021	Near Port Canteen	77.6	50.5	66.7

osure Limits
Exposure Limit
8.0 hours

Report Prepared by:

BBSR B

For Mitra S.K. Private Limited

Authorized Signatory

H.O.: Shrachi Centre (5th Floor), 74B, Adharya Jagadish Chandra Bose Road, Kolkate - 700 016, West Bengal, India T: 91 33 4014 3000 / 2265 0006 / 2265 0007, F: 91 33 2265 0008, E: info@mitrask.com, W: www.mitrask.com

MEK TESTING HISPECTION

N-5/100, Ground Floor IRC Village, Nayapalli Bhubaneswar - 751015 [CIN: U51909WB1956PTC023637]

T : (0874) 2362916, 2360917

F: (0874) 2362918

# TEST REPORT

Name & Address of the Customer: THE DHAMRA PORT COMPANY LIMITED

AT: DOSINGA, PO: DHAMRA

6DIST : BHADRAK, PIN :756171 ODISHA

Report No.: BBS/707 Date: 01.11.2021

Sample No.: MSKGL/ED/2020-21/10/00310 Sample Description: EFFLUENT WATER

Sampling Location : STP 150KLD Date of sampling : 02.10.2021

### ANALYSIS RESULT

SL.	Test Parameters	Units	Limit	Test Specification	Result	
	-		\$160 E		Inlet	Outlet
1.	Colour	Hazen	-	APHA (23rd Edition) 2120B 2017	Blackish	Clear
2.	Odour		-	APHA (23rd Edition) 2150B	Disagrecable	Agreeable
3.	pH value at 26°C		6.5 - 9.0	APHA (23rd Edition) 4500 H-B	7.55	7.30
4.	Appearance		He .	Lab Method	Turbid	Clear
5.	TSS	mg/l	<20.0	APHA (23rd Edition) 2540D	79.0	<2.5
6.	BOD	mg/l	<10.0	APHA (23rd Edition) 5210B 2017	40.0	<2.0
7.	COD	mg/l	<50.0	APHA (23rd Edition) 5220B 2017	138.0	
8.	Oil & Grease	mg/l	<10.0	APHA (23td Edition) 5220B 2017		6.0
9.	Ammonical Nitrogen	mg/l	<5.0	APHA (23 <sup>rd</sup> Edition) 4500-NH3-F 2017	59.0	<0.1
0.	Total Nitrogen (as N)	mg/l	<10.0	IS 14684 (1999); Rffin:2014	66.0	1,3
1.	Faecal Coliform	MPN/ 100ml	<1000.0	APHA (23rd Edition) 9221 E	7000.0	157.0

Report Prepared by:

BBSR B

For Mitra S. K. Private Limited



N-5/100, Ground Floor IRC Village, Nayapatil Bhubaneswar - 751015

[CIN: U51909WB1956PTC023037]

T: (0674) 2362916, 2360917 F: (0674) 2362918

## TEST REPORT

Name & Address of the Customer:

THE DHAMRA PORT COMPANY LIMITED

AT : DOSINGA, PO : DHAMRA

DIST: BHADRAK, PIN: 756171 ODISHA

Report No. : BBS/708 Date : 01.11.2021

Sample No.: MSKGL/ED/2020-21/10/00855 Sample Description: EFFLUENT WATER

Sampling Location : STP 150KLD Date of sampling : 18.10.2021

### ANALYSIS RESULT

SL.	Test Parameters	Units	Limit	Test Specification	Result	
				200000000000000000000000000000000000000	Inlet	Outlet
1.	Colour	Hazen	-	APHA (23rd Edition) 2120B 2017	Blackish	Clear
2.	Odour		-	APHA (23rd Edition) 2150B	Disagreeable	Agrecable
3.	pH value at 26°C		6.5 – 9.0	APHA (23rd Edition) 4500 H-B	7.02	7.21
4.	Appearance		9	Lab Method	Turbid	Clear
5.	TSS	mg/l	<20.0	APHA (23rd Edition) 2540D	233.0	<2.5
6.	BOD	mg/l	<10.0	APHA (23 <sup>rd</sup> Edition) 5210B 2017	47.0	<2.0
7.	COD	mg/l	<50.0	APHA (23 <sup>rd</sup> Edition) 5220B 2017	130.0	8.0
8.	Oil & Grease	mg/I	<10.0	APHA (23rd Edition) 5220B 2017	6.6	<1.4
9.	Ammonical Nitrogen	mg/l	<5.0	APHA (23 <sup>rd</sup> Edition) 4500-NH3-F 2017	25.0	<0.1
10.	Total Nitrogen (as N)	mg/l	<10.0	IS 14684 (1999); Rffm:2014	33.0	1.5
11.	Faecal Coliform	MPN/ 100ml	<1000.0	APHA (23 <sup>rd</sup> Edition) 9221 E	7900.0	180.0

Report Prepared by:

BBSR

For Mitra S. K. Private Limited



N-5/100, Ground Floor IRC Village, Nayapatil Bhubaneswar - 751015 [CIN: U51909WB1956PTC023037]

T: (0674) 2362916, 2360917

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## TEST REPORT

Name & Address of the Customer:

THE DHAMRA PORT COMPANY LIMITED

AT : DOSINGA, PO : DHAMRA

6DIST: BHADRAK, PIN: 756171 ODISHA

Report No.: BBS/702 Date: 01.11.2021

Sample No.: MSKGL/ED/2020-21/10/00308 Sample Description: EFFLUENT WATER

Sampling Location : STP 140KLD Date of sampling : 02.10.2021

### ANALYSIS RESULT

SL.	Test Parameters	Units	Limit	Test Specification	Result	
	d and the second	(A) Services (			Inlet	Outlet
ĵ,	Colour	Hazen		APHA (23st Edition) 2120B 2017	Blackish	Clear
2.	Odour	777	<b>6</b> €	APHA (23rd Edition) 2150B	Disagreeable	Agreeable
3.	pH value at 26°C		6.5 - 9.0	APHA (23 <sup>rd</sup> Edition) 4500 H-B	6.71	7.50
4.	Appearance		-	Lab Method	Turbid	Clear
5.	TSS	mg/l	<20.0	APHA (23rd Edition) 2540D	282.0	<2.5
6.	BOD	mg/l	<10.0	APHA (23rd Edition) 5210B 2017	97.0	<2.0
7,	COD	mg/I	<50.0	APHA (23 <sup>rd</sup> Edition) 5220B 2017	196.0	7.0
8.	Oil & Grease	mg/l	<10.0	APHA (23rd Edition) 5220B 2017	62.0	<1.4
9.	Ammonical Nitrogen	mg/l	<5.0	APHA (23 <sup>rd</sup> Edition) 4500-NH3-F 2017	72.0	<0.1
10.	Total Nitrogen (as N)	mg/l	<10.0	IS 14684 (1999); Rffm:2014	89.0	1.6
1.	Faecal Coliform	MPN/ 100ml	<1000.0	APHA (23 <sup>rd</sup> Edition) 9221 E	13000,0	280.0

Report Prepared by:

BBSR

For Mitra S. K. Private Limited



N-5/100, Ground Floor IRC Village, Nayapalii Bhubaneswar - 751015 ICIN: U51909WB1956PTC025087

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### TEST REPORT

Name & Address of the Customer:

THE DHAMRA PORT COMPANY LIMITED

AT: DOSINGA, PO: DHAMRA

DIST: BHADRAK, PIN: 756171 ODISHA

Report No.: BBS/704 Date: 01.11.2021

Sample No.: MSKGL/ED/2020-21/10/00853 Sample Description: EFFLUENT WATER

Sampling Location : STP 140KLD Date of sampling : 18.10.2021

### ANALYSIS RESULT

SL.	Test Parameters	Units	Limit	Test Specification	Result	
No.	.550,000,000,000,000,000	Ars	111	3.00. Specification	Inlet	Outlet
1.	Colour	Hazen	-	APHA (23 <sup>st</sup> Edition) 2120B 2017	Blackish	Clear
2.	Odour	7597	-	APHA (23rd Edition) 2150B	Disagrecable	Agreeable
3.	pH value at 26°C	****	6.5 – 9.0	APHA (23rd Edition) 4500 H-B	6.78	7.43
4.	Appearance	****	**	Lab Method	Turbid	Clear
52	TSS	mg/l	<20.0	APHA (23rd Edition) 2540D 53.0		<2.5
6.	BOD	mg/l	<10.0	APHA (23rd Edition) 5210B 2017	42.0	<2.0
7.	COD	mg/l	<50.0	APHA (23rd Edition) 5220B 2017	189.0	5.0
8.	Oil & Grease	mg/l	<10.0	APHA (23rd Edition) 5220B 2017	6.1	<1.4
9.	Ammonical Nitrogen	mg/l	<5.0	APHA (23 <sup>rd</sup> Edition) 4500-NH3-F 2017	12.0	<0.1
10.	Total Nitrogen (as N)	mg/l	<10.0	IS 14684 (1999); Rffm:2014	17.0	0.54
11.	Faecal Coliform	MPN/ 100ml	<1000.0			247.0

Report Prepared by:

BBSR S

For Mitra S. K. Private Limited



N-5/100, Ground Floor-IRC Village, Neyspalli Bhubaneswar - 751015

[CIN: U51909WB1956PTC023037]

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## TEST REPORT

Name & Address of the Customer:

THE DHAMRA PORT COMPANY LIMITED

AT : DOSINGA, PO : DHAMRA

DIST: BHADRAK, PIN: 756171 ODISHA

Report No.: BBS/711 Date : 01.11.2021

Sample No.: MSKGL/ED/2020-21/10/00306 Sample Description: EFFLUENT WATER

Sampling Location : STP 25KLD Date of sampling : 02.10.2021

#### ANALYSIS RESULT

SL.	Test Parameters	Units	Limit	Test Specification	Result	
No.		2333	America	Acst Specification	Inlet	Outlet
1.	Colour	Hazen		APHA (23rd Edition) 2120B 2017	Blackish	Clear
2,	Odour	255		APHA (23rd Edition) 2150B	Disagrecable	Agreeable
3.	pH value at 26°C	-	6.5 - 9.0	APHA (23rd Edition) 4500 H-B	6.59	7.56
4.	Appearance	****	- 200	Lab Method	Turbid	Clear
5.	TSS	mg/l	<20.0	APHA (23rd Edition) 2540D	373.0	<2.5
6.	BOD	mg/l	<10.0	APHA (23 <sup>rd</sup> Edition) 5210B 2017	764.0	<2.0
7.	COD	mg/I	<50.0	APHA (23 <sup>rd</sup> Edition) 5220B 2017	2829.0	6.0
8.	Oil & Grease	mg/l	<10.0	APHA (23 <sup>rd</sup> Edition) 5220B 2017	105.0	<1.4
9,	Ammonical Nitrogen	mg/l	<5.0	APHA (23 <sup>rd</sup> Edition) 4500-NH3-F 2017	23.0	<0.1
10.	Total Nitrogen (as N)	mg/l	<10.0	IS 14684 (1999); Rffm:2014	30.0	1.6
11.	Faecal Coliform	MPN/ 100ml	<1000,0	APHA (23rd Edition) 9221 E	3500.0	180,0

Report Prepared by:

BBSR

For Mitra S. K. Private Limited



N-5/100, Ground Floor IRC Village, Nayapalli Bhubaneswar - 751015

[CIN: U51909W61956PTC023037]

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## TEST REPORT

Name & Address of the Customer:

THE DHAMRA PORT COMPANY LIMITED

AT : DOSINGA, PO : DHAMRA

DIST: BHADRAK, PIN: 756171 ODISHA

Report No.: BBS/712 Date : 01.11.2021

Sample No.: MSKGL/ED/2020-21/10/00851 Sample Description: EFFLUENT WATER

Sampling Location : STP 25KLD Date of sampling : 18.10.2021

### ANALYSIS RESULT

SL.	Test Parameters	Units	Limit	Test Specification	Result	
No.			SHAMES	1 cot Opechication	Inlet	Outlet
1.	Colour	Hazen	-	APHA (23 <sup>rd</sup> Edition) 2120B 2017	Blackish	Clear
2.	Odour			APHA (23rd Edition) 2150B	Disagrecable	Agreeable
3.	pH value at 26°C		6.5 - 9.0	APHA (23rd Edition) 4500 H-B	6.58	7.09
4.	Appearance		-	Lab Method	Turbid	Clear
5.	TSS	mg/l	<20.0	APHA (23 <sup>rd</sup> Edition) 2540D	87.0	<2.5
6.	BOD	mg/l	<10.0	APHA (23rd Edition) 5210B 2017	39.0	<2.0
7.	COD	mg/l	<50.0	APHA (23rd Edition) 5220B 2017	180.0	4.0
8.	Oil & Grease	mg/l	<10.0	APHA (23™ Edition) 5220B 2017	8,4	<1.4
9.	Ammonical Nitrogen	mg/l	<5.0	APHA (23 <sup>rd</sup> Edition) 4500-NH3-F 2017	13.0	<0.1
10.	Total Nitrogen (as N)	mg/l	<10.0	IS 14684 (1999); Rffm:2014	19.0	0.38
11.	Faccal Coliform	MPN/ 100ml	<1000.0	APHA (23rd Edition) 9221 E	4300.0	230.0

Report Prepared by:

BBSR

For Mitra S. K. Private Limited

MSK TESTING® INSPECTION

N-5/100, Ground Floor IRC Village, Neyapatii Bhubaneswar - 751015 [CIN: U51909WB1956PTC023037]

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## TEST REPORT

Name & Address of the Customer: THE DHAMRA PORT COMPANY LIMITED

AT : DOSINGA, PO : DHAMRA

DIST: BHADRAK, PIN: 756171 ODISHA

Report No.: BBS/701 Date : 01.11.2021

Sample No.: MSKGL/ED/2020-21/10/00304 Sample Description: EFFLUENT WATER

Sampling Location : STP 15 KLD Date of sampling : 02.10.2021

### ANALYSIS RESULT

SL.	Test Parameters	Units	Limit	Test Specification	Result	
No.	San of Automatical			3333250370000	Inlet	Outlet
1.	Colour	Hazen		APHA (23rd Edition) 2120B 2017	Blackish	Clear
2.	Odour		-	APHA (23rd Edition) 2150B	Disagreeable	Agreeable
3.	pH value at 26°C		6.5 - 9.0	APHA (23rd Edition) 4500 H-B	6.86	7.54
4.	Appearance		( to the control of t	Lab Method	Turbid	Clear
5.	TSS	mg/l	<20.0	APHA (23rd Edition) 2540D	344.0	<2.5
6.	BOD	mg/l	<10.0	APHA (23rd Edition) 5210B 2017	85.0	<2.0
7.	COD	mg/l	<50.0	APHA (23rd Edition) 5220B 2017	169,0	5.0
8.	Oil & Grease	mg/l	<10.0	APHA (23rd Edition) 5220B 2017	21.0	<1.4
9.	Ammonical Nitrogen	mg/l	<5.0	APHA (23 <sup>rd</sup> Edition) 4500-NH3-F 2017	52.0	<0.1
10.	Total Nitrogen (as N)	mg/l	<10.0	IS 14684 (1999); Rffm:2014	60,0	1.5
11.	Faccal Coliform	MPN/ 100ml	<1000.0	APHA (23rd Edition) 9221 E	2200.0	400.0

Report Prepared by:

BBSR E

For Mitra S. K. Private Limited

MSK TESTINGLINSPECTION

N-5/100, Ground Floor IRC Village, Nayapalii Bhubaneswar - 751015 [CIN: U51909WB1956PTC023037]

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TEST REPORT

Name & Address of the Customer:

THE DHAMRA PORT COMPANY LIMITED

AT : DOSINGA, PO : DHAMRA

DIST: BHADRAK, PIN: 756171 ODISHA

Report No.: BBS/703 Date : 01.11.2021

Sample No.: MSKGL/ED/2020-21/10/00849 Sample Description: EFFLUENT WATER

Sampling Location : STP 15 KLD Date of sampling : 18.10,2021

### ANALYSIS RESULT

SL. No.	Test Parameters	Units	Limit	Test Specification	Result		
					Inlet	Outlet	
1.	Colour	Hazen	45	APHA (23 <sup>rd</sup> Edition) 2120B 2017	Blackish	Clear	
2.	Odour	****		APHA (23rd Edition) 2150B	Disagrecable	Agreeable	
3.	pH value at 26°C		6.5 – 9.0	APHA (23 <sup>rd</sup> Edition) 4500 H-B	7.12	7.48	
4.	Appearance		-	Lab Method	Turbid	Clear	
5.	TSS	mg/l	<20.0	APHA (23rd Edition) 2540D	67.0	<2.5	
6.	BOD	mg/l	<10.0	APHA (23rd Edition) 5210B 2017	27.0	<2.0	
7,	COD	mg/l	<50.0	APHA (23 <sup>rd</sup> Edition) 5220B 2017	121.0	7.0	
8.	Oil & Grease	mg/l	<10.0	APHA (23rd Edition) 5220B 2017	6.2	<1.4	
9,	Ammonical Nitrogen	mg/l	<5.0	APHA (23 <sup>rd</sup> Edition) 4500-NH3-F 2017	11.0	<0.1	
10.	Total Nitrogen (as N)	mg/I	<10.0	IS 14684 (1999); Rffm:2014	16.0	0.72	
11.	Faccal Coliform	MPN/ 100ml	<1000.0	APHA (23rd Edition) 9221 E	2800,0	450.0	

Report Prepared by:

BBSR

For Mitra S. K. Private Limited

MSK TESTINGO INSPECTION

N-5/160, Ground Floor IRC Village, Nayapalli Bhubaneswar - 75/11/15

[CIN: U51909WB1956PTC023037]

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### TEST REPORT

Name & Address of the Customer:

THE DHAMRA PORT COMPANY LIMITED

AT : DOSINGA, PO : DHAMRA DIST : BHADRAK, 756171 ODISHA Report No. : BBS/710 Date : 01.11.2021

Sample No.: MSKGL/FD/2020-21/10/00862

Date of sampling : 16.10.2021

Sampling Description: Ground Water (Piezometric)
Sampling Location: Township Pump House
Sampling Done By: Mr. Kunja Bihari Nayak

#### BACTERIOLOGICAL ANALYSIS RESULT AS PER IS: 10500 - 2012

J. No	Test Parameters	Units	Limit	Test Method / Specification	Result
1.	E. Coli	/100ml	Not Detectable	IS: 15185 : 2016	Not Detected
2.	Total Coliform Organism	/100ml	Not Detectable	IS: 15185 : 2016	Not Detected

CHEMICAL ANALYSIS RESULT AS PER IS: 10500 - 2012

SL No.	Test Parameter	Units	Requirement (Acceptable Limit)	Permissible limit in the absence of alternate Source	Test Method / Specification	Result
1.	pH (at 26°C)	<del></del>	6.5 - 8.5	No Relexation	IS 3025 (Part 11)-1984 Rffm: 2012	7.81
2	Sulphate (as SO <sub>4</sub> )	P.gm	200	400	IS 3025 (Part 24)- 1986 Rffin: 2014	22.0
3.	Calcium (as Ca)	mg/l	75	200	IS 3025 (Part 40)- 1991 Riffin: 2014	33.6
4.	Arsenic (as As)	mg/l	0.01	0.05	IS 3025 (Part 2) 2004 RA 2014	BDL(DL:0.005)
5.	Lead (as Pb)	mg/l	0.01	No Relaxation	IS 3025 (Part 2) 2004 RA 2014	BDL(DL:0.005)
6.	Zinc (as Zn)	mg/i	5.0	15.0	IS 3025 (Part 2) 2004 RA 2014	BDL(DL:0.02)
7.	Copper (as Cu)	may/l	0.05	1.5	IS 3025 (Part 2) 2004 RA 2014	BDL(DL:0.02)
8.	Mercury (as Hg)	mg/l	0.001	No Relaxation	IS 3025 (Part 48)-1994 Rffm: 2014	BDL(DL:0.0002)
9.	Cadmium (as Cd)	mg/l	0.003	No Relaxation	IS 3025 (Part 2) 2004 RA 2014	BDL(DL:0.001)
10.	Mineral Oil	mg/l	0.5	No Relaxation	IS 3025 (Part 39)-1991 Rffm: 2014	BDL(DL:0.5)
11.	Fluoride (as F)	mg/l	1.0	1.5	IS 3025 (Part 60)- 2008 Rffm; 2013	BDL(DL:0.2)
12.	Colour	Hazen	5	15	3025 (Part 4)-1983; Rffm:2012	BDL(DL:1.0)
13.	Odeur		Agrecable	Agreeable	IS 3025 (Part 5)-1983 Rffm:2012	Agrocable
14.	Turbidity	N.T.U	1	5	IS 3025 (Part 10)-1984 Rffm: 2012	BDL(DL:1:0)
15,	Residual free Chlorine	mg/l	0.2	1.0	IS 3025 (Part 26)- 1986 Rffm:2014	BDL(DL:0.1)
16.	Iron (as Fe)	mg/l	0.3	No Relaxation	IS 3025 (Part 53)-1988 Rfflm: 2014	BDL(DL:0.05)
17.	Chloride (as Cl)	mg/l	250	1000	IS 3025 (Part 32)-1988 Rffm: 2014	77.4
18.	Total Dissolved Solids	mg/l	500	2000	IS 3025 (Part 16)-1984; Rffm:2012	270.0
19.	Alkalinity (as CaCO <sub>2</sub> )	mg/1	200	600	IS 3025 (Part 23)- 1986 Rffm: 2009	182.0
20.	Aluminium (as Al)	mg/I	0.03	0.2	IS 3025 (Part 2) 2004 RA 2014	BDL(DL:0.01)
21.	Magnesium (as Mg)	mg/l	30	100	IS 3025 (Part 46)-1994 Rffm: 2014	26.0
22.	Total Hardness (as CaCO <sub>3</sub> )	mg/l	200	600	IS 3025 (Part 21)-2013	170.0
23.	Boron (as B)	mg/l	0.5	1.0	1S 3025 (Part 2) 2004 RA 2014	BDL(DL:0.3)
24.	Manganese (as Mn)	mg/I	0.1	0.3	IS 3025 (Part 2) 2004 RA 2014	BDL(DL:0.02)
25.	Nitrate (as NO <sub>3</sub> )	mg/I	45	No Relaxation	IS 3025 (Part 34)-1988 Rffim: 2014	BDL(DL:0.4)
26.	Phenolic Compounds (as C <sub>6</sub> H <sub>5</sub> OH)	mg/i	0.001	0.002	IS 3025 (Part 43)- 1992; Rffm: 2014	BDL(DL:0.001)
27.	Selenium (as Se)	mg/l	0.01	No Relaxation	IS 3025 (Part 2) 2004 RA 2014	BDL(DL:0.005)
28.	Total Chromium (as Cr)	mg/l	0.05	No Relessation	IS 3025 (Part 2) 2004 RA 2014	BDL(DL:0.01)
29_	Silver (as Ag)	mg/l	0.1	No Relaxation	IS 3025 (Part 2) 2004 RA 2014	BDL(DL-0,005)
30.	Barium (as Ba)	mg/I	0.7	No Relaxation	IS 3025 (Part 2) 2004 RA 2014	BDL(DL:0.1)
31.	Salinity	mg/l			IS 3025 (Part 14)- 2013	127.00



#### Ref. No. BBS/701

#### Date- 01.11.2021

32.	Sulphide ( as H2S)	mg/l	0.05	No Relaxation	IS 3025 (Part 29)- 1991; Rffm: 2014	BDL(DL:0.02)
33.	Ammonia ( as total ammonia-N)	mg/l	0.5	No Relexation	IS 3025 (Part 34)- 1988; Rffm: 2014	BDL(DL:0.1)
34.	Chloramines	mg/l	4.0	No Relaxation	IS 3025 (Part 26)- 1986; Rffm; 2014	BDL(DL:0.1)
35.	Nickel ( as Ni)	rng/l	0.02	No Relaxation	IS 3025 (Part 2) 2004 RA 2014	BDL(DL:0.01)
36.	Cyanide (as CN)	mg/l	0.05	No Relaxation	IS 3025 (Part 27)- 1986 Rffm; 2014	BDL(DL:0.01)
37.	Anionic Detergents (as MBAS)	mg/l	0.2	1.0	1S 13428(Annex K)- 2005	BDL(DL:0.05)
38.	Polynuclear Aromatic Hydrocarbons (as PAH)	mg/l	0.0001	No Relaxation	APHA ( 23" Edin.) 6440C	BDL(DL:0.0001)
39.	Polychlorinated Biphenyls (PCB)	mg/i	0.0005	No Relaxation	US EPA 8082	BDL(DL:0.0005)

S. Kanngr Report Prepared by: For Mitra S. K. Private Limited.

N-5/100, Ground Floor IRC Village, Neyapali Brubaneswar - 751015

[CIN: U51909WB1956FTC023637]

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TEST REPORT

Report No. : BBS/711 Date : 01.11.2021

Sample No.: MSKGL/FD/2020-21/10/00863

Date of sampling : 16.10.2021

Sampling Description : Ground Water (Piezometric)

Sampling Location: Pump House WTP Sampling Done By: Mr. Kunja Bihari Nayak

Name & Address of the Customer: THE DHAMRA PORT COMPANY LIMITED

AT: DOSINGA, PO: DHAMRA

DIST: BHADRAK, PIN:756171 ODISHA

#### BACTERIOLOGICAL ANALYSIS RESULT AS PER IS: 10500 - 2012

Sl. No	Test Parameters	Units	Limit	Test Method / Specification	Result
1.	E. Coli	/100ml	Not Detectable	IS: 15185 : 2016	Not Detected
2.	Total Coliform Organism	/100ml	Not Detectable	IS: 15185 : 2016	Not Detected

#### CHEMICAL ANALYSIS RESULT AS PER IS: 10500 - 2012

SL No.	Test Parameter	Units	Requirement (Acceptable Limit)	Permissible limit in the absence of alternate Source	Test Method / Specification	Result
1.	pH ( at 26° C)		6.5 - 8.5	No Relaxation	IS 3025 (Part 11)-1984 Rffm: 2012	7.61
2,	Sulphate (as SO <sub>4</sub> )	mg/l	200	400	IS 3025 (Part 24)- 1986 Rffm: 2014	25.0
3.	Calcium (as Ca)	mg/l	75	200	IS 3025 (Part 40)- 1991 Rffm; 2014	38.4
4.	Arsenic (as As)	mg/l	0.01	0.05	IS 3025 (Part 2) 2004 RA 2014	BDL(DL:0.005)
5.	Lead (as Pb)	mg/l	0.01	No Relaxation	IS 3025 (Part 2) 2004 RA 2014	BDL(DL:0.005)
6.	Zinc (as Zn)	mg/l	5.0	15.0	IS 3025 (Part 2) 2004 RA 2014	BDL(DL:0.02)
7.	Copper (as Cu)	mg/l	0.05	1.5	IS 3025 (Part 2) 2004 RA 2014	BDL(DL:0.02)
8.	Mercury (as Hg)	mg/l	0.001	No Relevation	IS 3025 (Part 48)-1994 Rffin: 2014	BDL(DL:0.0002)
9.	Cadmium (as Cd)	mg/l	0.003	No Relaxation	IS 3025 (Part 2) 2004 RA 2014	BDL(DL:0.001)
10.	Mineral Oil	mg/l	0.5	No Relaxation	IS 3025 (Part 39)-1991 Rffm: 2014	BDL(DL:0.5)
11.	Fluoride (as F)	mg/l	1.0	1.5	IS 3025 (Part 60)- 2008 Rffm: 2013	BDL(DL:0.2)
12	Colour	Hazen	5	15	3025 (Part 4)-1983; Rffin:2012	BDL(DL:1.0)
13.	Odour		Agreeable	Agreeable	IS 3025 (Part 5)-1983 Rffm-2012	Agrecable
14	Turbsdity	N.T.U	1	5	IS 3025 (Part 10)-1984 Rffm: 2012	BDL(DL:1.0)
15.	Residual free Chilorine	mg/l	0.2	1.0	IS 3025 (Part 26)- 1986 Rffm: 2014	BDL(DL:0.1)
16.	Iron (as Fo)	mg/l	0.3	No Relaxation	IS 3025 (Part 53)-1988 Rffin: 2014	BDL(DL:0.05)
17.	Chloride (as Cl)	mg/l	258	1000	IS 3025 (Part 32)-1988 Rffm: 2014	81.4
18.	Total Dissolved Solids	mg/l	500	2000	IS 3025 (Part 16)-1984; Rffm: 2012	253.0
19.	Alkalinity (as CaCO <sub>3</sub> )	mg/l	200	600	IS 3025 (Part 23)- 1986 Riffm: 2009	151.0
20.	Aluminium (as Al)	mg/l	0.03	0.2	IS 3025 (Part 2) 2004 RA 2014	BDL(DL:0.01)
21.	Magnesium (as Mg)	mg/l	30	001	IS 3025 (Part 46)-1994 Rifm; 2014	17.0
22.	Total Hardness (as CaCO <sub>5</sub> )	mg/l	206	600	IS 3025 (Part 21)-2013	167.0
23.	Boron (as B)	mg/l	0.5	1.0	IS 3025 (Part 2) 2004 RA 2014	BDL(DL:0.3)
24,	Manganese (as Mn)	mg/l	0.1	0.3	IS 3025 (Part 2) 2004 RA 2014	BDL(DL:0.02)
25.	Nitrate (as NO <sub>3</sub> )	rag/l	45	No Relaxation	IS 3025 (Part 34)-1988 Rffm; 2014	BDL(DL:0.4)
26.	Phenolic Compounds (as CaHoOH)	mg/i	0.001	0,002	IS 3025 (Pert 43)- 1992; Riffin: 2014	BDL(DL:0.001)
27.	Selenium (as Se)	mg/l	0.01	No Relaxation	IS 3025 (Part 2) 2004 RA 2014	BDL(DL:0.005)
28.	Total Chromium ( as Cr)	mg/l	0.05	No Relaxation	IS 3025 (Part 2) 2004 RA 2014	BDL(DL:0.01)
29.	Silver (as Ag)	mg/l	0.1	No Relaxation	IS 3025 (Part 2) 2004 RA 2014	BDL(DL:0.005)
30.	Barium (as Ba)	mg/I	0.7	No Relaxation	IS 3025 (Part 2) 2004 RA 2014	BDL(DL:0.1)
31.	Salinity	mg/l		111111111111111111111111111111111111111	IS 3025 (Part 14)- 2013	120.00





### Ref. No. BBS/711

### Date- 01.11.2021

32.	Sulphide ( as H2S)	mg/l	0.05	No Relaxation	IS 3025 (Part 29)- 1991; Rffm: 2014	BDL(DL:0.02)
33.	Ammonia ( as total ammonia-N)	mg/l	0.5	No Relaxation	IS 3025 (Part 34)- 1988; Rffm; 2014	BDL(DL:0.1)
34.	Chloramines	mg/l	4.0	No Relaxation	IS 3025 (Part 26)- 1986; Rffln; 2014	BDL(DL:0.1)
35.	Nickel ( as Ni)	mg/l	0.02	No Relaxation	IS 3025 (Part 2) 2004 RA 2014	BDL(DL:0.01)
36.	Cyanide (as CN)	mg/l	0.05	No Relaxation	IS 3025 (Part 27)- 1986 Rffm: 2014	BDL(DL:0.01)
37.	Anionic Detergents (as MBAS)	ngri	0.2	1.0	IS 13428(Annex K)- 2005	BDL(DL:0.05)
38.	Polynuclear Aromatic Hydrocarbons (as PAH)	l/gm	0.0001	No Relaxation	APHA ( 23 <sup>nd</sup> Edtn.) 6440C	BDL(DL;0.0001)
39.	Polychlorinated Biphenyls (PCB)	mg/l	0.0005	No Relaxation	US EPA 8082	BDL(DL:0.0005)

Report Prepared by:

For Mitra S. K. Private Limited.

N-5/100, Ground Floor IRC Village, Nayspalli Shubaneswar - 751015

[CIN: U51909WB1956PTC023037]

T: (0874) 2382916, 2360017 F: (0674) 2362918



### TEST REPORT

Name & Address of the Customer:

THE DHAMRA PORT COMPANY LIMITED

AT : DOSINGA, PO : DHAMRA

DIST: BHADRAK, PIN:756171 ODISHA

Report No. : BBS/712 Date : 01.11.2021

Sample No.; MSKGL/FD/2020-21/08/00864

Date of sampling : 16.10,2021

Sampling Description: Ground Water (Pjezometric)

Sampling Location: Running Room Sampling Done By: Mr. Kunja Bihari Nayak

### BACTERIOLOGICAL ANALYSIS RESULT AS PER IS: 10500 - 2012

SL No	Test Parameters	Units	Limit	Test Method / Specification	Result
1.	E. Coli	/100ml	Not Detectable	IS: 15185 : 2016	Not Detected
2.	Total Coliform Organism	/100ml	Not Detectable	IS: 15185 ; 2016	Not Detected

CHEMICAL ANALYSIS RESULT AS PER IS; 10500 - 2012 Requirement Permissible fimit 83. Test Parameter Units (Acceptable in the absence of Test Method / Specification No. Result Limit) alternate Source pH ( at 26° C) 1 6.5 - 8.3No Relaxation IS 3025 (Part 11)-1984 Riffin: 2012 7.68 Ž Sulphate (as SO<sub>s</sub>) mp/l 200 400 IS 3025 (Part 24)- 1986 Rffm: 2014 24.0 3. Calcium (as Ca) 75  $m_2/1$ 200 IS 3025 (Part 40)- 1991 Rffm: 2014 32.0 4 Arsenic (as As) mg/i 0.01 0.05 IS 3025 (Part 2) 2004 RA 2014 BDL(DL:0.005) 3 Lead (as Pb) mg/10.01 No Relaxation IS 3025 (Part 2) 2004 RA 2014 BDL(DL:0.005) Zinc (as Zn) 6. mg/15.0 15.0 IS 3025 (Part 2) 2004 RA 2014 BDL(DL:0.02) Copper (as Cu) 0.05 mg/l1.5 IS 3025 (Part 2) 2004 RA 2014 BDL(DL:0.02) 8 Mercury (as Hg) mg/l 0.001 No Relaxation IS 3025 (Part 48)-1994 Rffm: 2014 BDL(DL:0.0002) Cadmium (as Cd) 9 mg/I 8.003 No Relaxation IS 3025 (Part 2) 2004 RA 2014 BDL(DL:0.001) 10. Mineral Oil mog/l 0.5 No Relaxation IS 3025 (Part 39)-1991 Rffm: 2014 BDL(DL-0.5) Fluoride (as F) 11. mg/i 1.0 1.5 IS 3025 (Part 60)- 2008 Rffm: 2013 BDL(DL:0.2) 12 Colour. Hazen 3 15 3025 (Part 4)-1983; Rffm 2012 BDL(DL:1.0) 13. Odour Agrecable Agrecable IS 3025 (Part 5)-1983 Rffm:2012 Agreeable 14. Turbidity N.T.U IS 3025 (Part 10)-1984 Rffm: 2012 BDL(DL:1.0) 15. Residual free Chlorine 0.2 mg/l 1.6 IS 3025 (Part 26)- 1986 Rffm:2014 BDL(DL:0.1) 16 from (as Fe) 0.3 mg/lNo Relaxation IS 3025 (Part 53)-1988 Rffm: 2014 BDL/DL:0.05) 17. Chloride (as CI) 250 mg/l 1000 IS 3025 (Part 32)-1988 Rffm: 2014 79.5 18. Total Dissolved Solids mg/l 500 2000 IS 3025 (Part 16)-1984; Rffm:2012 265.0 19. Alkalinity (as CaCO<sub>3</sub>) mg/l290 600 IS 3025 (Part 23)- 1986 Rffm: 2009 149.0 20. Aluminium (as Al) mg/l 0.03 0.2 IS 3025 (Part 2) 2004 RA 2014 BDL(DL:0.01) 21. Magnesium (as Mg) 100 mg/l 30 IS 3025 (Part 46)-1994 Rffm; 2014 23.0 Total Hardness 22. mo/l 200 600 IS 3025 (Part 21)-2013 (as CaCO<sub>t</sub>) 165.0 23. Boron (as B) 0.5 mg/l IS 3025 (Part 2) 2004 RA 2014 BDL(DL:0.3) 24 Manganese (as Mn) ang/l 0.1 0.3 IS 3025 (Part 2) 2004 RA 2014 BDL(DL:0.02) 25. Nitrate (as NO<sub>3</sub>) mg/l 45 No Relaxation IS 3025 (Part 34)-1988 Rffin: 2014 BDL(DL:0.4) Phenolic Compounds 26. 0.001 0.002 IS 3025 (Part 43)- 1992: Rffm: 2014 (as C<sub>4</sub>H<sub>2</sub>OH) BDL(DL:0.001) ing/l Scienium (as Se) 27 0.01 No Relaxation mg/l IS 3025 (Part 2) 2004 RA 2014 BDL(DL:0.005) 28 Total Chromium ( as Cr) mg/l 0.05 No Relaxation IS 3025 (Part 2) 2004 RA 2014 BDL(DL:0.01) Silver ( as Ag) 29. mg/l 0.1 No Relaxation IS 3025 (Part 2) 2004 RA 2014 BDL(DL:0.005) 30. Barium (as Ba) mg/l 0.7 No Relaxation IS 3025 (Part 2) 2004 RA 2014 BDL(DL:0.1) 31 Salinity mg/l IS 3025 (Part 14)- 2013 120,00



### Ref. No. BBS/712

### Date- 01.11.2021

32.	Sulphide (as H2S)	mg/l	0.05	No Relaxation	IS 3025 (Part 29)- 1991; Rffm: 2014	BDL(DL:0.02)
33.	Ammonia ( as total ammonia-N)	mg/l	0.5	No Relaxation	IS 3025 (Part 34)- 1988; Rifin: 2014	BDL(DL:0.1)
34.	Chloramines	mg/l	4.0	No Relaxation	IS 3025 (Part 26)- 1986; Rffm: 2014	BDL(DL:0.1)
35.	Nickel (as Ni)	mg/l	0.02	No Relaxation	IS 3025 (Part 2) 2004 RA 2014	BDL(DL:0.01)
36.	Cyanide (as CN)	mg/l	0.05	No Relaxation	IS 3025 (Part 27)- 1986 Rffm: 2014	BDL(DL:0.01)
37,	Anionic Detergents (as MBAS)	mg/l	0.2	1.0	IS 13428(Alinex K)- 2005	BDL(DL:0,05)
38.	Polynuciear Aromatic Hydrocarbons (as PAH)	mg/l	0.0001	No Relaxation	APHA ( 23% Edin.) 6440C	BDL(DL:0.0001)
39.	Polychlorinated Biphenyls (PCB)	mg/l	0.0005	No Relaxation	US EPA 8082	BDL(DL:0.0005)

Report Prepared by:

For Mitra S. K. Private Limited.

MSK TESTING INSPECTION

N-5/108, Ground Floor IRC Village, Nayapali Bhubanaswar - 751015

[CIN: U51909WB1956PTC023037]

T: (0874) 2362916, 2360917 F: (0674) 2362918

### TEST REPORT

Name & Address of the Customer;

THE DHAMRA PORT COMPANY LIMITED

AT: DOSINGA, PO: DHAMRA

DIST : BHADRAK, PIN: 756171 ODISHA

Report No. : BBS/801 Date : 01.11.2021

Sample No. : MSKGL/ED/2020-21/10/00101

Sample Description: Sea Sediment Sampling Location: Dredging Area Date of sampling: 03.10.2021

#### ANALYSIS RESULT

Sl. No.	Parameters	Unit	Test Method	Result
1.	pH value	None	IS 2720 (Part 26)-1987;Rffm;2011	8.02
2.	Electrical Conductivity	us/cm	IS 3025 (Part 14)-1984;Riffm:2006	5420.0
3.	Organic Matter	%	IS 2720 (Part 22)-1972; Rffin:2015	0.96
4:	Turbidity	N.T.U	APHA (23 <sup>rd</sup> Edition) 2130B	248.0
5.	Moisture content	96	Lab Method	34.0
6.	Chloride (as C1)	mg/kg	TPM/MSK/P&E/1/10	3910.0
7.	Sulphate (as SO4)	mg/kg	IS 2720 (Part 27) 1977,RA 2015	854,0
8.	Sulphide (as S)	mg/kg	TPM/MSK/P&E/1/43	<5.0
9.	Phosphate (as PO4)	mg/kg	TPM/MSK/P&E/1/12	<3.0
10.	Phosphorus	mg/kg	TPM/MSK/P&E/1/12	250:0
11.	Iron (as Fe)	mg/kg	TPM/MSK/P&E/1/13	402.0
12.	Sodium (as Na)	mg/kg	TPM/MSK/P&E/1/4	4816,0
13,	Potassium (as K)	mg/kg	TPM/MSK/P&E/1/5	218.0
14.	Copper (as Cu)	mg/kg	EPA 6010D	20.0
15	Nickel (as Ni)	mg/kg	EPA 6010D	25.0
16	Zinc (as Zn)	mg/kg	EPA 6010D	43.0
17.	Manganese (as Mn)	mg/kg	EPA 6010D	460.0



N-5/100, Ground Floor IRC Village, Nayapalli Bhubaneswar - 75/1015

[CIN: U51909WB1956PTC023037]

T: (0874) 2362916, 2360917

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18.	Lead (as Pb)	mg/kg	EPA 6010D	10.0
19.	Boroa (as B)	mg/kg	IS 13428- 2005, Annex H	<5.0
20.	Aluminium ( as Al )	mg/kg	EPA 6010D	2152.0
21.	Total Chromium (as Cr)	mg/kg	EPA 6010D	38.0
22.	Total Nitrogen (as N)	mg/kg	IS 14684 (1999); Rffin:2014	532.0
23.	Organic Nitrogen	mg/kg	TPM/MSK/P&E/3/68	510.0
24.	Total Petroleum Hydrocarbon	mg/kg	USEPA 8015 B - Dec, 1996, 8270 D - Peb,2007	<0.05
25	Pessicide Residue	mg/kg	USEPA 3540 C USEPA 8082	<0.5
26.	Sand	%	TPM/MSK/P&E/1/36A	48,0
27.	Silt	%	TPM/MSK/P&E/1/36A	29.0
28.	Texture	None	TPM/MSK/P&E/1/36A	Loam
29.	Clay	%	TPM/MSK/P&E/1/36A	23.0

Ref. No. BBS/801

Date- 01.11.2021

#### Biological Result

SI No.	Parameters	Unit	Results
1.	Fungus (Phytobenthos)	CFU/g dry wt	1497
2.	Total count (Phytobenthos)	50 mg wet sediment	297
3.	No of species (Phytobenthos)	Nos.	4
4.	Diversity index (Phytobenthos)	****	1.67
5.	Major Species (phytobenthos)		Gyrosigma sp., Biddulphia mobilensis, Navicula clasterium
6.	Name of Phylum (Fauna)	****	Annelida, Mollusca
7.	Class & Number of individuals encountered (Fauna)		Plychaeta-40, Bivalvia-12
8.	Total no. of species encountered (Fauna)	Nos.	12
9	Total fauna (Fauna)	per m <sup>3</sup>	166

Report Prepared by:





N-5/100, Ground Floor IRC Village, Neyapalli Bhubaneswar - 751015

ICIN: U51909WB1956PTC0230371

T : (0874) 2362916, 2380917

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Name & Address of the Customer:

THE DHAMRA PORT COMPANY LIMITED

AT: DOSINGA, PO: DHAMRA

DIST: BHADRAK, PIN: 756171 ODISHA

TEST REPORT

Report No.: BBS/800

Date : 01,11.2021

Sample No.: MSKGL/ED/2020-21/10/00100

Sample Description: Sea Sediment

Sampling Location: Dredging Disposal Site

Date of sampling : 03.10.2021

#### ANALYSIS RESULT

Sl. No.	Parameters	Unit	Test Method	Result
1.	pH value	None	IS 2720 (Part 26)-1987;Rffm:2011	7.14
2,	Electrical Conductivity	us/em	IS 3025 (Part 14)-1984;Rffm: 2006	5010.0
3.	Organic Mutter	%	IS 2720 (Part 22)-1972; Rffm:2015	0.86
4	Turbidity	N.T.U	APHA (23 <sup>rd</sup> Edition) 2130B	250.0
5.	Moisture content	%	Lab Method	37.0
6.	Chloride (as Cl.)	mg/kg	TPM/MSK/P&E/1/10	3470 0
7.	Sulphate (as SO4)	mg/kg	IS 2720 (Port 27) 1977, RA 2015	802.0
8.	Sulphide (as S)	mg/kg	TPM/MSK/P&E/1/43	<5.0
9.	Phosphate (as PO4)	nig/kg	TPM/MSK/P&E/1/12	16.0
10.	Phosphorus	mg/kg	TPM/MSK/P&E/1/12	210.0
11.	Iron (as Fe)	mg/kg	TPM/MSK/P&E/1/13	449.0
12.	Sodium (as Na)	mg/kg	TPM/MSK/P&E/1/4	4272.0
13.	Potassium (as K)	mg/kg	TPM/MSK/P&E/1/5	184.0
14.	Copper (as Cu)	mg/kg	EPA 6010D	15.0
15,	Nickel (as Ni)	mg/kg	EPA 6010D	21.0
16,	Zinc (as Zn)	mg/kg	EPA 6010D	40.0
17.	Manganese (as Mn)	mg/kg	EPA 6010D	454.0



N-5/100, Ground Floor IRC Village, Nayapalii Bhubaneswar - 751015 [CIN: U51909WB1956PTC023037]

T: (0074) 2382916, 2380917

F: (0674) 2362918

18.	Lead (as Pb)	mg/kg	EPA 6010D	8.7
19,	Boron (as B)	mg/kg	IS 13428- 2005, Annes H	<5.0
20.	Aluminium ( as Al )	mg/kg	EPA 6010D	2416.0
21.	Total Chromium (as Cr)	mg/kg	EPA 6010D	35,0
22.	Total Nitrogen (as N)	mg/kg	1S 14584 (1999); Rffm:2014	594.0
23.	Organic Nitrogen	mg/kg	TPM/MSK/P&E/3/68	560.0
24,	Total Petroleum Hydrocarbon	mg/kg	USEPA 8015 B - Dec, 1996, 8270 D - Feb, 2007	<0.05
25.	Pesticide Residue	mg/kg	USEPA 3540 C USEPA 8082	<0.5
26.	Sand	1/4	TPM/MSK/P&E/1/36A	44.0
27.	Silt	%	TPM/MSK/P&E/1/36A	28.0
28.	Texture	None	TPM/MSK/P&E/1/36A	Loam
29.	Clay	%	TPM/MSK/P&E/1/36A	28.0

Ref. No. BBS/800

Date- 01.11.2021

### Biological Result

SI No.	Parameters	Unit	Results
1.	Fungus (Phytobenthos)	CFU/g dry wt.	1389
2.	Total count (Phytobenthos)	50 mg wet sediment	257
3.	No of species (Phytobenthos)	Nos.	6
4.	Diversity index (Phytobenthos)	200	1.90
5.	Major Species (phytobenthos)		Navicula closternum Biddulphia mobilensis, Gyrosigmo sp
6.	Name of Phylam (Fauna)	232	Annelida, Mollusca
7.	Class & Number of individuals encountered (Fauna)		Plychaeta-52,Bivalvia-21
8.	Total no. of species encountered (Fauna)	Nos.	21
9.	Total fauna (Fauna)	per m³	168

Report Prepared by:





N-5/100, Ground Floor IRC Village, Nayapalii Bhubaneswar - 751815 ICIN: U61909WB1956PTC0230371

T: (0674) 2362916, 2360917

F: (0674) 2362918

### TEST REPORT

Name & Address of the Customer: THE DHAMRA PORT COMPANY LIMITED

AT: DOSINGA, PO: DHAMRA

DIST: BHADRAK, PIN: 756171 ODISHA

Report No. : BBS/803 Date : 01.11.2021

Sample No.: MSKGL/ED/2020-21/10/00201

Sample Description : See Sediment Sampling Location : Dredging Area Date of sampling : 17.10.2021

### ANALYSIS RESULT

sl. No.	Parameters	Unit	Test Method	Result
1.	pH value	None	15 2720 (Part 26)-1987;Rffin:2011	8.05
2.	Electrical Conductivity	us/em	IS 3025 (Part 14)-1984;Riflim 2006	5841.0
3,	Organic Matter	%	IS 2720 (Part 22)-1972; Rffm:2015	0.78
4.	Turbidity	N.T.U	APHA (23 <sup>rd</sup> Edition) 2130B	178.0
5.	Moisture content	%	Lab Method	34.0
6,	Chloride (as Cl )	mg/kg	TPM/MSK/P&E/1/10	3214.0
7.	Sulphate (as SO4)	mg/kg	IS 2720 (Part 27) 1977, RA 2015	754.0
8.	Sulphide (as S)	mg/kg	TPM/MSK/P&E/1/43	<5.0
9.	Phosphate (as PO4)	mg/kg	TPM/MSK/P&E/1/12	<3.0
10.	Phosphorus	mg/kg	TPM/MSK/P&E/1/12	167,0
11.	Iron (as Fe)	mg/kg	TPM/MSK/P&E/1/13	289.0
12.	Sodium (as Na)	mg/kg	TPM/MSK/P&E/1/4	2150.0
13,	Potassium (as K)	mg/kg	TPM/MSK/P&E/1/5	241.0
14,	Copper (as Cu)	mg/kg	EPA 6010D	26.0
15.	Nickel (as Ni)	mg/kg	EPA 6010D	6.4
16,	Zinc (as Zn)	mg/kg	EPA 6010D	20.0
17.	Manganese (as Mn)	mg/kg	EPA 6010D	170.0

N-5/100, Ground Floor IRC Villaga, Navapalli Bhubaneswar - 751015

[CIN: U51909WB1956PTC023037]

T : (0874) 2362916, 2360917 F : (0674) 2362918

18.	Lead (as Pb)	mg/kg	EPA 6010D	6.2
19,	Boron (as B)	mg/kg	IS 13428- 2005, Annex H	<5,0
20.	Aluminium ( as Al )	mg/kg	EPA 6010D	2044.0
21.	Total Chromium (as Cr)	mg/kg	EPA 6010D	12.8
22.	Total Nitrogen (as N)	mg/kg	IS 14684 (1999); Rffm:2014	237.0
23.	Organic Nitrogen	mg/kg	TPM/MSK/P&E/3/68	211.0
24,	Total Petroleum Hydrocarbon	mg/kg	USEPA 8015 B - Dec, 1996, 8270 D - Feb,2007	<0.05
25,	Pesticide Residue	mg/kg	USEPA 3540 C USEPA 8082	<0.5
26.	Sand	%	TPM/MSK/P&E/1/36A	45.0
27.	Silt	%	TPM/MSK/P&E/1/36A	25.0
28.	Texture	None	TPM/MSK/P&E/1/36A	Clay Loam
29.	Clay	%	TPM/MSK/P&E/1/36A	30.0

Ref. No. BBS/803

Date- 01.11.2021

#### Biological Result

SI No.	Parameters	Unit	Results
1,	Fungus (Phytobenthos)	CFU/g dry wt.	1247
2.	Total count (Phytobenthos)	50 mg wet sediment	269
3.	No of species (Phytobenthos)	Nos.	4
4.	Diversity index (Phytobenthos)		1.51
5.	Major Species (phytobenthos)	-	Nizschia distans, Coscinodiscus sp
6.	Name of Phylun (Fauna)	-	Annelida, Mollusca
7.	Class & Number of individuals encountered (Fauna)	_	Plychaeta-50, Bivalvia-22
8.	Total no. of species encountered (Fauna)	Nos.	19
9.	Total fauna (Fauna)	per m <sup>3</sup>	150

Report Prepared by

For Mitra S.K. Private Limited Suthorized Signatory



N-5/100, Ground Floor IRC Village, Nayapalli Bhubaneswar - 751015

[CIN: U51909WB1956PTC023037]

T: (0874) 2362916, 2360917

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## TEST REPORT

Name & Address of the Customer:

THE DHAMRA PORT COMPANY LIMITED

AT: DOSINGA, PO: DHAMRA

DIST : BHADRAK, PIN: 756171 ODISHA

Report No. : BBS/802 Date : 01.11.2021

Sample No. : MSKGL/ED/2020-21/10/00200

Sample Description : Sea Sediment

Sampling Location: Dredging Disposal Site

Date of sampling : 17.10.2021

### ANALYSIS RESULT

Sl. No.	<b>Parameters</b>	Unit	Test Method	Result
1.	pH value	None	IS 2720 (Part 26)-1987;Rffin;2011	8,12
2	Electrical Conductivity	us/cm	IS 3025 (Part 14)-1984;Rffm:2006	4840,0
3.	Organic Matter	%	IS 2720 (Part 22)-1972, R/Fm: 2015	0.82
4.	Turbidity	N.T.U	APHA (23 <sup>rd</sup> Edition) 2130B	198.0
5	Moisture content	%	Lab Method	34.0
6.	Chloride (as Ct )	mg/kg	TPM/MSK/P&E/1/10	3100,0
7)	Sulphate (as SO4)	mg/kg	IS 2720 (Part 27) 1977, RA 2015	785.0
8.	Sulphide (as S)	mg/kg	TPM/MSK/P&E/1/43	<5.0
9.	Phosphate (as PO4)	mg/kg	TPM/MSK/P&E/1/12	12.0
10.	Phospherus	mg/kg	TPM/MSK/P&E/1/12	167.0
11.	Iron (as Fe)	mg/kg	TPM/MSK/P&E/1/13	392.0
12	Sodium (as Na)	mg/kg	TPM/MSK/P&E/1/4	3082.0
13.	Potassium (as K)	mg/kg	TPM/MSK/P&E/1/5	162,0
14.	Copper (as Cu)	mg/kg	EPA 6010D	19.0
15.	Nickel (as Ni)	mg/kg	EPA 6010D	39.0
16.	Zine (as Zn)	mg/kg	EPA 6010D	18.0
17.	Manganese (as Ma)	mg/kg	EPA 6010D	295.0



N-5/100, Ground Floor IRC Village, Neyapalli Bhubeneswar - 751015 [CIN: U51909WB1956PTC023037]

T: (0674) 2362916, 2360917

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18.	Lead (as Pb)	mg/kg	EPA 6010D	4.6
19.	Boron (as B)	mg/kg	IS 13428- 2005, Annex H	<5.0
20.	Aluminium ( as Al )	mg/kg	EPA 6010D	2178.0
21,	Total Chromium (as Cr)	mg/kg	EPA 6010D	79,0
22	Total Nitrogen (as N)	mg/kg	IS 14684 (1999); Rffin;2014	381.0
23.	Organic Nitrogen	mg/kg	TPM/MSK/P&E/3/68	364.0
24.	Total Petroleum Hydrocarbon	mg/kg	USEPA 8015 B - Dec, 1996, 8270 D -Feb,2007	<1.0
25.	Pesticide Residue	mg/kg	USEPA 3540 C USEPA 8082	<0.5
26.	Sand	%	TPM/MSK/P&E/1/36A	42.0
27.	Sili	%	TPM/MSK/P&E/1/36A	28.0
28.	Texture	None	TPM/MSK/P&E/1/36A	Clay Loam
29.	Clay	%	TPM/MSK/P&E/1/36A	30.0

Ref. No. BBS/802

Date- 01.11.2021

### Biological Result

SLNo.	Parameters	Unit	Results
1.	Fungus (Phytobenthos)	CFU/g dry wt.	1621
2.	Total count (Phytobenthos)	50 mg wet sediment	220
3.	No of species (Phytobenthos)	Nos.	4
4.	Diversity index (Phytobenthos)		1.91
5.	Major Species (phytobenthos)	****	Coscinodiscus sp., Biddulphia mobilensis
6.	Name of Phylum (Fauna)	****	Annelida, Mollusca
7.	Class & Number of individuals encountered (Fauna)		Plychaeta-62.Bivalvia-29
8.	Total no. of species encountered (Fauna)	Nos.	20
9,	Total fauna (Fauna)	per m <sup>3</sup>	258

Report Prepared by:

For Mitra S.K. Private Limited



Ref: MSKGL/ED/BHU-2021/00500

Date: 01.11.2021

# Site Specific Monitored Meteorological Data

For : The Dhamra Port Company Limited, Dosinga, Bhadrak, Odisha

Sr. No.	Para	meters	October.21
10.00		Minimum	24.7
1.	Temperature ( °C)	Maximum	35.8
2.77	E-IIEO-MARKAN	Average	29.3
		Minimum	31.1
2.	Relative Humidity (%)	Maximum	93.9
		Average	70.8
		Minimum	0.0
3.	Wind Speed (m/s)	Maximum	11.0
		Average	2.8
4.	Wind Direction (%)	N	4.5
	WIT 20079 OF SALES ECONO (2019-20)	NNE	2.8
		NE	7.55
		ENE	9.1
		E	2.12
		ESE	4.8
		SE	2.7
		SSE	6.44
		S	10.8
		SSW	11,2
		SW	13.2
		WSW	8.4
		W	7.1
		WNW	2.8
		CALM	3.49
		Total	161.5
5.	Rainfall (mm)	Minimum Day Wise	0.0
	13000000000000000000000000000000000000	Maximum Day Wise	27.6
		Average	0.2
		Minimum	748.0
6.	Ambient Pressure (mm Hg)	Maximum	758.4
		Average	751.5

(Source - Site Specific Data)

Prenared By

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Verified By

### THE DHAMRA PORT COMPANY LIMITED

## **Environment Management Plan**

SI. NO.	Activity	Relevant Environmental components likely to be impacted	Likely Impacts and their significance in the absence of Mitigation Measures	Mitigation Measures	Compliance
1	Capital dredging/ Reclamation/ Disposal/ Construction of Approach Trestle/ Berths and other offshore structures such as seawater intake/ marine outfall	Marine water Quality  Marine ecology	<ul> <li>Increase in turbidity</li> <li>Change in marine water quality due to aqueous discharges (oily waste, sanitary wastes) from dredgers, barges and workboats.</li> <li>Spill of Bentonite Clay during pile driving.</li> <li>Marine Ecology of this environment is already subjected to the changes due to maintenance dredging activities and hence the net impact will be minimal. Some of the likely impacts are:         <ul> <li>Decrease in DO levels.</li> <li>Increase in noise levels.</li> <li>Disturbance to benthic communities.</li> <li>Changes in species diversity and density in areas adjoining dredging site.</li> <li>Smothering or blanketing of sub-tidal communities.</li> </ul> </li> </ul>	<ul> <li>Check turbidity levels with baseline levels as reference during entire monitoring programme</li> <li>Dredge Management Programme.</li> <li>Discharge of waste into sea will be prohibited.</li> <li>Oil Spill control measures will be adopted.</li> <li>Ensure that slop tanks are provided to barges/ workboats for collection of liquid/solid waste.</li> <li>Recirculation/Reuse of Bentonite clay and adoption of better construction methods to minimize the spill on marine environment.</li> <li>Adoption Standard Reclamation methods with containment system to retain the solid inside the reclamation area.</li> <li>Disposal of unused Dredged material at the identified offshore disposal area only.</li> <li>Marine environmental monitoring as per environmental monitoring programme.</li> </ul>	Dredging is being carried out in the areas identified and approved as a part of Revised Master plan.  As a part of existing operation, Periodic marine water quality monitoring including turbidity is carried out near Kanika island by engaging MOEF&CC approved laboratory. The details of Marine Water quality monitoring reports for the period of Oct'21 to Mar'22 is enclosed as Annexure III.
		Mangrove area	<ul> <li>Impact on 9ha mangrove near the southern boundary.</li> <li>Impact on mangroves near northern boundary.</li> <li>Impact on mangroves at Kanika Island.</li> </ul>	<ul> <li>DPCL has excluded scattered mangroves identified near the southern boundary of the port in phase I development from the port activity and implementing the conservation measures. During the planning stage, a channel for seawater</li> </ul>	Noted & will be complied.  As a part of existing operation periodic monitoring program covering all seasons on various aspects of the marine ecology monitoring is being carried out by

SI. NO.	Activity	Relevant Environmental components likely to be impacted	Likely Impacts and their significance in the absence of Mitigation Measures	Mitigation Measures	Compliance
				influx is considered to the mangrove area.  Care shall be taken during reclamation near northern and southern side mangroves and reclamation bund shall be constructed to ensure that no impact on them. Construction of Northern rail link will pass through the sparse mangrove patch. It is estimated that ~0.1 ha of mangrove area will come under the development of utility corridor where the corridor will be developed on piles. Considering the mangrove footprint, 10 times of mangrove plantation will be done.  Minimum 50 m buffer has been provided near the Northern mangrove area and all the construction will be limited as per plan.  Discharge of toxic/hazardous materials during the port construction would not be allowed.  Revised Master Plan ensures the Tidal exchange near the mangrove area which is also ensured by of hydrodynamic modelling studies.  Dredge spoil should not be entered into mangrove area.  Awareness will be imparted to workers in the port about the importance of mangroves and their conservation.	NABL & MoEF&CC accredited laboratory.
		Impact on turtle/Other Macro Fauna	<ul><li>Accidental take during dredging.</li><li>Light Glare on Nesting</li></ul>	<ul> <li>The channel area is well away from the turtle congregation area and hence there is no regular movement of turtle into the channel area.</li> <li>DPCL to take appropriate measures to avoid accidental take of turtle during dredging.</li> </ul>	Noted and the same is being complied.

SI. NO.	Activity	Relevant Environmental components likely to be impacted	Likely Impacts and their significance in the absence of Mitigation Measures	Mitigation Measures	Compliance
				<ul> <li>Install specialized illumination system in line with "International Dark Sky Association (IDA)" to avoid glare to the sky or focusing light towards sea.</li> <li>Mercury vapour and metal halides will not be used. Sodium vapour lamps will be used</li> </ul>	
		Fishermen and fishing villages	<ul> <li>Local Fishermen approach to sea.</li> <li>Impact on fishing due to Construction works.</li> <li>Fishing harbour is located in Dhamra River at 6.5 km southwest boundary of the port. The fishing boats travels all through the Dhamra River and enter into sea. The approach channel of the port is oriented from south to boats travels from south to east. Fishing is being carried out at deep sea. Therefore, significant impact on fishing is not envisaged.</li> </ul>	<ul> <li>Proper access to the sea for the local fishermen is considered during planning stage itself.</li> <li>This is an existing port hence no direct impact is envisaged. Signboards will be placed at the construction activities in order to make fishermen aware of the on-going construction activities</li> <li>Necessary marker buoys will be installed</li> <li>Regular Interactions will be initiated with the fishing community before commencement of construction works</li> <li>Construction shall be limited to as per the development plan.</li> </ul>	Noted
2	Materials transport and construction activities.	Air Quality	<ul> <li>Exhaust emissions from vehicles.</li> <li>Windblown dust during material movement.</li> <li>Fugitive dust during construction material unloading.</li> <li>Dust suspension during site preparation, construction.</li> <li>Emissions from DG Sets.</li> </ul>	<ul> <li>To reduce impacts from exhausts, emission control norms will be enforced /adhered.</li> <li>All the vehicles and construction machinery will be periodically checked to ensure compliance to the emission standards.</li> <li>Construction equipment and transport vehicles will be periodically washed to remove accumulated dirt.</li> <li>Providing adequately sized construction yard for storage of construction materials, equipment tools, earthmoving equipment, etc.</li> </ul>	Complied.  As a part of existing operation, air pollution mitigation measures are being adopted.

SI. NO.	Activity	Relevant Environmental components likely to be impacted	Likely Impacts and their significance in the absence of Mitigation Measures	Mitigation Measures	Compliance
		Noise	Noise from following activities  - Vehicles transporting construction material.  - Diesel run engines of construction machinery and dredgers  - Pile driving activities during construction of Approach trestle/cargo berths etc.,	<ul> <li>Provide enclosures on all sides of construction site.</li> <li>Movement of material will be mostly during nonpeak hours.</li> <li>On-site vehicle speeds will be controlled to reduce excessive dust suspension in air and dispersion by traffic.</li> <li>Water sprinkling will be carried out to suppress fugitive dust.</li> <li>Environmental awareness program will be provided to the personnel involved in developmental works.</li> <li>Use of tarpaulin covers and speed regulations for vehicles engaged in transportation.</li> <li>Noise levels will be maintained below threshold levels stipulated by Central Pollution Control Board (CPCB)/OSPCB.</li> <li>Procurement of machinery / construction equipment will be done in accordance with specifications conforming to source noise levels less than 75 dB (A).</li> <li>Well-maintained construction equipment, which meets the regulatory standards for source noise levels, will be used.</li> <li>Any equipment emitting high noise, wherever possible, will be oriented so that the noise is directed away from sensitive receptors.</li> <li>Noise attenuation will be practiced for noisy equipment by employing suitable techniques such as acoustic controls, insulation and vibration dampers.</li> <li>High noise generating activities such as piling and drilling will be scheduled at</li> </ul>	Noted. As a part of existing operation Noise monitoring is carried out on monthly basis by engaging accredited NABL & MOEF&CC laboratory. The Monitoring results are also submitted to the Regional office on regular basis. The copy is enclosed as <b>Annexure - III.</b>

SI. NO.	Activity	Relevant Environmental components likely to be impacted	Likely Impacts and their significance in the absence of Mitigation Measures	Mitigation Measures	Compliance
		Disturbance to Natural Drainage pattern.	- Impact to natural flow of runoff due to reclamation and change of drainage course.	daytime (6.00am to 10 pm) to minimize noise impacts.  Personnel exposed to noise levels beyond threshold limits will be provided with personal protective equipment's such as earplugs, ear muffs, etc.  Ambient noise levels will be monitored at regular intervals.  Exercise route selection, traffic regulations, timings etc.,  Storm water runoff will be directed as per the storm water drainage network proposed considering the existing drainage pattern and from village area and port area into the sea.  Requirements of villagers for tide water and boat movement has been duly considered in the drainage plan.  Prudent Planning of Layout— Mathematical Modelling Studies shows Flow regime changes for various tidal conditions in the study domain after the proposed expansion development of the  Port are predicted to be not of much significance and is limited to the development location mostly and found to be very much local in nature. No change in the flow regime of the rest of the domain is observed.	Noted. Drainage pattern of the area is maintained. Creeks are periodically cleaned to ensure free flow of water from both outside and inside. Further inline to Revised Master Plan proper drainage facility will be developed as per the drainage plan.
		Vegetation and Strain on existing Infrastructure	<ul> <li>Loss of vegetation and strain on existing infrastructure.</li> </ul>	<ul> <li>The area being highly saline and Sea/Submerged inter tidal zone, no Major vegetation is present in the proposed expansion area except a narrow strip of throny bushes.</li> </ul>	Noted

SI. NO.	Activity	Relevant Environmental components likely to be impacted	Likely Impacts and their significance in the absence of Mitigation Measures	Mitigation Measures	Compliance
	Activity	-	_	<ul> <li>Construction activities shall be limited within the site and dust shall be contained within the construction area.</li> <li>The existing approach road to Dhamra Port is being widened by GoO which will improve the traffic conditions.</li> <li>Proposed National Water Way (NW-5) will also be used for the transport of part of construction material which will reduce likely congestion on road.</li> <li>In addition, approval has already been obtained by DPCL for 4 lane road and 2 rail tracks (as a part of Phase I &amp; II Clearance). As a part of Revised Master Plan, it is to develop further additional 2 lane road and 1 rail tracks. Traffic Wardens shall be deployed for regulating the traffic.</li> <li>Drivers should be sensitized with respect to need to drive carefully while passing village areas.</li> <li>Speed of the trucks shall be controlled by providing speed breakers, sign boards and other appropriate speed</li> </ul>	Noted.  DPCL has an exclusive rail connectivity for the project and has proposal for future expansion of rail-road connectivity.  Besides, DPCL has participated with PWD for maintenance and improvement of the main service road to Dhamra and has shared the cost of development.  As a part of RMP EIA studies, Traffic study was conducted for assessment & evaluation of feasibility of Four Lane road (which is already approved as a part of Phase —II clearance) with future provision of Two lane, to be developed as a part of Revised Master Plan to connect Bhadrak & Dhamra Port. Based on this —  1. Both Normal traffic +
				control techniques.  - Proper lighting, signboards shall be provided at required locations.	Generated traffic (due to proposed expansion) considered for the study.  2. Four lane (which is already approved as a part of Phase –II clearance) with future provision of 2 lane road, to be developed as a part of Revised Master Plan is proposed, which shall be sufficient to meet the Port Requirement as per the IRC guidelines.  Existing approach road from Jamujhadi to Dhamra will be

SI. NO.	Activity	Relevant Environmental components likely to be impacted	Likely Impacts and their significance in the absence of Mitigation Measures	Mitigation Measures	Compliance
3	Land Reclamation	Existing Water Resources like	- Proposed expansion is planned in an additional	<ul> <li>Existing protective bunds (salt dyke) and slope gradient will prevent</li> </ul>	utilized during construction phase (apart from proposed NW-5) which is being widened by GoO which will improve the traffic conditions. Proposed road link will induce local traffic movement on either side and boost the travel characteristics of the people residing in nearby villages addition, for easy evacuation of cargo, a new Rail/Road/Utility Corridor (12 km x 125 m wide) is also proposed from Northern side of Dhamra Port.
	Recialitation	Groundwater and surface water	area of 1323.4 Ha. Out of which approximately 1075.7 Ha land will be reclaimed and 247.7 Ha of land is proposed applied land. The proposed development of master plan site falls in saline and Sea/Submerged intertidal area without any macro vegetation, habitation and built-up area. The applied land to be reclaimed will be saline mud and will be separated from the adjoining land mass through the salt dyke. This being an intertidal zone which is sloping towards sea, therefore, there will be no impact on groundwater quality.	inundation of salt water to the adjoining land.  Return seawater from reclamation areas will be channeled back to sea.	

SI. NO.	Activity	Relevant Environmental components likely to be impacted	Likely Impacts and their significance in the absence of Mitigation Measures	Mitigation Measures	Compliance
			- Construction phase water requirement will be met through existing sources .i.e. Matai River.		
4	Solid Waste Management	Soil quality	- Impacts due to disposal of solid waste on ground	<ul> <li>Proper waste Management practice is being followed and shall be extended.</li> <li>General refuse generated on-site will be collected in waste skips and separated from construction waste.</li> <li>Other Construction waste will be used within port site for filling of low lying areas.</li> <li>Solid Waste Management Rules, 2016 and Construction &amp; Demolition Waste Management Rules, 2016 (as amended) will be followed for environmental sound management of respective waste.</li> <li>Burning of refuse at construction sites will be prohibited.</li> </ul>	Noted DPCL has developed a vision for making itself – "A Zero Waste to Landfill Port" by adoption of 5R principle of waste management i.e., Reduce, Reuse, Reprocess, Recycle & Recover. During the period of Oct'21 to Mar'22, a total quantity of 155.310 MT of solid waste has been handled in line to 5R concept. We have color coded bins for segregating different category of solid waste. Biodegradable wastes are used for compost preparation. Recyclable wastes are handed over to authorized recyclers.
5	Handling of hazardous wastes	Human safety and property/ Environment Loss	<ul> <li>Fire accidents due to hazardous material handling.</li> <li>Impact on Terrestrial and Marine Environment.</li> </ul>	<ul> <li>Hazardous and other waste Management Rules, 2016 (as amended) will be followed for environmental sound management of hazardous waste.</li> <li>Adequate safety measures as per OSHA</li> <li>standards will be adopted.</li> <li>Construction site will be secured by fencing with controlled/limited entry points.</li> <li>Hazardous materials such as lubricants, paints, compressed gases, and varnishes etc., will be stored as per the prescribed/approved safety norms.</li> </ul>	Noted

- Construction site will be secured by fencing with controlled/ limited entry points.	SI. NO.	Activity	Relevant Environmental components likely to be impacted	Likely Impacts and their significance in the absence of Mitigation Measures	Mitigation Measures	Compliance
6 Water Resources Resources like Groundwater and surface water water and surface water water water water and surface water wat	6		Resources like Groundwater and surface	•	fencing with controlled/ limited entry points.  Medical facilities including first aid will be made available for attending to injured workers.  Handling and storage as per statutory guidelines.  Positive isolation procedures will be adhered.  Hazardous wastes will be disposed through approved OSPCB/CPCB vendors.  Water required during construction activity will be met through existing water supply system from Matai River.  Groundwater table at Dhamra is high due to high rainfall. However, optimization of water resource will be done.  Prudent Planning of Layout - Based on existing drainage pattern and catchment area, main outfall drains are proposed to carry storm water discharge from village area and port area and discharging into seas.  Care will be taken to prevent the runoff from the construction site to the nearby natural streams connecting to rivers.  Construction camp wastewater will be collected and treated. Treated wastewater will be used for	Noted

SI. NO.	Activity	Relevant Environmental components likely to be impacted	Likely Impacts and their significance in the absence of Mitigation Measures	Mitigation Measures	Compliance
			Operati	onal Phase	
1	Cargo handling and Inland Cargo movement and storage areas, Regasification process and equipment operation such as pumps, compressors, etc.,	Air Quality	- Emissions from loading/ unloading equipment, DG sets, vehicular dust emissions, fugitive emissions from storage areas, Emissions from vessels visiting Dhamra Port, Vehicular emissions due to cargo transport, emissions from LNG/LPG regasification process, spillage of cargo etc.,  - Air Quality Modelling study is carried out to Predict the GLCs at the receptors due to Fugitive emissions from Dry bulk cargo stockyard and Vehicular movements, etc., and it is found that resultant concentrations are well within the NAAQs standards at all receptors.	through rail and Pipelines (~ 70%).  - Use of specialized ship loaders/unloaders,  - wagon tippler, track Hopper, covered conveyors and rapid loading system through silos.  - Use of -low Sulphur diesel fuel is proposed.  - Dust Suppression measures at loading/unloading points, wagon tippler complex, Track Hoppers, transfer points, stock yards, rapid loading system and at internal roads.  - Scientific and regulated stacking of cargo piles	Noted
		Noise	<ul><li>Due to equipment handling and vehicular movement.</li><li>Ship unloading operations.</li></ul>	<ul> <li>Acoustic Barriers and Enclosures.</li> <li>Personal Protective Equipment (PPE).</li> <li>Greenbelt Development.</li> <li>Counselling and traffic regulation.</li> </ul>	Noted. As a part of existing operation Noise monitoring is carried out on monthly basis by engaging accredited NABL & MOEF&CC

SI. NO.	Activity	Relevant Environmental components likely to be impacted	Likely Impacts and their significance in the absence of Mitigation Measures	Mitigation Measures	Compliance
		Traffic Addition	- Due to Regasification Process and equipment operation.  Cargo movement from/to port	<ul> <li>Most of the cargo transportation through rail and Pipelines (~ 70%).</li> </ul>	laboratory. The Monitoring results are also submitted to the Regional office on regular basis. The copy is enclosed as <b>Annexure - III.</b> Noted.  DPCL has an exclusive rail
				<ul> <li>through rail and Pipelines (~ 70%).</li> <li>Proposed National Water Way (NW-5) will also be used for the transport of cargos which will reduce likely congestion on road.</li> <li>Approval has already been obtained by DPCL for 4 lane road and 2 rail tracks (as a part of Phase I &amp; II Clearance). As a part of Revised Master Plan, it is to develop further additional 2 lane road and 1 rail tracks in the existing corridor.</li> <li>125 m wide corridor is meant to accommodate three rail tracks, a sixlane road, an electric overhead transmission line, utility corridor and side drain. This will be sufficient to cater the DPCL revised master Plan transportation requirements.</li> <li>rail, road and utilities corridor (approx.12km x</li> <li>125m wide) is also proposed from Northern side</li> <li>development of Dhamra Port.</li> <li>In addition, for easy evacuation of cargo, a new rail, road and utilities corridor (approx.12km x 125m wide) is also proposed from Northern side development of Dhamra Port.</li> </ul>	connectivity for the project and has proposal for future expansion of rail-road connectivity.  Besides, DPCL has participated with PWD for maintenance and improvement of the main service road to Dhamra and has shared the cost of development.  As a part of RMP EIA studies, Traffic study was conducted for assessment & evaluation of feasibility of Four Lane road (which is already approved as a part of Phase –II clearance) with future provision of Two lane, to be developed as a part of Revised Master Plan to connect Bhadrak & Dhamra Port. Based on this –  3. Both Normal traffic + Generated traffic (due to proposed expansion) considered for the study.

SI. NO.	Activity	Relevant Environmental components likely to be impacted	Likely Impacts and their significance in the absence of Mitigation Measures	Mitigation Measures	Compliance
					Jamujhadi to Dhamra will be utilized during construction phase (apart from proposed NW-5) which is being widened by GoO which will improve the traffic conditions Proposed road link will induce local traffic movement on either side and boost the travel characteristics of the people residing in nearby villages addition, for easy evacuation of cargo, a new Rail/Road/Utility Corridor (12 km x 125 m wide) is also proposed from Northern side of Dhamra Port.
		Fishermen and fishing villages	<ul> <li>Local Fishermen approach to sea.</li> <li>Fishing harbour is located in Dhamra River at 6.5 km southwest boundary of the port. The fishing boats travels all through the Dhamra River and enter into sea. The approach channel of the port is oriented from south to north east whereas fishing boats travels from south to east. Fishing is being carried out at deep sea. Therefore, significant impact on fishing is not envisaged.</li> </ul>	<ul> <li>Educate the fishermen about the orientation of approach channel and ships visits etc.,</li> <li>Regular interactions will be initiated with the fishing community.</li> </ul>	Noted
2	Aqueous discharges in harbour basin	Marine water quality and ecology	- Change in marine water quality/ecology due to discharge ship wastes (sullage), sewage, bilge water, Desalination Plant reject water, LNG/LPG	<ul> <li>Vessels/Ships will be required to exchange ballast water in a deep sea location prior to arrival in the harbour.</li> </ul>	Noted

SI. NO.	Activity	Relevant Environmental components likely to be impacted	Likely Impacts and their significance in the absence of Mitigation Measures	Mitigation Measures	Compliance
			regasification return water etc.	the near shore as well as harbour waters.  Ships would also comply with the MARPOL  regulation.  As a mitigation measure for spillages an Oil spill contingency plan prepared and will be  implemented.  Provision of waste reception facility for bilge water and waste oil will be explored  Desalination Plant water requirement selected prudently and will be sourced from river Matai which will ensure the reject TDS will be always less than the seawater TDS and hence no significant impact due to reject discharge into marine environment.  LNG/LPG regasification return water with low temperature (<70C than ambient) will be sent back through marine outfall system with diffusers at identified location through mathematical model studies which will ensures attainment of ambient conditions (within 600 m) in the harbour area.  Marine Water Quality monitoring is proposed as Part of Environmental Monitoring programme.	
3	Cargo and Oil Spills (Accidental)	Marine water quality and ecology	- Change in marine water quality		Noted

SI. NO.	Activity	Relevant Environmental components likely to be impacted	Likely Impacts and their significance in the absence of Mitigation Measures	Mitigation Measures	Compliance
				<ul> <li>Response time for shutting down the fueling, containment and recovery will be quicker.</li> </ul>	
4	Maintenance dredging	Marine water quality/Marine Ecology	<ul> <li>Increase in turbidity</li> <li>Decrease in DO levels</li> </ul>	<ul> <li>It will be ensured that dumping of the maintenance dredge material would be uniform at the identified offshore disposal ground.</li> <li>Dredge spoil disposal studies reveals that the changes in bed level at disposal site due to deposition of dredge spoil is less than 0.011 m. The spread of plume is also ensured that it will never reach the channel, shoreline and other eco sensitive areas.</li> <li>Pre and post dredge material disposal bathymetry survey at disposal location shall be carried out.</li> <li>Based on the TSS/Turbidity monitoring results during dredging, nearby receptors if any impacted would be provided with suitable mitigations measures such as silt screen to contain the turbidity.</li> </ul>	Noted
5	Water Supply	Water resources	- Impact on existing water resources	<ul> <li>Raw water shall be taken from Matai River</li> <li>(Perennial) at the existing intake location. The maximum water withdrawal shall be 100 MLD(for 40 MLD desalination plant).</li> <li>No downstream users are observed beyond the Intake Point at River Matai.</li> <li>Government of Odisha has accorded permission for water intake of 5 MLD from Matai River and necessary permission will be obtained from the</li> </ul>	

SI. NO.	Activity	Relevant Environmental components likely to be impacted	Likely Impacts and their significance in the absence of Mitigation Measures	Mitigation Measures	Compliance
				concerned authorities for revised Master plan requirements.	
6	Wastewater Discharge	Water Quality	<ul> <li>Impact due to discharge of runoff from stock piles and disposal of untreated sewage.</li> <li>Impact due to discharge of brine (reject from Desalination plant) runoff from stock piles.</li> <li>And disposal of untreated sewage.</li> </ul>	<ul> <li>Collection of runoff from stock piles and directing into settling ponds for recycling and supernatant water will be used for dust suppression.</li> <li>Neutralization using lime to ensure settlement of heavy metals, if any.</li> <li>STP (1 MLD capacity during 5 year and 2 MLD (Cumulative) capacity during 30 year</li> <li>development) to treat the sewage generated in the premises.</li> <li>ETP (3 MLD capacity during 5 year and 5 MLD (Cumulative) capacity during 30 year</li> <li>development) to treat the effluents.</li> <li>Storm Water Drainage System</li> <li>Treated Sewage and effluents shall be reused for dust suppression, irrigating greenbelt and other requirements.</li> </ul>	Noted
7	Seawater withdrawal for Regasification and water withdrawal from River matai for desalination plant	Marine ecology/ River Ecology	- Impingement/Entrainment/ Entrapment of aquatic life	<ul> <li>Intake with proper screens will be Provided</li> <li>Maintaining Low Intake Velocity to minimize the Entrainment &amp; impingement.</li> <li>Seawater Intake is proposed in protected</li> <li>harbour basin which will reduce major marine organism entry.</li> <li>Intake is proposed nearer to LNG Terminal and hence entrapment will be insignificant.</li> </ul>	Noted
8	Solid Waste Management	Groundwater and Soil quality	- Impact due to disposal of solid waste on ground		Noted DPCL has developed a vision for making itself – "A Zero Waste to Landfill Port" by adoption of 5R

SI. NO.	Activity	Relevant Environmental components likely to be impacted	Likely Impacts and their significance in the absence of Mitigation Measures	Mitigation Measures	Compliance
				<ul> <li>Organic Waste Convertor will be provided.</li> <li>Composted bio-degradable waste will be used as manure in greenbelt/gardens.</li> <li>Other recyclable wastes will be sold to OSPCB authorized vendors.</li> <li>Commercial use will be explored for the materials settled in dump pond.</li> </ul>	principle of waste management i.e. Reduce, Reuse, Reprocess, Recycle & Recover.  During the reported period, a total quantity of 155.310 MT of solid waste has been handled in line to 5R concept.  We have color coded bins for segregating different category of solid waste. Biodegradable wastes are used for compost preparation. Recyclable wastes are handed over to authorized recyclers.
	Handling of hazardous materials/ wastes	Fire accidents due to products handling and other health hazards/ Groundwater and soil contamination	<ul> <li>Human life and loss of property.</li> <li>Impact on Terrestrial and Marine Environment</li> </ul>	<ul> <li>Hazardous and other waste Management Rules, 2016 (as amended) will be followed for environmental sound management of hazardous waste.</li> <li>Adequate safety measures as per OSHA standards will be adopted.</li> <li>Hazardous materials such as lubricants, paints, compressed gases, and varnishes etc., will be stored as per the prescribed/approved safety norms.</li> <li>Medical facilities including first aid will be made available for attending to injured workers.</li> <li>Handling and storage as per statutory guidelines.</li> <li>Positive isolation procedures will be adhered.</li> <li>Hazardous wastes will be disposed through</li> <li>approved OSPCB/CPCB vendors or shall be</li> </ul>	Complied. We have a strict safety regimen with the motto "Safety First". Safety Observations are mandatory from every department of the port and immediate measures are undertaken to rectify the shortcoming.  OHSAS Guidelines and MSIHC Guidelines are followed for handling of Hazardous materials. First aid center facilities have been provided for employees and workers. Inline to this a wellness center is also operated outside the port premises for providing medical facilities for villagers. Dhamra Port Company Limited is an ISO 45001-2018 certified company.

SI. NO.	Activity	Relevant Environmental components likely to be impacted	Likely Impacts and their significance in the absence of Mitigation Measures	Mitigation Measures	Compliance
	Presence of Reclaimed back up area or Bund	Shoreline Changes Change in Hydrodyna mics	<ul> <li>The shoreline modelling studies shows that mostly accretion in the stretches studies and erosion in north of revised master pan area at the rates of -4.38m/ year and erosion below the Dhamra river region at the rate of -2.71 m/ year. Suitable mitigation measures will be carried out to maintain the stability of coast.</li> <li>Flow modelling shows that Variation in the flow regime (in the current speeds) after the expansion is limited to the development location mostly and found to be very much local in nature. No change in the flow regime of</li> </ul>	of high resolution satellite imageries during operation phase shall be carried out periodically.	Noted. Shoreline monitoring study was carried out as a part of Environment Impact Assessment study for Revised Master plan and further, the same will be carried out at regular intervals to check the impact and if required mitigation measures will be carried out.

SI. NO.	Activity	Relevant Environmental components likely to be impacted	Likely Impacts and their significance in the absence of Mitigation Measures	Mitigation Measures	Compliance
			the rest of the domain is observed.		
11	Operation of Port	Socio-economic conditions of the region  Natural Hazards	During operational phase the ex be 2200 persons and 11000 per persons and 20000 persons duri people will be given preference Together with this employment socio economic conditions of the and transport facilities that will be economic development of the repulsion Disaster Management Plan (DMI after expansion also with require	e) is already in place and will be continued d revisions. Port Conservator will act as the of educative, protective and rehabilitation	Noted & will be complied.  At present no hazardous or petroleum products are being handled at shore and details RA recommendation will be complied
					as and when applicable, However, as a part of present operation following measures are being adopted.  Disaster Management Plan was prepared was approved from District Administration. Periodic mock drills are also being carried out. Safety is being followed as per the prescribed guideline. Dedicated team lead by dedicated site safety team along with team at Corporate is ensuring best safety practices at Port premises.
		Induced Development	local importers and exporters i	ctive supply chain/value proposition to the n the states of Odisha, Chhattisgarh and native gateway to ports on the east coast of st India and Asia.	Noted & will be complied.

# **ANNEXURE-V**

# **Dhamra Port Company Limited**

# **Environmental Expenditure**

Period: Oct-21 to Mar-22

Sl.No	Activity/Category	Expenditure (in Lakhs)
01	Environmental study, audit and consultancy	3.98
02	Construction of new drains and drain cleaning	2.00
03	Environmental Monitoring Services	16.25
04	Hazardous waste management & disposal	11.58
05	Treatment and Disposal of Bio-Medical Waste	1.92
06	Plastic Waste Management & Disposal	12.54
07	Inside Port plantation and maintenance	31.50
08	Plantation in degraded village forest patch	12.67
09	O&M of Sewage Treatment Plant (STP)	18.12
10	O & M of Water Treatment Plant (WTP)	33.28
11	Port housekeeping (Environment)	35.86
12	Port housekeeping (Operation)	426.00
13	Housekeeping (Admin)	210.00
14	Housekeeping (Railway)	7.06
15	Housekeeping (Engineering Services)	114.49
16	Mechanized Sweeping Machine	
17	O & M of OWC machine	5.84
18	Vehicle Washing	4.25
19	Firefighting Expenses	48.83
20	O & M of Dust Buster and Mist Cannon	10.39
21	Kanika Island Conservation	33.50
22	Protection of South Side Mangrove	2.30
23	Protection of Olive Ridley Turtle	49.48
24	Sewage Management	15.68
	Total	1160.55

#### ANNEXURE-VI

#### THE DHAMRA PORT COMPANY LIMITED

# CSR WORK DETAILS Oct'21 to Mar'22

2 LL 3 SS 4 CC 5 SS 6 LL 7 SS 0 CC 8 SS	Merit Scholarship: The students from eight core GPs, scoring 75% & above marks in their class 10th examination under the Board of Secondary Education Odisha, LEAP project - ThinkZone Support to Quality Education (Setting up School Library in High Schools and ME schools) Programme: GURU SAMMAN- Felitication of retired teachers who have immensely contributed towards the Education upliftemnt of Bhadrak & dhamra region.  Support to School (in bridging the gap of basic facilities in schools) Programme: Learning Enrichment program forTeachers Swachhagraha (To bring about a culture of cleanliness among children and community people) Self Defense Training to School Girls  Adani DAV Public School, Kuamara, Udaan - Young & adolescent Students get to visit the Adani Dhamra Port for a knowledge based experience about the Port and the actvities of Adani Foundation	0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.0	0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.0	11.12 10.33 0.00 0.00 0.00 0.00 0.00	0.00 0.00 0.00 0.00 0.00 0.00 0.00	0.27 0.00 0.00 0.00 0.00 0.00	0.00 0.00 0.00 0.00 0.00 0.00	Total (Oct'21 - Mar'22)  11.39  10.33  0.00  0.00  0.00
2 L L S S S S S S S S S S S S S S S S S	marks in their class 10th examination under the Board of Secondary Education Odisha, LEAP project - ThinkZone Support to Quality Education (Setting up School Library in High Schools and ME schools) Programme: GURU SAMMAN- Felitication of retired teachers who have immensely contributed towards the Education upliftemnt of Bhadrak & dhamra region.  Support to School (in bridging the gap of basic facilities in schools) Programme: Learning Enrichment program forTeachers Swachhagraha (To bring about a culture of cleanliness among children and community people) Self Defense Training to School Girls  Adani DAV Public School, Kuamara, Udaan - Young & adolescent Students get to visit the Adani Dhamra Port for a knowledge based experience about the Port and the activities of Adani	0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.0	0.00 0.00 0.00 0.00 0.00 0.00	0.00 0.00 0.00 0.00 0.00	0.00 0.00 0.00 0.00	0.00 0.00 0.00 0.00	0.00 0.00 0.00	10.33 0.00 0.00
2 L 3 S 4 G 5 C 5 S  6 L 7 S 8 S	LEAP project - ThinkZone  Support to Quality Education (Setting up School Library in High Schools and ME schools) Programme:  GURU SAMMAN- Felitication of retired teachers who have immensely contributed towards the Education upliftemnt of Bhadrak & dhamra region.  Support to School (in bridging the gap of basic facilities in schools) Programme:  Learning Enrichment program forTeachers  Swachhagraha (To bring about a culture of cleanliness among children and community people)  Self Defense Training to School Girls  Adani DAV Public School, Kuamara,  Udaan - Young & adolescent Students get to visit the Adani Dhamra Port for a knowledge based experience about the Port and the activities of Adani	0.00 0.00 0.00 0.00 0.00 0.00 28.42	0.00 0.00 0.00 0.00 0.00	0.00 0.00 0.00 0.00 0.00	0.00 0.00 0.00 0.00	0.00 0.00 0.00 0.00	0.00	0.00
5 S S S S S S S S S S S S S S S S S S S	schools) Programme: GURU SAMMAN- Felitication of retired teachers who have immensely contributed towards the Education upliftemnt of Bhadrak & dhamra region.  Support to School (in bridging the gap of basic facilities in schools) Programme:  Learning Enrichment program forTeachers  Swachhagraha (To bring about a culture of cleanliness among children and community people)  Self Defense Training to School Girls  Adani DAV Public School, Kuamara,  Udaan - Young & adolescent Students get to visit the Adani Dhamra Port for a knowledge based experience about the Port and the activities of Adani	0.00 0.00 0.00 0.00 0.00 28.42	0.00 0.00 0.00 0.00 0.00	0.00 0.00 0.00 0.00	0.00	0.00	0.00	0.00
5 S S : 6 L 7 S C C 8 S S 9 A 10 U	contributed towards the Education upliftemnt of Bhadrak & dhamra region.  Support to School (in bridging the gap of basic facilities in schools ) Programme  Learning Enrichment program forTeachers  Swachhagraha (To bring about a culture of cleanliness among children and community people)  Self Defense Training to School Girls  Adani DAV Public School, Kuamara,  Udaan - Young & adolescent Students get to visit the Adani Dhamra Port for a knowledge based experience about the Port and the activities of Adani	0.00 0.00 0.00 0.00 28.42	0.00 0.00 0.00 0.00	0.00 0.00 0.00	0.00	0.00	0.00	0.00
8 S 9 A	: Learning Enrichment program forTeachers Swachhagraha (To bring about a culture of cleanliness among children and community people) Self Defense Training to School Girls Adani DAV Public School, Kuamara, Udaan - Young & adolescent Students get to visit the Adani Dhamra Port for a knowledge based experience about the Port and the activities of Adani	0.00 0.00 0.00 28.42	0.00 0.00 0.00	0.00	0.00	0.00		
7 S C S S S S S S S S S S S S S S S S S	Swachhagraha (To bring about a culture of cleanliness among children and community people)  Self Defense Training to School Girls  Adani DAV Public School, Kuamara,  Udaan - Young & adolescent Students get to visit the Adani Dhamra Port for a knowledge based experience about the Port and the activities of Adani	0.00 0.00 28.42	0.00	0.00			0.00	0.00
8 S 9 A 10 U	community people)  Self Defense Training to School Girls  Adani DAV Public School, Kuamara,  Udaan - Young & adolescent Students get to visit the Adani Dhamra Port for a knowledge based experience about the Port and the activities of Adani	0.00	0.00		0.00	0.00		0.00
9 A	Adani DAV Public School, Kuamara, Udaan - Young & adolescent Students get to visit the Adani Dhamra Port for a knowledge based experience about the Port and the actvities of Adani	28.42		0.00		0.00	0.00	0.00
10 U	Udaan - Young & adolescent Students get to visit the Adani Dhamra Port for a knowledge based experience about the Port and the actvities of Adani		28.69		0.00	0.00	0.00	0.00
	knowledge based experience about the Port and the actvities of Adani	0.00		31.90	31.90	25.81	31.29	178.01
			0.00	0.00	0.00	0.00	0.00	0.00
	0014141111	28.42	28.69	53.35	31.90	26.08	31.29	199.73
v	COMMUNIT Wellness Centre- Medicines for free distribution to community at the health	Y HEALTH						
1 C	Centre.  MHCU Service - 2 Mobile Health Care Units are catetring door step helath	1.11	6.47	5.66	5.62	6.01	6.07	30.94
<b>2</b> s	service to the villages in and around 03 blocks of Bhadrak District i.e. Chandbali, Tihidi & Bhadrak	0.00	7.42	7.42	12.05	0.00	0.00	26.89
3 1	Mega Health Camp - 04 Mega Health Check Up Camps will be organised focusing on the prevalent diseases from the community	0.00	0.00	3.50	0.40	1.48	6.55	11.93
4 E	Eye Screening Camp in School	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Special Day and Month Observation	0.00	0.00	2.37	0.00	0.00	0.80	3.17
6 A	SuPoshan Project - In curbing Malnourishment and control the number of Severe Accute Malnourishment (SAM) & Moderate Accute Malnourishment among 0-5 years of children and develop the Health status of Pregnant and Lactating mothers	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	modificis	1.11	13.89	18.95	18.07	7.49	13.42	72.93
	SUSTAINABLE							
	Support to Women SHG	0.00	0.00	0.00	0.00	4.00	6.00	10.00
	Farmers' group initiative	0.00	3.50	6.57	17.86 7.34	0.00	8.07 20.32	36.00 49.95
	Livestock Care Disaster Mitigation- Calamity Redressal	9.95 0.00	0.00	6.66 2.78	1.04	5.68 0.00	0.00	3.82
	Promoting Rural Sports	0.00	0.00	4.38	0.07	0.00	5.75	10.20
	Aahar	2.33	2.33	2.33	2.33	25.55	0.00	34.87
<b>7</b> S	Stakeholder Management	0.00	0.00	0.00	0.19	0.00	0.00	0.19
		12.28	5.83	22.72	28.83	35.23	40.14	145.03
	RURAL INFRASTRUCT			1				
	Village Development Related: Road Infra Support	0.00	0.00	18.34	63.14	3.23	24.02	108.73
	Drinking Water Facility-Handpump (31)  Village Development Related: Swach Dhamra Mission-Two Community Toilet	0.00	1.95 0.00	15.30 0.00	7.62 0.00	3.31 0.00	0.00	28.18 0.00
	Education related: Adani Skill Development	0.00	0.00	0.00	5.70	0.00	0.00	5.70
	Stadium Work Support: Mini Stadium at Chandbali	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Mobility cost for Supervision and monitoring for 5 months	0.00	0.00	0.00	0.22	0.40	0.00	0.62
	Pond Excavation	0.00	1.70	0.00	0.00	0.00	0.00	1.70
8 V	Village Development Related: High Mast Light Support	0.00	1.78	3.19	0.00	0.00	0.50	5.47
	Library Support (Library Infrastructure Supportat Basudevpur)	0.00	0.00	0.00	0.00	0.00	0.00	0.00
P	Engagement with Different Stakeholders. (SLD) - Rennovation of Community POND.	0.00	0.00	0.00	0.00	0.00	3.73	3.73
<b>11</b> C	Crematorium	1.50	0.00	0.00	0.00	0.00	0.00	1.50
		1.50	5.43	36.83	76.68	6.94	28.25	155.63
	GRAND TOTAL	43.31	53.84	131.85	155.48	75.74	113.10	573.32

## **ANNEXURE-VII**

	Dhamra Port Company Limited					
		OI	L SPILL MANAG	EMENT		
	DESCRIPTION			MRA	REMARKS	
			VIKOMA	DESMI		
		oom (meters)	300	1750	VIKOMA, Sentinel 1100 Boom + DESMI	
	Skimmer (20	TPH)	1	3	VIKOMA, KOMARA-20, 5-bar + DESMI	
	OSD Applica	itor (no.)	10	2		
	Oil Spill Disp	ersant (litres)	6875			
EQUIPMENT	10 Tons flex Barge (no.)		-	4		
EQUIPIVILINI	Sorbent boom (meters)		-	500		
	Sorbent Pad	l (no.)	-	2000		
	Shoreline	Mini Vaccum pumps	-	5		
	cleanup	OSD Applicator	-	5		
	Equipment	Fast Tanks	-	5		
VESSELS	Work Boats			2		
VESSELS	Tugs			5	2 tugs are equiped with equipment	
	IMO Level 1	IMO Level 1		7		
	IMO Level 2			3		
MANPOWER	IMO Level 3			1		
	Other		1	.5		

# **Plantation / Greenbelt Inside Port**



**Roadside Plantation (Inside Port)** 

**Roadside Plantation (Inside Port)** 

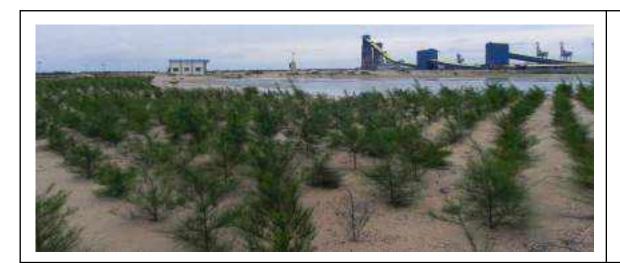




**Plantation Inside Port** 

**Plantation inside Port** 

# Plantation / Greenbelt Inside Port



**Plantation Inside Port Area** 



**Plantation Inside Port Area** 



**Plantation Inside Port Area** 



**Plantation Inside Port Area** 

# **Plantation / Greenbelt - Nursery**



# Plantation / Greenbelt - Degraded Forest Patch



**Plantation in degraded Forest Patch (North side)** 



**Plantation in degraded Forest Patch (Nr. Amarnagar)** 



Plantation in degraded Forest Patch (North side)



Plantation in degraded Forest Patch (Nr. Amarnagar)

# **South Side Mangrove Plantation and Conservation**



**Conservation & Protection of 9 Ha Mangrove Patch** 



**Conservation & Protection of 9 Ha Mangrove Patch** 



**Conservation & Protection of 9 Ha Mangrove Patch** 



**Conservation & Protection of 9 Ha Mangrove Patch** 

The Dhamra Port Company Limited					
	Fire Extinguisher Details				
Sl. No.	Locations	Type of Extinguishers & Quantity			
1	SWITCH YARD	DCP-5KG-4nos			
2	MCC -1	(CO2-4.5KG)-5nos (CO2 -3KG)-1no, (FOAM-50ltrs)-01no			
3	MCC-1(A)	(CO2-4.5KG)-3Nos(DCP-6KG)-2KG			
4	MCC -2	(CO2-4.5KG)-2nos			
5	MCC -2(A)	(CO2-4.5KG)-1no (CO2 -3KG)-1no			
6	MANTEI Office (Security)	CO2-4.5kg-02 Nos, DCP-6kg-04 Nos, DCP25kg-01 No.			
7	MCC -4	(CO2-4.5KG)-02nos. (DCP- 5KG)-1no			
8	TP - 1(A)	CO2-4.5KG-1no			
9	TP - 1(B)	CO2-4.5KG-1no			
10	TP - 2	CO2-4.5KG-1no			
11	TP - 2(A)	CO2-4.5KG-1no			
12	TP - 3	CO2-4.5KG-1no			
13	TP - 3(A)	CO2-4.5KG-1no			
14	NEW TP-3	CO2 -4.5KG-1no			
15	TP - 4	CO2 -4.5KG-1no			
16	TP - 4 (A)	CO2 -4.5KG-1no			
17	TP - 5	CO2 -4.5KG-1no			
18	TP - 6	CO2 -4.5KG-1no			
19	TP-7	CO2 -4.5KG-1no			
20	TP-8	CO2 -4.5KG-1no			
21	TP-9	CO2 -4.5KG-1no (DCP- 5KG)-1no.			
22	TP-10	CO2 -4.5KG-1no (DCP- 5KG)-1no.			
23	TP-10(A) TP-11	CO2 -4.5KG-1no			
24		CO2 -4.5KG-1no			
25	TP-11(A)	CO2 -4.5KG-1no			
26	TP - 12	CO2 -4.5KG-1no			
27	TP – 12(A)	CO2 -4.5KG-1no			
28	TP - 14	CO2 -4.5KG-1no			
29	TP - 15	CO2 -4.5KG-1no			
30	TP – 15(A)	CO2 -4.5KG-1no			
31	TP - 16	CO2 -4.5KG-1no			
32	TP - 17	CO2 -4.5KG-1no			
33	TP - 19	CO2 -4.5KG-1no			
34	TP - 21	CO2 -4.5KG-1no			
35	TP - 21	CO2 -4.5KG-1no			
36	JETTY	CO2 -4.5KG-2nos DCP-5KG-5nos			
37	SL	CO2 -4.5KG-4nos DCP-5KG-1no			
38	SUL-1	CO2 -4.5KG-5nos (CO2 -3KG)-1nos (DCP- 5KG)-2nos			
39	SUL-2	CO2 -4.5KG-5nos (CO2 -3KG)-1nos (DCP- 5KG)-2nos			
40	SUL-3	CO2 -4.5KG-6nos (DCP-2KG)-2nos (DCP-5KG)-1no			
41	SUL-4	CO2 -4.5KG-6nos (DCP- 5KG)-3nos			
42	SUL-5	CO2 -4.5KG-6nos (DCP- 5KG)-3nos			
43	LIEBHERR-11	CO2 -4.5KG-2no, DCP-5KG-2nos, DCP-2KG-2nos			
44	LIEBHERR-12	CO2 -4.5KG-2no, DCP-5KG-4nos			
45	LIEBHERR-06	(CO2 -4.5KG)-2no, (CO2 -3KG)-1no, DCP-5KG-1no			
46	LIEBHERR-07	CO2 -4.5KG)-3no, DCP-2KG-1no			
47	SILO - 1	CO2 -4.5KG-3nos DCP-5KG-1no			
48	SILO - 2	CO2 -4.5KG-3nos DCP-5KG-1no			
49	SILO - 3	CO2 -4.5KG-2nos DCP-5KG-1no			
50	SILO - 4	CO2 -4.5KG-3nos DCP-5KG-1no			

51	FIRE PUMP HOUSE	CO2 -4.5KG-2nos	
52	WTC -1	CO2 -4.5KG-2nos. DCP-5KG-2Nos	
53	WTC -2	CO2 -4.5KG-2nos DCP-5KG-2nos CO2 -3KG-1no	
54	SR -1	CO2 -4.5KG-2nos DCP-5KG-1no	
55	R - 1	CO2 -4.5KG-2nos DCP-5KG-1no	
56	SR -2	CO2 -4.5KG-2nos DCP-5KG-1no	
57	SR -3	CO2 -4.5KG-2nos DCP-5KG-1no	
58	SR -4	CO2 -4.5KG-1no CO2 -3KG-1no, DCP-5KG-1no	
59	SR-5	CO2 -4.5KG-2nos DCP-5KG-1no	
60	SR-6	CO2 -4.5KG-2nos DCP-5KG-1no	
61	SR-7	CO2 -4.5KG-2nos DCP-5KG-1no	
62	SR-8	CO2 -4.5KG-2nos DCP-5KG-1no	
63	SR-4A	CO2 -4.5KG-2nos DCP-5KG-1no	
64	SR-3A	CO2 -4.5KG-2nos DCP-5KG-1no	
65	Fire & Security Barrack	CO2-4.5KG-3nos, DCP-5KG-2no	
66	JETTY CONTAINER	CO2-4.5KG-1no, DCP-5KG-1no	
67	MHS OFFICE	CO2-4.5KG-2 Nos.	
68	PSS	CO2 -4.5KG-3nos, DCP-5kg-01No.	
69	BMH WORKSHOP	CO2 -4.5KG-3nos DCP-5KG-3nos FOAM-50ltrs-01no	
70	All Equipment	DCP-5KG-08nos.	
71	LOCO SHED	CO2 -4.5KG-02nos, DCP-5KG-2Nos.	
72	DIESEL FILLING STATION	Foam-9ltr-1no	
74	IOCL	Foam-9ltr-1no , Foam 5oltr-01 No.	
75	WTP	CO2 -4.5KG-4nos	
76	ADANI HEALTH CENTER	CO2-4.5kg-05 Nos, DCP5kg-03 Nos.	
77	REWA OFFICE	CO2-4.5KG-3Nos DCP-5KG-1No	
78	CUSTOMS OFFICE	CO2-4.5KG-1No DCP-5KG-1No	
79	DPCL STORE	CO2 -4.5KG-1no DCP-5KG-1No	
80	Lubricant Store	Foam-9ltr-1no, DCP-5KG-1No.	
81	SS-01	CO2 -4.5KG-1no	
82	SS-02	CO2 -4.5KG-1no	
83	SS-03	CO2 -4.5KG-1no	
84	SS-04	CO2 -4.5KG-1no	
85	SS-05	CO2 -4.5KG-3nos	
86	Adani port canteen	CO2 -4.5KG-03no DCP-5KG-1no	
87	DHAMRA HOUSE	DCP-6KG-7nos, DCP-2KG-1nos CO2 4.5KG-01no	
89	KANIKA GUEST HOUSE	CO2 -4.5KG-01no DCP-5KG-1no	
90	DAV SCHOOL, KUAMARA	CO2 -4.5KG-16nos DCP-5KG-15nos	
91	TOWNSHIP	CO2 -4.5KG-11nos	
92	New Township	CO2 -4.5KG-04nos, DCP-6KG-4nos	
93	COMMUNITY HALL	CO2 -4.5KG-1nos DCP-5KG-2nos	
94	PREFAB	CO2 -4.5KG-4nos DCP-5KG-5nos	
95	DHAMRA GUEST HOUSE	CO2 -4.5KG-4Nos.	
96	RAILWAY OFFICE	CO2 -4.5KG-02noS DCP-5KG-3nos	
96	BHATATIRA STATION		
98	BHATATIRA LC-5	CO2(4.5kg)-2Nos DCP-5KG-1no DCP-5KG-1no	
98	BHATATIRA LC-5  BHATATIRA- SP	CO24.5kg-1No	
100	GURUDASPUR STATION	CO2-4.5KG-1No DCP-5KG-1No	
100	GURUDAS PUR TSS	CO2 -4.5KG-1N0 DCP-5KG-1N0 CO2 -4.5KG-1no DCP-5KG-4Nos.	
101			
	GURUDAS PUR SUB STATION	DCP-5KG-2Nos	
103	INTAKE	CO2 -4.5KG-3nos DCP-5KG-1no	
104	RANITAL	CO2 -4.5KG-1no	
105	GURUDAS PUR LC-19	DCP-5KG-1no	
106	IMWB	CO2-4.5KG-1 No.	
107	LOCO TRANSFORMER	CO2-4.5KG-2nos, DCP-5KG-1no	

108	HEALTH CENTRE	CO2-4.5KG-1no, DCP-5KG-1 No.
108	TOWER WAGON	DCP-5KG-3nos
110	TIHIDI STATION	CO2 -4.5KG-1no DCP-5KG-1no
111	BANSADA STATION	CO2 -4.5KG-3nos
112	LC-26, NEAR DI ROAD	CO2 -4.5KG-1no
117	KOCHILA OFFICE	C02-4.5KG-2Nos DCP-5KG-2nos
117	BRAMHANI OFFICE	CO2 -4.5KG-1no DCP-5KG-1no
119	KANIKA TRANSFORMER	CO2 -4.5KG-1no DCP-5KG-1NO.
120	S. CONTAINER, NEAR MAIN GATE	CO2 -4.5KG-1no DCP-5KG-1no
121	FIRST AID CENTER	CO2 -4.5KG-1no DCP-5KG-1no
122	DPCL AMBULANCE(OLD)	DCP-5KG-1no.
123	DPCL AMBULANCE(NEW)	DCP-5KG-1no.
124	RAILWAY GSS	CO2 -4.5KG-1no DCP-5KG-1no
125	RUNNING ROOM	CO2 -4.5KG-1no DCP-5KG-1no
126	SAFETY INDUCTION HALL	CO2 -4.5KG-1no
127	FCC GODOWN	CO2 -4.5KG-19nos,DCP-5KG-03nos,Foam-9ltr-3nos,Foam 50 ltr1
128	FCC OFFICE	CO2 -4.5KG-1no DCP-5KG-1no
129	FCC CANTEEN	DCP-5KG-1no
130	WAISTAGE OIL STORE	Foam-9ltr-1no,CO2 4.5KG-01NO
131	LABOUR REST HOUSE	CO2 -4.5KG-1no
132	SS-6	CO2 -4.5KG-16nos DCP-5KG-10nos, Foam-50ltr-1no
133	COLONY PUMP HOUSE	CO2 -4.5KG-1no
134	BHADRAK GUEST HOUSE	CO2 -4.5KG-1no DCP-5KG-1no
135	BBSR OFFICE	CO2 -4.5KG-3nos DCP-5KG-4nos
136	BBSR GUEST HOUSE	CO2 -4.5KG-1no DCP-5KG-1no.
137	ADANI RAILWAY ENGINE	CO2 4.5KG-1, DCP-5KG-01 NO.
138	WASTE SHED	DCP5KG-1 NO, FOAM9LTR-1 NO.
139	FCC TRANSFERMER	DCP5KG-01 NO,CO2 4.5KG-01 NO
140	FCC LABOUR COLONY	CO2-4.5KG-01 NO, DCP5KG-02NOS.
141	SS-7	CO2 -4.5KG-9nos
142	SS-8	CO2 -4.5KG-9nos, DCP-5KG-02Nos
143	SS-9	CO2 -4.5KG-16nos, DCP-5KG-06Nos
144	TP-7(A)	CO2 -4.5KG-1no
145	TP-8(A)	CO2 -4.5KG-1no
146	TP-1(C)	CO2 -4.5KG-1no
147	TP-2(C)	CO2 -4.5KG-1no
148	TP-3(C)	CO2 -4.5KG-1no
149	North Gate	CO2 -4.5KG-3nos, DCP-5KG-01No
150	Mobile Equipment Office, BMH	CO2 -4.5KG-1no
151	DPCL Central Store	Foam 50ltr-01 No, DCP5kg-01 No.
152	Fire pump house (T. HOPPER)	CO24.5kg-01 No, DCP5kg-01 No.
153	FCC Workshop	CO24.5kg-02 Nos, DCP5kg-02 Nos.
	·	DCP5kg-03 Nos, CO2-4.5kg-01 no.
154	Township Shopping Mall	
155	CAT Dozer	DCP6KG-01 Nos
Total F	ire Extinguisher Installed at site	CO2-4.5kg=353Nos CO2-3kg =05nos DCP-6/5kg=253nos DCP-2kg=04nos DCP 25kg-02nos Foam-9ltrs=17nos Foam -50ltrs =06nos
Stock Ba	alance Fire Tender and Fire Store	CO2 (4.5kg) =97nos CO2 (3kg) =5nos DCP (ABC)-6kg=161nos

	DCP (ABC)-2kg=12nos DCP-25kg=08nos
	Foam(45ltrs) =05nos Foam (50ltrs) =02nos
	Water Mist(50ltrs) = 01 no.
	Water Mist(09ltrs) = 01 no.
	DCP Extinguisher= 440 Nos
	CO2 Extinguisher= 460 Nos
Total Numbers fire Extinguisher	Foam Extinguisher= 30 Nos
	Water Mist= 02 Nos

SL.No.	Description of mock drills and	Numbers of training &	Numbers of
	training	mock drill conducted	participants
1	Emergency Rescue mock drill	06	145
2	Safety Induction Training	156	1162
3	Portable fire Extinguisher training	53	1509
4	Defensive driving training	2	14
5	Toolbox training	546	4,914
6	On the Job Safety Awareness	26	260

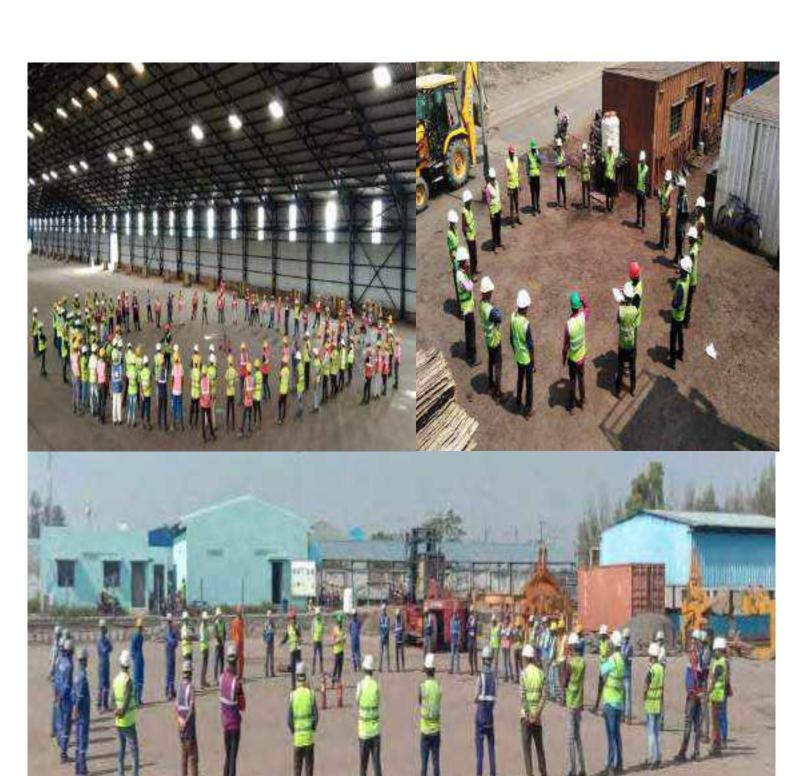
## Fire Crews member:-

Sl No	Position	Total
01	Fire Officer	01
02	Sub Fire Officer	00
03	Fire Supervisor	01
04	Safety Co ordinator	01
05	Fire tender Operator	07
06	Leading fireman	07
07	Fire man	22
		<b>Total Fire Crews- 39</b>

## Fire Tender Details:-

SI No	Fire Tenders	Water tank Capacity	Foam tank Capacity
01	OR-22D-8144	4500 ltr	500 ltr
02	OR-22D-8145	4500 ltr	500 ltr
03	OD-22T-3231	5000 ltr	1000 ltr

# **FIRE EXTINGUISHER TRAINING**



# **EMERGENCY RESCUE MOCK DRILL AT SITE**



# **Worker Colony**





**Worker Colony** 

Kitchen



**Open Washing Space** 



**Bathroom & Toilet complex** 



DPCL/ENV/OSPCB/2021-075

Date: 14.09.2021

To
The Member Secretary
State Pollution Control Board, Odisha
A/118, Nilakantha Nagar, Unit -VIII,
Bhubaneswar - 751012
Odisha

Sub: Environmental Statement for the financial year ending 31st March 2021 for Dhamra Port Company Limited at Dhamra, Bhadrak, Odisha.

Company Chineso at Onanna, Onacian, Odisha.

Ref: Consent Order No. 4218/IND-I-CON-6348 dated 24.04.2020.

Dear Sir,

With reference to the above-mentioned subject, please find enclosed Environmental Statement in Form V prescribed under Rule 14 of the Environment (Protection) Rules 1986 of The Dhamra Port Company Limited situated at Dhamra, Bhadrak, Odisha for the financial year ending 31st March 2021.

Thanking you,

Yours faithfully,

For The Dhamra Port Company Limited

Krishna Kumar Head Environment

Encl: As above.

Copy to: The Regional Officer, State Pollution Control Board, Odisha, Plot no. -1602, Ganeshwarpur, Januganj, Balasore - 756019

## FORM V (See Rule 14)

### Environmental Statement for the Financial Year ending 31st March 2021

### PART - A

(i) Name and address of the Owner/

Occupier of the Industry Operation or

Process

: Sudip Dasgupta

Chief Operating Officer

The Dhamra Port Company Limited

At/PO.- Dosinga, Via. Dhamra, Dist-Bhadrak

Odisha - 756171

(ii) Industry Category

Primary (STC Code)

Secondary (STC Code)

: Red-B

NA

NA

(iii) Production Capacity

: 71.84 Million MT/Annum Cargo & 1 Million

TEU/Annum Containerized Cargo

(iv) Year of Establishment

: 2000

(v) Date of last Environment Statement

submitted

: 21<sup>ST</sup> September, 2020

## PART - B

### Water and Raw Material Consumption

#### (i) Water Consumption

Water Consumption Cu. Mtr./Day	
Process	Nil
Cooling	Nil
Domestic	494.323 m³/day
Dust suppression	893.467 m³/day
Fire fighting	670.923 m³/day

40 1 2234 40 10	Process Water Consumption	on per unit of Product Output		
Name of Products	During the current financial year (2019-20)	During the current financial year (2020-21)		
Handling of Iron Ore, Coal, Limestone, Gypsum, Steel coil/plate, Slag, Fertilizers, Gas oil, LPG, Pyroxenite, Olivine Sand, Project Cargo, Dolomite, Coke*	0.035 m³/Ton	0.018 m³/Ton		

### (ii) Raw Material Consumption

Name of	Name of Products	Consumption of Raw Material per Unit of output	
Raw Material		During the previous financial year (2019-20)	During the current financial year (2020-21)
NiL*	Not Applicable	Nil	Nii

<sup>\*</sup> Unit does not have any manufacturing process

PART – C
Pollutants discharged to Environment/Unit of Output
(Parameters as specified in consent issued)

Pollutants	Quantity of pollutants discharged (Mass/day)	Concentrations of pollutants in discharges (mass/volume)	Percentage of variation from prescribed standards with reasons
(a) Water	Nil*		
(b) Air	Monitoring data attached as Annexure-1		

<sup>\*</sup>Unit does not manufacture anything, as it is a service industry (Port) engaged in handling and storage of cargo. No effluents are generated from the port. Treated water from the STP is used for horticulture purposes.

PART – D

Hazardous Wastes

(As specified under Hazardous Wastes Management and Handling Rules 1989)

	Total Quantity	
Hazardous Wastes	During the previous financial year (2019-20)	During the current financial year (2020-21)
(a) From Process Used oil /Spent oil	24.096 KL	30.680 KL
(b) From Process Oil containing cargo residue, Washing water and Sludge (Waste Oil)	896.250 KL	1003.530 KL
(c) From Process Chemical Containing Cargo residue and sludge/ waste/Residue containing oil	NA	Nil
(d) From Process Sludge and Filters contaminated with oil / Process waste, Residues and sludge /Contaminated cotton rags or other cleaning materials	1.154 MT	1.128 MT
(e) From Process  Ash from Incineration of Hazardous waste, Flue gas cleaning residues	NA	Nil
(f) From Process Empty barrels / Containers / Liners contaminated with Hazardous chemicals /wastes	NA	Nil
(g) From Pollution Control facilities	Nil	Nil

### PART - E

### Solid Waste

	Total Quantity Generated (MT/Annum)		
Solid Waste	During the previous financial year (2019-20)	During the current financial year (2020-21)	
(a) From Process (Ash)	Nil	Nil	
(b) From Pollution Control facilities	3.535 MT/Annum	4.645 MT/Annum	
(C-1) Quantity recycled or reutilized within the unit	3.535 MT/Annum	4.645 MT/Annum	
(C-2) Sold	Nil	Nil	
(C-3) Disposed	Nil	Nil	

### PART - F

Please specify the characterization (in terms of Composition and quantum) of Hazardous as well as solid wastes and indicate disposal practice adopted for both these categories of wastes:

SI. No	Name of waste	Generation quantity	Disposal method
1	Used oil /Spent Oil	30.680 KL	Sold to Authorized Recyclers /Re- processors
2	Oil containing cargo residue, Washing water and Sludge (Waste Oil)	1003.530 KL	Sold to Authorized Recyclers / Re-processors
3	Chemical Containing Cargo residue and sludge/ waste/Residue containing oil	Nil	NA
4	Sludge and Filters contaminated with oil / Process waste, Residues and sludge /Contaminated cotton rags or other cleaning materials	1.128 MT	ACC for co-processing /energy recovery/Stored in HW Shed
5	Ash from Incineration of Hazardous waste, Flue gas cleaning residues	Nil	NA
6	Empty barrels / Containers / Liners contaminated with Hazardous chemicals /wastes	NII	NA

DPCL has got the authorization from OSPCB vide letter no. IND-IV-HW-894/3729 on dated 21.03.2020 for handling of hazardous waste which is valid till 31.03.2025.

SI. No	Name of waste	Generation quantity	Disposal method
1	Paper waste	6.631 MT	Recycled for making note pad through third party recycler
2	Plastic waste	64.839 MT	Sent to M/s ACC Limited for co-processing/energy recovery
3:	Glass Waste	5.219 MT	Sold to scrap vendor for recycling.
4	Food waste	95.253 MT	Used for making compost for horticulture use.
5	STP Sludge	4.645 MT	Used as manure in horticulture work

#### PART - G

# Impact of the pollution abatement measures taken on conservation of natural resources and on the cost of production

- DPCL has three nos. of settling pond of capacity about 50,000 m3 is being used for collection of effluent and runoff water form stack yard area. The treated water is further being reused for dust suppression & sprinkling on road.
- Wastewater generated from Port and township is being treated in four nos, of sewage treatment plant (STP) of capacity 150 KLD, 140 KLD, 25 KLD & 15 KLD. The treated water is being used for horticulture/gardening purpose.
- Effluent Treatment Plant is used for treatment of wastewater generated from vehicle washing.
   Treated water from this ETP is again reused for vehicle washing.
- 9 nos. of mechanized road sweeping machines have been deployed for cleaning of road on regular basis.
- 2 nos. mist cannons have been deployed for suppression of fugitive dust emissions.
- Regular monitoring of Ambient Air Quality by a MOEFCC accredited agency to meet the prescribed standard by concerned authority.
- Green belt has been developed inside & outside of the port.
- During the financial year 2020-21, the total amount of Rs. 20.66 Crores was incurred on environmental protection measures.
- 50 KL capacity of rainwater harvesting structure has been developed for reutilization of rainwater in plantation purpose.
- Trawler has been provided to Forest Department, Govt. of Odisha for patrolling purpose for conservation of Olive Ridley turtle.
- Two nos. of rowing boat and one motor boat has been provided to Forest Department, GoO for conservation of Kanika Sand Island.

## PART - H

Additional measures /investment/ proposal for environmental protection including abatement of pollution, prevention of pollution.

#### **GHG Emission**

- Shoreline power for Ships, Dredgers & Tugboat berthed at Port
- Use of Renewable Energy (Roof top solar power)
- Switching over to e-machines from diesel operated
- Use of LED Lightings in inside and outside lightings
- Use of automatic sensor fitted lights in roads and common areas
- Usage of Ozone friendly gases in ACs and HVAC systems
- Use of air circuit breaker instead of conventional having SF6

#### Air management

- Use of rain guns for fugitive dust suppression at minerals stack yard
- Mechanized Road sweeping machines
- Pre wet system before wagon tippling
- Closed conveyor system.
- Tarpaulin covering of rail wagons at Wagon covering shed
- Wagon cargo loading by closed silo system
- Mechanized handling (loading & unloading) of cargo from ship
- Dust suppression system at conveyor lines and transfer points
- Water sprinkling on stack yard internal roads
- Dedicated team for housekeeping.
- Use of movable mist cannon for control of fugitive emission.

## Water management

- Zero effluent discharge from Port premises
- Use of 4 nos. of STP for treatment of domestic wastewater
- Reuse of STP treated wastewater for gardening and horticulture purpose
- Use of ETP for treatment of effluent generated at vehicle washing station
- Reuse of ETP treated wastewater for vehicle washing
- 3 nos, settling pond for runoff water treatment
- Reuse of Settling pond treated water for dust suppression and sprinkling on roads
- · Installation of water meter for monitoring the water usage
- Use of drip irrigation in gardening and horticulture work
- Installation of 50 KLD rainwater harvesting structure.

#### Waste Management

- Achieved zero waste to landfill in case of solid waste
- Energy recovery from plastic waste and hazardous waste by co-processing at ACC Limited.
- Port certified as Single Use Plastic (SUP) free Port by M/s CII.
- Implementation of 5R concept in waste management
- Waste to wealth initiative implemented
- Utilization of STP sludge as manure for horticulture use.

#### **Bio-Diversity Conservation**

- Around 9 ha of the mangrove area situated at south site of our port is being conserved and protected by declaring the area as no activity zone with proper bamboo fencing and providing material support to maintain the natural ecosystem.
- Further around 4,000 mangroves have been planted for conservation of mangroves.
- DPCL has also developed a nursery with massive numbers of mangrove sapling.
- Degraded forest patch/ gramya jungle adjacent to Port periphery at Amarnagar, Dosinga, Kanakprasad, Rabindranagar & Balisahi viliage are being developed by planting trees in coordination with forest department, GoO.
- DPCL provides support to Forest department for conservation of Kanika Sand Island.
- Specially designed "dark sky friendly" lights fixed in the port and township area which are turtle friendly.
- Adopting horizontal mounting lights and its periodic checking.
- Mercury vapor lamp and metal halides lamp are prohibited.
- Awareness programmes have been conducted in nearby village as well as inside the port premises by DPCL regarding the conservation of the Sea turtle Olive Ridley, mangrove conservation etc.
- Distribution of plants and seedling among local people for development of green ecosystem.

#### PART-1

## Any other particulars for improving the quality of environment:

- Dhamra Port committed to promote a culture seeking continual improvement in Environment performance of the organization.
- Dhamra Port emphasizes on implementing Environment Management System to optimize its
  resource consumption, improve efficiencies, reduce wastes by adopting 5R principles and
  enhance operational safety to minimize environmental risks. The environmental concerns are
  considered and addressed adequately during planning, project development and operations.
- Specialized illumination system in line with "International Dark Sky Association (IDA)" has been
  installed to avoid illuminating the sky or focusing light towards sea. Sodium vapour lamps are
  being used instead of mercury lamp. All area lighting, roadway lighting and lighting mounted on
  masts or other elevated structures are of full cutoff luminaries.
- Deflectors are installed on drag-head of dredgers to keep turtles out of path of dredger.
   Screens are also installed in inflow/overflow pipes of dredgers to monitor turtle entrainment.
   There are observers on Dredgers to ensure implementation of IUCN Dredging Protocol.
- DPCL has made an effective contribution towards Environment Protection, management and conservation during this year.
- Under the inspiration of Prime Minister's Clean India Mission, APSEZ has developed a vision for making itself – "A Zero waste to landfill Company". APSEZ's vision is based on adoption of 5 R's principle of waste management, i.e. Reduce, Reuse, Reprocess, Recycle & Recover.
- 100 % wastewater generated is being reused and recycled.
- Waste camps are being organized in township for collection of waste materials from township
  residents so as to collect other waste apart from garbage. The main intention is to make the
  area waste free and for creating awareness among residents.
- DPCL believe in sustainable development and are working in close harmony of biodiversity rich area. We are regularly monitoring our footprints on environment.
- Adopted the 5Rs principle in our Port premises
- Achieved Zero discharge of wastewater.
- Achieved Zero Plastic used inside our Port Premises.
- Single Use Plastic free port declared by M/s CII.
- Waste paper Recycling
- Use of Eco- Friendly product which is made of waste paper.
- Installation of 621 kwp Roof top solar power.

Date: 14-09-2021

(Signature of a person carrying out an industry,

operation or process) Name : Krishna Kumar

Designation: Head Environment

Address: The Dhamra Port Company Limited

At/PO. Dosinga, Via. Dhamra,

Dist-Bhadrak, Odisha

### Annexure 1

