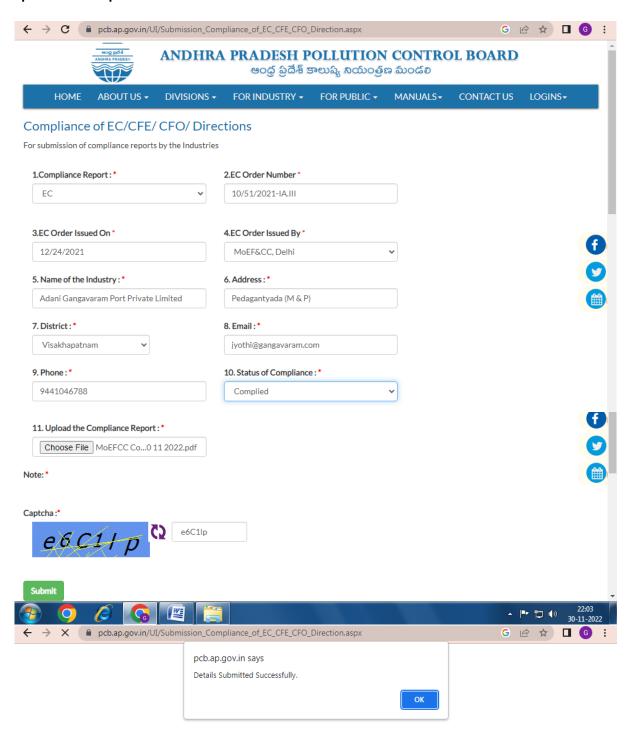
Screenshot - MoEF&CC Half-yearly EC & CRZ Clearance, CTE & CTO compliance report with necessary attachments uploaded on 30.11.2022 through the website eccompliance-ap@gov.in for the period from April 2022 to September – 2022.





GANGAVARAM PORT LIMITED

GPL/ENV/APPCB/2022-23/006

Date: 05/05/2022.

To

The Environmental Engineer, A.P. Pollution Control Board Regional Office APPCB Buildings, 3rd Floor Main Road, Madhavadhara VUDA Layout Visakhapatnam- 530 009.

Dear Sir,

Sub:- Monthly CFO Compliance, Environmental Monitoring Reports and Water Consumption detains (Form-1) – Submitted – Reg.

Reff:- 1. CFO & HWA Order No. APPCB/VSP/VSP/113/CFO/HO/2015, dated 13.01.2016, valid up to 31.12.2020.

 CFO & HWA Order No. APPCB/VSP/VSP/113/CFO/HO/2020, dated 10.09.2020, valid up to 31.12.2025.

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With reference to the above, we are here with submitting the monthly CFO compliance reports and CAAQM, terrestrial and marine monitoring results along with Water Consumption details in Form - 1 for the month of April -2022.

Yours Sincerely,

Authorized Signatory

Encl: As above.

Project Office

: Pedagantyada Mandal, Gangavaram (Post), Visakhapatnam - 530 044. Andhra Pradesh, INDIA

Tel.: +91 891 270 1177, 2277, 276 1377, Fax: +91 891 270 3377

Tel.: 040 3359 9999, Fax No.: 040 3359 9990

E-mail: port@gangavaram.com, Web: www.gangavaram.com

Compliance report of the conditions stipulated in Schedule A,B & C of CFO & HWA Order No. APPCB/VSP/VSP/113/CFO/HO/2015, dated 13.01.2016

Compliance of Schedule - A

SI.	Condition	Compliance
No. 1.	Any up-set condition in any plant/plants of the industry, which result in, increased effluent/ emission discharge and/ or violation of standards stipulated in this order shall be informed to this Board, under intimation to the Collector and District Magistrate and take immediate action to bring down the discharge / emission below the limits.	All conditions are being followed.
2.	The industry should carryout analysis of waste water discharges or emissions through chimneys for the parameters mentioned in this order on quarterly basis and submit to the Board.	GPL is carrying out 3 rd party monitoring and analysis. As per analysis reports, the samples are meeting the Board standards.
3.	All the rules & regulations notified by Ministry of Law and Justice, Government of India regarding Public Liability Insurance Act, 1991 should be followed as applicable.	Noted and conditions are being followed as applicable.
4.	The industry should put up two sign boards (6×4 ft. each)at publicly visible places at the main gate indicating the products, effluent discharge standards, air emission standards, hazardous waste quantities and validity of CFO and exhibit the CFO order at a prominent place in the factory premises.	Noted and condition is being followed.
5.	Notwithstanding anything contained in this consent order, the Board here by reserves the right and powers to review / revoke any and / or all the conditions imposed herein above and to make such variations as deemed fit for the purpose of the Acts by the Board.	Noted the condition.
6.	The industry shall file the water cess returns in Form-I as required under section (5) of water (Prevention and Control of Pollution) cess Act, 1977 on or before the 5 th of every calendar month, showing the quantity of water consumed in the previous monthly along with water meter readings. The industry shall remit water cess as per the assessment order as and when issued by Board.	Water consumption details of the previous month are being submitted before 5th of subsequent month in FORM - I. The latest reports for the Month of March, 2022 were submitted on 5th April, 2022 After introduction of GST, APPCB has instructed all the industries are not required to remit water cess charges from 1st July, 2017 onwards.

7.	The applicant shall submit Environment statement in Form V before 30 th September every year as per Rule No.14 of E(P) Rules,1986 & amendments thereof.	Complied and Form V was Submitted on 24.09.2021 for the period 2020- 2021
8.	The applicant should make applications through Online for renewal of Consent (under Water Air Acts) and Authorization under HWM Rules at least 120 days before the date of expiry of this order, along with prescribed fee under Water and Air Acts and detailed compliance of CFO conditions for obtaining Consent & HW Authorization of the board. The industry should immediately submit the revised application for consent to this Board in the event of any change in the raw material used, processes employed, quantity of trade effluents & quantity of emissions. Any change in the management shall be informed to the Board, the person authorized should not let out the premises / lend / sell / transfer their industrial premises without obtaining prior permission of the state Pollution Control Board.	GPL has obtained CFO & HWA of the Board vide order dated 13/01/2016 valid up to 31.12.2020 and extended up to 31.12.2025 vide order dated 10.09.2020.
9.	Any person aggrieved by an order made by the state board under section 25, section 26, section 27 of water Act, 1974 or section 21 of Air Act, 1981 may within thirty days from the date on which the order is communicated to him, prefer an appeal as per Andhra Pradesh Water Rules, 1976 and Air Rules 1982, to Appellate authority constituted under section 28 of the Water (prevention and control of pollution) Act, 1974 and section 31 of the Air (prevention and control of pollution) Act, 1981.	Noted and condition will be followed.

Compliance of Schedule - B

SI.	Condition			Compliance			
No.	Water Pollution						
1	The water consumption quantities are						
1.	1			ונונו	ies are		GPL is submitting water
	mentioned below: S. Purpose Quantity]		
		o. No	Pulpose	۱	KLD		consumption details and water cess
		1	Gardening/irrigation	-	25		in Form-l regularly.
		2	Dust suppression	Η,	1296.0		The industry is consuming water
		<u> </u>	Domestic		40		within consented quantity only.
		4	Ship supply		32.5		within consented quantity only.
		5	miscellaneous		40.6		Provided 2 No. nos of flow meters
			Total	1	1434.1		for quantification of water used for
	Sour	ce c	of water is Visakhapa	tna	m industr	ial	domestic and other purposes.
	1		ipply Co. the followir				domestic and other purposes.
	1		ed water consumptio	_			
	S.		Purpose		Quantity		
	No)			KLD		
	1	_	ıst suppression		1296.0		
	2		mestic purpose		40.00		
	3		ocess, where by water		73.1		
			ts polluted and polluta				
		_	e easily bio degradable			-	
	4		ocessing , where by ater gets polluted and				
			llutants are not easily	hio			
			gradable				
			Total		1409.1		
	Separate water meters shall be maintained						
	1 .		ssessing the quantit				
	for e	each	of the purpose m	ent	ioned abo	ve	
	for C	ess	assessment purpose	.			
2.	The	Gar	ngavaram Port Limi	ted	(GPL) sh	all	GPL has provided separate energy
	prov	ide	separate energy ma	ers	for Sewa	ge	meters for Sewage Treatment Plant
	Trea	tme	nt Plant (STP) and t	or	Air polluti	on	(STP) and separate energy meter for
	Cont	rol	equipments to	rec	ord ener	gy	the Air pollution Control equipments
	cons	ump	otion.				(MDSS) to record energy
							consumption.
	Air P						
1.	1		ngavaram Port Limi				The mitigation measures being
	1		with ambient air qu		•		implemented by GPL ensures that
	1		(Particulate matter s				the ambient air quality parameters
	μm) - 100μg /m³; PM $_{2.5}$ (Particulate matter size less than 2.5 μm) - 60μg / m³ : SO $_2$ - 80μg /m³ : NO $_X$ - 80μg /m³ ,outside the port		conform to the PCB prescribed				
			standards.				
	premises at the periphery of the industry.						
	Standards for other parameters as mentioned in the National Ambient Air Quality Standards CPCB Notification No.B-						
	1		:0/90/PCI-I, dated 18	.11.:	2009		
		-	evels:	_	- (*)		
			e (6 AM to 10 PM) - 7		• •		
	Nigh	it tir	ne (10 PM to 6 AM) \cdot	70	dB (A).		

2.	The Gangavaram port limited (GPL) shall maintain 3 CAAQMs with online connectivity to APPCB and maintain records.	GPL installed 3 No. of CAAQM stations to measure the parameters PM 10, PM 2.5, SO ² , NO, NO ² , CO at the following locations and data connected to APPCB website. i. Administrative office towards
		H.B. Colony (Station 1): ii. Project site office building towards Venkannapalem (Station2)
		iii. Watch tower – 4 towards Gangavaram village (Station3).As per the data, the SPM values are within Board standards.
3.	The Gangavaram Port Limited (GPL) shall Maintain wind breaking wall all along the Gangavaram village side up to a height 10 mts as wind speed is high in this area	GPL erected wind breaking wall of height 6m on the compound wall of height 3m near Gangavaram village and HB Colony to prevent any dust nuisance towards habitation & maintaining about 50 m width of green belt along port compound wall near Gangavaram (V).
4.	The Gangavaram Port Limited (GPL) shall not establish any other stock yards other than designated stock yards.	GPL has not established any stock yards other than designated stock yards.
5.	The Gangavaram Port Limited (GPL) shall maintain Telescopic chute at ship loading points	GPL is maintaining Telescopic chute at ship loading points.
6.	The Gangavaram port limited (GPL) shall not stock the Materials more than 10mts height where MDSS system available and shall restrict to 6 mts for other stocking heights where tankers water spraying system is maintained in the stockyards.	GPL obtained amendment to this condition vide Amendment to CFO dated 16/09/2016 and the condition was amended as: "GPL shall not stock the materials more than 12 meters height where MDSS system is available and shall maintain stack height of 10 meters at manual stack yards"
7.	The Gangavaram port limited (GPL) shall take up the cleaning of road connected to National Highway in co-ordination with GVMC and R&B Departments.	This condition was deleted vide direction no. 06 vide Order No.754/APPCB/UH-II/TF/VSP/ 2016, dated 12.08.2016. GVMC is taking up the cleaning of road.
8.	The Gangavaram Port Limited (GPL) shall maintain dusty cargo operations if the wind velocity crosses 20 KMPH and all MDSS sprinklers shall start immediately to maintain AAQ standards	Noted and condition is being followed.
9.	The Gangavaram Port Limited (GPL) shall maintain fully mechanized handling equipments for loading and un loading operations for dusty cargo to the maximum extent possible.	Noted and condition is being followed.

General The Gangavaram Port Limited (GPL) shall The records are being maintained maintain the following records and the and are available for inspecting same shall be made available to the officers of the Board. inspecting officers of the Board: a. Cargo handling material wise details. b. Log books for pollution control systems. c. Hazardous/non hazardous solid waste generated and disposed. d. Inspection book. e. Manifest copies of hazardous waste. The Gangavaram Port Limited (GPL) shall dispose solid waste (Non Hazardous) as follows: a. GPL is disposing the municipal solid waste to GVMC. S. Name of Quantity Disposal b. GPL is disposing the discarded No the solid material & plastic material to waste authorized recyclers. 10 T/m Shall be 1. Domestic c. STP sludge is being turned in to solid collected bio-compost and used as manure waste segregated and to green belt. disposed as per d. Lead acid batteries are being MSW Rules in disposed to the supplier on buy consultation back basis. with GVMC Authorities Discarded 10 T/m Shall be 2. material, disposed to plastic authorized material recyclers only 3. Sludge 1.0 T/m Shall he from STP composted and used in green belt programme 4. Lead acid Shall be batteries disposed tο authorized recyclers 3. The Gangavaram Port Limited (GPL) shall GPL has developed plantation of maintain green belt in 50 meters width as 4.84 Lakhs saplings in about stipulated in the EC order dated 07-02-350 acres within the Port 2012. premises besides existance of Prosopis in an extent of about 150 Acres covering periphery of all yards, roads, buildings and all along conveyor belt. Maintaining 50 m width of green belt towards North and North-West direction with special emphasis towards habitation i.e., HB Colony, Peda Gantyada, Venkannapalem, Kongapalem & Gangavaram village.

		Maintaining thick greenbelt at Port Approach road, Railway track side and at Truck parking area along the wind breaking wall towards HB Colony.
		Developed High Density Plantation (Miyawaki) within the Port premises in an extent of 1.0 Acre with 12,120 no. of plantation, as directed by APPCB
		GPL established exclusive nursery with 80,000 saplings and employed 183 people to maintain and improve the green belt on continuous basis.
		About Rs.1.85 Cr per annum is being spent for the development of green belt in the true spirit.
4.	The Gangavaram Port Limited (GPL) shall not store/ handle any hazardous cargo containers within premises.	GPL is not handling container cargo operations.
5.	All types of the fertilizers shall be stored in the closed warehouses only. The port shall ensure that there shall not be any open storage of urea or any other fertilizer materials and all urea & fertilizer material handling warehouses shall be maintained with effluent collection pits for collection and treatment and then used for green belt in the premises after meeting the standards.	GPL is storing the Fertilizers in closed ware houses and provided leachate collection pits around the area of warehouses and connected to STP.
6.	The Gangavaram Port Limited (GPL) shall store fuel oils used for construction equipment vessels / vehicles in a well designed manner and protect them against fire hazards by construction of compound wall to prevent access to unauthorized elements. The surface run off from storage area shall pass through oil water separator before being discharging. The Gangavaram Port Limited (GPL) shall store fuel oils used for construction equipment vessels / vehicles in a well designed manner and protect them against fire hazards by construction of compound wall to prevent access to unauthorized elements. The surface run off from storage area shall pass through oil water separator before being discharging.	GPL is storing the used oil in drums under a shed.
7.	The Gangavaram Port Limited (GPL) shall maintain the Malaria control programme and Health facilities in the operation phase. Vector control programmes. Control of all	GPL is having dispensary within the premises and no malaria cases were reported as of now. All anti malarial measures are taken

	breeding ground shall be carried out by the use of larvicide's in addition to control of adult mosquitoes. The health team should include a trained entomologist.	
8.	The Gangavaram Port Limited (GPL) shall maintain a task force to check the vehicle emissions on permanent basis The Gangavaram Port Limited (GPL) shall maintain a task force to check the vehicle emissions on permanent basis	GPL has provided provision for checking vehicle emissions with a task force team including environment and safety department officials.
9.	The Gangavaram Port Limited (GPL) shall constitute an Environment Management cell with qualified and trained staff.	GPL is having a dedicated Environment Management Team headed by Vice President.
10.	The Gangavaram Port Limited (GPL) shall maintain onsite and offsite emergency action plan after carrying out risk analysis and hazop studies	Complied with the condition.
11.	The Gangavaram Port Limited (GPL) with VUDA shall ensure that no slum development and unauthorized construction occur in the surrounding area.	VMRDA (VUDA) is taking necessary precautions to see that no slum development and unauthorized construction occur in the surrounding area of GPL.
12.	The Gangavaram Port Limited (GPL shall handle alumina in completely closed enclosures. It shall also furnish an action plan to install mechanized system.	GPL is handling the alumina in hoppers and directly through tankers.
13.	The Gangavaram Port Limited (GPL) shall implement fallowing for controlling fugitive emission: a. Adequate dust controlling measures should be undertaken for loading and unloading operations for dusty cargo. b. Closed conveyor belt with water sprinkling arrangement for suppression of dust while conveyor dusty cargo likes coal, iron ore & alumina. c. Vehicle movement minimized / eliminated by implementing mechanical operations.	systems at discharge/feeding points of belt conveyors at each transfer tower. c. Laid BT road within the port premises. d. 5 No. of heavy duty sweeping (3 No. existing & 2 New) machines were deployed for cleaning of berths, back up areas and roads.
	d. All the vehicles involved in transportation of cargo shall be covered with tarpaulin.	e. Covering the outgoing cargo vehicles with tarpaulin.f. Provided dedicated truck/tyre washing facility to wash all the
	e. Traffic management measures adopted to avoid traffic congestion and provide empty dusting vehicle washing / dry cleaning system to clean all out going cargo vehicles.	g. Provided dedicated truck parking facility.

14.	f. Sufficient parking facilities based on traffic density / vehicular movements anticipated from the port. g. Adequate water sprinkling provided on roads and at dusty cargo storage areas for suppression of dust The Gangavaram Port Limited (GPL) shall implement the following measures in the cargo handling and stacking area: a. The ship un-loader maintained with insitu water sprinkling system and unloading hoppers provided with covers on three sides to control fugitive emissions. Iron ore shall be unloaded through wagon tipplers. b. Mechanical stackers cum re-claimers for stacking, transfer and reclamation; Conveyors for transfer of materials to stop manual handling / mobile machines. c. MDSS in stacking areas.	h. Ensuring continuous water sprinkling on the berths, back up areas, at all transfer points, hauling roads with 20 Mobile DSS tankers for dust suppression. i. Established mechanical conveyor system for handling coal & Iron ore to prevent the spillage of cargo and provided closed hoods for the conveyor system to curb fugitive emissions of coal/iron ore particles into the air. ii. Stacker cum re-claimers are being used for loading and unloading the coal. The railway wagons are being loaded mechanically. The Port is having Stacker cum re-claimer-1no., reclaimers-3nos., stackers-3nos., wagon loader-1no., silo of 800 cu.m capacity, ship unloader-2nos, ship loader-1no., wagon tipplier-1no., mobile harbour cranes-5no.
		iii. Mechanical Dust Suppression System (MDSS): 176 No. of water cannons were installed at stack yards for dust suppression by spraying water at high pressure to form blanket of mist on surface of cargo stock to settle the dust.
15.	The Gangavaram Port Limited (GPL) shall ensure AAQ standards of the Board on all environmental conditions without fail.	GPL has provided 3 nos AAQ stations with data logger and connected to APPCB website.
16.	The Gangavaram Port Limited (GPL) shall maintain standby centrifugal pump so as to ensure uninterrupted operation of MDSS.	Complied. There are 4 no. Centrifugal pumps kept standby.
17.	The Gangavaram Port Limited (GPL) shall maintain compliance of all other conditions of CFE orders issued by the Board	Complied with the condition.
18.	The Gangavaram Port Limited (GPL) shall comply with Task Force directions and other directions issued by the Board from time to time.	Complied with the condition.

Compliance of Schedule - C

SI.	Condition	Compliance
No		
1.	All the rules and regulations notified by Ministry of Environment & Forests, Government of India under the E (P) Act, 1986 in respect of management, handling, transportation and storage of the Hazardous waste should be followed.	GPL is following all the rules and regulations notified by Ministry of Environment & Forests, Government of India under the E(P) Act, 1986 in respect of management, handling, transportation and storage of the Hazardous waste.
2.	The Gangavaram Port Limited (GPL) shall not store hazardous waste for more than 90 days as per the Hazardous Wastes (Management. Handling and Tran boundary Movement) Rules, 2008 and amendments thereof.	Complied with the condition.
3.	The Gangavaram Port Limited (GPL) shall dispose Used Lead Acid Batteries to the manufacturers / dealers on buyback basis	GPL is buying the Lead acid on buy back basis.
4.	The Gangavaram Port Limited (GPL) shall maintain 6 copy manifest system for transportation of waste generated and a copy shall be submitted to concern Regional Office of APPCB. The driver who transports Hazardous Waste should be well acquainted about the procedure to be followed in case of an emergency during transit. The transporter should carry a Transport Emergency (TREM) Card.	GPL is following manifest system for disposal of waste oil to APPCB authorized agencies and submitting the copies to the Board.
5.	The Gangavaram Port Limited (GPL) shall maintain proper records for Hazardous Wastes stated in Authorization in FORM-3 i.e., quantity of Incinerable waste, land disposal waste, recyclable waste etc., and file annual returns in Form- 4 as per Rule 22(2) of the Hazardous Wastes (Management, Handling & Tran boundary Movement) Rules, 2008 and amendments thereof	submitted on 25.06.2021 & Form – 4 Submitted on 09.06.2021.
6.	The Gangavaram Port Limited (GPL) shall submit the condition wise compliance report of the conditions stipulated in Schedule A, B & C of this Order on half yearly basis to Board Office, Hyderabad and concerned Regional Office	Complied with the condition. GL is submitting the compliance reports on monthly basis.

Compliance of the conditions stipulated in CFO Auto Renewal Order No. APPCB/VSP/VSP/113/CFO/HO/2020- 10/09/2020, valid up to 31.12.2025.

SI. No.	Condition	Compliance
1.	All other conditions mentioned in Schedules A, B & C of the combined CFO&HWA order issued by the Board vide order dated 13.01.2016 will remain same.	Noted and conditions are being followed as applicable.
2.	The facility shall comply with the standards issued by MoEF&CC / CPCB from time to time.	Noted and condition is being followed.
3.	The industry shall submit Half yearly compliance reports to all the stipulated conditions in Environmental Clearance (EC), Consent for Establishment (CFE) and Consent for Operation (CFO) through website i.e., https://pcb.ap.gov.in by 1st of January and 1st July of every year. The first half yearly compliance reports shall be furnished by the industry and second half yearly compliance reports shall be the audited through NABL accredited third party failing which the Consent Order issued will be cancelled.	Self-certified 1st half yearly compliance report for the period from April 2021 to September 2021 submitted on 29.11.2021 through web site.
4.	The facility shall ensure that dedicated fund is allotted towards Environment Relief Fund (ERF) in the Public Liability Insurance policy and submit a copy of the policy at the Regional Office: Visakhapatnam every year.	GPL is having Public liability Insurance of IFFCO-TOKIO vide Policy No:41063755, dated 28.09.2021, Valid till 14/09/2022 with Premium of Rs-5615/- & ERF of Rs.5615/-
5.	In case of false certification, noncompliance of conditions / directions and discrepancy in furnishing the information by the industry, the Board can withdraw the auto renewed consent and take action under provisions of relevant Acts & Rules.	Noted and condition is being followed.
6.	The facility shall inventorize the storage quantities of hazardous chemicals as per the hazard nature of reactivity / toxicity / flammability / explosive stored/handling in the premises as defined in the Management of Storage, Import of Hazardous Chemicals (MSIHC) Rules, 1989 and the details shall be furnished to the Factories Department and to the Regional Office, APPCB on monthly basis duly certifying the same.	GPL is not handling any Hazardous cargo/Containers/Chemicals.
7.	The facility shall identify major accident hazard chemicals & list out the hazardous chemicals endangered to human health & environment and the details shall be furnished to the Factories Department and to the Regional Office, APPCB time to time duly certifying the same by the industry. Further the facility shall extend training to the working personnel's while handling hazardous chemicals for prevention of	GPL is not handling any Hazardous cargo/Containers/Chemicals.

	accidents and necessary antidotes to ensure the safety, as per the MSIHC Rules, 1989.	
8.	The facility shall submit the copy of the safety audit report and On-Site / Off Site Emergency Plans as applicable after being certified by the Factories Department/concerned authority, to the APPCB, Regional Office from time to time, if the storage quantity of hazardous chemicals is equal to or, in excess of the threshold quantities specified in schedule 2 & 3 of MSIHC Rules, 1989.	An onsite and offsite emergency action plan has been prepared and submitted to APPCB, RO, VSP. Mock drills are being conducted twice in a year.
9.	The facility shall carryout calibration of safety equipments and leak detection systems at regular intervals and shall certify the same with the Factories Department/concerned authority. That certified copy shall be submitted to the APPCB, Regional Office. The facility shall install fluorescent Wind Vane at the highest point in the facility premises.	 GPL install fluorescent Wind Vane at the following two places within the Port premises. 1. On the top of Over Head Tank near Harbour Gate besides GPL Canteen. 2. On the top of Commercial Office Building (COB)
10	The facility shall inventorize the hazardous wastes and its quantities stored within the facility premises as per the Hazardous and Other Wastes (Management and Transboundary Movement) Rules, 2016 (HOWM Rules, 2016) and shall furnish the details to Regional Office, APPCB on monthly basis duly certifying the same by the industry.	GPL is not handling any Hazardous cargo/Containers/Chemicals. GPL is permitted to handle Used Lubricating oil of 12000 LPA. The generation, storage & disposal details are submitting to APPCB through Form – IV. Latest submission is on 09.06.2021 for the year 2020-2021.
11	The facility shall allow import of hazardous cargoes only after the importer complies with the MSIHC Rules, 1989.	GPL Not handling any Hazardous cargo/Containers/Chemicals.



GANGAVARAM PORT LIMITED

GPL/ENV/APPCB/2022-23/005

Date: 05.05.2022.

To

Sr. Environmental Engineer, CESS
Andhra Pradesh Pollution Control Board,
D.no:33-26-14D/2,
Near Sunrise Hospital, Pushpa Hotel Center,
Chalamalavari Street, Kasturibaipet,
Vijayawada-520010.
Andhra Pradesh.

Dear Sir,

Sub: Water Consumption Cess Statement - Reg.

Please find enclosed herewith the water consumption statement in FORM - 1 for the month of April - 2022, prepared under the Water (Prevention and Control of Pollution) Cess Act, 1977.

We request you to kindly consider the same.

Thanking you

Yours Sincerely,

Authorized Signatory

Encl: As above.

Copy submitted to the Environmental Engineer, A.P. Pollution Control Board, Regional Office, Visakhapatnam for kind information.

Project Office

: Pedagantyada Mandal, Gangavaram (Post), Visakhapatnam - 530 044. Andhra Pradesh, INDIA

Tel.: +91 891 270 1177, 2277, 276 1377, Fax: +91 891 270 3377

Corporate Office : 2nd, 3rd and 4th Floors, "Hansa Plaza", Plot No.798, Road No.36, Jubilee Hills, Hyderabad - 500 033

Tel.: 040 3359 9999, Fax No.: 040 3359 9990

 $\label{eq:form-1} FORM-1$ Returns Regarding Water Consumed During Month of April - 2022

Name & Address		of which water nsumed	Quantity of water consumed	If the meter was out of order the monthly avg. consumption of the water for the past 3 months of working period	Qty. of water qualifying for rebate according to the assesses	Remarks
(1)		(2)	(3)	(4)	(5)*	(6)
Gangavaram Port Limited, Gangavaram Post, Peda Gatyada	1) Industrial cooling/ spraying in mine pits or boiler feed.	Total from Municipal mains i. From Municipal water supply mains ii. From well / tube well.	34,312 Cum/KL		-	<u>.</u> 8
Mandal, Visakhapatnam.	2) Domestic Water	i. From Municipal water supply mains ii. From well / tube well	Cum/KL 4463.80	-	-	-

^(*) for claiming rebate under Col.7, the assessed shall indicate in the column the analytical and other reports annexed to this return in support of this claim.

Doll



An ISO 9001: 2015 Certified Lab

Centre for Aquaculture & Environmental Sciences

#2-9-5, Near Samatha College, Sector -9, MVP Colony, Visakhapatnam-530 017. Ph: 0891 - 2551277, 8142222277, 73969 08000 | E-mail: biochemlabs@biochemlabs.in | biochemlabs888@gmail.com | www.biochemlabs.in

Environmental Monitoring Reports

(16 April and 30 April 2022)

Gangavaram Port LTD.
Pedagantyada(Mandal)
Gangavaram (Post)
Visakhapatnam - 530 044





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Centre for Aquaculture & Environmental Sciences

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TEST REPORT ANALYSIS OF GROUND WATER SAMPLE

BCL Ref. No.	GPL/02/189	Issued to:
Monitoring Date	April 16, 2022	M/s. Gangavaram Port Ltd.
Reporting Date	April 21, 2022	Gangavaram (Village)
Organization	M/s. Gangavaram Port Ltd.	PedaGantiyada (Mandalam)
Type of Sample	Ground Water	Visakhapatnam.
Location	Gangavaram Village	
Sample Collected by	M/s. Biochem Labs	
Reference Standard	IS: 10500, 1991	

S. No.	Parameter	Unit	Result	Limit IS: 10500
1.	Temperature	°C	26.4	-
2.	pH	H+ concen.	7.12	6.5-8.5
3.	Total Hardness	mg/l	292	300
4.	Calcium (as Ca)	mg/l	58	75
5.	Magnesium (as Mg)	mg/l	24	30
6.	Chlorides	mg/l	96	250
7.	Manganese	mg/l	0.014	0.1
8.	Copper	mg/l	0.012	0.05
9.	Total Alkalinity	mg/l	68	200
10.	Total Dissolved Solids	mg/l	486	500
11.	Sulphate	mg/l	54	200
12.	Dissolved Oxygen	mg/l	3.0	50 8 1
13.	Nitrite (as NO ₂)	mg/l	0.018	0.02
14.	Iron	mg/l	0.12	0.3
15.	Fluoride	mg/l	0.8	1.0
16.	Oil & Grease	mg/l	BDL	0.01
17.	Chromium (as Cr ⁺⁶)	mg/l	0.014	0.05
18.	Cyanide	mg/l	NIL	0.05
19.	Zinc	mg/l	0.6	5.0
20.	Phenolic Compound	mg/l	NIL	0.001
21.	Free Residual Chlorine	mg/l	0.12	0.2
22.	Total Coli forms Count	MPN Index/100ml	8	1-11
23.	E.coli	Cfu/ml	Absent	Absent

Analyst





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TEST REPORT ANALYSIS OF GROUND WATER SAMPLE

BCL Ref. No.	GPL/02/190	Issued to:	
Monitoring Date	April 16, 2022	M/s. Gangavaram Port Ltd.	
Reporting Date	April 21, 2022	Gangavaram (Village)	
Organization	M/s. Gangavaram Port Ltd.	PedaGantiyada (Mandalam)	
Type of Sample	Ground Water	Visakhapatnam.	
Location	North bounder wall open well		
Sample Collected by	M/s. Biochem Labs		
Reference Standard	IS: 10500, 1991	W	

S. No.	Parameter	Unit	Result	Limit IS: 10500
1.	Temperature	°C	27.6	
2.	pH	H+ concen.	7.10	6.5-8.5
3.	Total Hardness	mg/l	226	300
4.	Calcium (as Ca)	mg/l	58	75
5.	Magnesium (as Mg)	mg/l	26	30
6.	Chlorides	mg/l	62	250
7.	Manganese	mg/l	0.02	0.1
8.	Copper	mg/l	0.014	0.05
9.	Total Alkalinity	mg/l	112	200
10.	Total Dissolved Solids	mg/l	460	500
11.	Sulphate	mg/l	48	200
12.	Dissolved Oxygen	mg/l	2.2	-
13.	Nitrite (as NO ₂)	mg/l	0.014	0.02
14.	Iron	mg/l	0.12	0.3
15.	Fluoride	mg/l	0.6	1.0
16.	Oil & Grease	mg/l	BDL	0.01
17.	Chromium (as Cr ⁺⁶)	mg/l	0.01	0.05
18.	Cyanide	mg/l	NIL	0.05
19.	Zinc	mg/l	0.2	5.0
20.	Phenolic Compound	mg/l	NIL	0.001
21.	Free Residual Chlorine	mg/l	0.06	0.2
22.	Total Coli forms Count	MPN Index/100ml	6	1-11
23.	E.coli	Cfu/ml	Absent	Absent

Analyst





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TEST REPORT NOISE LEVEL MONITORING

BCL Ref. No.	GPL/ 04/215	Issued to:	
Monitoring Date	April 16, 2022	10// 5. Garigavarari i ort Eta.	
Organization	M/s. Gangavaram Port Ltd.	Gangavaram (Village) PedaGantiyada (Mandalam)	
Collected by	M/s. Biochem Labs	Visakhapatnam.	

S.	Parameter	Unit	Location	Location Result		CPCI	3 Limit
No.			Day time	Night time	Industrial		
			. //			Day time	Night time
1.	Noise Level	Decibels	Cargo area	64	60	75	70
2.	Noise Level	Decibels	PedaGantyada/ Security Gate	62	58	-	-
			The second secon			ļ	
				Day time	Night time	Resid	dential
		7	13	Day time	Night time	Residence Day time	
111		7	15	Day time	Night time		
3.	Noise Level	Decibels	Gangavaram	Day time	Night time		dential Night time 45

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TEST REPORT NOISE LEVEL MONITORING

BCL Ref. No.	GPL/ 04/216	Issued to:
Monitoring Date	April 26, 2022	M/s. Gangavaram Port Ltd.
Organization	M/s. Gangavaram Port Ltd.	Gangavaram (Village) PedaGantiyada (Mandalam)
Collected by	M/s. Biochem Labs	Visakhapatnam.

S.	Parameter	Unit	Location Result			PCB Limit	
No.			Day time	Night time	Industrial		
			11	- A		Day time	Night time
1.	Noise Level	Decibels	Cargo area	70	62	75	70
2.	Noise Level	Decibels	PedaGantyada/ Security Gate	68	60	-	-
			AND SECTION ASSESSMENT		A TONISH TONISH		
		-/-		Day time	Night time	Resid	dential
		7		Day time	Night time	Reside Day time	dential Night time
3.	Noise Level	Decibels	Gangavaram	Day time	Night time		

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TEST REPORT ANALYSIS OF MARINE WATER

BCL Ref. No.	GPL/ 05/215	Issued to:
Monitoring Date	April 16, 2022	M/s. Gangavaram Port Ltd.
Reporting Date :	April 21, 2022	Gangavaram (Village)
Organization	M/s. Gangavaram Port Ltd.	PedaGantiyada (Mandalam)
Type of Sample	Marine Water (Low Tide / High Tide)	Visakhapatnam.
Sample Collected by	M/s. Biochem Labs	

S. No	Parameter	Unit		Re	sult	
	MATERIAL PROPERTY STATE AND THE STATE		Harbou	rBasine	Port Entrar	ce Channel
			Low tide	High tide	Low tide	High tide
1.	Temperature	°C	30.2	29.4	28.2	30.4
2.	рН	H+ conc	8.22	8.18	8.16	8.20
3.	Salinity	PSU	30.6	32.0	32.2	32.0
4.	Turbidity	NTU	34	22	14	12
5.	Total Suspended Solids	mg/l	38	20	16	10
6.	Transparency	Mts.	0.8	1.0	1.2	1.4
7.	Electrical Conductivity	mMHo	32.6	30.2	36.0	34.4

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TEST REPORT ANALYSIS OF MARINE WATER

BCL Ref. No.	GPL/ 05/215	Issued to:
Monitoring Date	April 16, 2022	M/s. Gangavaram Port Ltd.
Reporting Date	April 21, 2022	Gangavaram (Village)
Organization	M/s. Gangavaram Port Ltd.	PedaGantiyada (Mandalam)
Type of Sample	Marine Water (Low Tide / High Tide)	Visakhapatnam.
Sample Collected by	M/s. Biochem Labs	vioantapatriam.

S. No	Parameter	Unit	Result			
				South brake Wall Outside		Wall Outside
			Low tide	High tide	Low tide	High tide
1.	Temperature	°C	28.2	29.4	30.2	26.8
2.	рН	H+ conc	8.24	8.22	8.20	8.18
3.	Salinity	PSU	32.6	33.0	32.8	35.2
4.	Turbidity	NTU	14	18	12	10
5.	Total Suspended Solids	mg/l	18	20	14	12
6.	Transparency	Mts.	1.2	1.0	1.2	1.4
7.	Electrical Conductivity	mMHo	34.2	36.0	33.6	35.0







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TEST REPORT ANALYSIS OF MARINE WATER

BCL Ref. No.	GPL/ 05/215	Issued to:
Monitoring Date	April 16, 2022	M/s. Gangavaram Port Ltd.
Reporting Date	April 21, 2022	Gangavaram (Village)
Organization	M/s. Gangavaram Port Ltd.	PedaGantiyada (Mandalam)
Type of Sample	Marine Water (Low Tide / High Tide)	Visakhapatnam.
Sample Collected by	M/s. Biochem Labs	

S. No	Parameter	Unit		R	esult	
			HarbourBasine		Port Entrance Channe	ce Channel
			Low tide	High tide	Low tide	High tide
1.	Dissolved Oxygen	mg/l	3.8	4.6	4.8	5.2
2.	Biological Oxygen Demand	mg/l	1.2	2.0	1.6	2.8
3.	Oil & Grease	mg/l	1.0	0.8	0.6	0.8
4.	Sulphate	mg/l	968	954	1018	1024
5.	Phosphate	mg/l	0.36	0.32	0.24	0.30
6.	Nitrate	mg/l	3.0	2.8	2.0	2.2
7.	Nitrite	mg/l	0.024	0.028	0.026	0.024
8.	Chloride	mg/l	20436	19842	19684	21328
9.	Chromium	ppm	0.024	0.022	0.028	0.020
10.	Mercury	ppm	Nil	Nil	Nil	Nil
11.	Zinc	ppm	0.24	0.18	0.14	0.10
12.	Iron	ppm	0.03	0.022	0.024	0.026
13.	Manganese	ppm	0.024	0.028	0.026	0.018
14.	Cadmium	ppm	Nil	Nil	Nil	Nil

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TEST REPORT ANALYSIS OF MARINE WATER

BCL Ref. No.	GPL/ 05/215	Issued to:
Monitoring Date	April 16, 2022	M/s. Gangavaram Port Ltd.
Reporting Date	April 21, 2022	Gangavaram (Village)
Organization	M/s. Gangavaram Port Ltd.	- PedaGantiyada (Mandalam)
Type of Sample	Marine Water (Low Tide / High Tide)	Visakhapatnam.
Sample Collected by	M/s. Biochem Labs	Visakriapatram.

S. No	Parameter	Unit	- 48	Re	esult	
			South brake	South brake Wall Outside		Vall Outside
			Low tide	High tide	Low tide	High tide
1.	Dissolved Oxygen	mg/l	4.8	4.2	5.0	5.6
2.	Biological Oxygen Demand	mg/l	1.6	2.0	2.6	3.0
3.	Oil & Grease	mg/l	0.4	0.8	0.4	1.0
4.	Sulphate	mg/l	1042	1016	1064	1028
5.	Phosphate	mg/l	0.34	0.28	0.42	0.22
6.	Nitrate	mg/l	3.0	2.8	1.8	2.0
7.	Nitrite	mg/l	0.024	0.026	0.032	0.028
8.	Chloride	mg/l	20680	21268	21632	19486
9.	Chromium	ppm	0.028	0.024	0.026	0.032
10.	Mercury	ppm	Nil	Nil	Nil	Nil
11.	Zinc	ppm	0.16	0.14	0.12	0.1
12.	Iron	ppm	0.032	0.022	0.028	0.02
13.	Manganese	ppm	0.02	0.024	0.016	0.018
14.	Cadmium	ppm	Nil	Nil	Nil	Nil

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TEST REPORT ANALYSIS OF MARINE WATER

BCL Ref. No. GPL/ 05/215		Issued to:	
Monitoring Date	April 16, 2022	M/a Cangayaram Dart Ltd	
Reporting Date	April 21, 2022	M/s. Gangavaram Port Ltd.	
Organization M/s. Gangavaram Port Ltd.		— Gangavaram (Village) — PedaGantiyada (Mandalam)	
Type of Sample	Marine Water (Low Tide)	Visakhapatnam.	
Sample Collected by	M/s. Biochem Labs	vioaniapanam.	

Station Name: Harbourbasine / Low Tide

S. No	PARAMETERS	UNIT	RESULT
1.	Phytoplankton Count	No. /L	10000
2.	Zooplankton Count	No./m³	860
3.	Chlorophyll a	mg/m ³	1.4
4.	Chlorophyll b	mg/m ³	2.6
5.	Primary Productivity	gC/m ²	3.2
6.	Biomass	mg/m ²	2.8

S.No	Species	Total Species count in 1L
A.	Phytoplankton Species	AND AND
	Prorocentrummicans	16
	Amphora lineolata	06
	Cymbella marina	22
	Bacteriastrum delicatulum	10
	Thalassionema nitzschioides	02
	Chaetoceros dydymus	04
	Skeletonemacostatum	0
	Thalassiothrixlongissima	16
	Cymbella marina	10
B.	Zooplankton Species	
	Foraminifera	12
	Chaetognatha	06
	Amphipoda	10
	Cladocera	0
	Eggs of fish & larvae	04

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TEST REPORT ANALYSIS OF MARINE WATER

BCL Ref. No.	GPL/ 05/215	Issued to:	
Monitoring Date	April 16, 2022	M/a Consequences Doublad	
Reporting Date	April 21, 2022	M/s. Gangavaram Port Ltd.	
Organization M/s. Gangavaram Port Ltd.		Gangavaram (Village) PedaGantiyada (Mandalam) Visakhapatnam.	
Type of Sample Marine Water (Low Tide)			
Sample Collected by	M/s. Biochem Labs	visakiiapatiiaiii.	

Station Name: Port Entrance Channel / Low Tide

S. No	PARAMETERS	UNIT	RESULT
1.	Phytoplankton Count	No. /L	9400
2.	Zooplankton Count	No./m³	500
3.	Chlorophyll a	mg/m ³	2.8
4.	Chlorophyll b	mg/m ³	2.4
5.	Primary Productivity	gC/m ²	3.0
6.	Biomass	mg/m ²	2.6

S.No	Species	Total Species count in 1L
Α.	Phytoplankton Species Prorocentrummicans Amphora lineolata Cymbella marina Bacteriastrum delicatulum Thalassionema nitzschioides Chaetoceros dydymus Skeletonemacostatum Thalassiothrixlongissima	22 10 06 24 08 02 0
B.	Cymbella marina Zooplankton Species Foraminifera Chaetognatha Amphipoda Cladocera Eggs of fish & larvae	18 22 10 04 0

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TEST REPORT ANALYSIS OF MARINE WATER

BCL Ref. No.	GPL/ 05/215	Issued to:		
Monitoring Date April 16, 2022		M/s Consequence Doublish		
Reporting Date	April 21, 2022	M/s. Gangavaram Port Ltd.		
Organization M/s. Gangavaram Port Ltd. Type of Sample Marine Water (High Tide)		Gangavaram (Village) PedaGantiyada (Mandalam) Visakhapatnam.		
			Sample Collected by	M/s. Biochem Labs

Station Name: Harbourbasine / High Tide

S. No	PARAMETERS	UNIT	RESULT
1.	Phytoplankton Count	No. /L	11000
2.	Zooplankton Count	No./m³	850
3.	Chlorophyll a	mg/m ³	3.6
4.	Chlorophyll b	mg/m ³	2.8
5.	Primary Productivity	gC/m ²	3.2
6.	Biomass	mg/m ²	2.0

S.No	Species	Total Species count in 1L
Α.	Phytoplankton Species Prorocentrummicans Amphora lineolata Cymbella marina Bacteriastrum delicatulum Thalassionema nitzschioides Chaetoceros dydymus	10 14 08 0 10 28
	Skeletonemacostatum Thalassiothrixlongissima Cymbella marina	08 12 10
В.	Zooplankton Species Foraminifera Chaetognatha Amphipoda	18 14 06
	Cladocera Eggs of fish & larvae	10 04

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TEST REPORT ANALYSIS OF MARINE WATER

BCL Ref. No.	GPL/ 05/215	Issued to:
Monitoring Date	April 16, 2022	Ma Congoverem Port Ltd
Reporting Date	April 21, 2022	M/s. Gangavaram Port Ltd. Gangavaram (Village)
Organization	M/s. Gangavaram Port Ltd.	PedaGantiyada (Mandalam)
Type of Sample	Marine Water (High Tide)	Visakhapatnam.
Sample Collected by	M/s. Biochem Labs	visakiiapatiiaiii.

Station Name: Port Entrance Channel / High Tide

S. No	PARAMETERS	UNIT	RESULT
1.	Phytoplankton Count	No. /L	8600
2.	Zooplankton Count	No./m ³	400
3.	Chlorophyll a	mg/m ³	2.4
4.	Chlorophyll b	mg/m ³	2.2
5.	Primary Productivity	gC/m ²	1.6
6.	Biomass	mg/m ²	2.0

S.No	Species	Total Species count in 1L
Α.	Phytoplankton Species Prorocentrummicans Amphora lineolata Cymbella marina Bacteriastrum delicatulum Thalassionema nitzschioides Chaetoceros dydymus Skeletonemacostatum Thalassiothrixlongissima Cymbella marina	10 22 14 0 08 10 22 12
B.	Zooplankton Species Foraminifera Chaetognatha Amphipoda Cladocera Eggs of fish & larvae	12 06 0 0 06 12

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TEST REPORT ANALYSIS OF MARINE WATER

BCL Ref. No.	GPL/ 05/215	Issued to:
Monitoring Date	April 16, 2022	M/s Consistences Destitut
Reporting Date	April 21, 2022	M/s. Gangavaram Port Ltd. Gangavaram (Village)
Organization	M/s. Gangavaram Port Ltd.	PedaGantiyada (Mandalam)
Type of Sample	Marine Water (Low Tide)	Visakhapatnam.
Sample Collected by	M/s. Biochem Labs	vioakriapatriam.

Station Name: South brake Wall outside / Low Tide

S. No	PARAMETERS	UNIT	RESULT
1.	Phytoplankton Count	No. /L	10000
2.	Zooplankton Count	No./m³	800
3.	Chlorophyll a	mg/m ³	3.4
4.	Chlorophyll b	mg/m ³	2.6
5.	Primary Productivity	gC/m ²	3.2
6.	Biomass	mg/m ²	2.6

S.No	Species	Total Species count in 1L
A.	Phytoplankton Species	
	Prorocentrummicans	28
	Amphora lineolata	36
	Cymbella marina	50
	Bacteriastrum delicatulum	32
	Thalassionema nitzschioides	18
	Chaetoceros dydymus	0
	Skeletonemacostatum	26
	Thalassiothrixlongissima	32
	Cymbella marina	10
B.	Zooplankton Species	
	Foraminifera	28
	Chaetognatha	10
	Amphipoda	34
	Cladocera	0
	Eggs of fish & larvae	26

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TEST REPORT ANALYSIS OF MARINE WATER

BCL Ref. No.	GPL/ 05/215	Issued to:
Monitoring Date	April 16, 2022	M/a Companyarana Dani I tal
Reporting Date	April 21, 2022	M/s. Gangavaram Port Ltd.
Organization	M/s. Gangavaram Port Ltd.	——— Gangavaram (Village) ——— PedaGantiyada (Mandalam)
Type of Sample	Marine Water (Low Tide)	Visakhapatnam.
Sample Collected by	M/s. Biochem Labs	Visakiiapatiiaiii.

Station Name: North brake Wall Outside / Low Tide

S. No	PARAMETERS	UNIT	RESULT
1.	Phytoplankton Count	No. /L	1400
2.	Zooplankton Count	No./m ³	1000
3.	Chlorophyll a	mg/m ³	3.4
4.	Chlorophyll b	mg/m ³	2.8
5.	Primary Productivity	gC/m ²	3.0
6.	Biomass	mg/m ²	2.6

S.No	Species	Total Species count in 1L
Α.	Phytoplankton Species	
	Prorocentrummicans	34
	Amphora lineolata	60
	Cymbella marina	36
	Bacteriastrum delicatulum	04
	Thalassionema nitzschioides	48
	Chaetoceros dydymus	24
	Skeletonemacostatum	28
	Thalassiothrixlongissima	10
	Cymbella marina	0
B.	Zooplankton Species	
	Foraminifera	44
	Chaetognatha	36
	Amphipoda	04
	Cladocera	10
	Eggs of fish & larvae	08

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BCL *



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TEST REPORT ANALYSIS OF MARINE WATER

BCL Ref. No.	GPL/ 05/215	Issued to:
Monitoring Date	April 16, 2022	M/a Canana yanana Bard I I I
Reporting Date	April 21, 2022	M/s. Gangavaram Port Ltd.
Organization	M/s. Gangavaram Port Ltd.	Gangavaram (Village)
Type of Sample	Marine Water (High Tide)	PedaGantiyada (Mandalam) Visakhapatnam.
Sample Collected by	M/s. Biochem Labs	visakiiapatiiaiii.

Station Name: South brake Wall Outside / High Tide

S. No	PARAMETERS	UNIT	RESULT
1.	Phytoplankton Count	No. /L	9500
2.	Zooplankton Count	No./m³	650
3.	Chlorophyll a	mg/m ³	2.4
4.	Chlorophyll b	mg/m ³	2.2
5.	Primary Productivity	gC/m ²	3.0
6.	Biomass	mg/m ²	2.6

S.No	Species	Total Species count in 1L
A.	Phytoplankton Species Prorocentrummicans	
		42
	Amphora lineolata	50
	Cymbella marina	28
	Bacteriastrum delicatulum	30
	Thalassionema nitzschioides	04
	Chaetoceros dydymus	26
	Skeletonemacostatum	0
	Thalassiothrixlongissima	10
	Cymbella marina	26
B.	Zooplankton Species	
	Foraminifera	46
	Chaetognatha	08
	Amphipoda	28
	Cladocera	04
	Eggs of fish & larvae	18

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TEST REPORT ANALYSIS OF MARINE WATER

BCL Ref. No.	GPL/ 05/215	Issued to: M/s. Gangavaram Port Ltd. Gangavaram (Village) PedaGantiyada (Mandalam)		
Monitoring Date	April 16, 2022			
Reporting Date	April 21, 2022			
Organization	M/s. Gangavaram Port Ltd.			
Type of Sample	Marine Water (High Tide)	Visakhapatnam.		
Sample Collected by	M/s. Biochem Labs	vioaniapatiani.		

Station Name: North brake Wall Outside / High Tide

S. No	PARAMETERS	UNIT	RESULT
1.	Phytoplankton Count	No. /L	10500
2.	Zooplankton Count	No./m³	800
3.	Chlorophyll a	mg/m³	3.4
4.	Chlorophyll b	mg/m ³	2.6
5.	Primary Productivity	gC/m ²	3.0
6.	Biomass	mg/m ²	2.8

S.No	Species	Total Species count in 1L		
Α.	Phytoplankton Species Prorocentrummicans Amphora lineolata Cymbella marina Bacteriastrum delicatulum Thalassionema nitzschioides Chaetoceros dydymus Skeletonemacostatum Thalassiothrixlongissima Cymbella marina	56 12 26 04 46 34 06 28		
В.	Zooplankton Species Foraminifera Chaetognatha Amphipoda Cladocera Eggs of fish & larvae	04 32 40 28 0 02		

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TEST REPORT ANALYSIS OF MARINE WATER

BCL Ref. No.	GPL/ 05/216	Issued to:		
Monitoring Date	April 30, 2022	M/s. Gangavaram Port Ltd.		
Reporting Date	May 05, 2022	Gangavaram (Village)		
Organization	M/s. Gangavaram Port Ltd.	PedaGantiyada (Mandalam) Visakhapatnam.		
Type of Sample	Marine Water (Low Tide / High Tide)			
Sample Collected by	M/s. Biochem Labs			

S. No	Parameter	Unit	Result			
			Harbou	rBasine	Port Entrar	ce Channel
		A 1	Low tide	High tide	Low tide	High tide
1.	Temperature	°C	26.6	28.2	30.2	28.6
2.	pH	H+ conc	8.14	8.18	8.20	8.24
3.	Salinity	PSU	32.0	33.4	32.2	34.0
4.	Turbidity	NTU	34	20	12	14
5.	Total Suspended Solids	mg/l	42	34	18	16
6.	Transparency	Mts.	0.6	0.9	1.4	1.2
7.	Electrical Conductivity	mMHo	32.4	33.6	34.4	31.8







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TEST REPORT ANALYSIS OF MARINE WATER

BCL Ref. No.	GPL/ 05/216	Issued to:			
Monitoring Date	April 30, 2022	M/s. Gangavaram Port Ltd.			
Reporting Date	May 05, 2022	Gangavaram (Village)			
Organization M/s. Gangavaram Port Ltd.		PedaGantiyada (Mandalam)			
Type of Sample	Marine Water (Low Tide / High Tide)	Visakhapatnam.			
Sample Collected by	M/s. Biochem Labs				

S. No	Parameter	Unit		sult		
			South brake Wall Outside		North brake Wall Outsid	
			Low tide	High tide	Low tide	High tide
1.	Temperature	°C	24.6	26.0	27.2	28.6
2.	pH	H+ conc	8.22	8.20	8.24	8.28
3.	Salinity	PSU	32.0	33.2	34.6	34.0
4.	Turbidity	NTU	12	10	10	12
5.	Total Suspended Solids	mg/l	18	12	16	20
6.	Transparency	Mts.	1.2	1.6	1.8	1.6
7.	Electrical Conductivity	mMHo	34.6	32.2	34.8	35.4

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TEST REPORT ANALYSIS OF MARINE WATER

BCL Ref. No.	GPL/ 05/216	Issued to:		
Monitoring Date	April 30, 2022	M/s. Gangavaram Port Ltd.		
Reporting Date	May 05, 2022	Gangavaram (Village)		
Organization	M/s. Gangavaram Port Ltd.	PedaGantiyada (Mandalam)		
Type of Sample	Marine Water (Low Tide / High Tide)	Visakhapatnam.		
Sample Collected by	M/s. Biochem Labs	The state of the s		

S. No	Parameter	Unit	Result			
			HarbourBasine		Port Entrance Channe	ce Channel
			Low tide	High tide	Low tide	High tide
1.	Dissolved Oxygen	mg/l	4.4	5.0	5.6	4.8
2.	Biological Oxygen Demand	mg/l	1.6	2.2	2.4	2.0
3.	Oil & Grease	mg/l	1.0	0.8	0.4	0.6
4.	Sulphate	mg/l	968	1012	986	1046
5.	Phosphate	mg/l	0.34	0.32	0.26	0.22
6.	Nitrate	mg/l	3.2	2.0	1.8	2.2
7.	Nitrite	mg/l	0.028	0.026	0.012	0.018
8.	Chloride	mg/l	18692	20482	19348	20260
9.	Chromium	ppm	0.026	0.022	0.018	0.024
10.	Mercury	ppm	Nil	Nil	Nil	Nil
11.	Zinc	ppm	0.20	0.18	0.16	0.14
12.	Iron	ppm	0.024	0.026	0.02	0.022
13.	Manganese	ppm	0.026	0.022	0.014	0.018
14.	Cadmium	ppm	Nil	Nil	Nil	Nil

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TEST REPORT ANALYSIS OF MARINE WATER

BCL Ref. No.	GPL/ 05/216	Issued to:			
Monitoring Date	April 30, 2022	M/s. Gangavaram Port Ltd.			
Reporting Date	May 05, 2022	Gangavaram (Village)			
Organization	M/s. Gangavaram Port Ltd.	PedaGantiyada (Mandalam)			
Type of Sample	Marine Water (Low Tide / High Tide)	Visakhapatnam.			
Sample Collected by	M/s. Biochem Labs	vioakijapatiani.			

S. No	Parameter	Unit	1	R	esult	
			South brake	South brake Wall Outside		/all Outside
			Low tide	High tide	Low tide	High tide
1.	Dissolved Oxygen	mg/l	6.0	5.8	4.8	5.6
2.	Biological Oxygen Demand	mg/l	2.8	2.0	1.4	1.8
3.	Oil & Grease	mg/l	0.6	0.6	0.4	0.8
4.	Sulphate	mg/l	1024	1018	1036	1048
5.	Phosphate	mg/l	0.4	0.38	0.24	0.32
6.	Nitrate	mg/l	3.0	2.8	1.8	1.6
7.	Nitrite	mg/l	0.024	0.018	0.016	0.02
8.	Chloride	mg/l	21436	20682	19846	20496
9.	Chromium	ppm	0.026	0.02	0.018	0.022
10.	Mercury	ppm	Nil	Nil	Nil	Nil
11.	Zinc	ppm	0.14	0.18	0.16	0.10
12.	Iron	ppm	0.018	0.016	0.022	0.02
13.	Manganese	ppm	0.024	0.022	0.018	0.014
14.	Cadmium	ppm	Nil	Nil	Nil	Nil

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TEST REPORT ANALYSIS OF MARINE WATER

BCL Ref. No.	GPL/ 05/216	Issued to:
Monitoring Date	April 30, 2022	M/s. Gangavaram Port Ltd.
Reporting Date	May 05, 2022	Gangavaram (Village)
Organization	M/s. Gangavaram Port Ltd.	PedaGantiyada (Mandalam)
Type of Sample	Marine Water (Low Tide)	Visakhapatnam.
Sample Collected by	M/s. Biochem Labs	

Station Name: Harbourbasine / Low Tide

S. No	PARAMETERS	UNIT	RESULT
1.	Phytoplankton Count	No. /L	12000
2.	Zooplankton Count	No./m ³	1400
3.	Chlorophyll a	mg/m ³	2.0
4.	Chlorophyll b	mg/m ³	2.4
5.	Primary Productivity	gC/m ²	2.2
6.	Biomass	mg/m ²	1.8

S.No	Species	Total Species count in 1L
Α.	Phytoplankton Species	ASST ASST
	Prorocentrummicans	18
	Amphora lineolata	20
	Cymbella marina	04
	Bacteriastrum delicatulum	06
	Thalassionema nitzschioides	32
	Chaetoceros dydymus	10
	Skeletonemacostatum	04
	Thalassiothrixlongissima	20
	Cymbella marina	14
В.	Zooplankton Species	
	Foraminifera	18
	Chaetognatha	20
	Amphipoda	16
	Cladocera	10
	Eggs of fish & larvae	04

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TEST REPORT ANALYSIS OF MARINE WATER

BCL Ref. No.	GPL/ 05/216	Issued to:
Monitoring Date	April 30, 2022	M/s. Gangavaram Port Ltd.
Reporting Date	May 05, 2022	Gangavaram (Village)
Organization	M/s. Gangavaram Port Ltd.	PedaGantiyada (Mandalam)
Type of Sample	Marine Water (Low Tide)	Visakhapatnam.
Sample Collected by	M/s. Biochem Labs	violation patriorii.

Station Name: Port Entrance Channel / Low Tide

B. No	PARAMETERS	UNIT	RESULT
1.	Phytoplankton Count	No. /L	10000
2.	Zooplankton Count	No./m³	900
3.	Chlorophyll a	mg/m ³	2.4
4.	Chlorophyll b	mg/m ³	2.8
6.	Primary Productivity	gC/m ²	3.2
6.	Biomass	mg/m ²	1.6

S.No	Species	Total Species count in 1L
A.	Phytoplankton Species	
	Prorocentrummicans	20
	Amphora lineolata	10
	Cymbella marina	28
	Bacteriastrum delicatulum	14
	Thalassionema nitzschioides	0
	Chaetoceros dydymus	32
	Skeletonemacostatum	04
	Thalassiothrixlongissima	10
	Cymbella marina	02
B.	Zooplankton Species	
	Foraminifera	28
	Chaetognatha	16
	Amphipoda	04
	Cladocera	0
	Eggs of fish & larvae	18

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TEST REPORT ANALYSIS OF MARINE WATER

BCL Ref. No.	GPL/ 05/216	Issued to:
Monitoring Date	April 30, 2022	M/s. Gangavaram Port Ltd.
Reporting Date	May 05, 2022	Gangavaram (Village)
Organization	M/s. Gangavaram Port Ltd.	PedaGantiyada (Mandalam)
Type of Sample	Marine Water (High Tide)	Visakhapatnam.
Sample Collected by	M/s. Biochem Labs	Violati Spatiani.

Station Name: Harbourbasine / High Tide

B. No	PARAMETERS	UNIT	RESULT
1.	Phytoplankton Count	No. /L	11000
2.	Zooplankton Count	No./m ³	1000
3.	Chlorophyll a	mg/m ³	2.4
4.	Chlorophyll b	mg/m ³	2.6
6.	Primary Productivity	gC/m ²	2.0
6.	Biomass	mg/m ²	1.2

B.No	Species	Total Species count in 1L
Α.	Phytoplankton Species Prorocentrummicans Amphora lineolata Cymbella marina Bacteriastrum delicatulum Thalassionema nitzschioides Chaetoceros dydymus Bkeletonemacostatum Thalassiothrixlongissima	22 12 08 04 24 02 04
В.	Cymbella marina Zooplankton Species Foraminifera Chaetognatha Amphipoda	10 08 14 21 02
	Cladocera Eggs of fish & larvae	10 12

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TEST REPORT ANALYSIS OF MARINE WATER

BCL Ref. No.	GPL/ 05/216	Issued to:	
Monitoring Date	April 30, 2022	M/s. Gangavaram Port Ltd.	
Reporting Date	May 05, 2022	Gangavaram (Village)	
Organization	M/s. Gangavaram Port Ltd.	PedaGantiyada (Mandalam)	
Type of Sample	Marine Water (High Tide)	Visakhapatnam.	
Sample Collected by M/s. Biochem Labs		•	

Station Name: Port Entrance Channel / High Tide

B. No	PARAMETERS	UNIT	RESULT
1.	Phytoplankton Count	No. /L	1000
9.	Zooplankton Count	No./m³	800
3.	Chlorophyll a	mg/m ³	1.8
4.	Chlorophyll b	mg/m ³	2.6
6.	Primary Productivity	gC/m ²	3.0
6.	Biomass	mg/m ²	1.4

B.No	Species	Total Species count in 1L
A	Phytoplankton Species Prorocentrummicans Amphora lineolata Cymbella marina Bacteriastrum delicatulum Thalassionema nitzschioides Chaetoceros dydymus Skeletonemacostatum Thalassiothrixlongissima	80 06 46 14 08 20 0 22 10
B.	Cymbella marina Zooplankton Species Foraminifera Chaetognatha Amphipoda Cladocera Eggs of fish & larvae	22 04 18 12 06

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TEST REPORT ANALYSIS OF MARINE WATER

BCL Ref. No.	GPL/ 05/216	Issued to:
Monitoring Date	April 30, 2022	M/s. Gangavaram Port Ltd.
Reporting Date	May 05, 2022	Gangavaram (Village)
Organization	M/s. Gangavaram Port Ltd.	PedaGantiyada (Mandalam)
Type of Sample	Marine Water (Low Tide)	Visakhapatnam.
Sample Collected by	M/s. Biochem Labs	

Station Name: South brake Wall outside / Low Tide

B. No	PARAMETERS	UNIT	RESULT
1.	Phytoplankton Count	No. /L	13000
9.	Zooplankton Count	No./m³	950
3.	Chlorophyll a	mg/m ³	3.4
4	Chlorophyll b	mg/m ³	2.0
6.	Primary Productivity	gC/m ²	3.2
0.	Biomass	mg/m ²	2.4

B.No	Species	Total Species count in 1L
A	Phytoplankton Species	
	Prorocentrummicans	92
	Amphora lineolata	28
	Cymbella marina	56
	Bacteriastrum delicatulum	10
	Thalassionema nitzschioides	08
	Chaetoceros dydymus	26
	Skeletonemacostatum	36
	Thalassiothrixlongissima	18
	Cymbella marina	14
10	Zooplankton Species	
251	Foraminifora	38
	Chaefognatha	21
	Amphipoda	10
	Cladocara	26
	Eggs of fish & Jarvae	
	Eggs or han a larvao	04

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TEST REPORT ANALYSIS OF MARINE WATER

BCL Ref. No.	GPL/ 05/216	Issued to:
Monitoring Date	April 30, 2022	M/s. Gangavaram Port Ltd.
Reporting Date	May 05, 2022	Gangavaram (Village)
Organization	M/s. Gangavaram Port Ltd.	PedaGantiyada (Mandalam)
Type of Sample	Marine Water (Low Tide)	Visakhapatnam.
Sample Collected by	M/s. Biochem Labs	

Station Name: North brake Wall Outside / Low Tide

S. No	PARAMETERS	UNIT	RESULT
1.	Phytoplankton Count	No. /L	9800
2.	Zooplankton Count	No./m³	600
3.	Chlorophyll a	mg/m ³	3.2
4.	Chlorophyll b	mg/m ³	2.8
5.	Primary Productivity	gC/m ²	3.0
6.	Biomass	mg/m ²	2.4

S.No	Species	Total Species count in 1L
Α.	Phytoplankton Species	
70.00	Prorocentrummicans	84
	Amphora lineolata	56
	Cymbella marina	20
	Bacteriastrum delicatulum	08
	Thalassionema nitzschioides	10
	Chaetoceros dydymus	08
	Skeletonemacostatum	22
	Thalassiothrixlongissima	0
	Cymbella marina	10
B.	Zooplankton Species	
	Foraminifera	44
	Chaetognatha	20
	Amphipoda	08
	Cladocera	0
	Eggs of fish & larvae	02

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TEST REPORT ANALYSIS OF MARINE WATER

DCI Def No	GPL/ 05/216	Issued to:
BCL Ref. No. Monitoring Date	April 30, 2022	M/s. Gangavaram Port Ltd.
Reporting Date	May 05, 2022	Gangavaram (Village)
Organization	M/s. Gangavaram Port Ltd.	PedaGantiyada (Mandalam)
Type of Sample	Marine Water (High Tide)	Visakhapatnam.
Sample Collected by	M/s. Biochem Labs	

Station Name: South brake Wall Outside / High Tide

o Ma	PARAMETERS	UNIT	RESULT
B. No	Phytoplankton Count	No. /L	11000
11	Zooplankton Count	No./m³	800
81	Chlorophyll a	mg/m ³	2.8
0.	Chlorophyll b	mg/m ³	2.0
4.	Primary Productivity	gC/m ²	3.2
6	Biomass	mg/m ²	2.4

B.No	Species	Total Species count in 1L
A.	Phytoplankton Species Prorocentrummicans Amphora lineolata Cymbella marina Bacteriastrum delicatulum Thalassionema nitzschioides Chaetoceros dydymus Skeletonemacostatum Thalassiothrixlongissima Cymbella marina	84 18 56 10 24 0 0 8 38 10
8.	Zooplankton Species Foraminifera Chaetognatha Amphipoda Cladocera Eggs of fish & larvae	28 06 34 10 02

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TEST REPORT ANALYSIS OF MARINE WATER

BCL Ref. No.	GPL/ 05/216	Issued to:
Monitoring Date	April 30, 2022	M/s. Gangavaram Port Ltd.
Reporting Date	May 05, 2022	Gangavaram (Village)
Organization	M/s. Gangavaram Port Ltd.	PedaGantiyada (Mandalam)
Type of Sample	Marine Water (High Tide)	Visakhapatnam.
Sample Collected by	M/s. Biochem Labs	

Station Name: North brake Wall Outside / High Tide

B. No	PARAMETERS	UNIT	RESULT
1.	Phytoplankton Count	No. /L	1000
2.	Zooplankton Count	No./m ³	600
3.	Chlorophyll a	mg/m ³	3.4
4.	Chlorophyll b	mg/m ³	2.8
6.	Primary Productivity	gC/m ²	3.2
6.	Biomass	mg/m ²	2.0

i.No	Species	Total Species count in 1L
A.	Phytoplankton Species	
	Prorocentrummicans	68
	Amphora lineolata	35
	Cymbella marina	06
	Bacteriastrum delicatulum	42
	Thalassionema nitzschioides	12
	Chaetoceros dydymus	36
	Skeletonemacostatum	28
	Thalassiothrixlongissima	04
	Cymbella marina	10
B.	Zooplankton Species	
	Foraminifera	56
	Chaetognatha	12
	Amphipoda	36
	Cladocera	24
	Eggs of fish & larvae	0

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TEST REPORT ANALYSIS OF SEDIMENT SAMPLE

BCL Ref. No. GPL/ 06/215		Issued to:	
Monitoring Date	April 16, 2022	M/a Canasianana Danil tel	
Reporting Date	April 21, 2022	M/s. Gangavaram Port Ltd.Gangavaram (Village)	
Organization M/s. Gangavaram Po		PedaGantiyada (Mandalam)	
Type of Sample	Sediment (Low Tide)	Visakhapatnam.	
Sample Collected by	M/s. Biochem Labs	vioamapamam.	

B.No	Parameters Unit		Result	
			Harbour Basine	Port Entrance Channel
1.	pH	H+ conc	7.04	7.08
2.	Organic matter	%	1.6	1.0
3.	Nitrate	mg/kg	2.0	1.4
A.	Phosphate	mg/kg	1.2	1.0
6.	Oil & Grease	mg/kg	0.12	0.14
6.	Iron	ppm	0.1	0.12
7	Manganese	ppm	0.14	0.16
0.	Nickel	ppm	0.12	0.1
0.	Chromium	ppm	0.12	0.12
10.	Mercury	ppm	Nil	Nil
11.	Zino	ppm	1.0	1.0
12.	Lead	ppm	0.01	0.01
13.	Arsenic	ppm	0.01	0.01
14.	Belenium	ppm	0.01	0.01
15	Copper	ppm	0.16	0.18

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TEST REPORT ANALYSIS OF SEDIMENT SAMPLE

BCL Ref. No. GPL/ 06/215		Issued to:	
Monitoring Date	April 16, 2022	M/s. Gangavaram Port Ltd.	
Reporting Date	April 21, 2022	Gangavaram (Village)	
Organization M/s. Gangavaram Port L		PedaGantiyada (Mandalam)	
Type of Sample	Sediment (Low Tide)	Visakhapatnam.	
Sample Collected by	M/s. Biochem Labs	Trouble and the second	

B.No	Parameters	Parameters Unit		Res	Result	
			South brake Wall Outside	North brake Wall Outside		
1.	pH	H+ conc	7.10	7.12		
2.	Organic matter	%	1.2	1.2		
3.	Nitrate	mg/kg	2.0	1.0		
4.	Phosphate	mg/kg	0.8	1.2		
6.	Oil & Grease	mg/kg	0.02	0.01		
6.	Iron	ppm	0.16	0.14		
7.	Manganese	ppm	0.14	0.18		
B.	Nickel	ppm	0.12	0.12		
0.	Chromium	ppm	0.12	0.16		
10.	Mercury	ppm	Nil	Nil		
11.	Zinc	ppm	1.0	1.0		
12.	Lead	ppm	0.01	0.01		
13.	Arsenic	ppm	0.01	0.01		
14.	Selenium	ppm	0.01	0.01		
15.	Copper	ppm	0.18	0.14		

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Near Samatha College, Sector -9, MVP Colony, Visakhapatnam-530 017. Ph: 0891 - 2551277, 8142222277, 7990 08000 | E-mail: biochemlabs@biochemlabs.in | biochemlabs888@gmail.com | www.biochemlabs.in

TEST REPORT BENTHIC FAUNAL DIVERSITY

BCL Ref. No.	GPL/ 06/215	Issued to:	
Monitoring Date April 16, 2022		M/s. Gangavaram Port Ltd.	
Reporting Date	April 21, 2022	Gangavaram (Village)	
Organization	M/s. Gangavaram Port Ltd.	PedaGantiyada (Mandalam)	
Type of Sample	Sediment (Low Tide)	Visakhapatnam.	
Sample Collected by	M/s. Biochem Labs		

S. No	Species/Group	Result Total Species Count	
		HarbourBasine	Port Entrance Channel
1.	Opheliidae sp	28	30
2.	Glyceridae sp	04	10
3.	Nereidae sp	16	12
4.	Aphroditidae sp	24	06
5.	Cirratulidae sp	06	18
6.	Capitella sp	0	06
7.	Amphipoda sp.	22	18
8.	Gastropoda	12	0
9.	Chaetognatha	06	12

Malyst





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TEST REPORT BENTHIC FAUNAL DIVERSITY

BCL Ref. No.	BCL Ref. No. GPL/ 06/215		
Monitoring Date	April 16, 2022	M/s. Gangavaram Port Ltd.	
Reporting Date April 21, 2022 Organization M/s. Gangavaram Port Ltd. Type of Sample Sediment (Low Tide)		Gangavaram (Village)	
		PedaGantiyada (Mandalam) Visakhapatnam.	
			Sample Collected by

B. No	Species/Group	Result Total Species Count		
		South brake Wall Outside	North brake Wall Outside	
1.	Foraminifera	32	26	
2.	Amphipoda	14	08	
3.	Mytilusedulis	0	02	
4.	Gastropod veliger	18	12	
5.	Oithona	14	16	
6.	Capitella	02	0	
7.	Copepod nauplii	14	10	
0.	Brachyuran zoea	02	0	
8.	Neanthusarenaceodentala	08	06	

Amyst





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TEST REPORT ANALYSIS OF SEDIMENT SAMPLE

HCL Ref. No. GPL/ 06/216		Issued to:	
Monitoring Date	April 30, 2022	M/s. Gangavaram Port Ltd.	
Reporting Date May 05, 2022		Gangavaram (Village)	
Organization	M/s. Gangavaram Port Ltd.	PedaGantiyada (Mandalam)	
Type of Sample Sediment (Low Tide		Visakhapatnam.	
Sample Collected by	M/s. Biochem Labs		

B.No	Parameters	Unit		Result
			Harbour Basine	Port Entrance Channel
1.	pH	H+ conc	7.12	7.14
2.	Organic matter	%	2.0	1.0
3.	Nitrate	mg/kg	1.6	1.2
A.	Phosphate	mg/kg	1.0	1.0
6.	Oil & Grease	mg/kg	0.12	0.08
6.	Iron	ppm	0.14	0.12
7.	Manganese	ppm	0.12	0.16
6.	Nickel	ppm	0.14	0.12
0.	Chromium	ppm	0.16	0.1
10.	Mercury	ppm	Nil	Nil
11.	Zinc	ppm	1.0	1.0
12.	Lead	ppm	0.01	0.01
13.	Arsenic	ppm	0.01	0.01
14.	Selenium	ppm	0.01	0.01
15.	Copper	ppm	0.22	0.16

Maryst





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TEST REPORT ANALYSIS OF SEDIMENT SAMPLE

BCL Ref. No.	GPL/ 06/216	Issued to:	
Monitoring Date April 30, 2022 May 05, 2022		M/s. Gangavaram Port Ltd.	
		Gangavaram (Village)	
Organization	M/s. Gangavaram Port Ltd.	PedaGantiyada (Mandalam) Visakhapatnam.	
Type of Sample	Sediment (Low Tide)		
Sample Collected by	M/s. Biochem Labs		

5.No	Parameters	Unit	Res	sult
			South brake Wall Outside	North brake Wall Outside
1.	pH	H+ conc	7.06	7.04
B.	Organic matter	%	1.0	0.8
3.	Nitrate	mg/kg	2.0	1.4
A.	Phosphate	mg/kg	1.2	1.0
6.	Oil & Grease	mg/kg	0.08	0.06
0.	Iron	ppm	0.16	0.14
7	Manganese	ppm	0.14	0.12
0.	Nickel	ppm	0.12	0.1
0.	Chromium	ppm	0.16	0.12
10.	Mercury	ppm	Nil	Nil
11.	Zino	ppm	1.0	0.6
19.	Lead	ppm	0.01	0.01
13.	Arsenic	ppm	0.01	0.01
14:	Belenium	ppm	0.01	0.01
16.	Copper	ppm	0.18	0.14

Analyst





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Centre for Aquaculture & Environmental Sciences

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TEST REPORT BENTHIC FAUNAL DIVERSITY

BCL Ref. No.	GPL/ 06/216	Issued to:
Monitoring Date	April 30, 2022	M/s. Gangavaram Port Ltd.
Reporting Date	May 05, 2022	Gangavaram (Village)
Organization	M/s. Gangavaram Port Ltd.	PedaGantiyada (Mandalam)
Type of Sample	Sediment (Low Tide)	Visakhapatnam.
Sample Collected by	M/s. Biochem Labs	

B. No	Species/Group	Re	sult
		Total Spe	cies Count
		Harbour Basine	Port Entrance Channel
1.	Eunicidae sp.	64	50
9.	Paraonidae sp.	20	0
3.	Syllidae sp	18	06
A	Sabellidae sp	14	10
6	Oithona sp.	26	24
6.	Capitella sp.	08	16
7.	Syllidae sp	0	28
6.	Amphipoda sp.	12	0
0.	Nematoda sp.	06	08





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TEST REPORT BENTHIC FAUNAL DIVERSITY

BCL Ref. No.	GPL/ 06/216	Issued to:
Monitoring Date	April 30, 2022	M/s. Gangavaram Port Ltd.
Reporting Date	May 05, 2022	Gangavaram (Village)
Organization	M/s. Gangavaram Port Ltd.	PedaGantiyada (Mandalam)
Type of Sample	Sediment (Low Tide)	Visakhapatnam.
Sample Collected by	M/s. Biochem Labs	1.55

B. No	Species/Group	Res	sult
		Total Spec	cies Count
		South brake Wall Outside	North brake Wall Outside
1	Capitella sp.	54	68
9.	Syllidae sp	42	22
3.	Amphipoda sp.	04	18
14.	Nematoda sp.	36	04
6.	Capitella sp.	0	36
6.	Syllidae sp	28	18
7	Paraonidae sp.	36	0
0	Syllidae sp	06	10
8	Sabellidae sp	12	04

Miniyat



GANGAVARAM PORT LIMITED

(An ISO 9001:2015 & ISO 14001:2015

Certified Company)



Environment Monitoring Report April, 2022

Corporate Office:

2,3,4th Floors, Hansa plaza, Plot No.798, road No.36, Jubilee Hills, Hyderabad - 500033 Phone: 040 – 33599999

Site Office:

Gangavaram (V & Post) Pedagantyada (Mandal) Visakhapatnam – 530 044 Phone: 0891 -2701177

Reference No.:	GPL/April/2022	Submitted to:
Monitoring Date:	01.04.2022	_ 1
Organization Name:	Gangavaram Port Limited	A.P. Pollution Control Board,
Type Of Sample:	Ambient Air Quality	Regional office, Visakhapatnam
Sampled By:	Gangavaram Port Limited (CAAQ Monitoring Data)	

Station	Stat	ion - 1 - A (AOB)		rative Of Is HB Co		lding	Station - 2 - Project Site Office towards Venkannapalem								n - 3 - Wa irds Ven			
Parameter	PM10	PM 2.5	SO ²	NO	NO ²	со	PM10	PM 2.5	SO ²	NO	NO ²	со	PM10	PM 2.5	SO ²	NO	NO ²	со
Day average value	72.81	44.81	52.66	21.35	14.07	0.37	67.48	42.38	8.53	29.89	8.91	0.13	75.24	46.02	48.04	23.51	13.95	0.43
Standard	100 µg/m³	60 µg/m³	80 µg/m³	80 µg/m³	80 µg/m³	4 μg/m³	100 μg/m³	60 µg/m³	80 µg/m³	80 µg/m³	80 µg/m³	4 μg/m³	100 µg/m³	60 µg/m³	80 µg/m³	80 µg/m³	80 µg/m³	4 μg/m ³

Prepared by: Grasser UPS 1910

For Gangavaram Port Limited

Reference No.:	GPL/April/2022	Submitted to:
Monitoring Date:	02.04.2022	
Organization Name:	Gangavaram Port Limited	A.P. Pollution Control Board,
Type Of Sample:	Ambient Air Quality	Regional office, Visakhapatnam
Sampled By:	Gangavaram Port Limited (CAAQ Monitoring Data)	

						Am	bient A	ir Quali	ty 24 hr	s avera	ge data							
Station Parameter	Stat	ion - 1 - A (AOB)	Administ toward			lding				ject Site						atch Tov kannap		
Parameter	PM10	PM 2.5	SO ²	NO	NO ²	со	PM10	PM 2.5	SO ²	NO	NO ²	со	PM10	PM 2.5	SO ²	NO	NO ²	со
Day average value	73.20	45.06	55.59	20.73	14.14	0.71	67.84	42.62	8.61	29.34	9.30	0.18	75.64	46.27	50.16	22.69	14.10	0.77
Standard	100 µg/m³	60 µg/m³	80 µg/m³	80 µg/m³	80 µg/m³	4 µg/m³	100 µg/m³	60 µg/m³	80 µg/m³	80 µg/m³	80 µg/m³	4 µg/m³	100 µg/m³	60 µg/m³	80 pg/m³	80 µg/m³	80 µg/m³	4 µg/m ³

Prepared by: G vard runky
Extra CIPS 1910

For Gangavaram Port Limited

Reference No.:	GPL/April/2022	Submitted to:
Monitoring Date:	03.04.2022	
Organization Name:	Gangavaram Port Limited	A.P. Pollution Control Board,
Type Of Sample:	Ambient Air Quality	Regional office, Visakhapatnam
Sampled By:	Gangavaram Port Limited (CAAQ Monitoring Data)	

Station	Stat			rative Of Is HB Co		lding			- 2 - Pro ords Ver						n - 3 - Wa rds Ven			
Parameter	PM10	PM 2.5	SO ²	NO	NO ²	со	PM10	PM 2.5	SO ²	NO	NO ²	со	PM10	PM 2.5	SO ²	NO	NO ²	со
Day average value	72.77	44.79	54.18	20.04	14.02	0.48	67.43	42.37	8.44	29.03	9.95	0.23	75.19	46.00	47.59	22.43	13.97	0.41
Standard	100 µg/m³	60 µg/m³	80 µg/m³	80 µg/m³	80 µg/m³	4 μg/m³	100 µg/m³	60 µg/m³	80 µg/m³	80 µg/m³	80 µg/m³	4 μg/m³	100 µg/m³	60 µg/m³	80 µg/m³	80 µg/m³	80 µg/m³	4 µg/m

Prepared by: Grassusty

For Gangavaram Port Limited

Reference No.:	GPL/April/2022	Submitted to:
Monitoring Date:	04.04.2022	
Organization Name:	Gangavaram Port Limited	A.P. Pollution Control Board,
Type Of Sample:	Ambient Air Quality	Regional office, Visakhapatnam
Sampled By:	Gangavaram Port Limited (CAAQ Monitoring Data)	

Station	Station - 1 - Administrative Office Building (AOB) towards HB Colony						Station - 2 - Project Site Office towards Venkannapalem									atch Tow kannap		
Parameter	PM10	PM 2.5	SO ²	NO	NO ²	со	PM10	PM 2.5	SO ²	NO	NO ²	со	PM10	PM 2.5	SO ²	NO	NO ²	со
Day average value	71.94	44.27	52.34	22.85	19.88	0.10	66.66	41.88	8.33	35.09	7.45	0.34	74.33	45.47	58.01	24.84	45.66	0.25
Standard	100 µg/m³	60 µg/m³	80 µg/m³	80 µg/m³	80 µg/m³	4 µg/m³	100 µg/m³	60 µg/m³	80 µg/m³	80 µg/m³	80 µg/m³	4 μg/m³	100 µg/m³	60 µg/m³	80 µg/m³	80 µg/m³	80 µg/m³	4 µg/m ³

Prepared by: LATALEMENT 4PS 1910

For Gangavaram Fort Limited

Reference No.:	GPL/April/2022	Submitted to:
Monitoring Date:	05.04.2022	
Organization Name:	Gangavaram Port Limited	A.P. Pollution Control Board,
Type Of Sample:	Ambient Air Quality	Regional office, Visakhapatnam
Sampled By:	Gangavaram Port Limited (CAAQ Monitoring Data)	

						Am	bient A	ir Qualit	y 24 hr	s avera	ge data									
Station	Stat	ion - 1 - A (AOB)		rative Of Is HB Co		lding			- 2 - Pro irds Ver				Station - 3 - Watch Tower - 4 towards Venkannapalem							
Parameter	PM10	PM 2.5	SO ²	NO	NO ²	со	PM10	PM 2.5	SO ²	NO	NO ²	со	PM10	PM 2.5	SO ²	NO	NO ²	со		
Day average value	72.66	44.65	47.10	22.62	13.77	0.20	67.34	42.24	8.05	33.17	7.55	0.38	75.09	45.86	43.52	24.17	13.76	0.22		
Standard	100 µg/m³	60 µg/m³	80 µg/m³	80 µg/m³	80 µg/m³	4 μg/m³	100 µg/m³	60 µg/m³	80 µg/m³	80 µg/m³	80 µg/m³	4 μg/m³	100 µg/m³	60 µg/m³	80 µg/m³	80 µg/m³	80 µg/m³	4 µg/m³		

Prepared by: Grysmush Law UPS 1910

For Gangavaram Port Limited

Reference No.:	GPL/April/2022	Submitted to:
Monitoring Date:	06.04.2022	
Organization Name:	Gangavaram Port Limited	A.P. Pollution Control Board,
Type Of Sample:	Ambient Air Quality	Regional office, Visakhapatnam
Sampled By:	Gangavaram Port Limited (CAAQ Monitoring Data)	

						AIII	bient A	ii Qualii	.y 24 III	s avera	ge data								
Station	Stat		Administ) toward			lding				ject Site Ikannap			Station - 3 - Watch Tower - 4 towards Venkannapalem						
Parameter	PM10	PM 2.5	SO ²	NO	NO ²	со	PM10	PM 2.5	SO ²	NO	NO ²	со	PM10	PM 2.5	SO ²	NO	NO ²	со	
Day average value	74.04	45.43	48.75	21.04	14.16	0.33	68.60	42.97	10.75	34.56	7.45	0.35	76.50	46.65	44.48	23.02	14.14	0.35	
Standard	100 µg/m³	60 µg/m³	80 µg/m³	80 µg/m³	80 µg/m³	4 μg/m³	100 µg/m³	60 µg/m³	80 µg/m³	80 µg/m³	80 pg/m³	4 µg/m³	100 µg/m³	60 µg/m³	80 µg/m³	80 µg/m³	80 µg/m³	4 μg/m³	

Prepared by: G. VALS HUNG -LAG GPS 1910

For Gangavaram Port Limited

Reference No.:	GPL/April/2022	Submitted to:
Monitoring Date:	07.04.2022	
Organization Name:	Gangavaram Port Limited	A.P. Pollution Control Board,
Type Of Sample:	Ambient Air Quality	Regional office, Visakhapatnam
Sampled By:	Gangavaram Port Limited (CAAQ Monitoring Data)	

Station	(AOB) towards HB Colony								- 2 - Pro irds Ver		e Office alem		Station - 3 - Watch Tower - 4 towards Venkannapalem							
Parameter	PM10	PM 2.5	SO ²	NO	NO ²	со	PM10	PM 2.5	SO ²	NO	NO ²	со	PM10	PM 2.5	SO ²	NO	NO ²	со		
Day average value	75.72	46.37	48.26	21.45	14.20	0.30	70.17	43.87	12.38	29.56	6.38	0.28	78.24	47.62	43.59	23.71	14.13	0.33		
Standard	100 µg/m³	60 µg/m³	80 µg/m³	80 µg/m³	80 µg/m³	4 μg/m³	100 µg/m³	60 µg/m³	80 µg/m³	80 µg/m³	80 µg/m³	4 μg/m³	100 µg/m³	60 µg/m³	80 µg/m³	80 µg/m³	80 µg/m³	4 µg/m		

Prepared by: G VALS MUST

For Gangavaram Port Limited

Reference No.:	GPL/April/2022	Submitted to:
Monitoring Date:	08.04.2022	9
Organization Name:	Gangavaram Port Limited	A.P. Pollution Control Board,
Type Of Sample:	Ambient Air Quality	Regional office, Visakhapatnam
Sampled By:	Gangavaram Port Limited (CAAQ Monitoring Data)	

						Sections	bient A		99 4 0 - 5050 V.11010 5550											
Station	(AOB) towards HB Colony								- 2 - Pro ords Ver			27	Station - 3 - Watch Tower - 4 towards Venkannapalem							
Parameter	PM10	PM 2.5	SO ²	NO	NO ²	со	PM10	PM 2.5	SO ²	NO	NO ²	со	PM10	PM 2.5	SO ²	NO	NO ²	со		
Day average value	73.39	45.04	49.93	22.60	14.28	0.36	68.01	42.61	11.84	34.31	6.04	0.77	75.84	46.26	45.18	24.36	14.26	0.43		
Standard	100 µg/m³	60 µg/m³	80 µg/m³	80 µg/m³	80 µg/m³	4 µg/m³	100 μg/m³	60 µg/m³	80 µg/m³	80 µg/m³	80 µg/m³	4 μg/m³	100 µg/m³	60 µg/m³	80 µg/m³	80 µg/m³	80 µg/m³	4 µg/m³		

Prepared by: GVNS HUSTING UPS 1910

For Gangavaram Port Limited

Ref erence No.:	GPL/April/2022	Submitted to:
Monitoring Date:	09.04.2022	
Organization Name:	Gangavaram Port Limited	A.P. Pollution Control Board,
Type Of Sample:	Ambient Air Quality	Regional office, Visakhapatnam
Sampled By:	Gangavaram Port Limited (CAAQ Monitoring Data)	9

						Am	bient A	ir Qualii	y 24 hr	s avera	ge data							
Station	(AOB) towards HB Colony									ject Site kannap					n - 3 - Wa irds Ven			
Parameter	PM10	PM 2.5	SO ²	NO	NO ²	со	PM10	PM 2.5	SO ²	NO	NO ²	со	PM10	PM 2.5	SO ²	NO	NO ²	со
Day average value	72.28	44.37	51.13	22.17	14.13	0.35	66.98	41.97	11.98	29.95	6.56	0.38	74.69	45.57	45.89	24.63	14.21	0.32
Standard	100 µg/m³	60 µg/m³	80 µg/m³	80 µg/m³	80 µg/m³	4 µg/m³	100 µg/m³	60 µg/m³	80 µg/m³	80 µg/m³	80 µg/m³	4 µg/m³	100 µg/m³	60 µg/m³	80 µg/m³	80 µg/m³	80 µg/m³	4 µg/m³

Prepared by: GVNSHUShy Lyng UPS 1910

For Gangavaram Port Limited

Reference No.:	GPL/April/2022	Submitted to:
Monitoring Date:	10.04.2022	
Organization Name:	Gangavaram Port Limited	A.P. Pollution Control Board,
Type Of Sample:	Ambient Air Quality	Regional office, Visakhapatnam
Sampled By:	Gangavaram Port Limited (CAAQ Monitoring Data)	×

Station	(AOB) towards HB Colony								- 2 - Pro irds Ver	-			Station - 3 - Watch Tower - 4 towards Venkannapalem						
Parameter	PM10	PM 2.5	SO ²	NO	NO ²	со	PM10	PM 2.5	SO ²	NO	NO ²	со	PM10	PM 2.5	SO ²	NO	NO ²	со	
Day average value	71.47	43.96	50.83	21.68	14.17	0.61	66.23	41.58	12.08	31.84	6.21	0.41	73.85	45.15	46.75	23.31	14.17	0.71	
Standard	100 µg/m³	60 µg/m³	80 µg/m³	80 µg/m³	80 µg/m³	4 µg/m³	100 µg/m³	60 µg/m³	80 µg/m³	80 µg/m³	80 µg/m³	4 µg/m³	100 µg/m³	60 µg/m³	80 µg/m³	80 µg/m³	80 µg/m³	4 µg/m	

Prepared by: GVNSMidy-

For Gangavaram Port Limited

Reference No.:	GPL/April/2022	Submitted to:
Monitoring Date:	11.04.2022	-0
Organization Name:	Gangavaram Port Limited	A.P. Pollution Control Board,
Type Of Sample:	Ambient Air Quality	Regional office, Visakhapatnam
Sampled By:	Gangavaram Port Limited (CAAQ Monitoring Data)	

Station	(AOB) towards HB Colony									ject Site kannap			Station - 3 - Watch Tower - 4 towards Venkannapalem							
Parameter	PM10	PM 2.5	SO ²	NO	NO ²	со	PM10	PM 2.5	SO ²	NO	NO ²	со	PM10	PM 2.5	SO ²	NO	NO ²	со		
Day average value	71.29	43.86	48.90	21.83	14.27	0.40	66.06	41.49	11.94	32.44	5.84	0.45	73.67	45.05	45.47	23.80	14.17	0.59		
Standard	100 µg/m³	60 µg/m³	80 µg/m³	80 µg/m³	80 µg/m³	4 µg/m³	100 µg/m³	60 µg/m³	80 µg/m³	80 µg/m³	80 µg/m³	4 µg/m³	100 µg/m³	60 µg/m³	80 µg/m³	80 µg/m³	80 µg/m³	4 µg/m³		

Prepared by: Gunsmusty

For Gangavaram Port Limited

Reference No.:	GPL/April/2022	Submitted to:
Monitoring Date:	12.04.2022	
Organization Name:	Gangavaram Port Limited	A.P. Pollution Control Board,
Type Of Sample:	Ambient Air Quality	Regional office, Visakhapatnam
Sampled By:	Gangavaram Port Limited (CAAQ Monitoring Data)	

Station	Stat	ion - 1 - A (AOB)		rative Of Is HB Co		lding				ject Site kannap		·	o o			etch Tow kannap		
Parameter	PM10	PM 2.5	SO ²	NO	NO ²	со	PM10	PM 2.5	SO ²	NO	NO ²	со	PM10	PM 2.5	SO ²	NO	NO ²	со
Day average value	71.43	43.92	51.13	21.75	14.12	0.33	66.19	41.54	12.00	29.89	5.97	0.38	73.81	45.11	46.40	24.06	14.11	0.40
Standard	100 µg/m³	60 µg/m³	80 µg/m³	80 µg/m³	80 µg/m³	4 µg/m³	100 µg/m³	60 µg/m³	80 µg/m³	80 µg/m³	80 µg/m³	4 μg/m³	100 µg/m³	60 µg/m³	80 µg/m³	80 µg/m³	80 µg/m³	4 µg/m

Prepared by: GWSHUSHT Lun UPS 1910

For Gangavaram Port Limited

Reference No.:	GPL/April/2022	Submitted to:
Monitoring Date:	13.04.2022	
Organization Name:	Gangavaram Port Limited	A.P. Pollution Control Board,
Type Of Sample:	Ambient Air Quality	Regional office, Visakhapatnam
Sampled By:	Gangavaram Port Limited (CAAQ Monitoring Data)	

Station	Stat				(AOB) towards HB Colony								Station - 3 - Watch Tower – 4 towards Venkannapalem							
Parameter	PM10	PM 2.5	SO ²	NO	NO ²	со	PM10	PM 2.5	SO ²	NO	NO ²	со	PM10	PM 2.5	SO ²	NO	NO ²	со		
Day average value	70.63	43.46	51.68	22.93	14.35	0.45	65.45	41.11	12.08	29.93	6.17	0.42	72.98	44.63	49.36	25.46	14.54	0.52		
Standard	100 µg/m³	60 µg/m³	80 µg/m³	80 µg/m³	80 µg/m³	4 µg/m³	100 µg/m³	60 µg/m³	80 pg/m³	80 µg/m³	80 µg/m³	4 µg/m³	100 µg/m³	60 µg/m³	80 µg/m³	80 µg/m³	80 µg/m³	4 µg/m³		

Prepared by: Gracsmust

For Gangavaram Port Limiteo

Reference No.:	GPL/April/2022	Submitted to:
Monitoring Date:	14.04.2022	
Organization Name:	Gangavaram Port Limited	A.P. Pollution Control Board,
Type Of Sample:	Ambient Air Quality	Regional office, Visakhapatnam
Sampled By:	Gangavaram Port Limited (CAAQ Monitoring Data)	

Station	Stat	ion - 1 - A (AOB)	Administr) toward			lding				ject Site kannap			Station - 3 - Watch Tower - 4 towards Venkannapalem							
Parameter	PM10	PM 2.5	SO ²	NO	NO ²	со	PM10	PM 2.5	SO ²	NO	NO ²	со	PM10	PM 2.5	SO ²	NO	NO ²	со		
Day average value	71.07	43.72	53.55	21.51	14.74	0.74	65.86	41.36	12.07	27.64	6.70	0.20	73.44	44.91	49.21	24.03	14.76	0.70		
Standard	100 µg/m³	60 µg/m³	80 µg/m³	80 µg/m³	80 µg/m³	4 μg/m³	100 µg/m³	60 µg/m³	80 µg/m³	80 µg/m³	80 µg/m³	4 μg/m ³	100 µg/m³	60 µg/m³	80 µg/m³	80 µg/m³	80 µg/m³	4 µg/m³		

Prepared by: GVNS Mush Lung UPS 1910

For Gangavaram Port Limited

Reference No.:	GPL/April/2022	Submitted to:
Monitoring Date:	15.04.2022	
Organization Name:	Gangavaram Port Limited	A.D. Dollution Control Board
Type Of Sample:	Ambient Air Quality	A.P. Pollution Control Board, Regional office, Visakhapatnam
Campled Du	Gangavaram Port Limited	38* *
Sampled By:	(CAAQ Monitoring Data)	

						Am	bient Ai	ir Qualit	y 24 hr	s avera	ge data							
Station	Stat	ion - 1 - A (AOB)	Administr) toward			ding				ject Site Ikannap					n - 3 - Wa rds Ven			
Parameter	PM10	PM 2.5	SO ²	NO	NO ²	со	PM10	PM 2.5	SO ²	NO	NO ²	со	PM10	PM 2.5	SO ²	NO	NO ²	со
Day average value	70.96	43.66	51.02	21.92	14.82	0.53	65.76	41.30	11.97	29.13	6.03	0.24	73.32	44.84	46.98	23.56	14.80	0.55
Standard	100 µg/m³	60 µg/m³	80 µg/m³	80 µg/m³	80 µg/m³	4 µg/m³	100 µg/m³	60 µg/m³	80 µg/m³	80 µg/m³	80 µg/m³	4 µg/m³	100 µg/m³	60 µg/m³	80 µg/m³	80 µg/m³	80 µg/m³	4 µg/m³

Prepared by: GVNS MUNT

For Gangavaram Port Limited

Reference No.:	GPL/April/2022	Submitted to:
Monitoring Date:	16.04.2022	2
Organization Name:	Gangavaram Port Limited	A.P. Pollution Control Board,
Type Of Sample:	Ambient Air Quality	Regional office, Visakhapatnam
Sampled By:	Gangavaram Port Limited (CAAQ Monitoring Data)	

						Am	bient Ai	r Qualit	y 24 hr	s averaç	ge data							
Station	Stat	ion - 1 - A (AOB)		rative Of Is HB Co		ding				ject Site kannap					n - 3 - Wa irds Ven			
Parameter	PM10	PM 2.5	SO ²	NO	NO ²	со	PM10	PM 2.5	SO ²	NO	NO ²	со	PM10	PM 2.5	SO ²	NO	NO ²	со
Day average value	71,14	43.76	52.71	21.66	14.86	0.50	65.92	41.39	11.79	29.80	6.02	0.16	73.51	44.94	48.84	23.86	14.81	0.56
Standard	100 µg/m³	60 µg/m³	80 µg/m³	80 µg/m³	80 µg/m³	4 µg/m³	100 µg/m³	60 µg/m³	80 µg/m³	80 µg/m³	80 µg/m³	4 μg/m³	100 µg/m³	60 µg/m³	80 µg/m³	80 µg/m³	80 µg/m³	4 μg/m³

Prepared by: GIVNS HUNG-LAG GIS 1910

For Gangavaram Port Limited

Reference No.:	GPL/April/2022	Submitted to:				
Monitoring Date:	17.04.2022					
rganization Name: Gangavaram Port Limited ype Of Sample: Ambient Air Quality		A.P. Pollution Control Board, Regional office, Visakhapatnam				
						Sampled By:

						Am	bient A	ir Qualit	y 24 hr	s averaç	ge data							
Station Parameter	Station - 1 - Administrative Office Building (AOB) towards HB Colony					Station - 2 - Project Site Office towards Venkannapalem					Station - 3 - Watch Tower - 4 towards Venkannapalem							
	PM10	PM 2.5	SO ²	NO	NO ²	со	PM10	PM 2.5	SO ²	NO	NO ²	со	PM10	PM 2.5	SO ²	NO	NO ²	со
Day average value	71.21	43.78	51.24	22.87	14.89	0.38	65.99	41.42	11.75	29.89	6.29	0.34	73.59	44.97	45.97	25.73	14.89	0.39
Standard	100 µg/m³	60 µg/m³	80 µg/m³	80 µg/m³	80 µg/m³	4 µg/m³	100 µg/m³	60 µg/m³	80 µg/m³	80 µg/m³	80 µg/m³	4 µg/m³	100 µg/m³	60 µg/m³	80 µg/m³	80 µg/m³	80 µg/m³	4 µg/m³

Prepared by: GVNSHULY
LUT 4PS1910

For Gangavaram Port Limiteo

Reference No.:	GPL/April/2022	Submitted to:
Monitoring Date:	18.04.2022	
Organization Name:	Gangavaram Port Limited	A.P. Pollution Control Board,
Type Of Sample:	Ambient Air Quality	Regional office, Visakhapatnam
Sampled By:	Gangavaram Port Limited (CAAQ Monitoring Data)	

Station Parameter	Station - 1 - Administrative Office Building (AOB) towards HB Colony					Station - 2 - Project Site Office towards Venkannapalem					Station - 3 - Watch Tower - 4 towards Venkannapalem							
	PM10	PM 2.5	SO ²	NO	NO ²	со	PM10	PM 2.5	SO ²	NO	NO ²	со	PM10	PM 2.5	SO ²	NO	NO ²	со
Day average value	72.40	44.47	50.28	22.14	14.85	0.53	67.09	42.07	11.61	29.82	5.40	0.46	74.81	45.68	45.62	24.55	14.85	0.50
Standard	100 µg/m³	60 µg/m³	80 µg/m³	80 µg/m³	80 µg/m³	4 µg/m³	100 µg/m³	60 µg/m³	80 µg/m³	80 µg/m³	80 µg/m³	4 μg/m³	100 µg/m³	60 µg/m³	80 µg/m³	80 µg/m³	80 µg/m³	4 µg/m ³

Prepared by: Gras Huly -Lat 482 1910

For Gangavaram Port Limited

Reference No.:	GPL/April/2022	Submitted to:
Monitoring Date:	19.04.2022	
Organization Name:	Gangavaram Port Limited	A.P. Pollution Control Board,
Type Of Sample:	Ambient Air Quality	Regional office, Visakhapatnam
Sampled By:	Gangavaram Port Limited (CAAQ Monitoring Data)	3.

Station	Station - 1 - Administrative Office Building (AOB) towards HB Colony					Station - 2 - Project Site Office towards Venkannapalem					Station - 3 - Watch Tower - 4 towards Venkannapalem							
	PM10	PM 2.5	SO ²	NO	NO ²	со	PM10	PM 2.5	SO ²	NO	NO ²	со	PM10	PM 2.5	SO ²	NO	NO ²	со
Day average value	72.75	44.71	53.85	21,14	14.79	0.65	67.41	42.29	11.75	30.37	5.00	0.36	75.17	45.91	48.13	23.81	14.81	0.60
Standard	100 µg/m³	60 µg/m³	80 µg/m³	80 µg/m³	80 µg/m³	4 µg/m³	100 µg/m³	60 µg/m³	80 µg/m³	80 pg/m³	80 µg/m³	4 μg/m³	100 µg/m³	60 µg/m³	80 pg/m³	80 µg/m³	80 µg/m³	4 µg/m

Prepared by: G VALS wish LLM CIPS 1910

For Gangavaram Port Limited

Reference No.:	GPL/April/2022	Submitted to:
Monitoring Date:	20.04.2022	6
Organization Name:	Gangavaram Port Limited	A.P. Pollution Control Board,
Type Of Sample:	Ambient Air Quality	Regional office, Visakhapatnam
Sampled By:	Gangavaram Port Limited (CAAQ Monitoring Data)	

						Am	bient A	וו שטפוונ	.y 24 nr	s averaç	je uata							
Station	Stat	ion - 1 - A (AOB)		rative Of Is HB Co		ding				ject Site kannap					n - 3 - Wa irds Ven			
Parameter	PM10	PM 2.5	SO ²	NO	NO ²	со	PM10	PM 2.5	SO ²	NO	NO ²	со	PM10	PM 2.5	SO ²	NO	NO ²	со
Day average value	72.34	44.49	46.99	22.48	13.74	0.65	67.04	42.08	11.99	28.96	5.44	0.21	74.75	45.69	44.63	23.60	13.62	0.86
Standard	100 µg/m³	60 µg/m³	80 µg/m³	80 µg/m³	80 µg/m³	4 µg/m³	100 µg/m³	60 µg/m³	80 µg/m³	80 µg/m³	80 µg/m³	4 µg/m³	100 µg/m³	60 µg/m³	80 µg/m³	80 µg/m³	80 µg/m³	4 µg/m³

Prepared by: GANSHUNGT

For Gangavaram Port Limited

Reference No.:	GPL/April/2022	Submitted to:
Monitoring Date:	21.04.2022	
Organization Name:	Gangavaram Port Limited	A.P. Pollution Control Board,
Type Of Sample:	Ambient Air Quality	Regional office, Visakhapatnam
Sampled By:	Gangavaram Port Limited (CAAQ Monitoring Data)	

Station	(AOB) towards HB Colony									ject Site ikannap			Station - 3 - Watch Tower - 4 towards Venkannapalem						
Parameter	PM10	PM 2.5	SO ²	NO	NO ²	со	PM10	PM 2.5	SO ²	NO	NO ²	со	PM10	PM 2.5	SO ²	NO	NO ²	со	
Day average value	71.43	43.95	42.78	21.56	10.78	0.24	66.19	41.57	12.03	27.88	5.98	0.29	73.81	45.14	38.59	23.76	10.71	0.29	
Standard	100 μg/m³	60 µg/m³	80 µg/m³	80 µg/m³	80 µg/m³	4 µg/m³	100 µg/m³	60 µg/m³	80 µg/m³	80 µg/m³	80 µg/m³	4 μg/m³	100 µg/m³	60 µg/m³	80 µg/m³	80 µg/m³	80 µg/m³	4 µg/m	

Prepared by: GVXLS Musly UPS 1910

For Gangavaram Port Limited

Reference No.:	GPL/April/2022	Submitted to:
Monitoring Date:	22.04.2022	
Organization Name:	Gangavaram Port Limited	A.P. Pollution Control Board,
Type Of Sample:	Ambient Air Quality	Regional office, Visakhapatnam
Sampled By:	Gangavaram Port Limited (CAAQ Monitoring Data)	

Station	(AOB) towards HB Colony									ject Site kannap			Station - 3 - Watch Tower – 4 towards Venkannapalem							
Parameter	PM10	PM 2.5	SO ²	NO	NO ²	со	PM10	PM 2.5	SO ²	NO	NO ²	со	PM10	PM 2.5	SO ²	NO	NO ²	со		
Day average value	76.87	47.24	46.31	22.50	10.75	0.58	71.23	44.68	11.55	31.88	5.21	0.17	79.44	48.52	41.96	24.93	10.77	0.54		
Standard	100 µg/m³	60 µg/m³	80 µg/m³	80 µg/m³	80 µg/m³	4 µg/m³	100 µg/m³	60 µg/m³	80 µg/m³	80 µg/m³	80 µg/m³	4 µg/m³	100 µg/m³	60 µg/m³	80 µg/m³	80 µg/m³	80 µg/m³	4 µg/m		

Prepared by: Grans husty
AG 4051910

For Gangavaram Port Limited

Reference No.:	GPL/April/2022	Submitted to:	***
Monitoring Date:	23.04.2022		
Organization Name:	Gangavaram Port Limited	A.P. Pollution Control Board,	
Type Of Sample:	Ambient Air Quality	Regional office, Visakhapatnam	
Sampled By:	Gangavaram Port Limited (CAAQ Monitoring Data)		

Station	(AOB) towards HB Colony									ject Site nkannap							Station - 3 - Watch Tower – 4 towards Venkannapalem							
Parameter	PM10	PM 2.5	SO ²	NO	NO ²	со	PM10	PM 2.5	SO ²	NO	NO ²	со	PM10	PM 2.5	SO ²	NO	NO ²	со						
Day average value	77.71	47.79	51.08	21.60	11.19	0.87	72.01	45.21	11.80	31.46	5.06	0.22	80.30	49.08	46.42	24.78	11.32	0.87						
Standard	100 µg/m³	60 µg/m³	80 µg/m³	80 µg/m³	80 µg/m³	4 µg/m³	100 µg/m³	60 µg/m³	80 µg/m³	80 µg/m³	80 µg/m³	4 μg/m³	100 µg/m³	60 µg/m³	80 µg/m³	80 µg/m³	80 µg/m³	4 µg/m						

Prepared by: GINS Murh Lily GIS 1910

For Gangavaram Port Limited

Reference No.:	GPL/April/2022	Submitted to:
Monitoring Date:	24.04.2022	
Organization Name:	Gangavaram Port Limited	A.P. Pollution Control Board,
Type Of Sample:	Ambient Air Quality	Regional office, Visakhapatnam
Sampled By:	Gangavaram Port Limited (CAAQ Monitoring Data)	

	10					Am	bient A	ir Qualit	y 24 hr	s averag	ge data							17
Station	Stat	ion - 1 - A (AOB)		rative Of Is HB Co		lding				ject Site kannap			10		n - 3 - Wa irds Ven			
Parameter	PM10	PM 2.5	SO ²	NO	NO ²	со	PM10	PM 2.5	SO ²	NO	NO ²	со	PM10	PM 2.5	SO ²	NO	NO ²	со
Day average value	80.65	49.56	51.04	24.58	12.27	0.59	74.74	46.88	11.80	35.64	4.43	0.36	83.34	50.90	48.27	27.14	12.29	0.69
Standard	100 µg/m³	60 µg/m³	80 µg/m³	80 µg/m³	80 µg/m³	4 µg/m³	100 µg/m³	60 µg/m³	80 µg/m³	80 µg/m³	80 µg/m³	4 µg/m³	100 µg/m³	60 µg/m³	80 µg/m³	80 pg/m³	80 µg/m³	4 µg/m³

Prepared by: GYN CAUST
LIFT UP 1/8/10

For Gangavaram Port Limited

Reference No.:	GPL/April/2022	Submitted to:
Monitoring Date:	25.04.2022	
Organization Name:	Gangavaram Port Limited	A.P. Pollution Control Board,
Type Of Sample:	Ambient Air Quality	Regional office, Visakhapatnam
Sampled By:	Gangavaram Port Limited (CAAQ Monitoring Data)	

						7111	bient Ai	i Quant	y 24 iii.	a averaç	je uata								
Station	Stat	ion - 1 - <i>A</i> (AOB)	Administr toward			lding			- 2 - Pro rds Ven	Same and the same of the same			Station - 3 - Watch Tower - 4 towards Venkannapalem						
Parameter	PM10	PM 2.5	SO ²	NO	NO ²	со	PM10	PM 2.5	SO ²	NO	NO ²	со	PM10	PM 2.5	SO ²	NO	NO ²	со	
Day average value	79.38	48.81	51.83	21.85	12.27	0.46	73.57	46.17	11.98	31.70	5.04	0.32	82.03	50.13	49.60	25.30	12.28	0.52	
Standard	100 µg/m³	60 µg/m³	80 µg/m³	80 µg/m³	80 µg/m³	4 µg/m³	100 µg/m³	60 µg/m³	80 µg/m³	80 µg/m³	80 µg/m³	4 μg/m³	100 µg/m³	60 µg/m³	80 µg/m³	80 µg/m³	80 µg/m³	4 µg/m	

Prepared by: GVX SMUST LINT 4151910

For Gangavaram Port Limited

Reference No.:	GPL/April/2022	Submitted to:
Monitoring Date:	26.04.2022	
Organization Name:	Gangavaram Port Limited	A.P. Pollution Control Board,
Type Of Sample:	Ambient Air Quality	Regional office, Visakhapatnam
Sampled By:	Gangavaram Port Limited (CAAQ Monitoring Data)	

Station	Stat	ion - 1 - A (AOB)	Administr) toward			ding	Station - 2 - Project Site Office towards Venkannapalem					Station - 3 - Watch Tower – 4 towards Venkannapalem						
Parameter	PM10	PM 2.5	SO ²	NO	NO ²	cò	PM10	PM 2.5	SO ²	NO	NO ²	со	PM10	PM 2.5	SO ²	NO	NO ²	со
Day average value	80.19	49.28	48.17	22.87	12.58	0.32	74.32	46.63	11.86	32.05	5.10	0.32	82.87	50.62	44.43	25.25	12.54	0.39
Standard	100 µg/m³	60 µg/m³	80 µg/m³	80 µg/m³	80 µg/m³	4 μg/m³	100 µg/m³	60 µg/m³	80 µg/m³	80 µg/m³	80 µg/m³	4 μg/m³	100 µg/m³	60 µg/m³	80 µg/m³	80 µg/m³	80 µg/m³	4 μg/m ³

Prepared by: GVALLYWSY-

For Gangavaran Port Limited

Reference No.:	GPL/April/2022	Submitted to:
Monitoring Date:	27.04.2022	
Organization Name:	Gangavaram Port Limited	A.P. Pollution Control Board,
Type Of Sample:	Ambient Air Quality	Regional office, Visakhapatnam
Sampled By:	Gangavaram Port Limited (CAAQ Monitoring Data)	

						Am	bient Ai	r Qualit	y 24 hr	s averaç	ge data							
Station	Stat	ion - 1 - A (AOB)	Administr) toward			ding	Station - 2 - Project Site Office towards Venkannapalem						Station - 3 - Watch Tower - 4 towards Venkannapalem					
Parameter	PM10	PM 2.5	SO ²	NO	NO ²	со	PM10	PM 2.5	SO ²	NO	NO ²	со	PM10	PM 2.5	SO ²	NO	NO ²	со
Day average value	79.49	48.88	50.30	22.52	12.12	0.55	73.65	46.23	6.38	36.90	8.63	0.39	82.14	50.20	45.84	24.98	12.11	0.54
Standard	100 µg/m³	60 µg/m³	80 µg/m³	80 µg/m³	80 µg/m³	4 μg/m³	100 µg/m³	60 µg/m³	80 µg/m³	80 µg/m³	80 pg/m³	4 µg/m³	100 µg/m³	60 µg/m³	80 µg/m³	80 µg/m³	80 µg/m³	4 µg/m³

Prepared by: Grashust US1910

For Gangavaram Port Limited

Reference No.:	GPL/April/2022	Submitted to:
Monitoring Date:	28.04.2022	18 ×
Organization Name:	Gangavaram Port Limited	A.P. Pollution Control Board,
Type Of Sample:	Ambient Air Quality	Regional office, Visakhapatnam
Sampled By:	Gangavaram Port Limited (CAAQ Monitoring Data)	

						Am	bient Ai	ır Qualic	y 24 nr:	s averag	ge data							
Station	Stat	ion - 1 - A (AOB)	Administr) toward			ding	Station - 2 - Project Site Office towards Venkannapalem					Station - 3 - Watch Tower - 4 towards Venkannapalem						
Parameter	PM10	PM 2.5	SO ²	NO	NO ²	со	PM10	PM 2.5	SO ²	NO	NO ²	со	PM10	PM 2.5	SO ²	NO	NO ²	со
Day average value	79.56	48.92	49.84	22.13	11.25	0.50	73.73	46.28	0.07	32.88	12.95	0.33	82.21	50.25	46.40	24.10	11.14	0.66
Standard	100 µg/m³	60 µg/m³	80 µg/m³	80 pg/m³	80 µg/m³	4 µg/m³	100 µg/m³	60 µg/m³	80 µg/m³	80 µg/m³	80 µg/m³	4 µg/m³	100 µg/m³	60 µg/m³	80 µg/m³	80 µg/m³	80 µg/m³	4 μg/m³

Prepared by: GVNSNUM LUT CUPS 1910

For Gangavaram Port Limited

Reference No.:	GPL/April/2022	Submitted to:
Monitoring Date:	29.04.2022	
Organization Name: Gangavaram Port Limited		A.P. Pollution Control Board,
Type Of Sample:	Ambient Air Quality	Regional office, Visakhapatnam
Sampled By:	Gangavaram Port Limited (CAAQ Monitoring Data)	

Station	Stat	ion - 1 - A	Administr	ative Of	fice Buil	dino	Station - 2 - Project Site Office						Station - 3 - Watch Tower - 4						
Station	Stat) toward			unig	towards Venkannapalem					towards Venkannapalem							
Parameter	PM10	PM 2.5	SO ²	NO	NO ²	со	PM10	PM 2.5	SO ²	NO	NO ²	со	PM10	PM 2.5	SO ²	NO	NO ²	со	
Day average value	79.29	48.75	47.62	22.14	11.54	0.41	73.48	46.11	0.17	33.53	12.58	0.32	81.93	50.06	43.99	24.24	11.91	0.47	
Standard	100 µg/m³	60 µg/m³	80 µg/m³	80 µg/m³	80 µg/m³	4 μg/m³	100 µg/m³	60 μg/m³	80 µg/m³	80 µg/m³	80 µg/m³	4 μg/m³	100 µg/m³	60 µg/m³	80 µg/m³	80 µg/m³	80 µg/m³	4 μg/m³	

Prepared by: GVALS HUNG-LING UPS 1910 For Gangavaram Port Limited

Vice President (Environment)

Reference No.:	GPL/April/2022	Submitted to:
Monitoring Date:	30.04.2022	
Organization Name:	Gangavaram Port Limited	A.P. Pollution Control Board,
Type Of Sample:	Ambient Air Quality	Regional office, Visakhapatnam
Sampled By:	Gangavaram Port Limited (CAAQ Monitoring Data)	

Station	(AOB) towards HB Colony					lding	Station - 2 - Project Site Office towards Venkannapalem						Station - 3 - Watch Tower - 4 towards Venkannapalem					
Parameter	PM10	PM 2.5	SO ²	NO	NO ²	со	PM10	PM 2.5	SO ²	NO	NO ²	со	PM10	PM 2.5	SO ²	NO	NO ²	со
Day average value	81.28	50.01	56.46	24.93	12.47	0.74	75.31	47.30	0.12	32.01	13.16	0.19	83.99	51.35	49.46	25.27	13.33	0.76
Standard	100 µg/m³	60 µg/m³	80 µg/m³	80 µg/m³	80 µg/m³	4 μg/m³	100 µg/m³	60 µg/m³	80 µg/m³	80 µg/m³	80 µg/m³	4 µg/m³	100 µg/m³	60 µg/m³	80 µg/m³	80 µg/m³	80 µg/m³	4 µg/m ³

Prepared by: Granchurh
LHG 481810

For Garigavaram Port Limited



GANGAVARAM PORT LIMITED

GPL/ENV/APPCB/2022-23/011

Date: 06/06/2022.

To

The Environmental Engineer, A.P. Pollution Control Board Regional Office APPCB Buildings, 3rd Floor Main Road, Madhavadhara VUDA Layout Visakhapatnam- 530 009.

Dear Sir.

Sub:-Monthly CFO Compliance, Environmental Marine & Terrestrial

Monitoring Reports and Water Consumption detains (Form-1) -

Submitted - Reg.

 CFO & HWA Order No. APPCB/VSP/VSP/113/CFO/HO/2015. Reff:-

dated 13.01.2016, valid up to 31.12.2020.

2. CFO & HWA Order No. APPCB/VSP/VSP/113/CFO/HO/2020,

dated 10.09.2020, valid up to 31.12.2025.

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With reference to the above, we are here with submitting the monthly CFO compliance reports and CAAQM, Marine 8 Terrestrial monitoring results along with Water Consumption details in Form - 1 for the month of May -2022.

Yours Sincerely.

Authorized Signatory

Encl: As above.

Compliance of the conditions stipulated in CFO Auto Renewal Order No. APPCB/VSP/VSP/113/CFO/HO/2020- 10/09/2020, valid up to 31.12.2025.

SI. No.	Condition	Compliance
1.	All other conditions mentioned in Schedules A, B & C of the combined CFO&HWA order issued by the Board vide order dated 13.01.2016 will remain same.	Noted and conditions are being followed as applicable.
2.	The facility shall comply with the standards issued by MoEF&CC / CPCB from time to time.	Noted and condition is being followed.
3.	The industry shall submit Half yearly compliance reports to all the stipulated conditions in Environmental Clearance (EC), Consent for Establishment (CFE) and Consent for Operation (CFO) through website i.e., https://pcb.ap.gov.in by 1st of January and 1st July of every year. The	Self-certified 1st half yearly compliance report for the period from April 2021 to September 2021 submitted on 29.11.2021 through web site.
	first half yearly compliance reports shall be furnished by the industry and second half yearly compliance reports shall be the audited through NABL accredited third party failing which the Consent Order issued will be cancelled.	NABL Accredited Agency certified compliance report for the 2 nd half for the period from October 2021 to March 2022 was uploaded through website on 30.05.2022.
4.	The facility shall ensure that dedicated fund is allotted towards Environment Relief Fund (ERF) in the Public Liability Insurance policy and submit a copy of the policy at the Regional Office: Visakhapatnam every year.	GPL is having Public liability Insurance of IFFCO-TOKIO vide Policy No:41063755, dated 28.09.2021, Valid till 14/09/2022 with Premium of Rs-5615/- & ERF of Rs.5615/-
5.	In case of false certification, noncompliance of conditions / directions and discrepancy in furnishing the information by the industry, the Board can withdraw the auto renewed consent and take action under provisions of relevant Acts & Rules.	Noted and condition is being followed.
6.	The facility shall inventorize the storage quantities of hazardous chemicals as per the hazard nature of reactivity / toxicity / flammability / explosive stored/handling in the premises as defined in the Management of Storage, Import of Hazardous Chemicals (MSIHC) Rules, 1989 and the details shall be furnished to the Factories Department and to the Regional Office, APPCB on monthly basis duly certifying the same.	GPL is not handling any Hazardous cargo/Containers/Chemicals.
7.	The facility shall identify major accident hazard chemicals & list out the hazardous chemicals endangered to human health & environment and the details shall be furnished to the Factories Department and to the Regional Office, APPCB time to time duly certifying the same by the industry. Further the facility shall extend training to the working personnel's while handling hazardous chemicals for prevention of	GPL is not handling any Hazardous cargo/Containers/Chemicals.

	accidents and necessary antidotes to ensure the safety, as per the MSIHC Rules, 1989.	
8.	The facility shall submit the copy of the safety audit report and On-Site / Off Site Emergency Plans as applicable after being certified by the Factories Department/concerned authority, to the APPCB, Regional Office from time to time, if the storage quantity of hazardous chemicals is equal to or, in excess of the threshold quantities specified in schedule 2 & 3 of MSIHC Rules, 1989.	An onsite and offsite emergency action plan has been prepared and submitted to APPCB, RO, VSP. Mock drills are being conducted twice in a year.
9.	The facility shall carryout calibration of safety equipments and leak detection systems at regular intervals and shall certify the same with the Factories Department/concerned authority. That certified copy shall be submitted to the APPCB, Regional Office. The facility shall install fluorescent Wind Vane at the highest point in the facility premises.	 GPL install fluorescent Wind Vane at the following two places within the Port premises. 1. On the top of Over Head Tank near Harbour Gate besides GPL Canteen. 2. On the top of Commercial Office Building (COB)
10	The facility shall inventorize the hazardous wastes and its quantities stored within the facility premises as per the Hazardous and Other Wastes (Management and Transboundary Movement) Rules, 2016 (HOWM Rules, 2016) and shall furnish the details to Regional Office, APPCB on monthly basis duly certifying the same by the industry.	GPL is not handling any Hazardous cargo/Containers/Chemicals. GPL is permitted to handle Used Lubricating oil of 12000 LPA. The generation, storage & disposal details are submitting to APPCB through Form – IV. Latest submission is on 06.06.2022 for the year 2021-2022.
11	The facility shall allow import of hazardous cargoes only after the importer complies with the MSIHC Rules, 1989.	GPL Not handling any Hazardous cargo/Containers/Chemicals.

Compliance report of the conditions stipulated in Schedule A,B & C of CFO & HWA Order No. APPCB/VSP/VSP/113/CFO/HO/2015, dated 13.01.2016

Compliance of Schedule - A

SI. No.	Condition	Compliance
1.	Any up-set condition in any plant/plants of the industry, which result in, increased effluent/ emission discharge and/ or violation of standards stipulated in this order shall be informed to this Board, under intimation to the Collector and District Magistrate and take immediate action to bring down the discharge / emission below the limits.	All conditions are being followed.
2.	The industry should carryout analysis of waste water discharges or emissions through chimneys for the parameters mentioned in this order on quarterly basis and submit to the Board.	GPL is carrying out 3 rd party monitoring and analysis. As per analysis reports, the samples are meeting the Board standards.
3.	All the rules & regulations notified by Ministry of Law and Justice, Government of India regarding Public Liability Insurance Act, 1991 should be followed as applicable.	Noted and conditions are being followed as applicable.
4.	The industry should put up two sign boards (6×4 ft. each)at publicly visible places at the main gate indicating the products, effluent discharge standards, air emission standards, hazardous waste quantities and validity of CFO and exhibit the CFO order at a prominent place in the factory premises.	Noted and condition is being followed.
5.	Notwithstanding anything contained in this consent order, the Board here by reserves the right and powers to review / revoke any and / or all the conditions imposed herein above and to make such variations as deemed fit for the purpose of the Acts by the Board.	Noted the condition.
6.	The industry shall file the water cess returns in Form-I as required under section (5) of water (Prevention and Control of Pollution) cess Act, 1977 on or before the 5 th of every calendar month, showing the quantity of water consumed in the previous monthly along with water meter readings. The industry shall remit water cess as per the assessment order as and when issued by Board.	Water consumption details of the previous month are being submitted before 5 th of subsequent month in FORM - I. The latest reports for the Month of April, 2022 were submitted on 5 th May, 2022 After introduction of GST, APPCB has instructed all the industries are not required to remit water cess charges from 1 st July, 2017 onwards.

7.	The applicant shall submit Environment statement in Form V before 30 th September every year as per Rule No.14 of E(P) Rules,1986 & amendments thereof.	Complied and Form V was Submitted on 24.09.2021 for the period 2020- 2021
8.	The applicant should make applications through Online for renewal of Consent (under Water Air Acts) and Authorization under HWM Rules at least 120 days before the date of expiry of this order, along with prescribed fee under Water and Air Acts and detailed compliance of CFO conditions for obtaining Consent & HW Authorization of the board. The industry should immediately submit the revised application for consent to this Board in the event of any change in the raw material used, processes employed, quantity of trade effluents & quantity of emissions. Any change in the management shall be informed to the Board, the person authorized should not let out the premises / lend / sell / transfer their industrial premises without obtaining prior permission of the state Pollution Control Board.	GPL has obtained CFO & HWA of the Board vide order dated 13/01/2016 valid up to 31.12.2020 and extended up to 31.12.2025 vide order dated 10.09.2020.
9.	Any person aggrieved by an order made by the state board under section 25, section 26, section 27 of water Act, 1974 or section 21 of Air Act, 1981 may within thirty days from the date on which the order is communicated to him, prefer an appeal as per Andhra Pradesh Water Rules, 1976 and Air Rules 1982, to Appellate authority constituted under section 28 of the Water (prevention and control of pollution) Act, 1974 and section 31 of the Air (prevention and control of pollution) Act, 1981.	Noted and condition will be followed.

Compliance of Schedule - B

SI.			Condition				Compliance
No.	101-1		allution				
1			ollution	: . :	:		
1.	1		er consumption quar ed below:	ונונו	ies are		GPL is submitting water
	l men	S .)upotitu		GPL is submitting water consumption details and water cess
		o. No	Purpose	۱	luantity KLD		1
		1	Gardening/irrigation	-	25		in Form-l regularly.
		2	Dust suppression	٠	1296.0		The industry is consuming water
		<u> </u>	Domestic		40		within consented quantity only.
		4	Ship supply		32.5		within consented quantity only.
		5	miscellaneous		40.6		Provided 2 No. nos of flow meters
			Total	1	1434.1		for quantification of water used for
	Sour	ce c	of water is Visakhapa	tna	m industr	ial	domestic and other purposes.
	1		ipply Co. the followir				domestic and other purposes.
	1		ed water consumptio	_			
	S.		Purpose		Quantity		
	No)			KLD		
	1	_	ıst suppression		1296.0		
	2		mestic purpose		40.00		
	3		ocess, where by water		73.1		
			ts polluted and polluta				
		_	e easily bio degradable			-	
	4		ocessing , where by ater gets polluted and				
			llutants are not easily	hio			
			gradable				
			Total		1409.1		
	Sepa	rate	e water meters shal	be	maintain	ed	
	1 .		ssessing the quantit				
	for e	each	of the purpose m	ent	ioned abo	ve	
	for C	ess	assessment purpose	.			
2.	The	Gar	ngavaram Port Limi	ted	(GPL) sh	all	GPL has provided separate energy
	prov	ide	separate energy ma	ers	for Sewa	ge	meters for Sewage Treatment Plant
	Trea	tme	nt Plant (STP) and t	or	Air polluti	on	(STP) and separate energy meter for
	Cont	rol	equipments to	rec	ord ener	gy	the Air pollution Control equipments
	cons	ump	otion.				(MDSS) to record energy
							consumption.
	Air P						
1.	1		ngavaram Port Limi				The mitigation measures being
	1		with ambient air qu		•		implemented by GPL ensures that
	1		(Particulate matter s				the ambient air quality parameters
	, ,		00µg /m³;; PM _{2.5} (Pa				conform to the PCB prescribed
	1		s than 2.5 µm) - 60				standards.
		-	n ³ : NO _X - 80µg /m ³ ,		•	ort	
	1 '		s at the periphery of		•		
	Stan		•			as	
	1		ed in the Nationa				
		•	Standards CPCB No			.B-	
	1		:0/90/PCI-I, dated 18	.11.:	2009		
		-	evels:	_	- (*)		
			e (6 AM to 10 PM) - 7		• •		
	Nigh	it tir	ne (10 PM to 6 AM) \cdot	70	dB (A).		

2.	The Gangavaram port limited (GPL) shall maintain 3 CAAQMs with online connectivity to APPCB and maintain records.	GPL installed 3 No. of CAAQM stations to measure the parameters PM 10, PM 2.5, SO ² , NO, NO ² , CO at the following locations and data connected to APPCB website. i. Administrative office towards
		H.B. Colony (Station 1): ii. Project site office building towards Venkannapalem (Station2)
		iii. Watch tower – 4 towards Gangavaram village (Station3).As per the data, the SPM values are within Board standards.
3.	The Gangavaram Port Limited (GPL) shall Maintain wind breaking wall all along the Gangavaram village side up to a height 10 mts as wind speed is high in this area	GPL erected wind breaking wall of height 6m on the compound wall of height 3m near Gangavaram village and HB Colony to prevent any dust nuisance towards habitation & maintaining about 50 m width of green belt along port compound wall near Gangavaram (V).
4.	The Gangavaram Port Limited (GPL) shall not establish any other stock yards other than designated stock yards.	GPL has not established any stock yards other than designated stock yards.
5.	The Gangavaram Port Limited (GPL) shall maintain Telescopic chute at ship loading points	GPL is maintaining Telescopic chute at ship loading points.
6.	The Gangavaram port limited (GPL) shall not stock the Materials more than 10mts height where MDSS system available and shall restrict to 6 mts for other stocking heights where tankers water spraying system is maintained in the stockyards.	GPL obtained amendment to this condition vide Amendment to CFO dated 16/09/2016 and the condition was amended as: "GPL shall not stock the materials more than 12 meters height where MDSS system is available and shall maintain stack height of 10 meters at manual stack yards"
7.	The Gangavaram port limited (GPL) shall take up the cleaning of road connected to National Highway in co-ordination with GVMC and R&B Departments.	This condition was deleted vide direction no. 06 vide Order No.754/APPCB/UH-II/TF/VSP/ 2016, dated 12.08.2016. GVMC is taking up the cleaning of road.
8.	The Gangavaram Port Limited (GPL) shall maintain dusty cargo operations if the wind velocity crosses 20 KMPH and all MDSS sprinklers shall start immediately to maintain AAQ standards	Noted and condition is being followed.
9.	The Gangavaram Port Limited (GPL) shall maintain fully mechanized handling equipments for loading and un loading operations for dusty cargo to the maximum extent possible.	Noted and condition is being followed.

	Gene	en!				
1.	The main same inspea. Cb. Lc. Hgd. Ir	Gangavarar tain the fees shall be ecting office argo handling books for azardous/nenerated an anifest cop	ollowing made a ers of the le ng materia r pollution on hazaro ad dispose book. ies of haza	ll wise details. control systems dous solid wast	e a	The records are being maintained and are available for inspecting officers of the Board.
	dispo		vaste (No	n Hazardous) a		a. GPL is disposing the municipal solid waste to GVMC.
	S. No	Name of the solid waste	Quantity	Disposal	t	o. GPL is disposing the discarded material & plastic material to
	1.	Domestic solid waste	10 T/m	Shall be collected segregated and disposed as per MSW Rules in consultation with GVMC Authorities		authorized recyclers.STP sludge is being turned in to bio-compost and used as manure to green belt.d. Lead acid batteries are being
	2.	Discarded material, plastic material	10 T/m	Shall be disposed to authorized recyclers only		disposed to the supplier on buy back basis.
	3.	Sludge from STP	1.0 T/m	Shall be composted and used in green belt programme		
	4.	Lead acid batteries		Shall be disposed to authorized recyclers		
3.	main	tain green lated in th	belt in 50	mited (GPL) sha meters width a der dated 07-02	1S 2-	GPL has developed plantation of 5.0 Lakhs saplings in about 318.21 acres within the Port premises besides existance of Prosopis in an extent of about 150 Acres covering periphery of all yards, roads, buildings and all along conveyor belt. Maintaining 50 m width of green belt towards North and North-West direction with special emphasis towards habitation i.e., HB Colony, Peda Gantyada, Venkannapalem, Kongapalem & Gangavaram village.

		Maintaining thick greenbelt at Port Approach road, Railway track side and at Truck parking area along the wind breaking wall towards HB Colony.
		Developed High Density Plantation (Miyawaki) within the Port premises in an extent of 1.0 Acre with 12,120 no. of plantation, as directed by APPCB
		GPL established exclusive nursery with 80,000 saplings and employed 183 people to maintain and improve the green belt on continuous basis.
		About Rs.1.85 Cr per annum is being spent for the development of green belt in the true spirit.
4.	The Gangavaram Port Limited (GPL) shall not store/ handle any hazardous cargo containers within premises.	GPL is not handling container cargo operations.
5.	All types of the fertilizers shall be stored in the closed warehouses only. The port shall ensure that there shall not be any open storage of urea or any other fertilizer materials and all urea & fertilizer material handling warehouses shall be maintained with effluent collection pits for collection and treatment and then used for green belt in the premises after meeting the standards.	GPL is storing the Fertilizers in closed ware houses and provided leachate collection pits around the area of warehouses and connected to STP.
6.	The Gangavaram Port Limited (GPL) shall store fuel oils used for construction equipment vessels / vehicles in a well designed manner and protect them against fire hazards by construction of compound wall to prevent access to unauthorized elements. The surface run off from storage area shall pass through oil water separator before being discharging. The Gangavaram Port Limited (GPL) shall store fuel oils used for construction equipment vessels / vehicles in a well designed manner and protect them against fire hazards by construction of compound wall to prevent access to unauthorized elements. The surface run off from storage area shall pass through oil water separator before being discharging.	GPL is storing the used oil in drums under a shed.
7.	The Gangavaram Port Limited (GPL) shall maintain the Malaria control programme and Health facilities in the operation phase. Vector control programmes. Control of all	GPL is having dispensary within the premises and no malaria cases were reported as of now. All anti malarial measures are taken

	breeding ground shall be carried out by the use of larvicide's in addition to control of adult mosquitoes. The health team should include a trained entomologist.	
8.	The Gangavaram Port Limited (GPL) shall maintain a task force to check the vehicle emissions on permanent basis The Gangavaram Port Limited (GPL) shall maintain a task force to check the vehicle emissions on permanent basis	GPL has provided provision for checking vehicle emissions with a task force team including environment and safety department officials.
9.	The Gangavaram Port Limited (GPL) shall constitute an Environment Management cell with qualified and trained staff.	GPL is having a dedicated Environment Management Team headed by Vice President.
10.	The Gangavaram Port Limited (GPL) shall maintain onsite and offsite emergency action plan after carrying out risk analysis and hazop studies	Complied with the condition.
11.	The Gangavaram Port Limited (GPL) with VUDA shall ensure that no slum development and unauthorized construction occur in the surrounding area.	VMRDA (VUDA) is taking necessary precautions to see that no slum development and unauthorized construction occur in the surrounding area of GPL.
12.	The Gangavaram Port Limited (GPL shall handle alumina in completely closed enclosures. It shall also furnish an action plan to install mechanized system.	GPL is handling the alumina in hoppers and directly through tankers.
13.	The Gangavaram Port Limited (GPL) shall implement fallowing for controlling fugitive emission: a. Adequate dust controlling measures should be undertaken for loading and unloading operations for dusty cargo. b. Closed conveyor belt with water sprinkling arrangement for suppression of dust while conveyor dusty cargo likes coal, iron ore & alumina. c. Vehicle movement minimized / eliminated by implementing mechanical operations.	systems at discharge/feeding points of belt conveyors at each transfer tower. c. Laid BT road within the port premises. d. 5 No. of heavy duty sweeping (3 No. existing & 2 New) machines were deployed for cleaning of berths, back up areas and roads.
	d. All the vehicles involved in transportation of cargo shall be covered with tarpaulin.	e. Covering the outgoing cargo vehicles with tarpaulin.f. Provided dedicated truck/tyre washing facility to wash all the
	e. Traffic management measures adopted to avoid traffic congestion and provide empty dusting vehicle washing / dry cleaning system to clean all out going cargo vehicles.	g. Provided dedicated truck parking facility.

14.	f. Sufficient parking facilities based on traffic density / vehicular movements anticipated from the port. g. Adequate water sprinkling provided on roads and at dusty cargo storage areas for suppression of dust The Gangavaram Port Limited (GPL) shall implement the following measures in the cargo handling and stacking area: a. The ship un-loader maintained with insitu water sprinkling system and unloading hoppers provided with covers on three sides to control fugitive emissions. Iron ore shall be unloaded through wagon tipplers. b. Mechanical stackers cum re-claimers for stacking, transfer and reclamation; Conveyors for transfer of materials to stop manual handling / mobile machines. c. MDSS in stacking areas.	h. Ensuring continuous water sprinkling on the berths, back up areas, at all transfer points, hauling roads with 20 Mobile DSS tankers for dust suppression. i. Established mechanical conveyor system for handling coal & Iron ore to prevent the spillage of cargo and provided closed hoods for the conveyor system to curb fugitive emissions of coal/iron ore particles into the air. ii. Stacker cum re-claimers are being used for loading and unloading the coal. The railway wagons are being loaded mechanically. The Port is having Stacker cum re-claimer-1no., reclaimers-3nos., stackers-3nos., wagon loader-1no., silo of 800 cu.m capacity, ship unloader-2nos, ship loader-1no., wagon tipplier-1no., mobile harbour cranes-5no.
		iii. Mechanical Dust Suppression System (MDSS): 176 No. of water cannons were installed at stack yards for dust suppression by spraying water at high pressure to form blanket of mist on surface of cargo stock to settle the dust.
15.	The Gangavaram Port Limited (GPL) shall ensure AAQ standards of the Board on all environmental conditions without fail.	GPL has provided 3 nos AAQ stations with data logger and connected to APPCB website.
16.	The Gangavaram Port Limited (GPL) shall maintain standby centrifugal pump so as to ensure uninterrupted operation of MDSS.	Complied. There are 4 no. Centrifugal pumps kept standby.
17.	The Gangavaram Port Limited (GPL) shall maintain compliance of all other conditions of CFE orders issued by the Board	Complied with the condition.
18.	The Gangavaram Port Limited (GPL) shall comply with Task Force directions and other directions issued by the Board from time to time.	Complied with the condition.

Compliance of Schedule - C

SI.	Condition	Compliance
No		
1.	All the rules and regulations notified by Ministry of Environment & Forests, Government of India under the E (P) Act, 1986 in respect of management, handling, transportation and storage of the Hazardous waste should be followed.	GPL is following all the rules and regulations notified by Ministry of Environment & Forests, Government of India under the E(P) Act, 1986 in respect of management, handling, transportation and storage of the Hazardous waste.
2.	The Gangavaram Port Limited (GPL) shall not store hazardous waste for more than 90 days as per the Hazardous Wastes (Management. Handling and Tran boundary Movement) Rules, 2008 and amendments thereof.	Complied with the condition.
3.	The Gangavaram Port Limited (GPL) shall dispose Used Lead Acid Batteries to the manufacturers / dealers on buyback basis	GPL is buying the Lead acid on buy back basis.
4.	The Gangavaram Port Limited (GPL) shall maintain 6 copy manifest system for transportation of waste generated and a copy shall be submitted to concern Regional Office of APPCB. The driver who transports Hazardous Waste should be well acquainted about the procedure to be followed in case of an emergency during transit. The transporter should carry a Transport Emergency (TREM) Card.	GPL is following manifest system for disposal of waste oil to APPCB authorized agencies and submitting the copies to the Board.
5.	The Gangavaram Port Limited (GPL) shall maintain proper records for Hazardous Wastes stated in Authorization in FORM-3 i.e., quantity of Incinerable waste, land disposal waste, recyclable waste etc., and file annual returns in Form- 4 as per Rule 22(2) of the Hazardous Wastes (Management, Handling & Tran boundary Movement) Rules, 2008 and amendments thereof	GPL is maintaining records for Hazardous Wastes stated in Authorization in Form-3 of CFO Order and filing annual returns in Form- 4 to APPCB. For the year 2021-2022 Form – 3 & Form – 4 Submitted on 06.06.2022.
6.	The Gangavaram Port Limited (GPL) shall submit the condition wise compliance report of the conditions stipulated in Schedule A, B & C of this Order on half yearly basis to Board Office, Hyderabad and concerned Regional Office	Complied with the condition. GL is submitting the compliance reports on monthly basis.

GANGAVARAM PORT LIMITED

(An ISO 9001:2015 & ISO 14001:2015

Certified Company)



Environment Monitoring Report May, 2022

Corporate Office:

2,3,4th Floors, Hansa plaza, Plot No.798, road No.36, Jubilee Hills, Hyderabad - 500033 Phone: 040 – 33599999

Site Office:

Gangavaram (V & Post) Pedagantyada (Mandal) Visakhapatnam – 530 044 Phone: 0891 -2701177

Reference No.:	GPL/May/2022	Submitted to:
Monitoring Date:	01.05.2022	
Organization Name:	Gangavaram Port Limited	A.P. Pollution Control Board,
Type Of Sample:	Ambient Air Quality	Regional office, Visakhapatnam
Sampled By:	Gangavaram Port Limited (CAAQ Monitoring Data)	

Station	Stat	ion - 1 - A	Administr			ding				ject Site	Office alem				n - 3 - Wa irds Ven			
Parameter	PM10	PM 2.5	soz	NO	NO2	со	PM10	PM 2.5	SO ²	NO	NO ²	со	PM10	PM 2.5	SO ²	NO	NO²	со
Day average value	81.64	50,16	33.95	22.24	9.57	0.26	75.66	47.45	0.12	31.11	12.98	0.40	84.37	51,51	27.32	21.55	8.73	0.23
Standard	100 µg/m³	60 µg/m³	80 µg/m³	80 µg/m³	80 µg/m³	4 μg/m³	100 µg/m³	60 µg/m³	80 µg/m³	80 µg/m³	80 µg/m³	4 μg/m³	100 µg/m³	60 µg/m³	80 µg/m³	80 µg/m³	80 µg/m³	4 µg/m

Prepared by: GIVNS. Husty
LHT UPS 1910

For Gangavaram Port Limited

Reference No.:	GPL/May/2022	Submitted to:				
Monitoring Date:	02.05.2022					
Organization Name:	Gangavaram Port Limited	A.P. Pollution Control Board.				
Type Of Sample:	Ambient Air Quality	Regional office, Visakhapatnam				
Sampled By:	Gangavaram Port Limited (CAAQ Monitoring Data)					

						Am	bient Ai	r Qualit	y 24 hrs	averag	e data							
Station	Stat	ion - 1 - A (AOB)		rative Of		ding				ject Site		0/1			n - 3 - Wa irds Ven			
Parameter	PM10	PM 2.5	SO ²	NO	NO ²	co	PM10	PM 2.5	SO ²	NO	NO ²	co	PM10	PM 2.5	SO2	NO	NO2	со
Day average value	82.62	50.75	45.27	29.66	12.77	0.35	76.56	48.01	9.89	36.55	9.69	0.35	85.38	52.12	28.37	21.11	9.02	0.24
Standard	100 µg/m³	60 µg/m³	80 µg/m³	h8\w ₃	90 µg/m³	4 µg/m³	100 µg/m³	60 µg/m³	h8/w ₃	h8\w ₃	80 pg/m³	4 µg/m³	100 µg/m ³	60 µg/m³	hð\w ₂ 80	80 hava	h8/w ₃	4 µg/m

Prepared by: GVNCHWdg LAT UK 1910 For Gangavaram Port Limited

Vice President (Environment)

Reference No.:	GPL/May/2022	Submitted to:
Monitoring Date:	03.05.2022	
Organization Name:	Gangavaram Port Limited	A.P. Pollution Control Board,
Type Of Sample:	Ambient Air Quality	Regional office, Visakhapatnam
Sampled By:	Gangavaram Port Limited (CAAQ Monitoring Data)	

						Am	bient Ai	r Qualit	y 24 hrs	s averag	e data							
Station	Stat			rative Of is HB Co		ding				ject Site		1)				atch Tow kannap	1000	
Parameter	PM10	PM 2.5	SO ²	NO	NO ²	co	PM10	PM 2.5	S02	NO	NOs	со	PM10	PM 2.5	SO ²	NO	NO2	со
Day average value	83.10	51.03	47.34	29.04	12.12	0.48	77.01	48.27	10.25	31.24	11,62	0.41	85.87	52.41	43.21	32.14	12.21	0.51
Standard	100 µg/m³	60 µg/m³	80 µg/m³	h8\w ₃	h8\w ₂	4 µg/m³	100 µg/m³	60 µg/m³	h8\m ₃	h8/w ₂	80 µg/m³	4 µg/m³	100 µg/m³	60 µg/m³	80 µg/m³	hð\w ₂	hð/w ₃	4 µg/m³

Prepared by: Grover Husty CIPS 1910 LAST

For Gangavaram Root Limited

Reference No.:	GPL/May/2022	Submitted to:
Monitoring Date:	04.05.2022	
Organization Name;	Gangavaram Port Limited	A.P. Pollution Control Board,
Type Of Sample:	Ambient Air Quality	Regional office, Visakhapatnam
Sampled By:	Gangavaram Port Limited (CAAQ Monitoring Data)	

						All	ioient A	ii wuaii	ty 24 hr	s averag	le nara							
Station	Stat		Administr) toward			ding			- 2 - Pro ards Ver						n - 3 - Wa ards Ver			
Parameter	PM10	PM 2.5	so²	NO	NO ²	со	PM10	PM 2.5	SO ²	NO	NO2	со	PM10	PM 2.5	SO ²	NO	NO2	со
Day average value	81.07	49.87	43.20	30.27	13.41	0.21	75.13	47.17	10.09	27.00	10.23	0.45	83.77	51.21	37.70	32.93	13.69	0.17
Standard	100 µg/m³	60 µg/m³	80 µg/m³	80 µg/m³	80 µg/m³	4 μg/m ³	100 µg/m³	60 µg/m³	h8/w ₃	80 µg/m³	80 pg/m ³	4 μg/m³	100 µg/m³	60 µg/m³	80 µg/m³	h8/w ₃	80 µg/m³	4 µg/m ³

Prepared by: GVNSHULT

D. THERE. C

For Cangayacam Port Limited

Reference No.:	GPL/May/2022	Submitted to:
Monitoring Date:	05.05.2022	
Organization Name:	Gangavaram Port Limited	A.P. Pollution Control Board,
Type Of Sample:	Ambient Air Quality	Regional office, Visakhapatnam
Sampled By:	Gangavaram Port Limited (CAAQ Monitoring Data)	

						Am	bient A	ir Qualit	y 24 hrs	averag	e data							
Station	Stat	ion - 1 - A (AOB)		ative Of		ding				ject Site kannap						tch Tow		
Parameter	PM10	PM 2.5	SO ²	NO	NO ²	со	PM10	PM 2.5	SO ²	NO	NO ²	co	PM10	PM 2.5	SO2	NO	NO2	со
Day average value	85.40	52.43	45.27	29.66	12.77	0.35	79.14	49.59	9,65	26.05	9.47	0.49	88.25	53.84	32.57	19.38	10.17	0.28
Standard	100 µg/m³	60 µg/m³	h8/w ₃	80 µg/m³	h8\w ₂	4 μg/m³	100 µg/m³	60 µg/m³	80 µg/m³	80 µg/m³	h8/w ₂	4 µg/m³	100 µg/m³	60 µg/m³	h8/w ₃	80 µg/m³	90 µg/m³	4 µg/m³

Prepared by: GVNS Husty

For Gangavaram Port Limited

Reference No.:	GPL/May/2022	Submitted to:
Monitoring Date:	06.05.2022	
Organization Name:	Gangavaram Port Limited	A.P. Pollution Control Board,
Type Of Sample:	Ambient Air Quality	Regional office, Visakhapatnam
Sampled By:	Gangavaram Port Limited (CAAQ Monitoring Data)	

						Ar	nbient A	ir Qualit	y 24 hrs	saverag	e data							
Station	Stal		Administr) toward			ding			The second second second second	ect Site kannapa						kannapa		
Parameter	PM10	PM 2.5	SO ²	NO	NO ²	co	PM10	PM 2.5	SO ²	NO	NO ²	со	PM10	PM 2.5	SO ²	NO	NO2	co
Day average value	87.36	53.49	44.09	7.35	57.84	0.31	80.95	50.60	10.24	25.84	11.10	0.38	90.26	54.93	44.98	26.04	13.00	0.56
Standard	100 µg/m³	60 µg/m³	80 µg/m³	h8/w ₃	80 µg/m³	4 µg/m³	100 µg/m³	60 µg/m³	h8\w ₂	h80 80	h8/w ₂	4 µg/m³	100 µg/m³	60 µg/m³	80 µg/m³	80 µg/m³	80 µg/m³	4 µg/m³

Prepared by: Grans Hunty

For Gangavaram Port Limited

Vice President (Environment)

Reference No.:	GPL/May/2022	Submitted to:
Monitoring Date:	07.05.2022	
Organization Name:	Gangavaram Port Limited	A.P. Pollution Control Board,
Type Of Sample:	Ambient Air Quality	Regional office, Visakhapatnam
Sampled By:	Gangavaram Port Limited (CAAQ Monitoring Data)	

Station	Stati	on - 1 - A (AOB)	dministr toward			ding				ject Site kannap					n - 3 - Wa ards Ven			
Parameter	PM10	PM 2.5	SO ²	NO	NO ²	co	PM10	PM 2.5	SO2	NO	NO ²	со	PM10	PM 2.5	SO ²	NO	NO ²	со
Day average value	87.48	53.46	47.18	0.00	73,75	0.51	81.08	50.58	9.63	25.86	8.68	0.41	90.41	54.91	45.45	26.32	14.33	0.40
Standard	100 µg/m³	60 µg/m³	80 µg/m³	80 µg/m³	80 µg/m³	4 µg/m³	100 µg/m³	h8/w ₃	80 µg/m³	80 µg/m³	80 µg/m³	4 μg/m³	100 µg/m³	60 µg/m³	h8/w ₃	80 µg/m³	80 µg/m³	4 µg/m

Prepared by: Grand Husty

Lim 4181410

For Gangavaram, Port Limited

Reference No.:	GPL/May/2022	Submitted to:
Monitoring Date:	08.05.2022	
Organization Name:	Gangavaram Port Limited	A.P. Pollution Control Board,
Type Of Sample:	Ambient Air Quality	Regional office, Visakhapatnam
Sampled By:	Gangavaram Port Limited (CAAQ Monitoring Data)	

						Am	bient A	ir Qualit	y 24 hr	s averag	e data	ž.							
Station Parameter	Station - 1 - Administrative Office Building (AOB) towards HB Colony							Station - 2 - Project Site Office towards Venkannapalem						Station - 3 - Watch Tower - 4 towards Venkannapalem					
	PM10	PM 2.5	SO ²	NO	NO2	co	PM10	PM 2.5	SO ²	NO	NO2	co	PM10	PM 2.5	SO ²	NO	NO2	со	
Day average value	79.32	48.79	42.09	0.00	73.75	0.10	73.51	46.16	9.57	27.54	9.77	0.10	81.98	50.11	39.86	25,17	13.34	0.17	
Standard	100 µg/m³	60 µg/m³	90 µg/m³	80 µg/m³	80 µg/m³	4 μg/m³	100 µg/m³	60 µg/m³	80 µg/m³	h8\w ₃	h8\w ₃	4 µg/m³	100 µg/m³	60 µg/m³	80 µg/m³	80 µg/m³	h8/w ₃	4 µg/m³	

Prepared by: Grand Husty UPS 1910

For Gangavaram Port Limites

Ref erence No.:	GPL/May/2022	Submitted to:
Monitoring Date:	09.05.2022	
Organization Name:	Gangavaram Port Limited	A.P. Pollution Control Board,
Type Of Sample:	Ambient Air Quality	Regional office, Visakhapatnam
Sampled By:	Gangavaram Port Limited (CAAQ Monitoring Data)	

						All	nbient A	ii Qualic	y 24 III	s averag	je uaca							
Station Parameter	Stat		Administr) toward	Station - 2 - Project Site Office towards Venkannapalem							Station - 3 - Watch Tower - 4 towards Venkannapalem							
	PM10	PM 2.5	SO ²	NO	NO2	co	PM10	PM 2.5	SO2	NO	NO2	со	PM10	PM 2.5	SO2	NO	NO²	со
Day average value	76.57	47.12	36.39	0.00	73.75	0.01	70.96	44.57	10.18	23.37	13.07	0.04	79.12	48.39	34.14	23.58	13.34	0.16
Standard	100 µg/m³	60 µg/m³	80 µg/m³	80 µg/m³	80 µg/m ³	4 µg/m³	100 µg/m³	60 µg/m³	80 µg/m³	80 µg/m³	80 µg/m³	4 µg/m³	100 µg/m³	60 µg/m³	80 µg/m³	80 µg/m³	80 µg/m³	4 μg/m ³

Prepared by: CQVNS HUST LNG 4151910

For Gangavaram Port Limites

Reference No.:	GPL/May/2022	Submitted to:			
Monitoring Date:	10.05.2022	*			
rganization Name: Gangavaram Port Limited		A.P. Pollution Control Board,			
Type Of Sample:	Ambient Air Quality	Regional office, Visakhapatnam			
Sampled By:	Gangavaram Port Limited (CAAQ Monitoring Data)				

						Ar	nbient A	ir Quali	ty 24 hr	s averag	ge data	Ď								
Station Parameter	Station - 1 - Administrative Office Building (AOB) towards HB Colony							Station - 2 - Project Site Office towards Venkannapalem							Station - 3 - Watch Tower - 4 towards Venkannapalem					
	PM10	PM 2.5	so²	NO	NO ²	со	PM10	PM 2.5	SO ²	NO	NO ²	со	PM10	PM 2.5	SO ²	NO	NOS	со		
Day average value	78.18	48.16	33.99	0.00	73.75	0.04	72.45	45.56	10.06	18.00	14.93	0.12	80.79	49.46	34.36	22.83	13.39	0.26		
Standard	100 µg/m³	60 µg/m³	80 µg/m³	h0\w ₂	90 µg/m³	4 µg/m³	100 µg/m³	60 µg/m³	h8\w ₂	h8/w ₃	h8\m ₂	4 µg/m³	100 µg/m³	60 µg/m³	80 µg/m³	h8\w ₂	80 hg/m³	4 μg/m³		

Prepared by: GVALSHUNGT

For Gangavaram Port Limited

Reference No.:	GPL/May/2022	Submitted to:
Monitoring Date:	11.05.2022	
Organization Name:	Gangavaram Port Limited	A.P. Pollution Control Board,
Type Of Sample:	Ambient Air Quality	Regional office, Visakhapatnam
Sampled By:	Gangavaram Port Limited (CAAQ Monitoring Data)	

						All	iblent A	ir Qualit	y 24 nr	s averaç	je oaca							
Station Parameter	Station - 1 - Administrative Office Building (AOB) towards HB Colony						Station - 2 - Project Site Office towards Venkannapalem						Station - 3 - Watch Tower - 4 towards Venkannapalem					
	PM10	PM 2.5	SO ²	NO	NO²	со	PM10	PM 2.5	SO ²	NO	NO ²	co	PM10	PM 2.5	SO ²	NO	NO2	со
Day average value	82.27	50.53	41.88	14.82	41.35	0.26	76.25	47.80	8.97	27.26	11.15	0.32	85.02	51.89	36.80	25.11	12.12	0.30
Standard	100 µg/m³	60 µg/m³	80 µg/m³	80 µg/m³	80 µg/m³	4 μg/m³	100 µg/m³	60 µg/m³	80 µg/m³	h8\w ₃	80 µg/m³	4 µg/m³	100 µg/m³	60 µg/m³	80 µg/m³	80 µg/m³	80 µg/m³	4 µg/m

Prepared by: Grace Lendy US 1910

For Gangavaram/Port Limited

Reference No.:	GPL/May/2022	Submitted to:				
Monitoring Date:	12.05.2022					
rganization Name: Gangavaram Port Limited		A.P. Pollution Control Board,				
Type Of Sample:	Ambient Air Quality	Regional office, Visakhapatnam				
Sampled By:	Gangavaram Port Limited (CAAQ Monitoring Data)					

Station	Station - 1 - Administrative Office Building (AOB) towards HB Colony							Station - 2 - Project Site Office towards Venkannapalem							Station - 3 - Watch Tower - 4 towards Venkannapalem						
	PM10	PM 2.5	SO2	NO	NO ²	co	PM10	PM 2.5	SO ²	NO	NO2	co	PM10	PM 2.5	SO2	NO	NO ²	со			
Day average value	72.89	44.67	22.33	2.02	35.84	0.11	67.53	42.24	2.67	41.40	13.50	0.22	75.32	45.87	36.54	106.48	14.91	0.21			
Standard	100 µg/m³	60 µg/m³	80 µg/m³	h8\w ₂	80 µg/m³	4 μg/m³	100 µg/m³	60 µg/m³	80 µg/m³	80 µg/m³	80 µg/m³	4 μg/m³	100 µg/m³	60 µg/m³	80 µg/m³	80 µg/m³	80 µg/m³	4 µg/m³			

Prepared by: GVNSHUNGT LIF UNS 1910

For Gangavaram Port Limited

Reference No.:	GPL/May/2022	Submitted to:
Monitoring Date:	13.05.2022	
Organization Name:	Gangavaram Port Limited	A.P. Pollution Control Board,
Type Of Sample:	Ambient Air Quality	Regional office, Visakhapatnam
Sampled By:	Gangavaram Port Limited (CAAQ Monitoring Data)	

								2										
Station	Stat		Administr) toward		fice Build	ding				ject Site kannap:						atch Tow nkannapa	7-6	
Parameter	PM10	PM 2.5	SO ²	NO	NO ²	co	PM10	PM 2.5	SO ²	NO	NOs	со	PM10	PM 2.5	SO ²	NO	NO ²	со
Day average value	69.60	42.74	20.61	1.86	33.08	0.10	64.50	40.43	3.09	33.29	13.07	0.21	71.92	43.90	37.15	109.81	12.69	0.30
Standard	100 µg/m³	60 µg/m³	h8/w ₂	h80 h8/w ₃	80 µg/m³	4 μg/m³	100 µg/m³	60 µg/m³	h8\m ₂	h80 80	80 µg/m³	4 μg/m ³	100 µg/m³	60 µg/m³	80 µg/m³	h8/w ₂	80 µg/m³	4 µg/m³

Prepared by: GVNS Hunty

For Gangavaram Port Limited

Reference No.:	GPL/May/2022	Submitted to:
Monitoring Date:	14.05.2022	
Organization Name:	Gangavaram Port Limited	A.P. Pollution Control Board,
Type Of Sample:	Ambient Air Quality	Regional office, Visakhapatnam
Sampled By:	Gangavaram Port Limited (CAAQ Monitoring Data)	

Station	(AOB) towards HB Colony					ding				ject Site kannap			Station - 3 - Watch Tower - 4 towards Venkannapalem						
Parameter	PM10	PM 2.5	so²	NO	NOs	co	PM10	PM 2.5	SO ²	NO	NO2	со	PM10	PM 2.5	SO2	NO	NO2	со	
Day average value	69.36	42.67	22.20	2.00	35.62	0.11	64.27	40.36	2.96	35.26	12.49	0.34	71.67	43,82	34.17	110.08	11.56	0.37	
Standard	100 µg/m³	60 µg/m³	90 µg/m³	80 µg/m³	80 µg/m³	4 µg/m³	100 µg/m³	60 µg/m³	80 µg/m ³	80 µg/m³	80 µg/m³	4 µg/m³	100 µg/m³	60 µg/m³	80 µg/m³	80 µg/m³	80 µg/m³	4 µg/m ³	

Prepared by: GVALS Hunty
LANG UPS 1910

For Gangavaram Port Limited

Reference No.:	GPL/May/2022	Submitted to:
Monitoring Date:	15.05.2022	
Organization Name:	Gangavaram Port Limited	A.P. Pollution Control Board.
Type Of Sample:	Ambient Air Quality	Regional office, Visakhapatnam
Campled Buy	Gangavaram Port Limited	
Sampled By:	(CAAQ Monitoring Data)	

Station	(AOB) towards HB Colony									ject Site skannap			Station - 3 - Watch Tower - 4 towards Venkannapalem							
Parameter	PM10	PM 2.5	SO ²	NO	NO²	со	PM10	PM 2.5	SO ²	NO	NO ²	со	PM10	PM 2.5	SO ²	NO	NO2	со		
Day average value	72.75	44.70	20,72	1.87	33.25	0.10	67.41	42.28	2.78	39.53	9.21	0.47	75.18	45.91	27.97	111.18	11.79	0.22		
Standard	100 µg/m³	60 µg/m³	80 µg/m³	80 µg/m³	80 µg/m³	4 µg/m³	100 µg/m³	60 µg/m³	h8\w ₃	80 µg/m³	80 µg/m³	4 µg/m³	100 µg/m³	60 µg/m³	80 µg/m³	80 µg/m³	80 µg/m³	4 µg/m		

Prepared by: Grands Hurly

For Gangavaram Port Limited

Vice President (Environment)

Reference No.:	GPL/May/2022	Submitted to:
Monitoring Date:	16.05.2022	
Organization Name:	Gangavaram Port Limited	A.P. Pollution Control Board,
Type Of Sample:	Ambient Air Quality	Regional office, Visakhapatnam
Sampled By:	Gangavaram Port Limited (CAAQ Monitoring Data)	

						~	nbient A	m woan	Ly 24 III	2 over 0	ge uata								
Station	(AOB) towards HB Colony					ding				ject Site kannap			Station - 3 - Watch Tower - 4 towards Venkannapalem						
Parameter	PM10	PM 2.5	SO2	NO	NO ²	со	PM10	PM 2.5	SO ²	NO	NO ²	co	PM10	PM 2.5	SO ²	NO	NO²	со	
Day average value	64.45	39.68	34.16	10.67	37.04	0,21	59.73	37.54	2.47	35.26	6.79	0.22	66.60	40.76	36.48	117.40	11.61	0.14	
Standard	100 µg/m³	60 µg/m³	80 µg/m³	80 µg/m³	hā\w ₃	4 μg/m³	100 µg/m³	60 µg/m³	h8/w ₃	h8/w ₃	h8\w ₂	4 µg/m³	100 µg/m³	60 µg/m³	hð/w ₃	h8\w ₂ 80	h8\w ₃	4 µg/m³	

Prepared by: Grass Husts

For Gangavaram Port Limited

Reference No.:	GPL/May/2022	Submitted to:
Monitoring Date:	17.05.2022	
Organization Name:	Gangavaram Port Limited	A.P. Pollution Control Board,
Type Of Sample:	Ambient Air Quality	Regional office, Visakhapatnam
Sampled By:	Gangavaram Port Limited (CAAQ Monitoring Data)	

							nbient A			* (* (*) * (*)	•							
Station	(AOB) towards HB Colony					ding			- 2 - Pro ords Ver							atch Towe nkannapa		
Parameter	PM10	PM 2.5	SO ²	NO	NO ²	со	PM10	PM 2.5	SO ²	NO	NO ²	co	PM10	PM 2.5	SO ²	NO	NO ²	со
Day average value	64.66	39.81	36.29	11.34	39.35	0.22	59.91	37.65	0.24	32.10	5.01	0.25	66.81	40.88	42.73	105.89	15.65	0.14
Standard	100 µg/m³	60 µg/m³	80 µg/m³	80 µg/m³	80 µg/m³	4 μg/m³	100 µg/m³	60 µg/m³	80 µg/m³	80 µg/m³	h8/w ₃	4 µg/m³	100 µg/m³	h8/w ₃	h80 80	h8/w ₂ 80	h8/w ₂	4 µg/m

Prepared by: GVNS HUNTY
LIFT UPS 1910

For Gangavaram Port Limited

Reference No.:	GPL/May/2022	Submitted to:
Monitoring Date:	18.05.2022	
Organization Name:	Gangavaram Port Limited	A.P. Pollution Control Board,
Type Of Sample:	Ambient Air Quality	Regional office, Visakhapatnam
Sampled By:	Gangavaram Port Limited (CAAQ Monitoring Data)	

										rs avera	-									
Station	(AOB) towards HB Colony					ding				ject Site nkannap			Station - 3 - Watch Tower - 4 towards Venkannapalem							
Parameter	PM10	PM 2.5	SO ²	NO	NO ²	co	PM10	PM 2.5	SO ²	NO	NOs	со	PM10	PM 2.5	soz	NO	NO²	со		
Day average value	64.24	39.57	34.28	10,71	37.17	0,21	59.53	37.43	9.65	40.05	10.12	0.17	66.39	40.64	44.08	104.77	15.45	0.25		
Standard	100 µg/m³	60 µg/m³	80 µg/m³	80 µg/m³	h8/w ₂	4 μg/m³	100 µg/m³	60 µg/m³	80 µg/m³	80 µg/m³	80 µg/m³	4 μg/m³	100 µg/m³	60 µg/m³	h8/w ₃	80 µg/m³	80 µg/m³	4 µg/m³		

Prepared by: GVNS Kusty
246 4/11/910

For Gangayaram Port Limited

Reference No.:	GPL/May/2022	Submitted to:
Monitoring Date:	19,05.2022	
Organization Name:	Gangavaram Port Limited	A.P. Pollution Control Board,
Type Of Sample:	Ambient Air Quality	Regional office, Visakhapatnam
Sampled By:	Gangavaram Port Limited (CAAQ Monitoring Data)	65

Station	(AOB) towards HB Colony								- 2 - Pro ords Ven							latch Tow nkannapa		
Parameter	PM10	PM 2.5	SO ²	NO	NO ²	co	PM10	PM 2.5	50 ²	NO	NO ²	со	PM10	PM 2.5	SO ²	NO	NO2	co
Day average value	64.18	39.54	36.18	11,31	39.23	0.22	59.48	37.40	10.89	31.54	10.14	0.32	66.32	40.61	32.53	104.69	10.45	0.28
Standard	100 µg/m³	60 µg/m³	80 µg/m³	h8/w ₂	80 µg/m³	4 µg/m³	100 µg/m³	60 µg/m³	80 µg/m³	80 µg/m³	80 pg/m ³	4 µg/m³	100 µg/m³	60 µg/m ³	80 µg/m³	80 µg/m³	80 µg/m³	4 µg/m³

Prepared by: GVNS Husty
Ling US 1910

For Gangavaram Port Almited

Reference No.:	GPL/May/2022	Submitted to:
Monitoring Date:	20.05.2022	
Organization Name:	Gangavaram Port Limited	A.P. Pollution Control Board,
Type Of Sample:	Ambient Air Quality	Regional office, Visakhapatnam
Sampled By:	Gangavaram Port Limited (CAAQ Monitoring Data)	

						Α	mbient /	Air Qual	ity 24 h	rs avera	ge data				(+)		+		
Station	Stat	ion - 1 - A (AOB)	dministr			ding			n - 2 - Pro ards Ver				Station - 3 - Watch Tower - 4 towards Venkannapalem						
Parameter	PM10	PM 2.5	S02	NO	NO ²	со	PM10	PM 2.5	SO ²	NO	NO2	со	PM10	PM 2.5	so²	NO	NO2	co	
Day average value	65.87	40.58	34.37	10.74	37.27	0.21	61.03	38.38	10.84	26.79	10.63	0.12	68.07	41.67	36.33	114.37	9.93	1.02	
Standard	100 µg/m³	60 µg/m³	h80 h8/w ₃	h8/w ₂	h8\w ₂	4 µg/m³	100 µg/m³	60 µg/m³	90 µg/m³	80 µg/m³	h8\w ₂	4 μg/m³	100 µg/m³	60 µg/m³	hā\w ₃	80 µg/m³	80 µg/m³	4 μg/m³	

Prepared by: GVNS Hurly UNS 1910

For Gangavaram Port Limited

Reference No.:	GPL/May/2022	Submitted to:
Monitoring Date:	21.05.2022	
Organization Name:	Gangavaram Port Limited	A.P. Pollution Control Board,
Type Of Sample:	Ambient Air Quality	Regional office, Visakhapatnam
Sampled By:	Gangavaram Port Limited (CAAQ Monitoring Data)	53

							noiene A	ir Quality		average	e dota								
Station	(AOB) towards HB Colony					ding				ect Site kannapa			Station - 3 - Watch Tower – 4 towards Venkannapalem						
Parameter	PM10	PM 2.5	50²	NO	NO ²	co	PM10	PM 2.5	SO ²	NO	NO ²	co	PM10	PM 2.5	SO2	NO	NO2	со	
Day average value	68.87	42.37	36.09	11.28	39.13	0.22	63.82	40.08	4.05	33.30	6.93	0.41	71.16	43.52	46.02	117.11	13.35	1.35	
Standard	100 µg/m³	60 µg/m³	80 µg/m³	80 µg/m³	80 µg/m³	4 µg/m³	100 µg/m³	60 µg/m³	h8/w ₃	80 µg/m³	h8/w ₃	4 μg/m³	100 µg/m³	60 µg/m³	h8\w ₃	80 µg/m³	80 µg/m³	4 µg/m³	

Prepared by: Grass with

or Gangavaram Port Limited

Reference No.:	GPL/May/2022	Submitted to:
Monitoring Date:	22.05.2022	
Organization Name:	Gangavaram Port Limited	A.P. Pollution Control Board,
Type Of Sample:	Ambient Air Quality	Regional office, Visakhapatnam
Sampled By:	Gangavaram Port Limited (CAAQ Monitoring Data)	

						-													
Station	(AOB) towards HB Colony					ding				ject Site kannap			Station - 3 - Watch Tower - 4 towards Venkannapalem						
Parameter	PM10	PM 2.5	SO ²	NO	NO ²	со	PM10	PM 2.5	SO ²	NO	NO2	co	PM10	PM 2.5	50²	NO	NO2	со	
Day average value	71.53	43.91	34.45	10.77	37.35	0.21	66.28	41.54	3.04	23.57	7.62	0.20	73.91	45,10	44.50	97.34	13.36	0.58	
Standard	100 µg/m³	60 µg/m³	80 µg/m³	80 µg/m³	80 µg/m³	4 μg/m ³	100 µg/m³	60 µg/m³	80 µg/m³	80 µg/m³	h8\m ₃	4 μg/m³	100 µg/m³	60 µg/m³	h80 80	h80 h8/w ₃	h8/w ₂	4 µg/m	

Prepared by GIVNS Kudy
LIN UPS 1910

For Gangavaram Port Limited

Reference No.:	GPL/May/2022	Submitted to:
Monitoring Date:	23.05.2022	
Organization Name:	Gangavaram Port Limited	A.P. Pollution Control Board,
Type Of Sample:	Ambient Air Quality	Regional office, Visakhapatnam
Sampled By:	Gangavaram Port Limited (CAAQ Monitoring Data)	

Station	(AOB) towards HB Colony								- 2 - Pro rds Ven				Station - 3 - Watch Tower - 4 towards Venkannapalem						
Parameter	PM10	PM 2.5	SO ²	NO	NO ²	со	PM10	PM 2.5	SO ²	NO	NO2	co	PM10	PM 2.5	50 ²	NO	NO2	со	
Day average value	71.10	43.63	36.01	11.25	39.05	0.22	65.89	41.27	0.53	34.27	6.06	0.59	73.47	44.81	37.40	114.84	12.32	0.62	
Standard	100 µg/m³	60 µg/m³	80 µg/m³	80 µg/m³	80 pg/m³	4 µg/m³	100 µg/m³	60 µg/m³	80 µg/m³	80 µg/m³	80 µg/m³	4 μg/m ³	100 µg/m³	60 µg/m³	80 µg/m³	80 µg/m³	80 µg/m³	4 µg/m	

Prepared by: Grace works

For Gangayaram Port Limited

Reference No.:	GPL/May/2022	Submitted to:
Monitoring Date:	24.05.2022	21
Organization Name:	Gangavaram Port Limited	A.P. Pollution Control Board,
Type Of Sample:	Ambient Air Quality	Regional office, Visakhapatnam
Sampled By:	Gangavaram Port Limited (CAAQ Monitoring Data)	

Station	(AOB) towards HB Colony									ject Site kannap			Station - 3 - Watch Tower – 4 towards Venkannapalem						
Parameter	PM10	PM 2.5	soz	NO	NOS	со	PM10	PM 2.5	SO ²	NO	NO2	со	PM10	PM 2.5	SO ²	NO	NO2	co	
Day average value	60.79	37.41	34.51	10.79	37.43	0.21	56.35	35.40	0.00	25.90	8.14	0.21	62.81	38.42	31.09	59.22	10.83	0.33	
Standard	100 µg/m³	60 µg/m³	hā/w ₃	80 µg/m³	80 µg/m³	4 µg/m³	100 µg/m³	60 µg/m³	80 µg/m³	h8\w ₃	80 µg/m³	4 µg/m³	100 µg/m³	60 µg/m³	h8\w ₂	h8\w ₂ 80	h8/w ₃	4 µg/m	

Prepared by: GVNS Musty Lynx Mys 1910

For Gangavaram Port Limited

Reference No.:	GPL/May/2022	Submitted to:
Monitoring Date:	25.05.2022	
Organization Name:	Gangavaram Port Limited	A.P. Pollution Control Board,
Type Of Sample:	Ambient Air Quality	Regional office, Visakhapatnam
Sampled By:	Gangavaram Port Limited (CAAQ Monitoring Data)	

						An	nbient A	ir Quali	ty 24 hr	s avera	ge data									
Station	Stal		Administr) toward		fice Buil	ding				ject Site kannap			Station - 3 - Watch Tower - 4 towards Venkannapalem							
Parameter	PM10	PM 2.5	so²	NO	NOS	co	PM10	PM 2.5	50²	NO	NO²	co	PM10	PM 2.5	SO ²	NO	NO2	со		
Day average value	50.25	30.94	35.95	11.23	38.98	0.22	46.57	29.27	0.00	23.44	7.72	0.51	51,92	31.77	35.78	106.66	12.71	0.73		
Standard	100 µg/m³	60 µg/m³	80 µg/m³	80 µg/m³	80 µg/m³	4 μg/m³	100 µg/m³	60 µg/m³	80 µg/m³	80 µg/m³	80 µg/m³	4 µg/m³	100 µg/m³	60 µg/m³	BO µg/m³	80 µg/m³	h8\w ₃	4 µg/m³		

Prepared by: Grashush

For Gangavaram Port Limiteo

Reference No.:	GPL/May/2022	Submitted to:
Monitoring Date:	26.05.2022	
Organization Name;	Gangavaram Port Limited	A.P. Pollution Control Board,
Type Of Sample:	Ambient Air Quality	Regional office, Visakhapatnam
Sampled By:	Gangavaram Port Limited (CAAQ Monitoring Data)	

Station	(AOB) towards HB Colony								- 2 - Pro rds Ven				Station - 3 - Watch Tower - 4 towards Venkannapalem							
Parameter	PM10	PM 2.5	502	NO	NO ²	со	PM10	. PM 2.5	SO ²	NO	NO2	co	PM10	PM 2.5	SO ²	NO	NO ²	со		
Day average value	54.34	33.44	36.04	10.78	40,21	0.22	50.35	31.63	0.00	30.51	8.80	0.49	56.15	34.34	38.86	109.71	12.64	0.76		
Standard	100 µg/m³	60 pg/m ³	80 µg/m³	80 µg/m³	h8/w ₂	4 µg/m³	100 µg/m³	60 µg/m³	80 µg/m³	h8/w ₃	80 µg/m³	4 μg/m³	100 µg/m³	60 µg/m³	80 µg/m³	80 µg/m³	80 µg/m³	4 μg/m ³		

Prepared by: GVNS with

For Gangavaram Port Limited

Reference No.:	GPL/May/2022	Submitted to:
Monitoring Date:	27.05.2022	
Organization Name:	Gangavaram Port Limited	A.P. Pollution Control Board,
Type Of Sample:	Ambient Air Quality	Regional office, Visakhapatnam
Sampled By:	Gangavaram Port Limited (CAAQ Monitoring Data)	

								r Quality			0.37.77.70							
Station	Stat	ion - 1 - A (AOB)	ding			2. 1.2. (1.0.1)	ect Site kannap			Station - 3 - Watch Tower - 4 towards Venkannapalem								
Parameter	PM10	PM 2.5	SO ²	NO	NO2	co	PM10	PM 2.5	SO ²	NO	NO ²	co	PM10	PM 2.5	SO ²	NO	NOs	со
Day average value	63.66	39.20	54.71	60.59	9.27	. 1.11	58.99	37.08	0.00	21.26	11.06	0.63	65.78	40.25	43.31	81.11	9.22	0.92
Standard	100 µg/m³	60 µg/m³	80 µg/m³	80 µg/m³	80 µg/m³	4 μg/m³	100 µg/m³	60 µg/m³	80 µg/m³	80 µg/m³	80 µg/m³	4 μg/m³	100 µg/m³	60 µg/m³	80 µg/m³	80 µg/m³	80 µg/m³	4 µg/m

Prepared by: Grass with

For Gangavaram Port Limited

Reference No.:	GPL/May/2022	Submitted to:
Monitoring Date:	28.05.2022	
Organization Name;	Gangavaram Port Limited	A.P. Pollution Control Board,
Type Of Sample:	Ambient Air Quality	Regional office, Visakhapatnam
Sampled By:	Gangavaram Port Limited (CAAQ Monitoring Data)	

Station	(AOB) towards HB Colony									ject Site nkannap			Station - 3 - Watch Tower - 4 towards Venkannapalem							
Parameter	PM10	PM 2.5	SO ²	NO	NO2	co	PM10	PM 2.5	SO ²	NO	NO ²	co	PM10	PM 2.5	SO ²	NO	NO ²	со		
Day average value	53.00	32.64	57.35	70.47	10.31	1.12	49.11	30.87	2.58	46.66	12.04	0.74	54.76	33.52	54.95	76.46	10.21	1.12		
Standard	100 µg/m³	60 µg/m³	80 µg/m³	80 µg/m³	80 µg/m³	4 μg/m³	100 µg/m³	60 µg/m³	80 µg/m³	h8/w ₂	80 µg/m³	4 μg/m³	100 µg/m³	60 µg/m³	80 µg/m³	80 µg/m³	80 µg/m³	4 µg/m		

Prepared by: Gras, Hundy

For Gangavaram Port Limited

Reference No.:	GPL/May/2022	Submitted to:
Monitoring Date:	29.05.2022	
Organization Name:	Gangavaram Port Limited	A.P. Pollution Control Board,
Type Of Sample:	Ambient Air Quality	Regional office, Visakhapatnam
Sampled By:	Gangavaram Port Limited (CAAQ Monitoring Data)	

						An	nbient A	ir Quali	ty 24 hr	s averag	ge data									
Station	(AOB) towards HB Colony									ject Site kannap			Station - 3 - Watch Tower - 4 towards Venkannapalem							
Parameter	PM10	PM 2.5	SO ²	NO	NO ²	со	PM10	PM 2.5	SO ²	NO	NO ²	co	PM10	PM 2,5	SO ²	NO	NO2	со		
Day average value	53.54	33.00	62.29	65.71	13.61	0.77	49.62	31.22	2.73	32.88	14.37	0.25	55.33	33.89	60.08	71.23	13.64	0.76		
Standard	100 µg/m³	h8/w ₃	80 µg/m³	h80 80	h8/w ₃	4 µg/m³	100 µg/m³	60 µg/m³	80 µg/m³	hð/w ₂	h8\w ₂ 80	4 µg/m³	100 µg/m³	60 µg/m³	80 µg/m³	80 pg/m³	80 µg/m³	4 µg/m³		

Prepared by: Gras Husting

or Gangavaram Port Limiteo

Reference No.:	GPL/May/2022	Submitted to:
Monitoring Date:	30.05.2022	
Organization Name:	Gangavaram Port Limited	A.P. Pollution Control Board,
Type Of Sample:	Ambient Air Quality	Regional office, Visakhapatnam
Sampled By:	Gangavaram Port Limited (CAAQ Monitoring Data)	

						An	nbient A	ir Qualit	y 24 hr:	averag	e data							
Station	Stat		Administr) toward			ding				ject Site kannapa						atch Tow kannapa		
Parameter	PM10	PM 2.5	SO ²	NO	NO ²	со	PM10	PM 2.5	SO ²	NO	NOs	со	PM10	PM 2.5	SO ²	NO	NO2	со
Day average value	51.90	31.99	56.90	48.91	12.79	0.76	48.09	30.26	1.70	35.00	12.39	0.57	53.63	32.85	54.86	53.40	12.83	0.77
Standard	100 µg/m³	60 µg/m³	h8\w ₃	80 µg/m³	80 80	4 µg/m³	100 µg/m³	60 µg/m³	h8\w ₂	h8\w ₃	hg/w ₃	4 µg/m³	100 µg/m³	60 µg/m³	80 µg/m³	h8/w ₃	h8/w ₂	4 μg/m³

Prepared by: GVAS HURG

or Gangavaram Port Limited

Vice President (Environment

Reference No.:	nitoring Date: 31.05.2022 sanization Name: Gangavaram Port Limited se Of Sample: Ambient Air Quality	Submitted to:	
Monitoring Date:	31.05.2022	. 48	
Organization Name:	Gangavaram Port Limited	A.P. Pollution Control Board,	
Type Of Sample:	Ambient Air Quality	Regional office, Visakhapatnam	
Sampled By:	Gangavaram Port Limited (CAAQ Monitoring Data)		

						Am	bient Ai	ir Qualit	y 24 hrs	average	data							
Station	ion Station • 1 • Administrative Office Building (AOB) towards HB Colony								ject Site kannapa						atch Tow			
Parameter	PM10	PM 2.5	soz	NO	NO2	co	PM10	PM 2.5	SO ²	NO -	NO ²	co	PM10	PM 2.5	SO ²	NO	NOZ	со
Day average value	51.99	31.88	46.09	49.88	10.80	0.96	48.18	30.15	34.74	40.09	2.44	0.64	53.73	32.74	41.79	44.36	10.81	0.95
Standard	100 µg/m³	60 µg/m³	h8\w ₂ 80	80 µg/m³	80 µg/m³	4 µg/m³	100 µg/m³	60 µg/m³	h8\w ₃	h8\w ₃	h8/w ₃	4 µg/m³	100 µg/m³	60 µg/m³	hg/w ₃	80 µg/m³	h8/w ₂	4 µg/m³

Prepared by: Grasmoly Chrs 1910

For Gangavaram Port Limiteo



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Environmental Monitoring Reports

(14 May and 28 2022)

Gangavaram Port LTD.
Pedagantyada(Mandal)
Gangavaram (Post)
Visakhapatnam - 530 044





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TEST REPORT ANALYSIS OF GROUND WATER SAMPLE

BCL Ref. No.	GPL/02/191	Issued to:
Monitoring Date	May 14, 2022	M/s. Gangavaram Port Ltd.
Reporting Date	May 19, 2022	Gangavaram (Village)
Organization	M/s. Gangavaram Port Ltd.	PedaGantiyada (Mandalam)
Type of Sample	Ground Water	Visakhapatnam.
Location	Gangavaram Village	
Sample Collected by	M/s. Biochem Labs	
Reference Standard	IS: 10500, 1991	

S. No.	Parameter	Unit	Result	Limit IS: 10500
1.	Temperature	*C	29.4	-
2.	pH	H+ concen.	7.10	6.5-8.5
3.	Total Hardness	mg/l	286	300
4.	Calcium (as Ca)	mg/l	54	75
5.	Magnesium (as Mg)	mg/l	20	30
6.	Chlorides	mg/l	114	250
7.	Manganese	mg/l	0.018	0.1
8.	Copper	mg/l	0.012	0.05
9.	Total Alkalinity	mg/l	60	200
10.	Total Dissolved Solids	mg/l	492	500
11.	Sulphate	mg/l	52	200
12.	Dissolved Oxygen	mg/l	3.0	-
13.	Nitrite (as NO ₂)	mg/l	0.016	0.02
14.	Iron	mg/l	0.14	0.3
15.	Fluoride	mg/l	0.8	1.0
16.	Oil & Grease	mg/l	BDL	0.01
17.	Chromium (as Cr*5)	mg/l	0.012	0.05
18.	Cyanide	mg/l	NIL	0.05
19.	Zinc	mg/l	0.8	5.0
20.	Phenolic Compound	mg/i	NIL	0.001
21.	Free Residual Chlorine	mg/l	0.14	0.2
22	Total Coli forms Count	MPN Index/100ml	10	1-11
23.	E.coli	Cfu/ml	Absent	Absent

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TEST REPORT ANALYSIS OF GROUND WATER SAMPLE

BCL Ref. No.	GPL/02/192	_ 1
Monitoring Date	May 14, 2022	1
Reporting Date	May 19, 2022	
Organization	M/s. Gangavaram Port Ltd.	
Type of Sample	Ground Water	
Location	North bounder wall open well	
Sample Collected by	M/s. Biochem Labs	
Reference Standard	IS: 10500, 1991	

Issued to: M/s. Gangavaram Port Ltd. Gangavaram (Village) PedaGantiyada (Mandalam) Visakhapatnam.

S. No.	Parameter	Unit	Result	Limit IS: 10500
1.	Temperature	°C	28.2	-
2.	pH	H+ concen.	7.14	6.5-8.5
3.	Total Hardness	mg/l	248	300
4.	Calcium (as Ca)	mg/l	46	75
5.	Magnesium (as Mg)	mg/l	22	30
6.	Chlorides	mg/l	64	250
7.	Manganese	mg/l	0.02	0.1
8.	Copper	mg/l	0.014	0.05
9.	Total Alkalinity	mg/l	118	200
10.	Total Dissolved Solids	mg/l	484	500
11.	Sulphate	mg/l	46	200
12	Dissolved Oxygen	mg/l	2.0	-
13.	Nitrite (as NO ₂)	mg/l	0.014	0.02
14.	Iron	mg/l	0.12	0.3
15.	Fluoride	mg/l	0.8	1.0
16.	Oil & Grease	mg/l	BDL	0.01
17.	Chromium (as Cr*5)	mg/l	0.01	0.05
18.	Cyanide	mg/l	NIL	0.05
19.	Zinc	mg/l	0.2	5.0
20.	Phenolic Compound	mg/l	NIL	0.001
21.	Free Residual Chlorine	mg/l	0.04	0.2
22	Total Coli forms Count	MPN Index/100ml	6	1-11
23.	E.coli	Cfu/ml	Absent	Absent







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TEST REPORT NOISE LEVEL MONITORING

BCL Ref. No.	GPL/ 04/217	Issued to:
Monitoring Date	May 14, 2022	M/s. Gangavaram Port Ltd.
Organization	M/s. Gangavaram Port Ltd.	Gangavaram (Village) PedaGantiyada (Mandalam)
Collected by	M/s. Biochem Labs	Visakhapatnam.

S.	Parameter	Unit	Location	Re	sult	CPCE	CPCB Limit		
No.	1 diameter	(1000000)		Day time	Night time	Indu	strial		
			1			Day time	Night time		
1.	Noise Level	Decibels	Cargo area	68	62	75	70		
2.	Noise Level	Decibels	PedaGantyada/ Security Gate	64	60	•	,		
		-/-		Day time	Night time	Resid	dential		
					18.	Day time	Night time		
3.	Noise Level	Decibels	Gangavaram	48	36	55	45		
	Noise Level	Decibels	HB Colony	46	42				

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TEST REPORT NOISE LEVEL MONITORING

BCL Ref. No.	GPL/ 04/218	Issued to:	
Monitoring Date	May 28, 2022	M/s. Gangavaram Port Ltd.	
Organization	M/s. Gangavaram Port Ltd.	Gangavaram (Village) PedaGantiyada (Mandalam)	
Collected by	M/s. Biochem Labs	Visakhapatnam.	

S.	Parameter	Unit	Location	Re	sult	CPCB Limit t time Industrial		
No.		38888		Day time	Night time			
						Day time	Night time	
1.	Noise Level	Decibels	Cargo area	72	68	75	70	
2.	Noise Level	Decibels	PedaGantyada/ Security Gate	68	62	×	-	
		-/-		Day time	Night time	Resid	sidential	
					1 H.	Day time	Night time	
3.	Noise Level	Decibels	Gangavaram	44	32	55	45	
		Decibels	HB Colony	52	40		-	

Analyst





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TEST REPORT ANALYSIS OF MARINE WATER

BCL Ref. No.	GPL/ 05/217	Issued to:			
Monitoring Date	May 14, 2022	M/s Consessed Booking			
Reporting Date	May 19, 2022	M/s. Gangavaram Port Ltd.			
Organization	M/s. Gangavaram Port Ltd.	Gangavaram (Village) PedaGantiyada (Mandalam)			
Type of Sample	Marine Water (Low Tide / High Tide)	Visakhapatnam.			
Sample Collected by	M/s. Biochem Labs	visakiiapatiiatii.			

S. No	Parameter	Unit		Re	sult	
				rBasine	Port Entrance Chann	
			Low tide	High tide	Low tide	High tide
1.	Temperature	°C	30.2	30.4	28.8	31.4
2.	pH	H+ conc	8.20	8.12	8.16	8.18
3.	Salinity	PSU	32.6	32.0	31.8	32.0
4.	Turbidity	NTU	24	18	10	12
5.	Total Suspended Solids	mg/l	30	22	14	10
6.	Transparency	Mts.	0.9	1.0	1.4	1.2
7.	Electrical Conductivity	mMHo	34.2	32.2	36.0	31.4

Analyst





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TEST REPORT ANALYSIS OF MARINE WATER

BCL Ref. No.	GPL/ 05/217	Issued to:
Monitoring Date	May 14, 2022	M/s. Gangavaram Port Ltd.
Reporting Date	May 19, 2022	Gangavaram (Village)
Organization	M/s. Gangavaram Port Ltd.	PedaGantiyada (Mandalam)
Type of Sample	Marine Water (Low Tide / High Tide)	Visakhapatnam.
Sample Collected by	M/s. Biochem Labs	

S. No	Parameter	Unit		Re	sult	
			South brake Wall Outside North brake Wall Out		Wall Outside	
			Low tide	High tide	Low tide	High tide
1.	Temperature	°C	32.2	29.8	30.2	31.8
2	pH	H+ conc	8.26	8.22	8.20	8.24
3.	Salinity	PSU	32.4	33.0	32.2	35.0
4	Turbidity	NTU	14	10	12	8
5.	Total Suspended Solids	mg/l	16	12	14	10
6.	Transparency	Mts.	1.2	1.4	1.2	1.6
7.	Electrical Conductivity	mMHo	34.0	32.6	33.8	34.0

Analyst





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TEST REPORT ANALYSIS OF MARINE WATER

BCL Ref. No.	GPL/ 05/217	Issued to:
Monitoring Date	May 14, 2022	M/s. Gangavaram Port Ltd.
Reporting Date	May 19, 2022	Gangavaram (Village)
Organization	M/s. Gangavaram Port Ltd.	PedaGantiyada (Mandalam)
Type of Sample	Marine Water (Low Tide / High Tide)	Visakhapatnam.
Sample Collected by	M/s. Biochem Labs	

S. No	Parameter	Unit		R	esult	
	1,0000000000000000000000000000000000000		Harbou	rBasine	Port Entrane	ce Channel
			Low tide	High tide	Low tide	High tide
1.	Dissolved Oxygen	mg/l	3.2	3.4	4.2	3.8
2.	Biological Oxygen Demand	mg/l	1.0	1.2	1.6	1.8
3.	Oil & Grease	mg/l	1.4	1.0	8.0	0.4
4.	Sulphate	mg/l	1034	1026	1038	1042
5.	Phosphate	mg/l	0.32	0.34	0.24	0.30
6.	Nitrate	mg/l	3.0	2.2	2.8	2.4
7.	Nitrite	mg/l	0.026	0.028	0.022	0.024
8.	Chloride	mg/l	20836	20840	19654	21260
9.	Chromium	ppm	0.022	0.026	0.028	0.020
10.	Mercury	ppm	Nil	Nil	Nil	Nil
11.	Zinc	ppm	0.26	0.18	0.14	0.12
12.	Iron	ppm	0.03	0.024	0.026	0.028
13.	Manganese	ppm	0.024	0.026	0.022	0.018
14.	Cadmium	ppm	Nil	Nil	Nil	Nil

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TEST REPORT ANALYSIS OF MARINE WATER

BCL Ref. No.	GPL/ 05/217	Issued to:
Monitoring Date	May 14, 2022	M/s. Gangavaram Port Ltd.
Reporting Date	May 19, 2022	Gangavaram (Village)
Organization	M/s. Gangavaram Port Ltd.	PedaGantiyada (Mandalam)
Type of Sample	Marine Water (Low Tide / High Tide)	Visakhapatnam.
Sample Collected by	M/s. Biochem Labs	The state of the s

S. No	Parameter Unit		Result			
			South brake Wall Outside		North brake Wa	/all Outside
			Low tide	High tide	Low tide	High tide
1.	Dissolved Oxygen	mg/l	4.0	3.2	4.4	3.6
2.	Biological Oxygen Demand	mg/l	1.8	1.0	1.6	1.2
3.	Oil & Grease	mg/l	0.6	0.8	0.4	0.6
4	Sulphate	mg/l	1040	1026	1018	1032
5	Phosphate	mg/l	0.32	0.24	0.36	0.22
6.	Nitrate	mg/l	3.0	2.2	1.8	2.4
7.	Nitrite	mg/l	0.028	0.026	0.02	0.022
8.	Chloride	mg/l	19684	21438	20692	19286
9.	Chromium	ppm	0.026	0.024	0.028	0.024
10.	Mercury	ppm	Nil	Nil	Nil	Mil
11.	Zinc	ppm	0.18	0.14	0.12	0.16
12.	Iron	ppm	0.03	0.022	0.026	0.02
13.	Manganese	ppm	0.02	0.014	0.016	0.018
14.	Cadmium	ppm	Nil	Nil	Nil	Nil

Analyst





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TEST REPORT ANALYSIS OF MARINE WATER

Sample Collected by	M/s. Biochem Labs	
Type of Sample	Marine Water (Low Tide)	Visakhapatnam,
Organization	M/s. Gangavaram Port Ltd.	PedaGantiyada (Mandalam)
Reporting Date	May 19, 2022	Gangavaram (Village)
Monitoring Date	May 14, 2022	M/s. Gangavaram Port Ltd.
BCL Ref. No.	GPL/ 05/217	Issued to:

Station Name: Harbourbasine / Low Tide

S. No	PARAMETERS	UNIT	RESULT
1.	Phytoplankton Count	No. /L	12000
2	Zooplankton Count	No./m³	800
3.	Chlorophyll a	mg/m ³	3.4
4.	Chlorophyll b	mg/m³	2.2
5.	Primary Productivity	gC/m ²	3.0
6.	Biomass	mg/m ²	2.8

S.No	Species	Total Species count in 1L
A.	Phytoplankton Species	A DECEMBER OF THE PROPERTY OF
30	Prorocentrummicans	28
	Amphora lineolata	10
	Cymbella marina	04
	Bacteriastrum delicatulum	10
	Thalassionema nitzschioides	32
	Chaetoceros dydymus	08
	Skeletonemacostatum	18
	Thalassiothrixlongissima	24
	Cymbella marina	02
В.	Zooplankton Species	
87	Foraminifera	34
	Chaetognatha	02
	Amphipoda	10
	Cladocera	18
	Eggs of fish & larvae	06

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TEST REPORT ANALYSIS OF MARINE WATER

BCL Ref. No.	GPL/ 05/217	Issued to:
Monitoring Date	May 14, 2022	Mis Consenses Post Ltd
Reporting Date	May 19, 2022	M/s. Gangavaram Port Ltd.
Organization	M/s. Gangavaram Port Ltd.	Gangavaram (Village) PedaGantiyada (Mandalam)
Type of Sample	Marine Water (Low Tide)	Visakhapatnam.
Sample Collected by	M/s. Biochem Labs	visaviapatiani.
Charles and the control of the contr	The state of the s	

Station Name: Port Entrance Channel / Low Tide

S. No	PARAMETERS	UNIT	RESULT
1.	Phytoplankton Count	No. /L	9800
2.	Zooplankton Count	No./m ³	600
3.	Chlorophyll a	mg/m ³	2.6
4.	Chlorophyll b	mg/m³	2.2
5.	Primary Productivity	gC/m ²	3.0
6.	Biomass	mg/m²	2.4

S.No	Species	Total Species count in 1L
A.	Phytoplankton Species Prorocentrummicans Amphora lineolata Cymbella marina Bacteriastrum delicatulum Thalassionema nitzschioides Chaetoceros dydymus Skeletonemacostatum	24 10 14 08 12 10 06
	Thalassiothrixlongissima Cymbella marina	12 04
В.	Zooplankton Species Foraminifera Chaetognatha	20 16
	Amphipoda Cladocera	10 06
	Eggs of fish & larvae	02

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TEST REPORT ANALYSIS OF MARINE WATER

BCL Ref. No.	GPL/ 05/217	Issued to:
Monitoring Date	May 14, 2022	M/s. Gangavaram Port Ltd.
Reporting Date	May 19, 2022	Gangavaram (Village)
Organization	M/s. Gangavaram Port Ltd.	PedaGantiyada (Mandalam)
Type of Sample	Marine Water (High Tide)	Visakhapatnam.
Sample Collected by	M/s. Biochem Labs	

Station Name: Harbourbasine / High Tide

S. No	PARAMETERS	UNIT	RESULT
1.	Phytoplankton Count	No. /L	11000
2.	Zooplankton Count	No./m³	1000
3.	Chlorophyll a	mg/m ³	3.4
4.	Chlorophyll b	mg/m³	2.8
5.	Primary Productivity	gC/m ²	3.0
6.	Biomass	mg/m ²	2.6

S.No	Species	Total Species count in 1L
A.	Phytoplankton Species Prorocentrummicans Amphora lineolata Cymbella marina Bacteriastrum delicatulum Thalassionėma nitzschioides Chaetoceros dydymus Skeletonemacostatum Thalassiothrixlongissima Cymbella marina	22 14 08 12 10 04 08 11
B.	Zooplankton Species Foraminifera Chaetognatha Amphipoda Cladocera Eggs of fish & larvae	04 14 06 10 08

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TEST REPORT ANALYSIS OF MARINE WATER

BCL Ref. No.	GPL/ 05/217	Issued to:
Monitoring Date	May 14, 2022	M/s. Gangavaram Port Ltd.
Reporting Date	May 19, 2022	Gangavaram (Village)
Organization	M/s. Gangavaram Port Ltd.	PedaGantiyada (Mandalam)
Type of Sample	Marine Water (High Tide)	Visakhapatnam.
Sample Collected by	M/s. Biochem Labs	The second second second
	A contract of the contract of	

Station Name: Port Entrance Channel / High Tide

S. No	PARAMETERS	UNIT	RESULT
1.	Phytoplankton Count	No. /L	1200
2.	Zooplankton Count	No./m ³	800
3.	Chlorophyll a	mg/m³	2.6
4.	Chlorophyll b	mg/m³	3.2
5.	Primary Productivity	gC/m ²	2.6
6.	Biomass	mg/m ²	2.8

S.No	Species	Total Species count in 1L
A.	Phytoplankton Species	
	Prorocentrummicans	14
	Amphora lineolata	20
	Cymbella marina	14
	Bacteriastrum delicatulum	12
	Thalassionema nitzschioides	08
	Chaetoceros dydymus	10
	Skeletonemacostatum	02
	Thalassiothrixlongissima	12
	Cymbella marina	06
B.	Zooplankton Species	
	Foraminifera	10
	Chaetognatha	18
	Amphipoda	04
	Cladocera	06
	Eggs of fish & larvae	12

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TEST REPORT ANALYSIS OF MARINE WATER

BCL Ref. No.	GPL/ 05/217	Issued to:
Monitoring Date	May 14, 2022	W- 6 B-4144
Reporting Date	May 19, 2022	M/s. Gangavaram Port Ltd.
Organization	M/s. Gangavaram Port Ltd.	Gangavaram (Village)
Type of Sample	Marine Water (Low Tide)	PedaGantiyada (Mandalam) Visakhapatnam.
Sample Collected by	M/s. Biochem Labs	visaniapaulalli.

Station Name: South brake Wall outside / Low Tide

S. No	PARAMETERS	UNIT	RESULT
1.	Phytoplankton Count	No. /L	12000
2.	Zooplankton Count	No./m³	900
3.	Chlorophyll a	mg/m³	3.2
4.	Chlorophyll b	mg/m³	2.4
5.	Primary Productivity	gC/m ²	3.2
6.	Biomass	mg/m²	2.8

.No	Species	Total Species count in 1L
A.	Phytoplankton Species Prorocentrummicans Amphora lineolata Cymbella marina Bacteriastrum delicatulum Thalassionema nitzschioides Chaetoceros dydymus Skeletonemacostatum Thalassiothrixlongissima Cymbella marina	42 36 56 32 04 12 06 32
В.	Zooplankton Species Foraminifera Chaetognatha Amphipoda Cladocera Eggs of fish & larvae	38 26 34 14 06

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TEST REPORT ANALYSIS OF MARINE WATER

BCL Ref. No.	GPL/ 05/217	Issued to:
Monitoring Date	May 14, 2022	M/o Consoveren Ded Ltd
Reporting Date	May 19, 2022	M/s. Gangavaram Port Ltd.
Organization	M/s. Gangavaram Port Ltd.	Gangavaram (Village) PedaGantiyada (Mandalam)
Type of Sample	Marine Water (Low Tide)	Visakhapatnam.
Sample Collected by	M/s. Biochem Labs	viouriupatilari.

Station Name: North brake Wall Outside / Low Tide

S. No	PARAMETERS	UNIT	RESULT
1.	Phytoplankton Count	No. /L	12000
2.	Zooplankton Count	No./m³	1000
3.	Chlorophyll a	mg/m³	3.6
4.	Chlorophyll b	mg/m³	2.4
5.	Primary Productivity	gC/m ²	3.0
6.	Biomass	mg/m ²	2.2

S.No	Species	Total Species count in 1L
A.	Phytoplankton Species Prorocentrummicans Amphora lineolata Cymbella marina	34 48 54
	Bacteriastrum delicatulum Thalassionema nitzschioides Chaetoceros dydymus Skeletonemacostatum Thalassiothrixlongissima Cymbella marina	28 40 04 22 12 06
B.	Zooplankton Species Foraminifera Chaetognatha Amphipoda Cladocera Eggs of fish & larvae	56 32 30 10 04

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TEST REPORT ANALYSIS OF MARINE WATER

BCL Ref. No.	GPL/ 05/217	Issued to:	
Monitoring Date	May 14, 2022	M/s. Gangavaram Port Ltd.	
Reporting Date	May 19, 2022	Gangavaram (Village)	
Organization	M/s. Gangavaram Port Ltd.	PedaGantiyada (Mandalam) Visakhapatnam.	
Type of Sample	Marine Water (High Tide)		
Sample Collected by	M/s. Biochem Labs		

Station Name: South brake Wall Outside / High Tide

S. No	PARAMETERS	UNIT	RESULT
1.	Phytoplankton Count	No. /L	9000
2.	Zooplankton Count	No./m ³	700
3.	Chlorophyll a	mg/m ³	2.8
4.	Chlorophyll b	mg/m ³	2.6
5.	Primary Productivity	gC/m ²	3.0
6.	Biomass	mg/m²	2.4

S.No	Species	Total Species count in 1L
A.	Phytoplankton Species Prorocentrummicans Amphora lineolata Cymbella marina Bacteriastrum delicatulum Thalassionema nitzschioides Chaetoceros dydymus Skeletonemacostatum Thalassiothrixlongissima	42 64 28 36 04 28 14
B.	Cymbella marina Zooplankton Species Foraminifera Chaetognatha Amphipoda Cladocera Eggs of fish & larvae	02 42 24 08 04 12

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TEST REPORT ANALYSIS OF MARINE WATER

BCL Ref. No.	GPL/ 05/217	Issued to:
Monitoring Date	May 14, 2022	M/s. Gangavaram Port Ltd.
Reporting Date	May 19, 2022	Gangavaram (Village)
Organization	M/s. Gangavaram Port Ltd.	PedaGantiyada (Mandalam)
Type of Sample	Marine Water (High Tide)	Visakhapatnam.
Sample Collected by	M/s. Biochem Labs	

Station Name: North brake Wall Outside / High Tide

S. No	PARAMETERS	UNIT	RESULT
1.	Phytoplankton Count	No. /L	11000
2.	Zooplankton Count	No./m³	1400
3.	Chlorophyll a	mg/m ³	3.6
4.	Chlorophyll b	mg/m ³	2.4
5.	Primary Productivity	gC/m ²	3.0
6.	Biomass	mg/m²	2.6

S.No	Species	Total Species count in 1L
Α.	Phytoplankton Species Prorocentrummicans Amphora lineolata Cymbella marina Bacteriastrum delicatulum Thalassionema nitzschioides Chaetoceros dydymus Skeletonemacostatum Thalassiothrixlongissima Cymbella marina	68 12 46 28 40 32 06 20 04
B.	Zooplankton Species Foraminifera Chaetognatha Amphipoda Cladocera Eggs of fish & larvae	30 44 28 14 08

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TEST REPORT ANALYSIS OF MARINE WATER

GPL/ 05/218	Issued to:	
May 28, 2022	M/s. Gangavaram Port Ltd.	
June 02, 2022	Gangavaram (Village)	
M/s. Gangavaram Port Ltd.	PedaGantiyada (Mandalam)	
Marine Water (Low Tide / High Tide)	Visakhapatnam.	
M/s. Biochem Labs	T Section (September 1981)	
	May 28, 2022 June 02, 2022 M/s. Gangavaram Port Ltd. Marine Water (Low Tide / High Tide)	

S. No	Parameter	Unit		Re	sult	
				rBasine	Port Entran	ce Channel
			Low tide	High tide	Low tide	High tide
1.	Temperature	°C	32.6	30.2	32.2	29.6
2.	pH	H+ conc	8.18	8.22	8.20	8.24
3.	Salinity	PSU	32.6	33.2	32.2	33.0
4.	Turbidity	NTU	24	30	10	14
5.	Total Suspended Solids	mg/l	30	34	14	16
6.	Transparency	Mts.	0.9	0.6	1.4	1.2
7.	Electrical Conductivity	mMHo	32.8	33.4	32.4	30.8

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TEST REPORT ANALYSIS OF MARINE WATER

BCL Ref. No.	GPL/ 05/218	Issued to:
Monitoring Date	May 28, 2022	M/s. Gangavaram Port Ltd.
Reporting Date	June 02, 2022	Gangavaram (Village)
Organization	M/s. Gangavaram Port Ltd.	PedaGantiyada (Mandalam)
Type of Sample	Marine Water (Low Tide / High Tide)	Visakhapatnam.
Sample Collected by	M/s. Biochem Labs	

S. No	Parameter Unit		Result			
			South brake !	Wall Outside	North brake \	Wall Outside
			Low tide	High tide	Low tide	High tide
1.	Temperature	°C	30.6	32.0	28.2	30.6
2.	pH	H+ conc	8.24	8.20	8.22	8.28
3.	Salinity	PSU	32.6	33.0	32.8	34.0
4.	Turbidity	NTU	10	14	10	12
5.	Total Suspended Solids	mg/l	12	16	14	18
6.	Transparency	Mts.	1.4	1.2	1.6	1.6
7.	Electrical Conductivity	mMHo	34.8	33.2	34.2	35.0

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TEST REPORT ANALYSIS OF MARINE WATER

BCL Ref. No.	GPL/ 05/218	Issued to:
Monitoring Date	May 28, 2022	M/s. Gangavaram Port Ltd.
Reporting Date	June 02, 2022	Gangavaram (Village)
Organization	M/s. Gangavaram Port Ltd.	PedaGantiyada (Mandalam)
Type of Sample	Marine Water (Low Tide / High Tide)	Visakhapatnam.
Sample Collected by	M/s. Biochem Labs	N

S. No	Parameter Unit		Result			
			HarbourBasine		Port Entrance	ce Channel
			Low tide	High tide	Low tide	High tide
1.	Dissolved Oxygen	mg/l	4.0	3.6	3.8	3.8
2.	Biological Oxygen Demand	mg/l	1.8	1.4	1.6	1.4
3.	Oil & Grease	mg/l	0.8	0.6	0.4	0.6
4.	Sulphate	mg/l	986	992	1026	1040
5.	Phosphate	mg/l	0.3	0.32	0.26	0.28
6.	Nitrate	mg/i	3.0	2.0	2.8	2.2
7.	Nitrite	mg/l	0.024	0.026	0.016	0.018
8.	Chloride	mg/l	20680	19842	20468	18986
9.	Chromium	ppm	0.028	0.022	0.018	0.020
10.	Mercury	ppm	Nil	Nil	Nil	Nil
11.	Zinc	ppm	0.22	0.18	0.16	0.12
12.	Iron	ppm	0.028	0.026	0.02	0.024
13.	Manganese	ppm	0.02	0.022	0.016	0.018
14.	Cadmium	ppm	Nil	Nil	Nil	Nil

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TEST REPORT ANALYSIS OF MARINE WATER

BCL Ref. No.	GPL/ 05/218	Issued to:
Monitoring Date	May 28, 2022	M/s. Gangavaram Port Ltd.
Reporting Date	June 02, 2022	Gangavaram (Village)
Organization	M/s. Gangavaram Port Ltd.	PedaGantiyada (Mandalam)
Type of Sample	Marine Water (Low Tide / High Tide)	Visakhapatnam.
Sample Collected by	M/s. Biochem Labs	1) RVCCVLENGLECOSCOCOLE

S. No	Parameter	Unit	and the same of the same	R	esult	
2000			South brake Wall Outside		North brake W	Iall Outside
			Low tide	High tide	Low tide	High tide
1.	Dissolved Oxygen	mg/l	4.2	3.8	4.0	4.6
2.	Biological Oxygen Demand	mg/l	1.8	1.2	1.6	2.0
3.	Oil & Grease	mg/l	0.6	0.8	0.4	8.0
4	Sulphate	mg/l	1032	1024	1068	1046
5	Phosphate	mg/l	0.4	0.36	0.24	0.38
6	Nitrate	mg/l	3.0	2.2	2.0	1.6
7	Nitrite	mg/l	0.022	0.024	0.016	0.02
8.	Chloride	mg/l	20456	20160	18628	20246
9.	Chromium	ppm	0.024	0.02	0.018	0.026
10.	Mercury	ppm	Nil	Nil	Nil	Nil
11.	Zinc	ppm	0.14	0.12	0.16	0.10
12.	Iron	ppm	0.018	0.016	0.024	0.02
13.	Manganese	ppm	0.022	0.02	0.018	0.016
14.	Cadmium	ppm	Nil	Nil	Nil	Nil

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TEST REPORT ANALYSIS OF MARINE WATER

GPL/ 05/218	Issued to:
May 28, 2022	M/s. Gangavaram Port Ltd.
June 02, 2022	Gangavaram (Village)
M/s. Gangavaram Port Ltd.	PedaGantiyada (Mandalam)
Marine Water (Low Tide)	Visakhapatnam.
M/s. Biochem Labs	
	May 28, 2022 June 02, 2022 M/s. Gangavaram Port Ltd. Marine Water (Low Tide)

Station Name: Harbourbasine / Low Tide

S. No	PARAMETERS	UNIT	RESULT
5. 140	Phytoplankton Count	No. /L	12000
2.	Zooplankton Count	No./m³	1000
3.	Chlorophyll a	mg/m³	2.8
4	Chlorophyll b	mg/m ³	2.4
5	Primary Productivity	gC/m ²	2.6
6.	Biomass	mg/m ²	1.4

S.No	Species	Total Species count in 1L
Α.	Phytoplankton Species Prorocentrummicans Amphora lineolata Cymbella marina Bacteriastrum delicatulum Thalassionema nitzschioides Chaetoceros dydymus Skeletonemacostatum Thalassiothrixlongissima Cymbella marina	18 30 04 18 32 10 08 06 18
B.	Zooplankton Species Foraminifera Chaetognatha Amphipoda Cladocera Eggs of fish & larvae	32 24 04 10 02

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TEST REPORT ANALYSIS OF MARINE WATER

BCL Ref. No.	GPL/ 05/218	Issued to:		
Monitoring Date	May 28, 2022	M/s. Gangavaram Port Ltd.		
Reporting Date	June 02, 2022	Gangavaram (Village)		
Organization	M/s. Gangavaram Port Ltd.	PedaGantiyada (Mandalam		
Type of Sample Marine Water (Low Tide)		Visakhapatnam.		
Sample Collected by	M/s. Biochem Labs	18884W N		

Station Name: Port Entrance Channel / Low Tide

S. No	PARAMETERS	UNIT	RESULT
1	Phytoplankton Count	No. /L	12000
2	Zooplankton Count	No./m ³	900
3.	Chlorophyll a	mg/m ³	3.2
4	Chlorophyll b	mg/m ³	2.4
5.	Primary Productivity	gC/m ²	3.2
6	Biomass	mg/m²	1.8

S.No	Species	Total Species count in 1L
Α.	Phytoplankton Species Prorocentrummicans Amphora lineolata Cymbella marina Bacteriastrum delicatulum Thalassionema nitzschioides Chaetoceros dydymus Skeletonemacostatum Thalassiothrixlongissima Cymbella marina	20 12 22 14 06 32 04 12
B.	Zooplankton Species Foraminifera Chaetognatha Amphipoda Cladocera Eggs of fish & larvae	24 16 04 02 26

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TEST REPORT ANALYSIS OF MARINE WATER

BCL Ref. No.	GPL/ 05/218	Issued to:
Monitoring Date	May 28, 2022	M/s. Gangavaram Port Ltd.
Reporting Date	June 02, 2022	Gangavaram (Village)
Organization	M/s. Gangavaram Port Ltd.	PedaGantiyada (Mandalam)
Type of Sample	Marine Water (High Tide)	Visakhapatnam.
Sample Collected by	M/s. Biochem Labs	

Station Name: Harbourbasine / High Tide

S. No	PARAMETERS	UNIT	RESULT
1.	Phytoplankton Count	No. /L	10000
2	Zooplankton Count	No./m³	1200
3.	Chlorophyll a	mg/m ³	2.8
4.	Chlorophyll b	mg/m³	2.6
5.	Primary Productivity	gC/m ²	3.0
6.	Biomass	mg/m²	2.2

S.No	Species	Total Species count in 1L
Α.	Phytoplankton Species	
	Prorocentrummicans	24
	Amphora lineolata	12
	Cymbella marina	08
	Bacteriastrum delicatulum	16
	Thalassionema nitzschioides	24
	Chaetoceros dydymus	08
	Skeletonemacostatum	12
	Thalassiothrixlongissima	26
	Cymbella marina	04
B.	Zooplankton Species	4000
	Foraminifera	12
	Chaetognatha	28
	Amphipoda	06
	Cladocera	10
	Eggs of fish & larvae	06

Analyst





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Centre for Aquaculture & Environmental Sciences

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TEST REPORT ANALYSIS OF MARINE WATER

BCL Ref. No.	GPL/ 05/218	Issued to:	
Monitoring Date	May 28, 2022	M/s. Gangavaram Port Ltd.	
Reporting Date	June 02, 2022	Gangavaram (Village)	
Organization	M/s. Gangavaram Port Ltd.	PedaGantiyada (Mandalam)	
Type of Sample	Marine Water (High Tide)	Visakhapatnam.	
Sample Collected by	M/s. Biochem Labs	rioditi tapati ani.	
The Street Control of the Control of			

Station Name: Port Entrance Channel / High Tide

S. No	PARAMETERS	UNIT	RESULT
1.	Phytoplankton Count	No. /L	1000
2.	Zooplankton Count	No./m ³	800
3.	Chlorophyll a	mg/m³	3.8
4.	Chlorophyll b	mg/m ³	2.4
5.	Primary Productivity	gC/m ²	3.0
6.	Biomass	mg/m²	2.4

S.No	Species	Total Species count in 1L
A.	Phytoplankton Species	
	Prorocentrummicans	34
	Amphora lineolata	02
	Cymbella marina	28
	Bacteriastrum delicatulum	14
	Thalassionema nitzschioides	08
	Chaetoceros dydymus	26
	Skeletonemacostatum	18
	Thalassiothrixlongissima	20
	Cymbella marina	06
B.	Zooplankton Species	
	Foraminifera	20
	Chaetognatha	14
	Amphipoda	10
	Cladocera	12
	Eggs of fish & larvae	08

Analyst





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TEST REPORT ANALYSIS OF MARINE WATER

BCL Ref. No.	GPL/ 05/218	Issued to:	
Monitoring Date	May 28, 2022	M/s. Gangavaram Port Ltd.	
Reporting Date	June 02, 2022	Gangavaram (Village)	
Organization	M/s. Gangavaram Port Ltd.	PedaGantiyada (Mandalam) Visakhapatnam.	
Type of Sample	Marine Water (Low Tide)		
Sample Collected by	M/s. Biochem Labs		

Station Name: South brake Wall outside / Low Tide

S. No	PARAMETERS	UNIT	RESULT
1.	Phytoplankton Count	No. /L	10000
2.	Zooplankton Count	No./m³	950
3.	Chlorophyll a	mg/m³	3.2
4.	Chlorophyll b	mg/m³	2.8
5.	Primary Productivity	gC/m ²	3.0
6.	Biomass	mg/m²	2.4

S.No	Species	Total Species count in 1L
A.	Phytoplankton Species Prorocentrummicans Amphora lineolata Cymbella marina Bacteriastrum delicatulum Thalassionema nitzschioides Chaetoceros dydymus Skeletonemacostatum Thalassiothrixlongissima Cymbella marina	86 28 06 10 28 22 36 08
B.	Zooplankton Species Foraminifera Chaetognatha Amphipoda Cladocera Eggs of fish & larvae	42 21 04 26 08

Analyst





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TEST REPORT ANALYSIS OF MARINE WATER

BCL Ref. No.	GPL/ 05/218	Issued to:
Monitoring Date	May 28, 2022	W- 0
Reporting Date	June 02, 2022	M/s. Gangavaram Port Ltd.
Organization M/s. Gangavaram Port Ltd.		Gangavaram (Village)
Type of Sample	Marine Water (Low Tide)	 PedaGantiyada (Mandalam) Visakhapatnam.
Sample Collected by	M/s. Biochem Labs	visakiiapatiiaiti.

Station Name: North brake Wall Outside / Low Tide

S. No	PARAMETERS	UNIT	RESULT
1.	Phytoplankton Count	No. /L	9000
2.	Zooplankton Count	No./m ³	600
3.	Chlorophyll a	mg/m ³	3.0
4.	Chlorophyll b	mg/m³	2.8
5.	Primary Productivity	gC/m ²	3.2
6.	Biomass	mg/m ²	2.8

S.No	Species	Total Species count in 1L
A.	Phytoplankton Species	1-4-14
	Prorocentrummicans	68
	Amphora lineolata	46
	Cymbella marina	20
	Bacteriastrum delicatulum	06
	Thalassionema nitzschioides	10
	Chaetoceros dydymus	08
	Skeletonemacostatum	24
	Thalassiothrixlongissima	12
	Cymbella marina	04
B.	Zooplankton Species	
	Foraminifera	42
	Chaetognatha	20
	Amphipoda	06
	Cladocera	10
	Eggs of fish & larvae	04

Analyst





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TEST REPORT ANALYSIS OF MARINE WATER

BCL Ref. No.	GPL/ 05/218	M/s. Gangavaram Port Ltd. Gangavaram (Village)	
Monitoring Date	May 28, 2022		
Reporting Date	June 02, 2022		
Organization	M/s. Gangavaram Port Ltd.	PedaGantiyada (Mandalam) Visakhapatnam.	
Type of Sample	Marine Water (High Tide)		
Sample Collected by	M/s. Biochem Labs		

Station Name: South brake Wall Outside / High Tide

S. No	PARAMETERS	UNIT	RESULT
1.	Phytoplankton Count	No. /L	11000
2.	Zooplankton Count	No./m³	800
3.	Chlorophyll a	mg/m ³	2.6
4.	Chlorophyll b	mg/m ³	2.4
5.	Primary Productivity	gC/m ²	3.2
6.	Biomass	mg/m ²	2.6

S.No	Species	Total Species count in 1L
Α.	Phytoplankton Species Prorocentrummicans Amphora lineolata Cymbella marina Bacteriastrum delicatulum Thalassionema nitzschioides Chaetoceros dydymus Skeletonemacostatum Thalassiothrixlongissima Cymbella marina	90 18 46 14 28 36 04 38
B.	Zooplankton Species Foraminifera Chaetognatha Amphipoda Cladocera Eggs of fish & larvae	24 06 32 10 06

Analyst





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TEST REPORT ANALYSIS OF MARINE WATER

BCL Ref. No.	GPL/ 05/218	Issued to:	
Monitoring Date May 28, 2022			
Reporting Date June 02, 2022		M/s. Gangavaram Port Ltd.	
Organization M/s. Gangavaram Port Ltd.		Gangavaram (Village) PedaGantiyada (Mandalam	
Type of Sample Marine Water (High Tide)			
Sample Collected by	M/s. Biochem Labs	Visakhapatnam.	

Station Name: North brake Wall Outside / High Tide

S. No	PARAMETERS	UNIT	RESULT
1.	Phytoplankton Count	No. /L	10000
2.	Zooplankton Count	No./m³	1200
3.	Chiorophyll a	mg/m ³	3.2
4.	Chlorophyll b	mg/m ³	2.8
5.	Primary Productivity	gC/m²	3.0
6.	Biomass	mg/m²	2.4

S.No	Species	Total Species count in 1L
A.	Phytoplankton Species Prorocentrummicans	And and
		86
	Amphora lineolata Cymbella marina	35
	Bacteriastrum delicatulum	48
		42
	Thalassionema nitzschioides	12
	Chaetoceros dydymus	34
	Skeletonemacostatum	28
	Thalassiothrixlongissima	04
	Cymbella marina	12
B.	Zooplankton Species	
	Foraminifera	44
	Chaetognatha	12
	Amphipoda	30
	Cladocera	24
	Eggs of fish & larvae	22

Analyst





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TEST REPORT ANALYSIS OF SEDIMENT SAMPLE

BCL Ref. No.	GPL/ 06/217	Issued to:	
Monitoring Date	May 14, 2022	M/s. Gangavaram Port Ltd. Gangavaram (Vīllage) PedaGantiyada (Mandalam) Visakhapatnam.	
Reporting Date	May 19, 2022		
Organization	M/s. Gangavaram Port Ltd.		
Type of Sample	Sediment (Low Tide)		
Sample Collected by	M/s. Biochem Labs		

S.No	Parameters	Unit	Result	
	0.0000000000000000000000000000000000000		Harbour Basine	Port Entrance Channel
1.	pH	H+ conc	7.08	7.10
2.	Organic matter	%	2.2	1.8
3.	Nitrate	mg/kg	2.4	1.6
4.	Phosphate	mg/kg	1.8	1.4
5.	Oil & Grease	mg/kg	0.12	0.1
6.	Iron	ppm	0.16	0.14
7.	Manganese	ppm	0.14	0.12
8.	Nickel	ppm	0.12	0.1
9.	Chromium	ppm	0.1	0.12
10.	Mercury	ppm	Nil	Nil
11.	Zinc	ppm	1.0	8.0
12.	Lead	ppm	0.01	0.01
13.	Arsenic	ppm	0.01	0.01
14.	Selenium	ppm	0.01	0.01
15.	Copper	ppm	0.18	0.14

Analyst





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TEST REPORT ANALYSIS OF SEDIMENT SAMPLE

BCL Ref. No.	GPL/ 06/217	Issued to:		
Monitoring Date	May 14, 2022	Mis Consequence Bod Ltd		
Reporting Date	May 19, 2022	M/s. Gangavaram Port Ltd. Gangavaram (Village)		
Organization	M/s. Gangavaram Port Ltd.	PedaGantiyada (Mandalam)		
Type of Sample	Sediment (Low Tide)	Visakhapatnam.		
Sample Collected by	M/s. Biochem Labs	visakijapatijaiji,		

S.No	Parameters	Unit	Result	
		3536	South brake Wall Outside	North brake Wall Outside
1.	pH	H+ conc	7.06	7.10
2.	Organic matter	%	1.0	1.2
3.	Nitrate	mg/kg	2.0	1.6
4.	Phosphate	mg/kg	0.8	1.0
5.	Oil & Grease	mg/kg	0.02	0.01
6.	Iron	ppm	0.14	0.14
7.	Manganese	ppm	0.12	0.12
8.	Nickel	ppm	0.12	0.1
9.	Chromium	ppm	0.14	0.14
10.	Mercury	ppm	Nil	Nil
11.	Zinc	ppm	1.0	0.6
12.	Lead	ppm	0.01	0.01
13.	Arsenic	ppm	0.01	0.01
14.	Selenium	ppm	0.01	0.01
15.	Copper	ppm	0.2	0.16

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TEST REPORT BENTHIC FAUNAL DIVERSITY

BCL Ref. No.	GPL/ 06/217	Issued to:
Monitoring Date	May 14, 2022	M/s. Gangavaram Port Ltd.
Reporting Date	May 19, 2022	Gangavaram (Village)
Organization M/s. Gangavaram Port Ltd. Type of Sample Sediment (Low Tide)		PedaGantiyada (Mandalam) Visakhapatnam.

S. No	Species/Group	% Composition	
	0.5300000000000000000000000000000000000	HarbourBasine	Port Entrance Channel
1.	Opheliidae sp	32	22
2.	Glyceridae sp	08	10
3.	Nereidae sp	24	16
4.	Aphroditidae sp	0	12
5.	Cirratulidae sp	14	10
6.	Capitella sp	26	06
7.	Amphipoda sp.	10	14
8.	Gastropoda	04	0
9.	Chaetognatha	06	12

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TEST REPORT BENTHIC FAUNAL DIVERSITY

BCL Ref. No.	GPL/ 06/217	Issued to:	
Monitoring Date May 14, 2022 Reporting Date May 19, 2022 Organization M/s. Gangavaram Port Ltd. Type of Sample Sediment (Low Tide)		500000000000000000000000000000000000000	
		M/s. Gangavaram Port Ltd.	
		Gangavaram (Village) PedaGantiyada (Mandalam)	
			Sample Collected by

S. No	Species/Group	% Compos	sition
		South brake Wall Outside	North brake Wall Outside
1.	Foraminifera	38	24
2.	Amphipoda	14	
3.	Mytilusedulis	20	08
4.	Gastropod veliger	0	14
5.	Oithona	16	12
6.	Capitella	10	04
7.	Copepod nauplii	14	06
9.	Brachyuran zoea		10
8.	Neanthusarenaceodentala	06	22
•	reditifuadreflaceodefliala	02	06

Analyst





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TEST REPORT ANALYSIS OF SEDIMENT SAMPLE

BCL Ref. No.	GPL/ 06/218	Issued to:
Monitoring Date	May 28, 2022	M/s. Gangavaram Port Ltd.
Reporting Date	The same of the sa	
Organization	M/s. Gangavaram Port Ltd.	Gangavaram (Village) PedaGantiyada (Mandalam)
Type of Sample Sediment (Low Tide)		Visakhapatnam.
Sample Collected by	M/s. Biochem Labs	

S.No	Parameters	arameters Unit Result		sult
T 11/17/20	TOCOGREDOVE ISSUE	570000	South brake Wall Outside	North brake Wall Outside
1.	pH	H+ conc	7.02	7.08
2.	Organic matter	%	1.0	0.8
3.	Nitrate	mg/kg	2.0	1.6
4.	Phosphate	mg/kg	1,4	1.0
5.	Oil & Grease	mg/kg	0.06	0.04
6.	Iron	ppm	0.14	0.12
7.	Manganese	ppm	0.12	0.1
8.	Nickel	ppm	0.12	0.12
9.	Chromium	ppm	0.14	0.12
10.	Mercury	ppm	Nil	Nil
11.	Zinc	ppm	1.0	8.0
12.	Lead	ppm	0.01	0.01
13.	Arsenic	ppm	0.01	0.01
14.	Selenium	ppm	0.01	0.01
15.	Copper	ppm	0.16	0.12

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TEST REPORT ANALYSIS OF SEDIMENT SAMPLE

BCL Ref. No.	GPL/ 06/218	Issued to:	
Monitoring Date	May 28, 2022	Min Consequent Deat Ltd	
Reporting Date	June 02, 2022	M/s. Gangavaram Port Ltd. Gangavaram (Village)	
Organization	M/s. Gangavaram Port Ltd.	PedaGantiyada (Mandalam)	
Type of Sample Sediment (Low Tide)		Visakhapatnam.	
Sample Collected by	M/s. Biochem Labs	viouriapunani.	

S.No	Parameters	Unit	/ O. T A. C D. C C C C C C	Result	
58960			Harbour Basine	Port Entrance Channe	
1.	pH	H+ conc	7.10	7.16	
2.	Organic matter	%	2.0	1.6	
3.	Nitrate	mg/kg	1.8	1.4	
4.	Phosphate	mg/kg	1.0	1.0	
5.	Oil & Grease	mg/kg	0.1	0.08	
6.	Iron	ppm	0.14	0.12	
7.	Manganese	ppm	0.16	0.14	
8.	Nickel	ppm	0.14	0.1	
9.	Chromium	ppm	0.12	0.1	
10.	Mercury	ppm	Nil	Nil	
11.	Zinc	ppm	1.0	0.6	
12.	Lead	ppm	0.01	0.01	
13.	Arsenic	ppm	0.01	0.01	
14.	Selenium	ppm	0.01	0.01	
15.	Copper	ppm	0.24	0.18	

Analyst





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TEST REPORT BENTHIC FAUNAL DIVERSITY

BCL Ref. No.	GPL/ 06/218	Issued to:
Monitoring Date	May 28, 2022	M/s, Gangavaram Port Ltd.
Reporting Date	June 02, 2022	Gangavaram (Village)
Organization M/s. Gangavaram Port Ltd. Type of Sample Sediment (Low Tide)		PedaGantiyada (Mandalam) Visakhapatnam.

S. No	Species/Group	% Composition	
	10 (83)	Harbour Basine	Port Entrance Channel
1.	Eunicidae sp.	24	32
2.	Paraonidae sp.	36	20
3.	Syllidae sp	0	14
4.	Sabellidae sp	10	08
5.	Oithona sp.	14	24
6.	Capitella sp.	08	0
7.	Syllidae sp	10	08
9.	Amphipoda sp.	12	0
8.	Nematoda sp.	08	04

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TEST REPORT BENTHIC FAUNAL DIVERSITY

BCL Ref. No.	GPL/ 06/218	Issued to:	
Monitoring Date May 28, 2022 Reporting Date June 02, 2022		M/s. Gangavaram Port Ltd. Gangavaram (Village)	
Type of Sample Sediment (Low Tide)		Visakhapatnam.	
Sample Collected by	M/s. Biochem Labs		

S. No	Species/Group	% Composition	
0. 110		South brake Wall Outside	North brake Wall Outside
1.	Capitella sp.	68	54
2	Syllidae sp	36	22
3.	Amphipoda sp.	28	32
4.	Nematoda sp.	36	06
5.	Capitella sp.	04	24
6.	Syllidae sp	28	08
7.	Paraonidae sp.	36	12
9.	Syllidae sp	14	10
8.	Sabellidae sp	0	04

Analyst





GANGAVARAM PORT LIMITED

GPL/ENV/APPCB/2022-23/010

Date: 06.06.2022.

To

Sr. Environmental Engineer, CESS Andhra Pradesh Pollution Control Board, D.no:33-26-14D/2. Near Sunrise Hospital, Pushpa Hotel Center, Chalamalavari Street, Kasturibaipet, Vijayawada-520010. Andhra Pradesh.

Dear Sir.

Sub: Water Consumption Cess Statement - Reg.

Please find enclosed herewith the water consumption statement in FORM -1 for the month of May - 2022, prepared under the Water (Prevention and Control of Pollution) Cess Act. 1977.

We request you to kindly consider the same.

Thanking you

Yours Sincerely,

Signatory

Encl: As above.

Copy submitted to the Environmental Engineer, A.P. Pollution Control Board. Regional Office, Visakhapatnam for kind information.

Project Office

: Pedagantyada Mandal, Gangavaram (Post), Visakhapatnam - 530 044. Andhra Pradesh, INDIA

Tel.: +91 891 270 1177, 2277, 276 1377, Fax: +91 891 270 3377

Corporate Office: 2rd, 3rd and 4th Floors, "Hansa Plaza", Plot No.798, Road No.36, Jubilee Hills, Hyderabad - 500 033

Tel.: 040 3359 9999, Fax No.: 040 3359 9990

F-mail: nort@nannavaram.com. Web: www.oanoavaram.com

FORM - 1

Returns Regarding Water Consumed During Month of May - 2022

Remarks	(9)	9	X 3
Qty. of water qualifying for rebate according to the assesses	(5)*		5 13
If the meter was out of order the monthly avg. consumption of the water for the past 3 months of working period	(4)	4	
Quantity of water consumed	(3)	25,403 Cum/KL	Cum/KL 6373.20
Purpose of which water consumed	(2)	Total from Municipal mains i. From Municipal water supply mains ii. From well / tube well.	i. From Municipal water supply mains ii. From well /
Purpose o		1) Industrial cooling/ spraying in mine pits or boiler feed.	2) Domestic Water
Name & Address	(1)	Gangavaram Port Limited, Gangavaram Post, Peda Gatyada	É

(*) for claiming rebate under Col.7, the assessed shall indicate in the column the analytical and other reports annexed to this return in support of this claim.

For Gangavaram, Port Limited

(Dr. D. Nothi)



GANGAVARAM PORT LIMITED

GPL/ENV/APPCB/2022-23/020

Date: 05.07.2022.

To

Sr. Environmental Engineer, CESS Andhra Pradesh Pollution Control Board. D.no:33-26-14D/2. Near Sunrise Hospital, Pushpa Hotel Center, Chalamalavari Street, Kasturibaipet, Vijayawada-520010. Andhra Pradesh.

Dear Sir.

Sub: Water Consumption Cess Statement - Reg.

Please find enclosed herewith the water consumption statement in FORM -1 for the month of June - 2022, prepared under the Water (Prevention and Control of Pollution) Cess Act. 1977.

We request you to kindly consider the same.

Thanking you

Yours Sincerely,

For Gangavaram Port Limited

Authorized Signatory Vice President (Environment)

Encl: As above.

Copy submitted to the Environmental Engineer, A.P. Pollution Control Board, Regional Office, Visakhapatnam for kind information.

FORM - 1

Returns Regarding Water Consumed During Month of June - 2022

Name & Address	Purpose o	Purpose of which water consumed	Quantity of water consumed	If the meter was out of order the monthly avg. consumption of the water for the past 3 months of working period	Qty. of water qualifying for rebate according to the assesses	Remarks
(1)		(2)	(3)	(4)	*(5)	(9)
	1) Industrial cooling/	Total from Municipal mains i, From	22,239 Cum/KL		· 1	•
	spraying in mine	Municipal	0			, k
Gangavaram Port	Dits or	water supply	·		12	
Limited,	i oliod	mains				
Gangavaram Post,	en non	ii. From well /		9		
Peda Gatyada	המח.	tube well.				
Mandal,	4	i, From			II)	
Visakhapatnam.		Municipal	Cum/KL	ı	,	i
	2) Domestic	water supply	3891.50			E .
	Water	mains				
)		ii. From well /				
	E	tube well				

(*) for claiming rebate under Col.7, the assessed shall indicate in the column the analytical and other reports annexed to this return in support of this claim.

For Gangavarampont Limited

J. J. J. J.

Vice President (Environment)



GANGAVARAM PORT LIMITED

GPL/ENV/APPCB/2022-23/021

Date: 05/07/2022.

To

The Environmental Engineer, A.P. Pollution Control Board Regional Office APPCB Buildings, 3rd Floor Main Road, Madhavadhara VUDA Layout Visakhapatnam- 530 009.

Dear Sir.

Sub:-

Monthly CFO Compliance, Environmental Marine & Terrestrial Monitoring Reports and Water Consumption detains (Form-1) -Submitted - Reg.

Reff:-

- CFO 8 HWA Order No. APPCB/VSP/VSP/113/CFO/HO/2015. dated 13.01.2016, valid up to 31.12.2020.
- CFO & HWA Order No. APPCB/VSP/VSP/113/CFO/HO/2020, dated 10.09.2020, valid up to 31.12.2025.

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With reference to the above, we are here with submitting the monthly CFO compliance reports and CAAQM, Marine & Terrestrial monitoring results along with Water Consumption details in Form - 1 for the month of June -2022.

Yours Sincerely,

For Gangavaram Port Limited

Authorized Sheething

Encl: As above.

Project Office

: Pedagantyada Mandal, Gangavaram (Post), Visakhapatnam - 530 044. Andhra Pradesh, INDIA

Tel.: +91 891 270 1177, 2277, 276 1377, Fax: +91 891 270 3377

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Compliance of the conditions stipulated in CFO Auto Renewal Order No. APPCB/VSP/VSP/113/CFO/HO/2020-10/09/2020, valid up to 31.12.2025.

SI. No.	Condition	Compliance
1.	All other conditions mentioned in Schedules A, B & C of the combined CFO8HWA order issued by the Board vide order dated 13.01.2016 will remain same.	Noted and conditions are being followed as applicable.
2.	The facility shall comply with the standards issued by MoEF&CC / CPCB from time to time.	Noted and condition is being followed.
3.	The industry shall submit Half yearly compliance reports to all the stipulated conditions in Environmental Clearance (EC), Consent for Establishment (CFE) and Consent for Operation (CFO) through website i.e., https://pcb.ap.gov.in by 1st of January and 1st July of every year. The first half yearly compliance reports shall be furnished by the industry and second half yearly compliance reports shall be the audited through NABL accredited third party failing which the Consent Order issued will be cancelled.	Self-certified 1st half yearly compliance report for the period from April 2021 to September 2021 submitted on 29.11.2021 through web site. NABL Accredited Agency certified compliance report for the 2nd half for the period from October 2021 to March 2022 was uploaded through website on 30.05.2022.
4.	The facility shall ensure that dedicated fund is allotted towards Environment Relief Fund (ERF) in the Public Liability Insurance policy and submit a copy of the policy at the Regional Office: Visakhapatnam every year.	GPL is having Public liability Insurance of IFFCO-TOKIO vide Policy No:41063755, dated 28.09.2021, Valid till 14/09/2022 with Premium of Rs-5615/- & ERF of Rs.5615/-
5.	In case of false certification, noncompliance of conditions / directions and discrepancy in furnishing the information by the industry, the Board can withdraw the auto renewed consent and take action under provisions of relevant Acts & Rules.	
6.	The facility shall inventorize the storage quantities of hazardous chemicals as per the hazard nature of reactivity / toxicity / flammability / explosive stored/handling in the premises as defined in the Management of Storage, Import of Hazardous Chemicals (MSIHC) Rules, 1989 and the details shall be furnished to the Factories Department and to the Regional Office, APPCB on monthly basis duly certifying the same.	
7.	The facility shall identify major accident hazard chemicals & list out the hazardous chemicals endangered to human health & environment and the details shall be furnished to the Factories Department and to the Regional Office, APPCB time to time duly certifying the same by the industry. Further the facility shall extend training to the working personnel's while handling hazardous chemicals for prevention of	GPL is not handling any Hazardous cargo/Containers/Chemicals.

	accidents and necessary antidotes to ensure the safety, as per the MSIHC Rules, 1989.	INTROCENT AND INTERNAL SECTION
8.	The facility shall submit the copy of the safety audit report and On-Site / Off Site Emergency Plans as applicable after being certified by the Factories Department/concerned authority, to the APPCB, Regional Office from time to time, if the storage quantity of hazardous chemicals is equal to or, in excess of the threshold quantities specified in schedule 2 & 3 of MSIHC Rules, 1989.	An onsite and offsite emergency action plan has been prepared and submitted to APPCB, RO, VSP. Mock drills are being conducted twice in a year.
9.	The facility shall carryout calibration of safety equipments and leak detection systems at regular intervals and shall certify the same with the Factories Department/concerned authority. That certified copy shall be submitted to the APPCB, Regional Office. The facility shall install fluorescent Wind Vane at the highest point in the facility premises.	GPL install fluorescent Wind Vane at the following two places within the Port premises. 1. On the top of Over Head Tank near Harbour Gate besides GPL Canteen. 2. On the top of Commercial Office Building (COB)
10	The facility shall inventorize the hazardous wastes and its quantities stored within the facility premises as per the Hazardous and Other Wastes (Management and Transboundary Movement) Rules, 2016 (HOWM Rules, 2016) and shall furnish the details to Regional Office, APPCB on monthly basis duly certifying the same by the industry.	GPL is not handling any Hazardous cargo/Containers/Chemicals. GPL is permitted to handle Used Lubricating oil of 12000 LPA. The generation, storage & disposal details are submitting to APPCB through Form – IV. Latest submission is on 06.06.2022 for the year 2021-2022.
11	The facility shall allow import of hazardous cargoes only after the importer complies with the MSIHC Rules, 1989.	GPL Not handling any Hazardous cargo/Containers/Chemicals.

Compliance report of the conditions stipulated in Schedule A,B & C of CFO & HWA Order No. APPCB/VSP/VSP/113/CFO/HO/2015, dated 13.01.2016

Compliance of Schedule - A

SI.	Condition	Compliance
No.		The state of the s
1.	Any up-set condition in any plant/plants of the industry, which result in, increased effluent/ emission discharge and/ or violation of standards stipulated in this order shall be informed to this Board, under intimation to the Collector and District Magistrate and take immediate action to bring down the discharge / emission below the limits.	
2.	The industry should carryout analysis of waste water discharges or emissions through chimneys for the parameters mentioned in this order on quarterly basis and submit to the Board.	monitoring and analysis. As per
3.	All the rules 8 regulations notified by Ministry of Law and Justice, Government of India regarding Public Liability Insurance Act, 1991 should be followed as applicable.	
4.	The industry should put up two sign boards (6×4 ft. each)at publicly visible places at the main gate indicating the products, effluent discharge standards, air emission standards, hazardous waste quantities and validity of CFO and exhibit the CFO order at a prominent place in the factory premises.	
5.	Notwithstanding anything contained in this consent order, the Board here by reserves the right and powers to review / revoke any and / or all the conditions imposed herein above and to make such variations as deemed fit for the purpose of the Acts by the Board.	
6.	The industry shall file the water cess returns in Form-I as required under section (5) of water (Prevention and Control of Pollution) cess Act, 1977 on or before the 5th of every calendar month, showing the quantity of water consumed in the previous monthly along with water meter readings. The industry shall remit water cess as per the assessment order as and when issued by Board.	previous month are being submitted before 5 th of subsequent month in FORM - I. The latest reports for the Month of May, 2022 were submitted on 5 th June, 2022

7.	The applicant shall submit Environment statement in Form V before 30 th September every year as per Rule No.14 of E(P) Rules,1986 & amendments thereof.	Complied and Form V was Submitted on 24.09.2021 for the period 2020-2021
8.	The applicant should make applications through Online for renewal of Consent (under Water Air Acts) and Authorization under HWM Rules at least 120 days before the date of expiry of this order, along with prescribed fee under Water and Air Acts and detailed compliance of CFO conditions for obtaining Consent & HW Authorization of the board. The industry should immediately submit the revised application for consent to this Board in the event of any change in the raw material used, processes employed, quantity of trade effluents & quantity of emissions. Any change in the management shall be informed to the Board, the person authorized should not let out the premises / lend / sell / transfer their industrial premises without obtaining prior permission of the state Pollution Control Board.	GPL has obtained CFO & HWA of the Board vide order dated 13/01/2016 valid up to 31.12.2020 and extended up to 31.12.2025 vide order dated 10.09.2020.
9.	Any person aggrieved by an order made by the state board under section 25, section 26, section 27 of water Act, 1974 or section 21 of Air Act, 1981 may within thirty days from the date on which the order is communicated to him, prefer an appeal as per Andhra Pradesh Water Rules, 1976 and Air Rules 1982, to Appellate authority constituted under section 28 of the Water (prevention and control of pollution) Act, 1974 and section 31 of the Air (prevention and control of pollution) Act, 1981.	

Compliance of Schedule - B

SI. No.			Condition		Compliance
140.	Wal	er P	ollution		
1.	- Contract Contract Contract	and the latest death of	er consumption quant	ities are	
	1000		ied below:		GPL is submitting water
		S.	Purpose	Quantity	consumption details and water ces
		No		KLD	in Form-I regularly.
		1	Gardening/irrigation	25	in Form-Fregularly.
		2	Dust suppression	1296.0	The Industry is appropriate water
	1 1	3	Domestic	40	The industry is consuming water
		4	Ship supply	32.5	within consented quantity only.
		5	miscellaneous	40.6	an asserbless and
		2	Total	1434.1	Provided 2 No. nos of flow meter
	C				for quantification of water used for
	100000000000000000000000000000000000000		of water is Visakhapatr		domestic and other purposes.
			upply Co. the following	is the	The the service was a second to a post of the
			ed water consumption.		
	S	31	Purpose	Quantity	
	N	-		KLD	
	1		ust suppression	1296.0	
	2	_	omestic purpose	40.00	
	3	1 1 1 1 1 1 1 1 1	ocess, where by water	73.1	
			ts polluted and pollutant	s	
			e easily bio degradable.		
	1 4		ocessing, where by	-	
			ater gets polluted and		
			llutants are not easily bid		
	degradable Total 1409.1		DESIGNATION OF THE PARTY OF THE		
			Total		
			e water meters shall t		
	for	the a	assessing the quantity	of water used	
	for	each	of the purpose mer	tioned above	
	for	Cess	assessment purpose.		the comment of the same of
2.		_	ngavaram Port Limite	d (GPL) shall	GPL has provided separate energy
	100000000000000000000000000000000000000		separate energy mate		meters for Sewage Treatment Plan
			nt Plant (STP) and for	(STP) and separate energy meter fo	
			equipments to re		
	100000000000000000000000000000000000000			cord energy	the Air pollution Control equipment
	CON	SUIII	ption.		(MDSS) to record energy
	Ale	Dell'	41		consumption.
		would be			
	-	minute described	ition	. (00)	
1.	The	Gai	ngavaram Port Limite		
1.	The	Gai	ngavaram Port Limite with ambient air qua	ity standards	implemented by GPL ensures tha
1.	The	Gai	ngavaram Port Limite	ity standards	implemented by GPL ensures tha
1.	The com of P	Gai ply M ₁₀	ngavaram Port Limite with ambient air qua	ity standards e less than 10	implemented by GPL ensures that the ambient air quality parameter
1.	The com of P µm	Gai ply M ₁₀) - 10	ngavaram Port Limite with ambient air qua (Particulate matter siz 20µg /m³; PM 2.5 (Parti	ity standards e less than 10 culate matter	implemented by GPL ensures that the ambient air quality parameter
1.	The com of P µm size	Gar ply M ₁₀) - 10 less	ngavaram Port Limite with ambient air qua (Particulate matter siz DOµg /m³; PM 25 (Parti s than 2.5 µm) - 60µ	ity standards e less than 10 culate matter g / m ³ : SO ₂ -	implemented by GPL ensures that the ambient air quality parameter conform to the PCB prescriber
1.	The com of P µm size 80µ	Gar ply M ₁₀) - 10 less g /m	ngavaram Port Limite with ambient air qua (Particulate matter siz 20µg /m³; PM 2.5 (Parti 5 than 2.5 µm) - 60µ n³; NO _x -80µg /m³,ou	ity standards e less than 10 culate matter g / m ³ : SO ₂ - tside the port	implemented by GPL ensures that the ambient air quality parameter conform to the PCB prescriber
1,	The com of P µm size 80µ prer	Gar ply M ₁₀) - 10 less g /m nise	ngavaram Port Limite with ambient air qua (Particulate matter siz DOµg /m³; PM 2.5 (Parti s than 2.5 µm) - 60µ n³; NO _x -80µg /m³,ou s at the periphery of th	ity standards e less than 10 culate matter g / m ³ : SO ₂ - tside the port e industry.	implemented by GPL ensures that the ambient air quality parameter conform to the PCB prescriber standards.
1,	The com of P µm size 80µ pred Star	Gar ply M ₁₀) - 10 less g /m nise	ngavaram Port Limite with ambient air qua (Particulate matter siz DOµg /m³; P/M 2.5 (Particulate particulate periphery of the documents of the periphery of the documents are the periphery of the documents are particulated as for other particulated with the periphery of the particulated as for other particulated as for other particulated with the periphery of the particulated as for other particulated with the periphery of the particulated as for other particulated with the periphery of the peri	ity standards e less than 10 culate matter g / m ³ : SO ₂ - tside the port e industry. ameters as	implemented by GPL ensures that the ambient air quality parameters conform to the PCB prescriber standards.
1.	The com of P µm size 80µ prer Star	Gar ply M ₁₀) - 10 less g /m nise ndan	ngavaram Port Limite with ambient air qua (Particulate matter siz 20 pg /m³; PM 2.5 (Particulate pm) - 60 pm 3; NO _X - 80 pg /m³, out at the periphery of the ds for other parted in the National	ity standards a less than 10 culate matter g / m³ : SO ₂ - tside the port e industry. Tameters as Ambient Air	implemented by GPL ensures that the ambient air quality parameter conform to the PCB prescriber standards.
1.	The com of P pm size 80p prer Star mer Qua	Gar ply M ₁₀) - 10 less g /m nise ndan tion lity	ngavaram Port Limite with ambient air qua (Particulate matter siz DOµg /m³; PM 25 (Particulate pamp) - 60µ n³; NO _x - 80µg /m³,ous at the periphery of the ds for other pamp of the Standards CPCB Notification of the Standards of the St	ity standards a less than 10 culate matter g / m³ : SO ₂ - tside the port e industry. Tameters as Ambient Air ication No.B-	implemented by GPL ensures that the ambient air quality parameters conform to the PCB prescriber standards.
1.	The com of P pm size 80p prer Star mer Qua 290	Gar ply M ₁₀) - 10 less g /m nise ndan stion lity 16/2	ngavaram Port Limite with ambient air qua (Particulate matter siz DOµg /m³; P/M 2.5 (Particulate particulate per per particulate per per per per per per per per per pe	ity standards a less than 10 culate matter g / m³ : SO ₂ - tside the port e industry. Tameters as Ambient Air ication No.B-	implemented by GPL ensures that the ambient air quality parameters conform to the PCB prescribed standards.
1.	The com of P pm size 80p prem Star Qua 290 Nois	Gar ply M ₁₀) - 10 less g /m nise ndan ition lity 16/2 se Le	ngavaram Port Limite with ambient air qua (Particulate matter siz 20 pg /m ³ ; P/M _{2.5} (Particulate matter siz 20 pg /m ³ ; P/M _{2.5} (Particulate matter siz 20 pg /m ³ , out than 2.5 pm) - 60 pg sat the periphery of the ds for other pared in the National Standards CPCB Notifice/PO/PCI-I, dated 18.15 per size.	ity standards a less than 10 culate matter g / m³ : SO₂ - tside the port e industry. Tameters as Ambient Air ication No.B-1.2009	implemented by GPL ensures that the ambient air quality parameters conform to the PCB prescribed standards.
1.	The com of P pm size 80p prer Star mer Qua 290 Nois Day	Gar ply M ₁₀) - 10 less g /m nise dan stion lity 16/2 time	ngavaram Port Limite with ambient air qua (Particulate matter siz DOµg /m³; P/M 2.5 (Particulate particulate per per particulate per per per per per per per per per pe	ity standards a less than 10 culate matter g / m³: SO₂ - tside the port e industry. Tameters as Ambient Air ication No.B-1.2009	implemented by GPL ensures that the ambient air quality parameters conform to the PCB prescriber standards.

2.	The Gangavaram port limited (GPL) shall maintain 3 CAAQMs with online connectivity to APPCB and maintain records.	GPL installed 3 No. of CAAQM stations to measure the parameters PM 10, PM 2.5, SO ² , NO, NO ² , CO at the following locations and data connected to APPCB website.
		i. Administrative office towards H.B. Colony (Station 1): ii. Project site office building towards Venkannapalem (Station2) iii. Watch tower – 4 towards
-10		Gangavaram village (Station3).As per the data, the SPM values are within Board standards.
3.	The Gangavaram Port Limited (GPL) shall Maintain wind breaking wall all along the Gangavaram village side up to a height 10 mts as wind speed is high in this area	GPL erected wind breaking wall of height 6m on the compound wall of height 3m near Gangavaram village and HB Colony to prevent any dust nuisance towards habitation 8 maintaining about 50 m width of green belt along port compound wall near Gangavaram (V).
4.	The Gangavaram Port Limited (GPL) shall not establish any other stock yards other than designated stock yards.	GPL has not established any stock yards other than designated stock yards.
5.	The Gangavaram Port Limited (GPL) shall maintain Telescopic chute at ship loading points	GPL is maintaining Telescopic chute at ship loading points.
6.	The Gangavaram port limited (GPL) shall not stock the Materials more than 10mts height where MDSS system available and shall restrict to 6 mts for other stocking heights where tankers water spraying system is maintained in the stockyards.	GPL obtained amendment to this condition vide Amendment to CFO dated 16/09/2016 and the condition was amended as: "GPL shall not stock the materials more than 12 meters height where MDSS system is available and shall maintain stack height of 10 meters at manual stack yards"
7,	The Gangavaram port limited (GPL) shall take up the cleaning of road connected to National Highway in co-ordination with GVMC and R&B Departments.	This condition was deleted vide direction no. 06 vide Order No. 754/ APPCB/UH-II/TF/VSP/ 2016, dated 12.08.2016. GVMC is taking up the cleaning of road.
8.	The Gangavaram Port Limited (GPL) shall maintain dusty cargo operations if the wind velocity crosses 20 KMPH and all MDSS sprinklers shall start immediately to maintain AAQ standards	Noted and condition is being followed.
9.	The Gangavaram Port Limited (GPL) shall maintain fully mechanized handling equipments for loading and un loading operations for dusty cargo to the maximum extent possible.	Noted and condition is being followed.

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mi sa in: a. b. c. d. e.	nintain the fine shall be pecting office Cargo handli Log books for Hazardous/n generated as Inspection b Manifest core Gangavara	following e made ers of the ng materia or pollution on hazar nd dispose ook. pies of haz m Port Li	Board: al wise details, control systems, dous solid waste	The records are being maintained and are available for inspecting officers of the Board. a. GPL is disposing the municipal
S	The state of	Quantity	Disposal	solid waste to GVMC. b. GPL is disposing the discarded
1		10 T/m	Shall be collected segregated and disposed as per MSW Rules in consultation with GVMC Authorities	material & plastic material to authorized recyclers. c. STP sludge is being turned in to bio-compost and used as manure to green belt. d. Lead acid batteries are being
	Discarded material, plastic material	10 T/m	Shall be disposed to authorized recyclers only	disposed to the supplier on buy back basis.
3.	Sludge from STP	1.0 T/m	Shall be composted and used in green belt programme	
4	Lead acid batteries	2	Shall be disposed to authorized recyclers	
m st	intain green	belt in 50	mited (GPL) shall) meters width as der dated 07-02-	 GPL has developed plantation of 5.0 Lakhs saplings in about 318.21 acres within the Port premises besides existance of Prosopis in an extent of about 150 Acres covering periphery of all yards, roads, buildings and all along conveyor belt. Maintaining 50 m width of green belt towards North and North-West direction with special emphasis towards habitation i.e., HB Colony, Peda Gantyada,

torial.		Maintaining thick greenbelt at Port Approach road, Railway track side and at Truck parking area along the wind breaking wall towards HB Colony.
		Developed High Density Plantation (Miyawaki) within the Port premises in an extent of 1.0 Acre with 12,120 no. of plantation, as directed by APPCB
		GPL established exclusive nursery with 80,000 saplings and employed 183 people to maintain and improve the green belt on continuous basis.
		About Rs.1.85 Cr per annum is being spent for the development of green belt in the true spirit.
4.	The Gangavaram Port Limited (GPL) shall not store/ handle any hazardous cargo containers within premises.	GPL is not handling container cargo operations.
5.	All types of the fertilizers shall be stored in the closed warehouses only. The port shall ensure that there shall not be any open storage of urea or any other fertilizer materials and all urea 8 fertilizer material handling warehouses shall be maintained with effluent collection pits for collection and treatment and then used for green belt in the premises after meeting the standards.	GPL is storing the Fertilizers in closed ware houses and provided leachate collection pits around the area of warehouses and connected to STP.
6.	The Gangavaram Port Limited (GPL) shall store fuel oils used for construction equipment vessels / vehicles in a well designed manner and protect them against fire hazards by construction of compound wall to prevent access to unauthorized elements. The surface run off from storage area shall pass through oil water separator before being discharging. The Gangavaram Port Limited (GPL) shall store fuel oils used for construction equipment vessels / vehicles in a well designed manner and protect them against fire hazards by construction of compound wall to prevent access to unauthorized elements. The surface run off from storage area shall pass through oil water separator before being discharging.	under a shed.
7.	The Gangavaram Port Limited (GPL) shall maintain the Malaria control programme and Health facilities in the operation phase. Vector control programmes. Control of all	GPL is having dispensary within the premises and no malaria cases were reported as of now. All anti malarial measures are taken

	breeding ground shall be carried out by the use of larvicide's in addition to control of adult mosquitoes. The health team should include a trained entomologist.	rather a feet throughout a contract of the con
8.	The Gangavaram Port Limited (GPL) shall maintain a task force to check the vehicle emissions on permanent basis The Gangavaram Port Limited (GPL) shall maintain a task force to check the vehicle emissions on permanent basis	GPL has provided provision for checking vehicle emissions with a task force team including environment and safety department officials.
9.	The Gangavaram Port Limited (GPL) shall constitute an Environment Management cell with qualified and trained staff.	GPL is having a dedicated Environment Management Team headed by Vice President.
10.	The Gangavaram Port Limited (GPL) shall maintain onsite and offsite emergency action plan after carrying out risk analysis and hazop studies	Complied with the condition.
11.	The Gangavaram Port Limited (GPL) with VUDA shall ensure that no slum development and unauthorized construction occur in the surrounding area.	VMRDA (VUDA) is taking necessary precautions to see that no slum development and unauthorized construction occur in the surrounding area of GPL.
12.	The Gangavaram Port Limited (GPL shall handle alumina in completely closed enclosures. It shall also furnish an action plan to install mechanized system.	GPL is handling the alumina in hoppers and directly through tankers.
13,	The Gangavaram Port Limited (GPL) shall implement fallowing for controlling fugitive emission: a. Adequate dust controlling measures should be undertaken for loading and unloading operations for dusty cargo. b. Closed conveyor belt with water sprinkling arrangement for suppression of dust while conveyor dusty cargo likes coal, iron ore 8 alumina. c. Vehicle movement minimized / eliminated by implementing mechanical operations.	a. Mechanical Dust Suppression System (MDSS): 176 No. of water cannons were installed at stack yards for dust. b. Provided Dust suppression systems at discharge/feeding points of belt conveyors at each transfer tower. c. Laid BT road within the port premises. d. 5 No. of heavy duty sweeping (3 No. existing 8 2 New) machines were deployed for cleaning of berths, back up areas and roads.
	d. All the vehicles involved in transportation of cargo shall be covered with tarpaulin. e. Traffic management measures adopted to avoid traffic congestion and provide empty dusting vehicle washing / dry cleaning system to clean all out going	e. Covering the outgoing cargo vehicles with tarpaulin. f. Provided dedicated truck/tyre washing facility to wash all the outgoing vehicles g. Provided dedicated truck parking facility.

	f. Sufficient parking facilities based on traffic density / vehicular movements anticipated from the port. g. Adequate water sprinkling provided on roads and at dusty cargo storage areas for suppression of dust	h. Ensuring continuous water sprinkling on the berths, back up areas, at all transfer points, hauling roads with 20 Mobile DSS tankers for dust suppression.
14.	The Gangavaram Port Limited (GPL) shall implement the following measures in the cargo handling and stacking area: a. The ship un-loader maintained with insitu water sprinkling system and unloading hoppers provided with covers on three sides to control fugitive emissions. Iron ore shall be unloaded through wagon tipplers. b. Mechanical stackers cum re-claimers for stacking, transfer and reclamation; Conveyors for transfer of materials to stop manual handling / mobile machines. c. MDSS in stacking areas.	i. Established mechanical conveyor system for handling coal & Iron ore to prevent the spillage of cargo and provided closed hoods for the conveyor system to curb fugitive emissions of coal/iron ore particles into the air. ii. Stacker cum re-claimers are being used for loading and unloading the coal. The railway wagons are being loaded mechanically. The Port is having Stacker cum re-claimer-1no., reclaimers-3nos., stackers-3nos., wagon loader-1no., silo of 800 cu.m capacity, ship unloader-2nos, ship loader-1no., wagon tipplier-1no., mobile harbour cranes-5no.
		iii. Mechanical Dust Suppression System (MDSS): 176 No. of water cannons were installed at stack yards for dust suppression by spraying water at high pressure to form blanket of mist on surface of cargo stock to settle the dust.
15.	The Gangavaram Port Limited (GPL) shall ensure AAQ standards of the Board on all environmental conditions without fail.	GPL has provided 3 nos AAQ stations with data logger and connected to APPCB website.
16.	The Gangavaram Port Limited (GPL) shall maintain standby centrifugal pump so as to ensure uninterrupted operation of MDSS.	Complied. There are 4 no. Centrifugal pumps kept standby.
17.	The Gangavaram Port Limited (GPL) shall maintain compliance of all other conditions of CFE orders issued by the Board	Complied with the condition.
18.	The Gangavaram Port Limited (GPL) shall comply with Task Force directions and other directions issued by the Board from time to time.	Complied with the condition.

Compliance of Schedule - C

SI. No	Condition	Compliance
1.	All the rules and regulations notified by Ministry of Environment & Forests, Government of India under the E (P) Act, 1986 in respect of management, handling, transportation and storage of the Hazardous waste should be followed.	Environment & Forests, Government of India under the E(P) Act, 1986 in
2.	The Gangavaram Port Limited (GPL) shall not store hazardous waste for more than 90 days as per the Hazardous Wastes (Management. Handling and Tran boundary Movement) Rules, 2008 and amendments thereof.	Complied with the condition.
3.	The Gangavaram Port Limited (GPL) shall dispose Used Lead Acid Batteries to the manufacturers / dealers on buyback basis	GPL is buying the Lead acid on buy back basis.
4.	The Gangavaram Port Limited (GPL) shall maintain 6 copy manifest system for transportation of waste generated and a copy shall be submitted to concern Regional Office of APPCB. The driver who transports Hazardous Waste should be well acquainted about the procedure to be followed in case of an emergency during transit. The transporter should carry a Transport Emergency (TREM) Card.	GPL is following manifest system for disposal of waste oil to APPCB authorized agencies and submitting the copies to the Board.
5.	The Gangavaram Port Limited (GPL) shall maintain proper records for Hazardous Wastes stated in Authorization in FORM-3 i.e., quantity of Incinerable waste, land disposal waste, recyclable waste etc., and file annual returns in Form- 4 as per Rule 22(2) of the Hazardous Wastes (Management, Handling & Tran boundary Movement) Rules, 2008 and amendments	GPL is maintaining records for Hazardous Wastes stated in Authorization in Form-3 of CFO Order and filing annual returns in Form- 4 to APPCB. For the year 2021-2022 Form - 3 & Form - 4 Submitted on 06.06.2022.
	thereof	
6.	The Gangavaram Port Limited (GPL) shall submit the condition wise compliance report of the conditions stipulated in Schedule A, B & C of this Order on half yearly basis to Board Office, Hyderabad and concerned Regional Office	[[18] [[18]

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GANGAVARAM PORT LIMITED

(An ISO 9001:2015 & ISO 14001:2015

Certified Company)



Environment Monitoring Report June, 2022

Corporate Office:

2,3,4th Floors, Hansa plaza, Plot No.798, road No.36, Jubilee Hills, Hyderabad - 500033 Phone: 040 – 33599999

Site Office:

Gangavaram (V & Post) Pedagantyada (Mandal) Visakhapatnam – 530 044 Phone: 0891 -2701177

	2000 E0 00000000	
Reference No.:	GPL/May/2022	Submitted to:
Monitoring Date:	01.06.2022	
on Name:	Organization Name: Gangavaram Port Limited	A.P. Pollution Control Board,
Type Of Sample:	Ambient Air Quality	Regional office, Visakhapatnam
Sampled By:	Gangavaram Port Limited (CAAQ Monitoring Data)	

		Ambient Air Quality 24 hrs average data	ality 24 hrs a	verage data		
Station	Stat Administrative (AOB) towar	Station - 1 Administrative Office Building (AOB) towards HB Colony	Sta Project towards V	Station - 2 Project Site Office towards Venkannapalem	Station - 3 Watch Tower	Station - 3 Watch Tower - 4 towards Venkannapalem
Parameter	PM10	PM 2,5	PM10	PM 2.5	PM10	PM 2.5
Day average value	61.06	37.35	56.57	35.32	63.09	38.36
Standard	100 µg/m³	60 µg/m³	100 µg/m³	60 µg/m³	100 µg/m³	60 µg/m³

Prepared by: LAN LIKEIND

For Gangavaram Port Limited

(DK.D. Jyothi)

GPL/May/2022 Submitted to:	: 02.06.2022	Organization Name: Gangavaram Port Limited A.P. Pollution Control Board	Ambient Air Quality Regional office, Visakhapatnam	Gangavaram Port Limited
Reference No.:	Monitoring Date:	rganization Na	Type Of Sample:	Sampled Bv:

Station	Stat Administrative (AOB) towar	Administrative Office Building (AOB) towards HB Colony	Sta Project towards Ve	Station - 2 Project Site Office towards Venkannapalem	Station - 3 Watch Tower	Station - 3 Watch Tower - 4 towards Venkannapalem
Parameter	PM10	PM 2.5	PM10	PM 2.5	PM10	PM 2.5
Day average value	50.50	31.00	46,76	29.30	52.15	31.81
Standard	100 µg/m³	60 µg/m³	100 µg/m³	60 µg/m³	100 µg/m³	60 µg/m³

Prepared by: Cart 1919
U151919
Covant Hust

For Gangavaram Port Limited

(Or. O. Jyothi)

		4
Reference No.:	GPL/May/2022	Submitted to:
Monitoring Date:	03.06,2022	
tion Name:	Organization Name: Gangavaram Port Limited	A.P. Pollution Control Board,
Type Of Sample:	Ambient Air Quality	Regional office, Visakhapatnam
Sampled By:	Gangavaram Port Limited (CAAQ Monitoring Data)	

		Ambient Air Quality 24 hrs average data	allty 24 hrs a	verage data		
Station	Stat Administrative (AOB) towar	Station - 1 Administrative Office Building (AOB) towards HB Colony	Sta Project	Station · 2 Project Site Office towards Venkannapalem	Station - 3 Watch Tower - 4 towards Venkannapalem	Station - 3 Watch Tower - 4
Parameter	PM10	PM 2.5	PM10	PM 2.5	PM10	PM 2.5
Day average value	52.08	31.92	48.28	30.21	53.81	32.78
Standard	100 µg/m²	60 µg/m³	100 µg/m³	60 µg/m³	100 µg/m³	60 µg/m³

Prepared by: Lint 1910

For Gangavaram Port Limited

Vice President (Environment)

GPL/May/2022 Submitted to:	e: 04,06.2022	Organization Name: Gangavaram Port Limited A.P. Pollution Control Board,	: Ambient Air Quality Regional office, Visakhapatnam	Gangavaram Port Limited
Reference No.:	Monitoring Date:	nization	Type Of Sample:	Palomes Palomes

		Ambient Air Quality 24 hrs average data	ality 24 hrs a	verage data		
Station	Stat Administrative (AOB) towar	Station - 1 dministrative Office Building (AOB) towards HB Colony	Sta Project towards V	Station - 2 Project Site Office towards Venkannapalem	Station - 3 Watch Tower - 4 towards Venkannapalem	Station - 3 Watch Tower - 4 Irds Venkannapalem
Parameter	PM10	PM 2.5	PM10	PM 2.5	PM10	PM 2.5
Day average value	50.10	30.77	46,44	29.11	51.77	31.60
Standard	100 µg/m³	60 µg/m³ ·	100 µg/m³	60 µg/m³	100 µg/m³	60 µg/m³

Prepared by: Luck 1910

For Gangavaram Port Limited

Reference No.:	GPI /Mav/2022	Submitted to:
		200
Monitoring Date:	05.06.2022	
ization Name:	Organization Name: Gangavaram Port Limited	A.P. Pollution Control Board,
Type Of Sample:	Ambient Air Quality	Regional office, Visakhapatnam
Sampled By:	Gangavaram Port Limited (CAAQ Monitoring Data)	

		Ambient Air Quality 24 hrs average data	ality 24 hrs a	verage data		
Station	Stat Administrative (AOB) towar	Station - 1 Administrative Office Building (AOB) towards HB Colony	Sta Project towards V	Station · 2 Project Site Office towards Venkannapalem	Station - 3 Watch Tower - 4 towards Venkannapalem	Station - 3 Watch Tower - 4 ords Venkannapalem
Parameter	PM10	PM 2.5	PM10	PM 2.5	PM10	PM 2.5
Day average value	48.26	29.68	44.72	28.07	49.86	30.47
Standard	100 µg/m³	60 µg/m³	100 µg/m³	60 µg/m³	100 µg/m³	60 µg/m³

Prepared by: LANT CURSEN

For Gangavaram Port Limited

(Dr.D. Jyothi)

Reference No.:	GPL/May/2022	Submitted to:
Monitoring Date:	06.06.2022	
ization Name:	Organization Name: Gangavaram Port Limited	A.P. Pollution Control Board,
Type Of Sample:	Ambient Air Quality	Regional office, Visakhapatnam
Sampled By:	Gangavaram Port Limited (CAAQ Monitoring Data)	

		Ambient Air Quality 24 hrs average data	ality 24 hrs a	verage data		
Station	Stat Administrative (AOB) towar	Station - 1 Administrative Office Building (AOB) towards HB Colony	Sta Project towards V	Station - 2 Project Site Office towards Venkannapalem	Station - 3 Watch Tower - 4 towards Venkannapalem	Station - 3 Watch Tower - 4 Irds Venkannapalem
Parameter	PM10	PM 2.5	PM10	PM 2.5	PM10	PM 2.5
Day average value	53,43	32.82	49.53	31.06	55,23	33.72
Standard	100 µg/m²	60 µg/m³	100 µg/m³	60 µg/m³	100 µg/m³	60 µg/m³

Prepared by: Chil 1900

For Gangavaram Port Limited

	40000	
	GPL/May/2022	Submitted to:
Monitoring Date:	07.06.2022	
me:	Organization Name: Gangavaram Port Limited	A.P. Pollution Control Board,
	Ambient Air Quality	Regional office, Visakhapatnam
	Gangavaram Port Limited (CAAQ Monitoring Data)	

		Ambient Air Quality 24 hrs average data	iality 24 nrs a	verage data		
Station	Stat Administrative (AOB) towar	Station - 1 Administrative Office Building (AOB) towards HB Colony	Sta Project towards V	Station · 2 Project Site Office towards Venkannapalem	Station - 3 Watch Tower - 4 towards Venkannapalem	Station - 3 Watch Tower - 4
Parameter	PM10	PM 2.5	PM10	PM 2.5	PM10	PM 2.5
Day average value	49.82	30.65	46.18	29.00	51.51	31.49
Standard	100 µg/m³	60 µg/m³	100 µg/m³	60 µg/m³	100 µg/m³	60 µg/m³

Prepared by: Chr [1810

For Gangavaram Port Limited

(Dl. D. Jyothi)

Vice President (Environment)

Reference No.:	GPL/May/2022	Submitted to:
Monitoring Date:	08.06.2022	
Organization Name:	Gangavaram Port Limited	A.P. Pollution Control Board,
Type Of Sample:	Ambient Air Quality	Regional office, Visakhapatnam
Sampled By:	Gangavaram Port Limited (CAAQ Monitoring Data)	

Station	Stat	Station - 1	Sta	Station - 2	Station - 3	200-3
	Administrative (AOB) towar	Administrative Office Building (AOB) towards HB Colony	Project towards V	Project Site Office towards Venkannapalem	Watch Tower - 4 towards Venkannapalem	Watch Tower - 4 irds Venkannapalem
Parameter	PM10	PM 2.5	PM10	PM 2.5	PM10	PM 2.5
Day average value	49.84	30.60	46.18	28.94	51.49	31,42
Standard	100 µg/m³	60 µg/m³	100 µg/m³	60 µg/m³	100 µg/m³	60 µg/m³

Christman

For Gangavaram, Port Limited

Reference No.: GPL/May/2022 Submitted to:
Monitoring Date: 09.06.2022 Organization Name: Gangavaram Port Limited Regional office, Visakhapatnam
Monitoring Date: 09.06.2022

		Ambient Air Quality 24 mrs average data	January 6-4 1113 0			
Station	Stat Administrative (AOB) towar	Station - 1 Administrative Office Building (AOB) towards HB Colony	Sta Project towards V	Station - 2 Project Site Office towards Venkannapalem	Station - 3 Watch Tower	Station - 3 Watch Tower - 4 towards Venkannapalem
Parameter	PM10	PM 2.5	PM10	PM 2.5	PM10	PM 2.5
Day average value	49.37	30.31	45.71	28.65	50.98	31.11
Standard	100 µg/m³	60 µg/m³	100 µg/m³	60 µg/m³	100 µg/m³	60 µg/m³

Prepared by: Charles

For Gangavaram Port Limited

Vice President (Environment)

Reference No.:	GPL/May/2022	Submitted to:
Monitoring Date:	10.06.2022	
on Name:	Organization Name: Gangavaram Port Limited	A.P. Pollution Control Board,
Type Of Sample:	Ambient Air Quality	Regional office, Visakhapatnam
Sampled By:	Gangavaram Port Limited (CAAQ Monitoring Data)	

		Ambient Air Quality 24 hrs average data	ality 24 hrs a	verage data		
Station	Stat Administrative (AOB) towar	Station - 1 Administrative Office Building (AOB) towards HB Colony	Sta Project towards V	Station · 2 Project Site Office towards Venkannapalem	Station - 3 Watch Tower - 4 towards Venkannapalem	ower - 4 kannapalem
Parameter	PM10	PM 2.5	PM10	PM 2.5	PM10	PM 2.5
Day average value	50.08	30,73	46.35	29,04	51.71	31.54
Standard	100 µg/m³	60 µg/m³	100 µg/m³	60 µg/m³	100 µg/m³	60 µg/m³

Prepared by: 14

For Gangavaram Port Limited

Deference Mo.	COC/Men/100	Choodhand to.
direction.	Gr Cimay/2022	Suumitteu to:
Monitoring Date:	11.06.2022	
ization Name:	Organization Name: Gangavaram Port Limited	A.P. Pollution Control Board,
Type Of Sample:	Ambient Air Quality	Regional office, Visakhapatnam
Sampled By:	Gangavaram Port Limited (CAAQ Monitoring Data)	

		Ambient Air Quality 24 hrs average data	ality 24 hrs a	verage data		
Station	Stat Administrative (AOB) towar	Station - 1 Administrative Office Building (AOB) towards HB Colony	Sta Project towards Ve	Station · 2 Project Site Office towards Venkannapalem	Station - 3 Watch Tower - 4 towards Venkannapalem	Station - 3 Watch Tower - 4
Parameter	PM10	PM 2.5	PM10	PM 2.5	PM10	PM 2.5
Day average value	49.60	30,45	45.96	28.80	51.29	31.29
Standard	100 µg/m³	60 µg/m³	100 µg/m³	60 µg/m³	100 µg/m³	60 µg/m³

Prepared by: 146

For Gangavaram Port Limited

Reference No.:	GPL/May/2022	Submitted to:
Monitoring Date:	12.06.2022	
ization Name:	Organization Name: Gangavaram Port Limited	A.P. Pollution Control Board,
Type Of Sample:	Ambient Air Quality	Regional office, Visakhapatnam
Sampled By:	Gangavaram Port Limited (CAAQ Monitoring Data)	

		Ambient Air Quality 24 hrs average data	ality 24 hrs a	verage data		
Station	Stat Administrative (AOB) towar	Station - 1 Administrative Office Building (AOB) towards HB Colony	Sta Project Cowards V	Station - 2 Project Site Office towards Venkannapalem	Station - 3 Watch Tower - 4 towards Venkannapalem	Station - 3 Watch Tower - 4
Parameter	PM10	PM 2.5	PM10	PM 2.5	PM10	PM 2.5
Day average value	47.92	29.37	44.38	27.77	49,49	30,15
Standard	100 µg/m³	60 µg/m³	100 µg/m³	60 µg/m³	100 µg/m³	60 µg/m³

Prepared by: Just 1916 (APS 1916

For Gangavaram Port Limited

GPL/May/2022 Submitted to:	13.06.2022	Organization Name: Gangavaram Port Limited A.P. Pollution Control Board,	Ambient Air Quality Regional office, Visakhapatnam	Gangavaram Port Limited
Reference No.:	Monitoring Date:	Organization Name:	Type Of Sample:	Sampled By:

		Ambient Air Quality 24 hrs average data	ality 24 hrs a	verage data		
Station	Stat Administrative (AOB) towar	Station - 1 Administrative Office Building (AOB) towards HB Colony	Sta Project towards Ve	Station - 2 Project Site Office towards Venkannapalem	Station - 3 Watch Tower - 4 towards Venkannapalem	Station - 3 Watch Tower - 4
Parameter	PM10	PM 2.5	PM10	PM 2.5	PM10	PM 2.5
Day average value	49.92	30.64	46.28	28.99	51.63	31,49
Standard	100 µg/m³	60 µg/m³	100 µg/m³	60 µg/m³	100 µg/m³	60 µg/m³

Prepared by:

For Gangavaram Port Limited

10. D. Jyothi)

Vice President (Environment)

Monitoring Date:	GPL/May/2022 14.06.2022	Submitted to:
ion Name:	Organization Name: Gangavaram Port Limited	A.P. Pollution Control Board,
Type Of Sample:	Ambient Air Quality	Regional office, Visakhapatnam
Sampled By:	Gangavaram Port Limited	

		Ambient Air Quality 24 hrs average data	ality 24 hrs a	verage data		
Station	Stat Administrative (AOB) towar	Station - 1 Administrative Office Building (AOB) towards HB Colony	Sta Project towards V	Station - 2 Project Site Office towards Venkannapalem	Station - 3 Watch Tower - 4 towards Venkannapalem	Station - 3 Watch Tower - 4
Parameter	PM10	PM 2.5	PM10	PM 2.5	PM10	PM 2.5
Day average value	48.78	29.97	45.19	28.35	50.40	30.78
Standard	100 µg/m³	60 µg/m³	100 µg/m³	60 µg/m³	100 µg/m³	60 µg/m³

Prepared by: /

For Gangavaram Port Limited

Vice President (Environment)

	The second secon	
Reference No.:	GPL/May/2022	Submitted to:
Monitoring Date:	15.06.2022	
ganization Name:	Organization Name: Gangavaram Port Limited	A.P. Pollution Control Board.
Type Of Sample:	Ambient Air Quality	Regional office, Visakhapatnam
Sampled By:	Gangavaram Port Limited (CAAQ Monitoring Data)	

		Ambient Air Quality 24 hrs average data	elity 24 hrs a	verage data		
Station	Stat Administrative (AOB) towar	Administrative Office Building (AOB) towards HB Colony	Sta Project towards V	Station - 2 Project Site Office towards Venkannapalem	Station - 3 Watch Tower - 4 towards Venkannanalem	Station - 3 Watch Tower - 4
Parameter	PM10	PM 2.5	PM10	PM 2.5	PM10	PM 2.5
Day average value	48.61	29.85	45.02	28.23	50.21	30.65
Standard	100.µg/m³	60 µg/m³	100 µg/m³	60 µg/m³	100 µg/m³	60 µg/m³

Prepared by: Liwit UNS 1910

For Gangavaram Port Limited

Orbo Jyothi)

Vice President (Environment)

Reference No.:	GPU/Mav/2022	Submitted to:
A STATE OF THE PARTY OF THE PAR		200
Monitoring Date:	16.06.2022	
inization Name:	Organization Name: Gangavaram Port Limited	A.P. Pollution Control Board,
Type Of Sample:	Ambient Air Quality	Regional office, Visakhapatnam
Sampled By:	Gangavaram Port Limited (CAAQ Monitoring Data)	

		Ambient Air Quality 24 hrs average data	ality 24 hrs a	verage data		
Station	Stat Administrative (AOB) towar	Station - 1 Administrative Office Building (AOB) towards HB Colony	Sta Project towards Ve	Station · 2 Project Site Office towards Venkannapalem	Station - 3 Watch Tower - 4 towards Venkannapalem	Station - 3 Watch Tower - 4
Parameter	PM10	PM 2.5	PM10	PM 2.5	PM10	PM 2.5
Day average value	46.41	28.54	43.00	26,99	47.96	29.31
Standard	100 µg/m³	60 µg/m³	100 µg/m³	60 µg/m³	100 µg/m³	60 µg/m³

Prepared by: Zuer U/S 1216

For Gangavaram, Port Limited

e	100000	Submitted to: A.P. Pollution Control Board, Regional office, Visakhapatnam
Type Of Sample:	Ambient Air Quality	
4 7	Gangavaram Port Limited	

		Ambient Air Quality 24 hrs average data	iality 24 hrs a	verage data		
Station	Stat Administrative (AOB) towar	Station - 1 Administrative Office Building (AOB) towards HB Colony	Sta Project towards Ve	Station - 2 Project Site Office towards Venkannapalem	Station - 3 Watch Tower - 4 towards Venkannapalem	Station - 3 Watch Tower - 4
Parameter	PM10	PM 2.5	PM10	PM 2.5	PM10	PM 2.5
Day average value	45.61	28.07	42.25	26.54	47.12	28.82
Standard	100 µg/m³	60 µg/m³	100 µg/m³	60 µg/m³	100 µg/m³	60 µg/m³

Prepared by: / Judy

For Gangavaram Port Limited

Vice President (Environment)

Reference No.:	GPL/May/2022	Submitted to:
Monitoring Date:	18.06.2022	
ization Name:	Organization Name: Gangavaram Port Limited	A.P. Pollution Control Board,
Type Of Sample:	Ambient Air Quality	Regional office, Visakhapatnam
Sampled By:	Gangavaram Port Limited (CAAQ Monitoring Data)	

		Ambient Air Quality 24 hrs average data	iality 24 nrs a	verage data		
Station	Stat Administrative (AOB) towar	Station · 1 Administrative Office Building (AOB) towards HB Colony	Sta Project towards Ve	Station - 2 Project Site Office towards Venkannapalem	Station - 3 Watch Tower towards Venkann	Station - 3 Watch Tower - 4 towards Venkannapalem
Parameter	PM10	PM 2.5	PM10	PM 2.5	PM10	PM 2.5
Day average value	45.03	27.71	41.73	26.21	46.54	28,46
Standard	100 µg/m³	60 µg/m³	100 µg/m³	60 µg/m³	100 µg/m³	60 µg/m³

Prepared by: 24

Reference No.:	GPL/May/2022	Submitted to:
Monitoring Date:	19.06.2022	
ganization Name:	Organization Name: Gangavaram Port Limited	A.P. Pollution Control Board,
Type Of Sample:	Ambient Air Quality	Regional office, Visakhapatnam
Sampled By:	Gangavaram Port Limited (CAAQ Monitoring Data)	

Station	Stat Administrative (AOB) towar	Station - 1 Administrative Office Building (AOB) towards HB Colony	Sta Project towards V	Station - 2 Project Site Office towards Venkannapalem	Statio Watch T towards Ven	Station - 3 Watch Tower - 4 towards Venkannapalem
Parameter	PM10	PM 2.5	PM10	PM 2.5	PM10	PM 2.5
Day average value	45,90	28.25	42.68	26.81	47.51	29.06
Standard	100 µg/m³	60 µg/m³	100 µg/m³	60 µg/m³	100 µg/m³	60 µg/m³

Prepared by: Chigh 910

For Gangavaram, Port Limited

Kererence No.;	GPL/May/2022	Submitted to:
Monitoring Date:	20.06.2022	
n Name:	Organization Name: Gangavaram Port Limited	A.P. Pollution Control Board,
Type Of Sample:	Ambient Air Quality	Regional office, Visakhapatnam
Sampled By:	Gangavaram Port Limited (CAAQ Monitoring Data)	

		Ambient Air Quality 24 hrs average data	ality 24 hrs a	verage data		
Station	Stat Administrative (AOB) towar	Station - 1 Administrative Office Building (AOB) towards HB Colony	Sta Project towards Ve	Station - 2 Project Site Office towards Venkannapalem	Station - 3 Watch Tower - 4 towards Venkannapalem	Station - 3 Watch Tower - 4
Parameter	PM10	PM 2.5	PM10	PM 2.5	PM10	PM 2.5
Day average value	47,12	28.97	43.67	27.41	48.62	27.21
Standard	100 µg/m³	60 µg/m³	100 µg/m³	60 µg/m³	100 µg/m³	60 µg/m³

Prepared by:

For Gangavaram Port Limited

GPL/May/2022 Submitted to:	21.06.2022	Organization Name: Gangavaram Port Limited A.P. Pollution Control Board,	Ambient Air Quality Regional office, Visakhapatnam	Gangavaram Port Limited (CAAQ Monitoring Data)
Reference No.:	Monitoring Date:	Organization Name:	Type Of Sample:	Sampled By:

Station	Stat Administrative	Station - 1 Administrative Office Building	Sta Project	Station - 2 Project Site Office	Station - 3 Watch Tower	Station - 3 Watch Tower - 4
Parameter	(AUB) towar	(AOB) towards HB Colony	cowards Ve	towards Venkannapalem	towards Ven	towards Venkannapalem
	PM10	PM 2.5	PM10	PM 2.5	PM10	PM 2.5
Day average value	47.50	29,19	44.00	27.61	49.08	29.98
Standard	100 µg/m³	60 µg/m³	100 µg/m³	60 µg/m³	100 µg/m³	60 ua/m³

Prepared by: Ling 910

For Gangavaram Port Limited

GPL/May/2022 Submitted to:	22.06.2022	Organization Name: Gangavaram Port Limited A.P. Pollution Control Board,	Ambient Air Quality Regional office, Visakhapatnam	Gangavaram Port Limited
Reference No.:	Monitoring Date: 22.	ization Name: Ga	Type Of Sample: Am	Sampled By: Gar

		Ambient Air Quality 24 hrs average data	ality 24 hrs a	verage data		
Station	Stat Administrative (AOB) towar	Station - 1 Administrative Office Building (AOB) towards HB Colony	Sta Project Cowards V	Station - 2 Project Site Office towards Venkannapalem	Station - 3 Watch Tower - 4 towards Venkannapalem	Station - 3 Watch Tower - 4
Parameter	PM10	PM 2.5	PM10	PM 2.5	PM10	PM 2.5
Day average value	46.15	28.38	42.76	26.84	47.68	29.14
Standard	100 µg/m³	60 µg/m³	100 µg/m³	60 µg/m²	100 µg/m³	60 µg/m³

Prepared by: Cher 4/31910

		Ambient Air Quality 24 hrs average data	ality 24 hrs a	verage data		
Station	Stat Administrative (AOB) towar	Station - 1 Administrative Office Building (AOB) towards HB Colony	Sta Project towards Ve	Station - 2 Project Site Office towards Venkannapalem	Station - 3 Watch Tower - 4 towards Venkannaoalem	Station - 3 Watch Tower - 4
Parameter	PM10	PM 2.5	PM10	PM 2.5	PM10	PM 2.5
Day average value	47,42	29.11	43.95	27.53	49.00	29.89
Standard	100 µg/m²	60 µg/m³	100 µg/m³	60 µg/m³	100 µg/m³	60 µg/m³

Prepared by: April

For Gangavaram Port Limited

(Dr. D. Jyothi)

Reference No.: Monitoring Date: Organization Name: Type Of Sample:	Vo.: GPL/May/2022 Submitted to:	Date: 24.06.2022	Organization Name: Gangavaram Port Limited A.P. Pollution Control Board,	nple: Ambient Air Quality Regional office, Visakhapatnam	Sampled By: Gangavaram Port Limited
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		Ambient Air Quality 24 hrs average data	ality 24 hrs a	verage data		
Station	Stat Administrative (AOB) towar	Station - 1 Administrative Office Building (AOB) towards HB Colony	Sta Project towards Ve	Station - 2 Project Site Office towards Venkannapalem	Station - 3 Watch Tower - 4 towards Venkannapalem	Station - 3 Watch Tower - 4 Inds Venkannapalem
Parameter	PM10	PM 2.5	PM10	PM 2.5	PM10	PM 2.5
Day average value	48.20	29,61	44.67	28.01	49.81	30.41
Standard	100 µg/m³	60 µg/m³	100 µg/m³	60 µg/m³	100 µg/m³	60 µg/m³

Prepared by: CHE CUS 1900

For Gangavaram Port Limited

For Gangavaram Port Limited

For Gangavaram Port Limited

Reference No.: GPL/May/2022 Monitoring Date: 25.06.2022 Organization Name: Gangavaram Port Limited Type Of Sample: Ambient Air Quality	Submitted to: A.P. Pollution Control Board, Regional office, Visakhapatnam
/ / / / / / /	2022 2022 varam Port Limited at Air Quality

		Ambient Air Quality 24 hrs average data	ality 24 hrs a	verage data		
Station	Stat Administrative (AOB) towar	Station · 1 Administrative Office Building (AOB) towards HB Colony	Sta Project	Station - 2 Project Site Office towards Venkannapalem	Station - 3 Watch Tower - 4 towards Venkannapalem	Station - 3 Watch Tower - 4 irds Venkannapalem
Parameter	PM10	PM 2.5	PM10	PM 2.5	PM10	PM 2.5
Day average value	47.66	29,26	44.16	27.68	49.25	30.05
Standard	100 µg/m³	60 µg/m³	100 µg/m³	60 µg/m³	100 µg/m³	60 µg/m³

Prepared by: Clum

For Gangavaram Port Limited

Reference No.:	GPL/May/2022	Submitted to:
Monitoring Date:	26.06,2022	
anization Name:	Organization Name: Gangavaram Port Limited	A.P. Pollution Control Board,
Type Of Sample:	Ambient Air Quality	Regional office, Visakhapatnam
Sampled By:	Gangavaram Port Limited (CAAQ Monitoring Data)	

		Ambient Air Quality 24 hrs average data	ality 24 hrs a	verage data		
Station	Stat Administrative (AOB) towar	Station - 1 Administrative Office Building (AOB) towards HB Colony	Sta Project cowards V	Station - 2 Project Site Office towards Venkannapalem	Station - 3 Watch Tower - 4 towards Venkannapalem	Station - 3 Watch Tower - 4
Parameter	PM10	PM 2.5	PM10	PM 2.5	PM10	PM 2.5
Day average value	46.45	28.60	43,05	27.05	48.00	29.37
Standard	100 µg/m³	60 µg/m³	100 µg/m³	60 µg/m³	100 µg/m³	60 µg/m³

Prepared by: CHAT 910

For Gangavaram Port Limited

(Dr. D. Jyothi)

Reference No.:	GPL/May/2022	Submitted to:
Monitoring Date:	27.06.2022	
tion Name:	Organization Name: Gangavaram Port Limited	A.P. Pollution Control Board,
Type Of Sample:	Ambient Air Quality	Regional office, Visakhapatnam
Sampled By:	Gangavaram Port Limited (CAAQ Monitoring Data)	

		Amoretic All Gooticy 24 titls average data		•		
Station	Stat Administrative (AOB) towar	Station - 1 Administrative Office Building (AOB) towards HB Colony	Sta Project towards V	Station - 2 Project Site Office towards Venkannapalem	Station - 3 Watch Tower - 4 towards Venkannapalem	Station - 3 Watch Tower - 4 irds Venkannapalem
Parameter	PM10	PM 2.5	PM10	PM 2.5	PM10	PM 2.5
Day average value	47.01	28,95	43,56	27.39	48.58	29.73
Standard	100 µg/m³	60 µg/m³	100 µg/m³	60 µg/m³	100 µg/m³	60 µg/m³

Prepared by: Char UP121910 UV-15 WAS

For Gangavaram Port Limites

0000		
Reference No.:	GPL/May/2022	Submitted to:
Monitoring Date:	28.06.2022	
ganization Name:	Organization Name: Gangavaram Port Limited	A.P. Pollution Control Board,
Type Of Sample:	Ambient Air Quality	Regional office, Visakhapatnam
Sampled By:	Gangavaram Port Limited (CAAQ Monitoring Data)	

		Ambient Air Quality 24 hrs average data	ality 24 hrs a	iverage data		
Station	Stat Administrative (AOB) towar	Station - 1 Administrative Office Building (AOB) towards HB Colony	Sta Project towards V	Station - 2 Project Site Office towards Venkannapalem	Station - 3 Watch Tower - 4 towards Venkannapalem	Station - 3 Watch Tower - 4
Parameter	PM10	PM 2.5	PM10	PM 2.5	PM10	PM 2.5
Day average value	47.91	29.51	44.40	27.91	49.51	30,30
Standard	100 µg/m³	60 µg/m³	100 µg/m³	60 µg/m³	100 µg/m³	60 µg/m³

(Dr. D. Jyothi) For Gangavaram Port Limites

Submitted to:		A.P. Pollution Control Board,	Regional office, Visakhapatnam	
GPL/May/2022	29.06.2022	Organization Name: Gangavaram Port Limited	Ambient Air Quality	Gangavaram Port Limited (CAAQ Monitoring Data)
Reference No.:	Monitoring Date:	Organization Name:	Type Of Sample:	Sampled By:

Station	Stat Administrative (AOB) towar	Station - 1 Administrative Office Building (AOB) towards HB Colony	Sta Project towards V	Station - 2 Project Site Office towards Venkannapalem	Statio Watch T towards Ven	Station - 3 Watch Tower - 4 towards Venkannapalem
Parameter	PM10	PM 2.5	PM10	PM 2.5	PM10	PM 2.5
Day average value	46,96	28.93	43.51	27.36	48.52	7762
Standard	100 µg/m³	60 µg/m³	100 µg/m³	60 µg/m³	100 µg/m³	60 µg/m³

Prepared by:

For Gangavaram Port Limited

Reference No.:	GPL/May/2022	Submitted to:
Monitoring Date:	30.06.2022	
Name:	Organization Name: Gangavaram Port Limited	A.P. Pollution Control Board,
Type Of Sample:	Ambient Air Quality	Regional office, Visakhapatnam
Sampled By:	Gangavaram Port Limited (CAAQ Monitoring Data)	18.1 1.00

		Ambient Air Quality 24 hrs average data	ality 24 hrs a	verage data		
Station	Stat Administrative (AOB) towar	Station - 1 Administrative Office Building (AOB) towards HB Colony	Sta Project towards V	Station - 2 Project Site Office towards Venkannapalem	Station - 3 Watch Tower - 4 towards Venkannapalem	Station - 3 Watch Tower - 4 Irds Venkannapalem
Parameter	PM10	PM 2.5	PM10	PM 2.5	PM10	PM 2.5
Day average value	46.67	28.76	43.25	27.20	48.23	29.53
Standard	100 µg/m³	60 µg/m³	100 µg/m³	60 µg/m³	100 µg/m³	60 µg/m³

Prepared by: Zar

For Gangavaram Port Limited

Vice President (Environment)



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Environmental Monitoring Reports

(13 June and 25 June 2022)

Gangavaram Port LTD. Pedagantyada(Mandal) Gangavaram (Post) Visakhapatnam - 530 044





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TEST REPORT ANALYSIS OF GROUND WATER SAMPLE

BCL Ref. No.	GPL/02/193	Issued to:
Monitoring Date	June 11, 2022	M/s. Gangavaram Port Ltd.
Reporting Date	June 16, 2022	Gangavaram (Village)
Organization	M/s. Gangavaram Port Ltd.	PedaGantiyada (Mandalam)
Type of Sample	Ground Water	Visakhapatnam.
Location	Gangavaram Village	
Sample Collected by	M/s. Biochem Labs	
Reference Standard	IS: 10500, 1991	

S. No.	Parameter	Unit	Result	Limit IS: 10500
1.	Temperature	°C	29.6	-
2.	pH	H+ concen.	7.12	6.5-8.5
3.	Total Hardness	rng/l	296	300
4.	Calcium (as Ca)	mg/l	58	75
5.	Magnesium (as Mg)	mg/l	26	30
6.	Chlorides	mg/l	118	250
7.	Manganese	mg/l	0.016	0.1
8.	Copper	mg/l	0.012	0.05
9.	Total Alkalinity	mg/l	62	200
10.	Total Dissolved Solids	mg/l	486	500
11.	Sulphate	mg/l	50	200
12.	Dissolved Oxygen	mg/l	3.0	
13.	Nitrite (as NO ₂)	mg/l	0.018	0.02
14.	Iron	mg/l	0.12	0.3
15.	Fluoride	mg/l	0.6	1.0
16.	Oil & Grease	mg/l	BDL	0.01
17.	Chromium (as Cr ^{+®})	mg/l	0.012	0.05
18.	Cyanide	mg/l	NIL	0.05
19.	Zinc	mg/l	0.4	5.0
20.	Phenolic Compound	mg/l	NIL	0.001
21.	Free Residual Chlorine	mg/l	0.12	0.2
22	Total Coli forms Count	MPN Index/100ml	10	1-11
23.	E.coli	Cfu/ml	Absent	Absent

Analyst



Authorized Signatory



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TEST REPORT ANALYSIS OF GROUND WATER SAMPLE

BCL Ref. No.	GPL/02/194	Issued to:	
Monitoring Date	June 11, 2022	M/s. Gangavaram Port Ltd.	
Reporting Date	June 16, 2022	Gangavaram (Village)	
Organization	M/s. Gangavaram Port Ltd.	PedaGantiyada (Mandalam)	
Type of Sample	Ground Water	Visakhapatnam.	
Location	North bounder wall open well		
Sample Collected by	M/s. Biochem Labs		
Reference Standard	IS: 10500, 1991		

S. No.	Parameter	Unit	Result	Limit IS: 10500
1.	Temperature	°C	30.2	-
2	pH	H+ concen.	7.10	6.5-8.5
3.	Total Hardness	mg/l	256	300
4.	Calcium (as Ca)	mg/l	42	75
5.	Magnesium (as Mg)	mg/l	20	30
6.	Chlorides	mg/l	60	250
7.	Manganese	mg/l	0.02	0.1
В.	Copper	mg/l	0.016	0.05
9.	Total Alkalinity	mg/l	112	200
10.	Total Dissolved Solids	mg/l	464	500
11.	Sulphate	mg/l	42	200
12.	Dissolved Oxygen	mg/l	2.4	9
13.	Nitrite (as NO ₂)	mg/l	0.014	0.02
14.	Iron	mg/l	0.16	0.3
15.	Fluoride	mg/l	0.9	1.0
16.	Oil & Grease	mg/l	BDL	0.01
17.	Chromium (as Cr ⁺⁶)	mg/l	0.01	0.05
18.	Cyanide	mg/l	NIL	0.05
19.	Zinc	mg/l	0.6	5.0
20.	Phenolic Compound	mg/l	NIL	0.001
21.	Free Residual Chlorine	mg/l	0.04	0.2
22.	Total Coli forms Count	MPN Index/100ml	8	1-11
23.	E.coli	Cfu/ml	Absent	Absent

Analyst



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TEST REPORT NOISE LEVEL MONITORING

BCL Ref. No.	GPL/ 04/219	Issued to:
Monitoring Date	June 11, 2022	M/s. Gangavaram Port Ltd.
Organization	M/s. Gangavaram Port Ltd.	Gangavaram (Village) PedaGantiyada (Mandalam)
Collected by	M/s. Biochem Labs	Visakhapatnam.

S.	Parameter	rameter Unit		Re	sult	CPCI	CPCB Limit	
No.				Day time Night time Industr		ıstrial		
				A	(C)2000000000000000000000000000000000000	Day time	Night time	
1.	Noise Level	Decibels	Cargo area	70	64	75	70	
2.	Noise Level	Decibels	PedaGantyada/ Security Gate	66	60	-	-	
				Day time	Night time	Resid	dential	
						Day time	Night time	
	Nietos I soci	Decibels	Gangavaram	46	34	55	45	
3.	Noise Level	Decipoid		1 15/3/27	10000		1 1 2 2 2 2 2 2 2	

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TEST REPORT NOISE LEVEL MONITORING

BCL Ref. No.	GPL/ 04/220	Issued to:	
Monitoring Date	June 25, 2022	M/s. Gangavaram Port Ltd.	
Organization	M/s. Gangavaram Port Ltd.	Gangavaram (Village) PedaGantiyada (Mandalam)	
Collected by	M/s. Biochem Labs	Visakhapatnam.	

S.	Parameter	Unit	Location	Result		CPCI	B Limit			
No.		1	IL-SAME S	Day time Night tin		Day time Night time	Night time	Indu	lustrial	
					TO CONTRACT OF THE PARTY OF THE	Day time	Night time			
1.	Noise Level	Decibels	Cargo area	74	66	75	70			
2.	Noise Level	Decibels	PedaGantyada/ Security Gate	64	60	-	(7)			
				Day time	Night time	Resid	dential			
						- "	_			
						Day time	Night time			
3.	Noise Level	Decibels	Gangavaram	42	36	Day time	Night time			

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TEST REPORT ANALYSIS OF MARINE WATER

BCL Ref. No.	GPL/ 05/219	Issued to:		
Monitoring Date	June 11, 2022	M/s. Gangavaram Port Ltd.		
Reporting Date	June 16, 2022	Gangavaram (Village)		
Organization	M/s. Gangavaram Port Ltd.	PedaGantiyada (Mandalam)		
Type of Sample	Marine Water (Low Tide / High Tide)	Visakhapatnam.		
Sample Collected by	M/s. Biochem Labs			

S. No	Parameter	Unit	Result			
		The second secon	HarbourBasine		Port Entrance Channe	
			Low tide	High tide	Low tide	High tide
1.	Temperature	°C	29.6	31.4	28.7	31.0
2	pH	H+ conc	8.14	8.12	8.20	8.18
3,	Salinity	PSU	31.8	32.0	31.4	32.2
4.	Turbidity	NTU	28	14	10	8
5.	Total Suspended Solids	mg/l	34	20	12	10
6.	Transparency	Mts.	1.0	1.2	1.4	1.6
7.	Electrical Conductivity	mMHo	34,6	32.8	34.0	32.4

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TEST REPORT ANALYSIS OF MARINE WATER

BCL Ref. No.	GPL/ 05/219	Issued to:		
Monitoring Date	June 11, 2022	M/s. Gangavaram Port Ltd.		
Reporting Date	June 16, 2022	Gangavaram (Village)		
Organization M/s. Gangavaram Port Ltd.		PedaGantiyada (Mandalam)		
Type of Sample	Marine Water (Low Tide / High Tide)	Visakhapatnam.		
Sample Collected by	M/s. Biochem Labs	viouniapatriari.		

S. No	Parameter	Unit		Re	sult	
			South brake	Wall Outside	North brake	Wall Outside
			Low tide	High tide	Low tide	High tide
1.	Temperature	°C	32.0	28.8	31.2	32.2
2.	pH	H+ conc	8.22	8.20	8.16	8.24
3.	Salinity	PSU	32.4	30.0	34.2	32.0
4.	Turbidity	NTU	12	10	14	10
5.	Total Suspended Solids	mg/l	14	16	18	12
6.	Transparency	Mts.	1.2	1.4	1,2	1.4
7.	Electrical Conductivity	mMHo	34.2	32.8	33.6	34.0

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TEST REPORT ANALYSIS OF MARINE WATER

BCL Ref. No.	GPL/ 05/219	Issued to:		
Monitoring Date	June 11, 2022	M/s. Gangavaram Port Ltd.		
Reporting Date	June 16, 2022	Gangavaram (Village)		
Organization M/s. Gangavaram Port Ltd.		PedaGantiyada (Mandalam)		
Type of Sample	Marine Water (Low Tide / High Tide)	Visakhapatnam.		
Sample Collected by	M/s. Biochem Labs			

S. No	Parameter	Unit	Result			
			HarbourBasine		Port Entrance Channe	
			Low tide	High tide	Low tide	High tide
1.	Dissolved Oxygen	mg/l	3.6	3.4	4.0	3.8
2.	Biological Oxygen Demand	mg/l	1.2	1.6	1.8	1.4
3.	Oil & Grease	mg/l	1.2	1.0	0.6	0.4
4.	Sulphate	mg/l	996	1014	1054	1046
5.	Phosphate	mg/l	0.38	0.34	0.22	0.18
6.	Nitrate	mg/l	3.2	2.6	2.8	2.0
7.	Nitrite	mg/l	0.024	0.028	0.020	0.024
8.	Chloride	mg/l	19864	19692	21438	20280
9.	Chromium	ppm	0.028	0.026	0.024	0.020
10.	Mercury	ppm	Nil	Nii	Nil	Nil
11.	Zinc	ppm	0.24	0.18	0.16	0,12
12.	Iron	ppm	0.03	0.026	0.024	0.028
13.	Manganese	ppm	0.028	0.026	0.02	0.018
14.	Cadmium	ppm	Nil	Nil	Nil	Nil

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TEST REPORT ANALYSIS OF MARINE WATER

BCL Ref. No.	GPL/ 05/219	Issued to:			
Monitoring Date	June 11, 2022	Min Consmission Bod I td			
Reporting Date	June 16, 2022	M/s. Gangavaram Port Ltd.			
Organization M/s. Gangavaram Port Ltd.		- Gangavaram (Village) - PedaGantiyada (Mandalam)			
Type of Sample	Marine Water (Low Tide / High Tide)	Visakhapatnam.			
Sample Collected by	M/s. Biochem Labs				

S. No	Parameter	Unit		esult		
			South brake Wall Outside		North brake Wall Outsid	
			Low tide	High tide	Low tide	High tide
1.	Dissolved Oxygen	mg/l	4.2	3.8	4.0	3.6
2.	Biological Oxygen Demand	mg/l	1.8	1.4	1.6	1.2
3.	Oil & Grease	mg/l	0.8	0.6	0.4	0.6
4.	Sulphate	mg/l	1038	1020	1042	1026
5.	Phosphate	mg/l	0.3	0.28	0.32	0.22
6.	Nitrate	mg/l	2.6	2.4	1.8	2.2
7.	Nitrite	mg/l	0.024	0.022	0.02	0.026
8.	Chloride	mg/l	21618	20482	20368	19864
9.	Chromium	ppm	0.022	0.024	0.026	0.024
10.	Mercury	ppm	Nil	Nil	Nil	Nil
11.	Zinc	ppm	0.16	0.14	0.12	0.18
12.	Iron	ppm	0.024	0.022	0.028	0.02
13.	Manganese	ppm	0.02	0.016	0.014	0.018
14.	Cadmium	ppm	Nil	Nil	Nil	Nil

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TEST REPORT ANALYSIS OF MARINE WATER

BCL Ref. No.	GPL/ 05/219	Issued to:
Monitoring Date	June 11, 2022	M/s. Gangavaram Port Ltd.
Reporting Date	June 16, 2022	Gangavaram (Village)
Organization	M/s. Gangavaram Port Ltd.	PedaGantiyada (Mandalam)
Type of Sample	Marine Water (Low Tide)	Visakhapatnam.
Sample Collected by	M/s. Biochem Labs	

Station Name: Harbourbasine / Low Tide

S. No	PARAMETERS	UNIT	RESULT
1.	Phytoplankton Count	No. /L	10000
2.	Zooplankton Count	No./m³	1200
3.	Chlorophyll a	mg/m³	3.6
4.	Chlorophyll b	mg/m³	2.8
5.	Primary Productivity	gC/m ²	3.0
6.	Biomass	mg/m ²	2.6

S.No	Species	Total Species count in 1L
A.	Phytoplankton Species	
	Prorocentrummicans	30
	Amphora lineolata	10
	Cymbella marina	04
	Bacteriastrum delicatulum	18
	Thalassionema nitzschioides	24
	Chaetoceros dydymus	06
	Skeletonemacostatum	18
	Thalassiothrixlongissima	02
	Cymbella marina	14
В.	Zooplankton Species	
	Foraminifera	26
	Chaetognatha	08
	Amphipoda	10
	Cladocera	04
	Eggs of fish & larvae	06

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TEST REPORT ANALYSIS OF MARINE WATER

BCL Ref. No.	GPL/ 05/219	Issued to:
Monitoring Date	June 11, 2022	M/s. Gangavaram Port Ltd.
Reporting Date	June 16, 2022	Gangavaram (Village)
Organization	M/s, Gangavaram Port Ltd.	PedaGantiyada (Mandalam)
Type of Sample	Marine Water (Low Tide)	Visakhapatnam.
Sample Collected by	M/s. Biochem Labs	Tradition of the state of the s

Station Name: Port Entrance Channel / Low Tide

S. No	PARAMETERS	UNIT	RESULT	
1.	Phytoplankton Count	No. /L	9000	
2.	Zooplankton Count	No./m³	800	
3.	Chlorophyll a	mg/m³	2.8	
4.	Chlorophyll b	mg/m ³	2.4	
5.	Primary Productivity	gC/m ²	3.0	
6.	Biomass	mg/m ²	2.6	

S.No	Species	Total Species count in 1L
Α.	Phytoplankton Species Prorocentrummicans Amphora lineolata Cymbella marina Bacteriastrum delicatulum Thalassionema nitzschioides Chaetoceros dydymus Skeletonemacostatum Thalassiothrixlongissima Cymbella marina	20 10 14 08 14 02 06 12
B.	Zooplankton Species Foraminifera Chaetognatha Amphipoda Cladocera Eggs of fish & larvae	20 12 10 06 04

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TEST REPORT ANALYSIS OF MARINE WATER

BCL Ref. No.	GPL/ 05/219	Issued to:
Monitoring Date	June 11, 2022	M/s. Gangavaram Port Ltd.
Reporting Date	June 16, 2022	Gangavaram (Village)
Organization	M/s. Gangavaram Port Ltd.	PedaGantiyada (Mandalam)
Type of Sample	Marine Water (High Tide)	Visakhapatnam.
Sample Collected by	M/s. Biochem Labs	

Station Name: Harbourbasine / High Tide

S. No	PARAMETERS	UNIT	RESULT
1.	Phytoplankton Count	No. /L	11000
2.	Zooplankton Count	No./m³	1200
3.	Chlorophyll a	mg/m³	3.2
4.	Chlorophyll b	mg/m ³	2.8
5.	Primary Productivity	gC/m ²	3.0
6.	Biomass	mg/m ²	2.4

No Species	Total Species count in 1L
A. Phytoplankton Species Prorocentrummicans Amphora lineolata Cymbella marina Bacteriastrum delicatulum Thalassionema nitzschioides Chaetoceros dydymus Skeletonemacostatum Thalassiothrixlongissima Cymbella marina	16 14 10 06 10 02 08 11
B. Zooplankton Species Foraminifera Chaetognatha Amphipoda Cladocera Eggs of fish & larvae	08 10 06 12 06

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TEST REPORT ANALYSIS OF MARINE WATER

BCL Ref. No.	GPL/ 05/219	Issued to:
Monitoring Date	June 11, 2022	M/s. Gangavaram Port Ltd.
Reporting Date	June 16, 2022	Gangavaram (Village)
Organization	M/s. Gangavaram Port Ltd.	PedaGantiyada (Mandalam)
Type of Sample	Marine Water (High Tide)	Visakhapatnam.
Sample Collected by	M/s. Biochem Labs	

Station Name: Port Entrance Channel / High Tide

S. No	PARAMETERS	UNIT	RESULT	
1.	Phytoplankton Count	No. /L	12000	
2.	Zooplankton Count	No./m ³	1000	
3,	Chlorophyll a	mg/m³	2.8	
4.	Chlorophyll b	mg/m ³	3.2	
5.	Primary Productivity	gC/m ²	2.4	
6.	Biomass	mg/m²	2.8	

S.No	Species	Total Species count in 1L
A.	Phytoplankton Species	9-
N/CSV	Prorocentrummicans	12
	Amphora lineolata	06
	Cymbella marina	10
	Bacteriastrum delicatulum	12
	Thalassionema nitzschioides	08
	Chaetoceros dydymus	10
	Skeletonemacostatum	06
	Thalassiothrixlongissima	12
	Cymbella marina	06
B.	Zooplankton Species	
10.000	Foraminifera	12
	Chaetognatha	18
	Amphipoda	06
	Cladocera	04
	Eggs of fish & larvae	10
	THE WOOD CONTRACTOR OF CONTRAC	5,700

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TEST REPORT ANALYSIS OF MARINE WATER

BCL Ref. No.	GPL/ 05/219	Issued to:
Monitoring Date	June 11, 2022	M/s. Gangavaram Port Ltd.
Reporting Date	June 16, 2022	Gangavaram (Village)
Organization	M/s. Gangavaram Port Ltd.	PedaGantiyada (Mandalam)
Type of Sample	Marine Water (Low Tide)	Visakhapatnam.
Sample Collected by M/s. Biochem Labs		

Station Name: South brake Wall outside / Low Tide

S. No	PARAMETERS	UNIT	RESULT
1.	Phytoplankton Count	No. /L	12000
2.	Zooplankton Count	No./m³	900
3.	Chlorophyll a	mg/m³	3.0
4.	Chlorophyll b	mg/m³	2.4
5.	Primary Productivity	gC/m ²	3.6
6.	Biomass	mg/m²	2.4

S.No	Species	Total Species count in 1L
A.	Phytoplankton Species	400
ditte.	Prorocentrummicans	54
	Amphora lineolata	36
	Cymbella marina	28
	Bacteriastrum delicatulum	32
	Thalassionema nitzschioides	30
	Chaetoceros dydymus	12
	Skeletonemacostatum	22
	Thalassiothrixlongissima	32
	Cymbella marina	12
B.	Zooplankton Species	922
	Foraminifera	46
	Chaetognatha	26
	Amphipoda	. 20
	Cladocera	14
	Eggs of fish & larvae	08

Analyst





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TEST REPORT ANALYSIS OF MARINE WATER

BCL Ref. No.	GPL/ 05/219	Issued to:
Monitoring Date	June 11, 2022	M/s. Gangavaram Port Ltd.
Reporting Date	June 16, 2022	Gangavaram (Village)
Organization	M/s. Gangavaram Port Ltd.	PedaGantiyada (Mandalam)
Type of Sample	Marine Water (Low Tide)	Visakhapatnam.
Sample Collected by	M/s. Biochem Labs	

Station Name: North brake Wall Outside / Low Tide

S. No	PARAMETERS	UNIT	RESULT
1.	Phytoplankton Count	No. /L	14000
2	Zooplankton Count	No./m ³	1000
3.	Chlorophyll a	mg/m ³	3.4
4.	Chlorophyll b	mg/m ³	2.8
5.	Primary Productivity	gC/m ²	3.0
6	Biomass	mg/m ²	2.6

S.No	Species	Total Species count in 1L
A.	Phytoplankton Species Prorocentrummicans Amphora lineolata Cymbella marina Bacteriastrum delicatulum Thalassionema nitzschioides Chaetoceros dydymus Skeletonemacostatum Thalassiothrixlongissima Cymbella marina	36 48 60 28 42 04 28 12
B.	Zooplankton Species Foraminifera Chaetognatha Amphipoda Cladocera Eggs of fish & larvae	54 32 36 10 08

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TEST REPORT ANALYSIS OF MARINE WATER

Monitoring Date Reporting Date	June 11, 2022 June 16, 2022	M/s. Gangavaram Port Ltd.
Organization	M/s. Gangavaram Port Ltd.	Gangavaram (Village) PedaGantiyada (Mandalam)
Type of Sample	Marine Water (High Tide)	Visakhapatnam.
Sample Collected by	M/s. Biochem Labs	

Station Name: South brake Wall Outside / High Tide

S. No	PARAMETERS	UNIT	RESULT
1.	Phytoplankton Count	No. /L	9000
2.	Zooplankton Count	No./m³	600
3.	Chlorophyll a	mg/m ³	2.4
4.	Chlorophyll b	mg/m ³	2.6
5.	Primary Productivity	gC/m ²	3.0
6.	Biomass	mg/m²	2.2

S.No	Species	Total Species count in 1L
A.	Phytoplankton Species Prorocentrummicans Amphora lineolata Cymbella marina Bacteriastrum delicatulum Thalassionema nitzschioides Chaetoceros dydymus Skeletonemacostatum Thalassiothrixlongissima Cymbella marina	36 64 28 36 24 04 14 26
B.	Zooplankton Species Foraminifera Chaetognatha Amphipoda Cladocera Eggs of fish & larvae	48 24 10 04 12

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TEST REPORT ANALYSIS OF MARINE WATER

Sample Collected by	M/s. Biochem Labs	
Type of Sample	Marine Water (High Tide)	Visakhapatnam.
Organization	M/s. Gangavaram Port Ltd.	PedaGantiyada (Mandalam)
Reporting Date	June 16, 2022	Gangavaram (Village)
Monitoring Date	June 11, 2022	M/s. Gangavaram Port Ltd.
BCL Ref. No.	GPL/ 05/219	Issued to:

Station Name: North brake Wall Outside / High Tide

S. No	PARAMETERS	UNIT	RESULT
1.	Phytoplankton Count	No. /L	11000
2.	Zooplankton Count	No./m³	1200
3.	Chlorophyll a	mg/m ³	3.4
4.	Chlorophyll b	mg/m ³	2.6
5.	Primary Productivity	gC/m ²	3.0
6.	Biomass	mg/m ²	2.8

S.No	Species	Total Species count in 1L
Α.	Phytoplankton Species Prorocentrummicans Amphora lineolata Cymbella marina Bacteriastrum delicatulum Thalassionema nitzschioides Chaetoceros dydymus Skeletonemacostatum Thalassiothrixlongissima Cymbella marina	58 12 44 28 36 32 10 20
B.	Zooplankton Species Foraminifera Chaetognatha Amphipoda Cladocera Eggs of fish & larvae	32 44 28 10 08

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TEST REPORT ANALYSIS OF MARINE WATER

BCL Ref. No.	GPL/ 05/220	Issued to:		
Monitoring Date	June 25, 2022	M/s. Gangavaram Port Ltd.		
Reporting Date	June 30, 2022	Gangavaram (Village)		
Organization M/s. Gangavaram Port Ltd.		PedaGantiyada (Mandalam)		
Type of Sample	Marine Water (Low Tide / High Tide)	Visakhapatnam.		
Sample Collected by	M/s. Biochem Labs	Transaction (separation (1))		

S. No	Parameter	Unit		Re	sult	
		1 1	HarbourBasine		Port Entran	ce Channel
			Low tide	High tide	Low tide	High tide
1.	Temperature	°C	32.8	31.2	32.6	29.8
2.	pH	H+ conc	8.24	8.22	8.20	8.22
3.	Salinity	PSU	32.4	33.6	32.0	33.4
4.	Turbidity	NTU	26	18	10	14
5.	Total Suspended Solids	mg/l	30	24	12	16
6.	Transparency	Mts.	0.9	1.0	1.4	1.2
7.	Electrical Conductivity	mMHo	36.8	33.6	32.0	31.8







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TEST REPORT ANALYSIS OF MARINE WATER

BCL Ref. No.	GPL/ 05/220	Issued to:
Monitoring Date	June 25, 2022	M/s. Gangavaram Port Ltd.
Reporting Date	June 30, 2022	Gangavaram (Village)
Organization		
Type of Sample	Marine Water (Low Tide / High Tide)	PedaGantiyada (Mandalam) Visakhapatnam.
Sample Collected by	M/s, Biochem Labs	viousiapatitani.

S. No	Parameter	Unit		Re	sult	
			South brake Wall Outside	North brake Wall Outs	Wall Outside	
			Low tide	High tide	Low tide	High tide
1.	Temperature	°C	30.8	32.0	28.2	31.6
2.	pH	H+ conc	8.22	8.24	8.22	8.26
3.	Salinity	PSU	32.4	33.2	. 32.8	33.0
4.	Turbidity	NTU	12	10	14	12
5.	Total Suspended Solids	mg/l	16	12	18	16
6.	Transparency	Mts.	1.2	1.4	1.2	1.4
7.	Electrical Conductivity	mMHo	36.0	32.2	34.2	33,8







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TEST REPORT ANALYSIS OF MARINE WATER

BCL Ref. No. GPL/ 05/220		Issued to:
Monitoring Date	June 25, 2022	M/s Conscionan Bort Ltd
Reporting Date	June 30, 2022	 M/s. Gangavaram Port Ltd. Gangavaram (Village)
Organization	M/s. Gangavaram Port Ltd.	PedaGantiyada (Mandalam)
Type of Sample	Marine Water (Low Tide / High Tide)	Visakhapatnam.
Sample Collected by	M/s. Biochem Labs	Transfer of the contract of th

S. No	Parameter	Unit		R	esult	
	10.000000000000000000000000000000000000	Harbo	Harbou	rBasine	Port Entran	ce Channel
			Low tide	High tide	Low tide	High tide
1.	Dissolved Oxygen	mg/l	3.8	4.0	3.8	3.6
2.	Biological Oxygen Demand	mg/l	1.4	1.8	1.6	1.4
3.	Oil & Grease	mg/l	1.6	1.0	0.8	0.6
4.	Sulphate	mg/l	1026	998	1036	1018
5.	Phosphate	mg/l	0.28	0.32	0.26	0.24
6.	Nitrate	mg/l	3.2	2.0	2.8	2.6
7.	Nitrite	mg/l	0.028	0.026	0.016	0.014
8.	Chloride	mg/l	18624	20432	21246	20618
9.	Chromium	ppm	0.026	0.022	0.018	0.022
10.	Mercury	ppm	Nii	Nil	Nil	Nil
11.	Zinc	ppm	0.20	0.18	0.14	0.12
12.	Iron	ppm	0.024	0.026	0.02	0.02
13.	Manganese	ppm	0.02	0.024	0.016	0.018
14.	Cadmium	ppm	Nil	Nil	Nil	Nil

Analyst





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TEST REPORT ANALYSIS OF MARINE WATER

BCL Ref. No.	GPL/ 05/220	Issued to:
Monitoring Date	June 25, 2022	M/s. Gangavaram Port Ltd.
Reporting Date	June 30, 2022	Gangavaram (Village)
Organization	M/s. Gangavaram Port Ltd.	PedaGantiyada (Mandalam)
Type of Sample	Marine Water (Low Tide / High Tide)	Visakhapatnam.
Sample Collected by	M/s. Biochem Labs	1.0000010000000000000000000000000000000

5. No	Parameter	Unit		R	esult	
			South brake	Wall Outside	North brake W	/all Outside
			Low tide	High tide	Low tide	High tide
1.	Dissolved Oxygen	mg/l	4.0	4.6	4.2	3.8
2.	Biological Oxygen Demand	mg/l	1.8	2.2	2.0	1.6
3.	Oil & Grease	mg/l	0.4	0.8	0.6	0.8
4.	Sulphate	mg/l	1036	1020	1042	1056
.5.	Phosphate	mg/l	0.38	0.36	0.26	0.32
6.	Nitrate	mg/I	3.0	2.4	2.0	1.8
7.	Nitrite	mg/l	0.026	0.024	0.018	0.02
8.	Chloride	mg/l	21612	20864	19692	20486
9.	Chromium	ppm	0.026	0.02	0.016	0.02
10.	Mercury	ppm	Nil	Nil	Nil	Nil
11.	Zinc	ppm	0.16	0.12	0.18	0.10
12.	Iron	ppm	0.014	0.016	0.026	0.02
13.	Manganese	ppm	0.024	0.02	0.018	0.016
14.	Cadmium	ppm	Nil	Nil	Nil	Nil

Analyst





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TEST REPORT ANALYSIS OF MARINE WATER

Issued to:
22 M/s. Gangavaram Port Ltd.
22 Gangavaram (Village)
aram Port Ltd. PedaGantiyada (Mandalam)
r (Low Tide) Visakhapatnam.
Labs
-

Station Name: Harbourbasine / Low Tide

S. No	PARAMETERS	UNIT	RESULT
1.	Phytoplankton Count	No. /L	14000
2.	Zooplankton Count	No./m ³	1200
3.	Chlorophyll a	mg/m³	2.6
4.	Chlorophyll b	mg/m³	2.2
5.	Primary Productivity	gC/m ²	2.6
6.	Biomass	mg/m²	1.8

S.No	Species	Total Species count in 1L
Α.	Phytoplankton Species Prorocentrummicans Amphora lineolata Cymbella marina Bacteriastrum delicatulum Thalassionema nitzschioides Chaetoceros dydymus Skeletonemacostatum Thalassiothrixlongissima Cymbella marina	18 20 04 18 32 06 08 04
В.	Zooplankton Species Foraminifera Chaetognatha Amphipoda Cladocera Eggs of fish & larvae	24 18 06 10 08

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TEST REPORT ANALYSIS OF MARINE WATER

Monitoring Date	June 25, 2022	M/s. Gangavaram Port Ltd.	
Reporting Date	June 30, 2022	Gangavaram (Village)	
Organization M/s. Gangavaram Port Ltd. Type of Sample Marine Water (Low Tide)		PedaGantiyada (Mandalam)	
Sample Collected by	M/s. Biochem Labs	Visakhapatnam.	

Station Name: Port Entrance Channel / Low Tide

S. No	PARAMETERS	UNIT	RESULT
1.	Phytoplankton Count	No. /L	12000
2.	Zooplankton Count	No./m³	800 .
3.	Chlorophyll a	mg/m ³	3.0
4.	Chlorophyll b	mg/m ³	2.6
5.	Primary Productivity	gC/m ²	3.2
6.	Biomass	mg/m²	2.8

i.No	Species	Total Species count in 1L
A. Phyto Proro Ampli Cymli Bacte Thala Chae Skele	oplankton Species centrummicans nora lineolata pella marina eriastrum delicatulum assionema nitzschioides toceros dydymus etonemacostatum assiothrixlongissima	14 12 06 14 10 22 04
B. Zoop Forai Chae Ampl Clade	pella marina lankton Species minifera tognatha nipoda poera of fish & larvae	20 16 04 02 18

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TEST REPORT ANALYSIS OF MARINE WATER

ne 30, 2022 s. Gangavaram Port Ltd.	Gangavaram (Village) PedaGantiyada (Mandalam)
rine Water (High Tide)	Visakhapatnam,
	. Gangavaram Port Ltd.

Station Name: Harbourbasine / High Tide

S. No	PARAMETERS	UNIT	RESULT
1.	Phytoplankton Count	No. /L	9000
2.	Zooplankton Count	No./m ³	600
3.	Chlorophyll a	mg/m³	2.4
4	Chlorophyll b	mg/m ³	2.6
6.	Primary Productivity	gC/m ²	3.0
6.	Biomass	mg/m²	2.8

.No	Species	Total Species count in 1L
۸.	Phytoplankton Species Prorocentrummicans Amphora lineolata	28 06
	Cymbella marina	22
	Bacteriastrum delicatulum	10
	Thalassionema nitzschioides	24
	Chaetoceros dydymus	04
	Skeletonemacostatum	12
	Thalassiothrixlongissima	08
WA.	Cymbella marina	10
0.	Zooplankton Species Foraminifera	14
	Chaefognatha	02
	Amphipoda	14
	Cladocera	10
	Eggs of fish & larvae	18

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TEST REPORT ANALYSIS OF MARINE WATER

BCL Ref. No.	GPL/ 05/220	Issued to:	
Monitoring Date	June 25, 2022	M/- C B-4114	
Reporting Date	June 30, 2022	M/s. Gangavaram Port Ltd.	
Organization	M/s. Gangavaram Port Ltd.	Gangavaram (Village) PedaGantiyada (Mandalam Visakhapatnam.	
Type of Sample	Marine Water (High Tide)		
Sample Collected by	M/s. Biochem Labs		

Station Name: Port Entrance Channel / High Tide

S. No	PARAMETERS	UNIT	RESULT	
1.	Phytoplankton Count	No. /L	1000	
2.	Zooplankton Count	No./m ³	1400	
3.	Chlorophyll a	mg/m³	3.6	
4.	Chlorophyll b	mg/m³	2.4	
5.	Primary Productivity	gC/m ²	3.2	
6.	Biomass	mg/m ²	2.8	

.No	Species	Total Species count in 1L
Α.	Phytoplankton Species Prorocentrummicans Amphora lineolata Cymbella marina Bacteriastrum delicatulum	30 14 28 06
	Thalassionema nitzschioides Chaetoceros dydymus Skeletonemacostatum Thalassiothrixlongissima Cymbella marina	16 04 18 20
3.	Zooplankton Species Foraminifera Chaetognatha Amphipoda Cladocera Eggs of fish & larvae	22 14 18 06 10

Analyst





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TEST REPORT ANALYSIS OF MARINE WATER

BCL Ref. No.	GPL/ 05/220	Issued to:	
Monitoring Date	June 25, 2022	M/s. Gangavaram Port Ltd.	
Reporting Date	June 30, 2022	Gangavaram (Village)	
Organization	M/s. Gangavaram Port Ltd.	PedaGantiyada (Mandalam)	
Type of Sample	Marine Water (Low Tide)	Visakhapatnam,	
Sample Collected by	M/s. Biochem Labs		

Station Name: South brake Wall outside / Low Tide

S. No	PARAMETERS	UNIT	RESULT
1	Phytoplankton Count	No. /L	10000
2	Zooplankton Count	No./m ³	1400
3.	Chlorophyll a	mg/m³	3.6
4	Chlorophyll b	mg/m³	2.8
5.	Primary Productivity	gC/m ²	3.2
6.	Biomass	mg/m²	2.8

S.No	Species	Total Species count in 1L
Α.	Phytoplankton Species Prorocentrummicans Amphora lineolata Cymbella marina Bacteriastrum delicatulum Thalassionema nitzschioides Chaetoceros dydymus Skeletonemacostatum Thalassiothrixlongissima Cymbella marina	64 28 06 24 08 48 36 16
B.	Zooplankton Species Foraminifera Chaetognatha Amphipoda Cladocera Eggs of fish & larvae	56 21 04 26 14

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TEST REPORT ANALYSIS OF MARINE WATER

BCL Ref. No.	GPL/ 05/220	Issued to:	
Monitoring Date	June 25, 2022	M/s. Gangavaram Port Ltd.	
Reporting Date	June 30, 2022	Gangavaram (Village)	
Organization M/s. Gangavaram Port Ltd. Type of Sample Marine Water (Low Tide)		PedaGantiyada (Mandalam	
		Visakhapatnam.	
Sample Collected by	M/s. Biochem Labs	vicaniapatiani.	

Station Name: North brake Wall Outside / Low Tide

S. No	PARAMETERS	UNIT	RESULT
1.	Phytoplankton Count	No. /L	9000
2.	Zooplankton Count	No./m³	500
3.	Chlorophyll a	mg/m ³	3.0
4.	Chlorophyll b	mg/m ³	2.6
5.	Primary Productivity	gC/m ²	3.2
6.	Biomass	mg/m ²	2.4

S.No	Species	Total Species count in 1L
Α.	Phytoplankton Species Prorocentrummicans Amphora lineolata Cymbella marina Bacteriastrum delicatulum Thalassionema nitzschioides Chaetoceros dydymus Skeletonemacostatum Thalassiothrixlongissima Cymbella marina	82 46 20 34 0 28 04 20
В.	Zooplankton Species Foraminifera Chaetognatha Amphipoda Cladocera Eggs of fish & larvae	28 20 04 10 04

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TEST REPORT ANALYSIS OF MARINE WATER

BCL Ref. No.	GPL/ 05/220	Issued to:	
Monitoring Date	June 25, 2022	M/s. Gangavaram Port Ltd.	
Reporting Date	June 30, 2022	Gangavaram (Village)	
Organization	M/s. Gangavaram Port Ltd.	PedaGantiyada (Mandalam) Visakhapatnam.	
Type of Sample	Marine Water (High Tide)		
Sample Collected by	M/s. Biochem Labs		

Station Name: South brake Wall Outside / High Tide

S. No	PARAMETERS	UNIT	RESULT
1.	Phytoplankton Count	No. /L	11000
2.	Zooplankton Count	No./m ³	1000
3.	Chlorophyll a	mg/m³	2.8
4.	Chlorophyll b	mg/m ³	2.4
5.	Primary Productivity	gC/m ²	3.2
6.	Biomass	mg/m²	2.4

S.No	Species	Total Species count in 1L
A.	Phytoplankton Species Prorocentrummicans Amphora lineolata Cymbella marina Bacteriastrum delicatulum Thalassionema nitzschioides Chaetoceros dydymus Skeletonemacostatum Thalassiothrixlongissima	42 18 34 06 20 36 10
В.	Cymbella marina Zooplankton Species Foraminifera Chaetognatha Amphipoda	28 06 30
	Cladocera Eggs of fish & larvae	10 08

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TEST REPORT ANALYSIS OF MARINE WATER

GPL/ 05/220	Issued to:	
June 25, 2022	M/s. Gangavaram Port Ltd. Gangavaram (Village) PedaGantiyada (Mandalam) Visakhapatnam.	
June 30, 2022		
M/s. Gangavaram Port Ltd.		
Marine Water (High Tide)		
M/s. Biochem Labs		
	June 25, 2022 June 30, 2022 M/s. Gangavaram Port Ltd. Marine Water (High Tide)	

Station Name: North brake Wall Outside / High Tide

S. No	PARAMETERS	UNIT	RESULT
1.	Phytoplankton Count	No. /L	10000
2.	Zooplankton Count	No./m ³	1200
3.	Chlorophyll a	mg/m ³	3.4
4.	Chlorophyll b	mg/m ³	2.8
5.	Primary Productivity	gC/m ²	3.2
6.	Biomass	mg/m ²	2.6

.No	Species	Total Species count in 1L
Α.	Phytoplankton Species Prorocentrummicans Amphora lineolata Cymbella marina Bacteriastrum delicatulum Thalassionema nitzschioides Chaetoceros dydymus	38 35 24 30 02 34
	Skeletonemacostatum Thalassiothrixlongissima Cymbella marina	08 20 12
3,	Zooplankton Species Foraminifera Chaetognatha Amphipoda	22 12 18
	Cladocera Eggs of fish & larvae	04 10

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TEST REPORT ANALYSIS OF SEDIMENT SAMPLE

BCI. Ref. No.	GPL/ 06/219	Issued to:
Monitoring Date	June 11, 2022	M/s. Gangavaram Port Ltd.
Reporting Date	June 16, 2022	Gangavaram (Village)
Organization	M/s. Gangavaram Port Ltd.	PedaGantiyada (Mandalam)
Type of Sample	Sediment (Low Tide)	Visakhapatnam.
Sample Collected by	M/s. Biochem Labs	

S.No.	Parameters	Unit	Result	
			Harbour Basine	Port Entrance Channel
1.	pH	H+ conc	7.06	7.04
2	Organic matter	%	2.0	1.6
3.	Nitrate	mg/kg	2,4	1.8
4.	Phosphate	mg/kg	1.6	1.2
5.	Oil & Grease	mg/kg	0.14	+0.1
6.	Iron	ppm	0.16	0.14
7.	Manganese	ppm	0.12	0.1
8.	Nickel	ppm	0.14	0.12
9.	Chromium	ppm	0.16	0.14
10.	Mercury	ppm	Nil	Nil
11.	Zinc	ppm	0.6	0.8
12.	Lead	ppm	0.01	0.01
13.	Arsenic	ppm	0.01	0.01
14.	Selenium	ppm	0.01	0.01
15.	Copper	ppm	0.16	0.14

Analyst





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TEST REPORT ANALYSIS OF SEDIMENT SAMPLE

GPL/ 06/219	Issued to:	
June 11, 2022	M/s. Gangavaram Port Ltd.	
June 16, 2022	Gangavaram (Village)	
M/s. Gangavaram Port Ltd.	PedaGantiyada (Mandalam) Visakhapatnam.	
Sediment (Low Tide)		
M/s. Biochem Labs		
	June 11, 2022 June 16, 2022 M/s. Gangavaram Port Ltd. Sediment (Low Tide)	

S.No	Parameters	Unit	Result		
		100	South brake Wall Outside	North brake Wall Outside	
1.	pH	H+ conc	7.0	7.08	
2.	Organic matter	%	1.0	1.2	
3.	Nitrate	mg/kg	2.2	1.4	
4.	Phosphate	mg/kg	0.8	1.0	
5.	Oil & Grease	mg/kg	0.02	0.01	
6.	Iron	ppm	0.12	0.14	
7.	Manganese	ppm	0.14	0.12	
8.	Nickel	ppm	0.12	0.1	
9.	Chromium	ppm	0.12	0.1	
10.	Mercury	ppm	Nil	Nil	
11.	Zinc	ppm	1.0	0.8	
12.	Lead	ppm	0.01	0.01	
13.	Arsenic	ppm	0.01	0.01	
14.	Selenium	ppm	0.01	0.01	
15.	Copper	ppm	0.18	0.12	

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TEST REPORT BENTHIC FAUNAL DIVERSITY

BCL Ref. No.	GPL/ 06/219	Issued to:	
Monitoring Date	June 11, 2022	M/s. Gangavaram Port Ltd.	
Reporting Date June 16, 2022 Organization M/s. Gangavaram Port Ltd. Type of Sample Sediment (Low Tide)		Gangavaram (Village)	
		PedaGantiyada (Mandalam)	
		Visakhapatnam.	
Sample Collected by	M/s. Biochem Labs	- 1	

S. No	Species/Group	% Composition	
		HarbourBasine	Port Entrance Channel
1.	Opheliidae sp	20	24
2.	Glyceridae sp	12	10
2. 3.	Nereidae sp	06	18
4.	Aphroditidae sp	08	0
5.	Cirratulidae sp	10	14
6.	Capitella sp	0	06
7.	Amphipoda sp.	10	12
8.	Gastropoda	04	0
9.	Chaetognatha	02	12

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TEST REPORT BENTHIC FAUNAL DIVERSITY

BCL Ref. No.	GPL/ 06/219	Issued to:	
Monitoring Date	June 11, 2022	M/s. Gangavaram Port Ltd.	
Reporting Date	June 16, 2022	Gangavaram (Village)	
Organization	M/s. Gangavaram Port Ltd.	PedaGantiyada (Mandalam)	
Type of Sample	Sediment (Low Tide)	Visakhapatnam.	
Sample Collected by	M/s. Biochem Labs		

B. No	Species/Group	% Composition	
		South brake Wall Outside	North brake Wall Outside
1.	Foraminifera	38	24
2	Amphipoda	26	36
0.	Mytilusedulis	02	14
4.	Gastropod veliger	20	28
6.	Oithona	16	02
6.	Capitella	20	16
7.	Copepod nauplii	22	10
9.	Brachyuran zoea	06	20
0.	Neanthusarenaceodentala	10	04

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TEST REPORT ANALYSIS OF SEDIMENT SAMPLE

BCL Ref. No. GPL/ 06/220		Issued to:	
Monitoring Date	June 25, 2022	M/s. Gangavaram Port Ltd.	
Reporting Date	June 30, 2022		
Organization M/s. Gangavaram Port Ltd.		Gangavaram (Village) PedaGantiyada (Mandalam)	
Type of Sample	Sediment (Low Tide)	Visakhapatnam.	
Sample Collected by	M/s. Biochem Labs	Violatiopatrialit.	

S.No	Parameters	Unit		Result	
			Harbour Basine	Port Entrance Channe	
1.	pН	H+ conc	7.12	7.10	
2.	Organic matter	%	2.2	1.4	
3.	Nitrate	mg/kg	1.8	1.2	
4.	Phosphate	mg/kg	1.0	1.0	
5.	Oil & Grease	mg/kg	0.14	0.08	
6.	Iron	ppm	0.16	0.12	
7.	Manganese	ppm	0.14	0.12	
8.	Nickel	ppm	0.12	0.14	
9.	Chromium	ppm	0.12	0.12	
10.	Mercury	ppm	Nil	Nil	
11.	Zinc	ppm	1.0	0.8	
12.	Lead	ppm	0.01	0.01	
13.	Arsenic	ppm	0.01	0.01	
14.	Selenium	ppm	0.01	0.01	
15.	Copper	ppm	0.22	0.16	

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TEST REPORT ANALYSIS OF SEDIMENT SAMPLE

BCL Ref. No.	GPL/ 06/220	Issued to:
Monitoring Date	June 25, 2022	M/s. Gangavaram Port Ltd.
Reporting Date	June 30, 2022	Gangavaram (Village)
Organization	M/s. Gangavaram Port Ltd.	PedaGantiyada (Mandalam)
Type of Sample	Sediment (Low Tide)	Visakhapatnam.
Sample Collected by	M/s. Biochem Labs	

S.No	Parameters	Unit	Result	
		253,1535	South brake Wall Outside	North brake Wall Outside
1.	pH	H+ conc	7.14	7.08
2.	Organic matter	%	1.0	0.8
3.	Nitrate	mg/kg	2.0	1.4
4.	Phosphate	mg/kg	1.6	1.0
5.	Oil & Grease	mg/kg	0.02	0.04
6.	Iron	ppm	0.14	0.12
7.	Manganese	ppm	0.12	0.1
8.	Nickel	ppm	0.1	0.12
9.	Chromium	ppm	0.12	0.1
10.	Mercury	ppm	Nil	Nil
11.	Zinc	ppm	1.0	0.8
12.	Lead	ppm	0.01	0.01
13.	Arsenic	ppm	0.01	0.01
14.	Selenium	ppm	0.01	0.01
15.	Copper	ppm	0.18	0.14

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TEST REPORT BENTHIC FAUNAL DIVERSITY

BCL Ref. No.	GPL/ 06/220	Issued to:	
Monitoring Date	June 25, 2022		
Reporting Date	June 30, 2022	M/s. Gangavaram Port Ltd.	
Organization	M/s. Gangavaram Port Ltd.	Gangavaram (Village) PedaGantiyada (Mandalam)	
Type of Sample	Sediment (Low Tide)		
Sample Collected by	M/s. Biochem Labs	Visakhapatnam.	

S. No	Species/Group	% Com	position
		Harbour Basine	Port Entrance Channel
1.	Eunicidae sp.	16	22
2.	Paraonidae sp.	10	14
3.	Syllidae sp	04	08
4.	Sabellidae sp	08	
6.	Oithona sp.	14	10
6.	Capitella sp.	12	26
7.	Syllidae sp	1000	18
0.	Amphipoda sp.	10	06
	Nematoda sp.	06	02
1186	тчеттенска ар.	80	04

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TEST REPORT BENTHIC FAUNAL DIVERSITY

BCL Ref. No.	GPL/ 06/220	Issued to:
Monitoring Date	June 25, 2022	M/s. Gangavaram Port Ltd.
Reporting Date	June 30, 2022	Gangavaram (Village)
Organization M/s. Gangavaram Port Lte Type of Sample Sediment (Low Tide)		PedaGantiyada (Mandalam)
		Visakhapatnam.
Sample Collected by	M/s. Biochem Labs	

S. No	Species/Group	% Comp	position
		South brake Wall Outside	North brake Wall Outside
1.	Capitella sp.	46	38
2.	Syllidae sp	32	24
3.	Amphipoda sp.	06	32
4.	Nematoda sp.	36	06
5.	Capitella sp.	10	22
6.	Syllidae sp	28	08
7.	Paraonidae sp.	12	14
9.	Syllidae sp	14	10
8.	Sabellidae sp	08	02

Analyst





GANGAVARAM PORT LIMITED

GPL/ENV/APPCB/2022-23/028

Date: 05.08.2022.

Tο

Sr. Environmental Engineer, CESS Andhra Pradesh Pollution Control Board, D.no:33-26-14D/2, Near Sunrise Hospital, Pushpa Hotel Center, Chalamalavari Street, Kasturibaipet, Vijayawada-520010. Andhra Pradesh.

Dear Sir.

Sub: Water Consumption Cess Statement - Reg.

Please find enclosed herewith the water consumption statement in FORM -1 for the month of July - 2022, prepared under the Water (Prevention and Control of Pollution) Cess Act, 1977.

We request you to kindly consider the same.

Thanking you

Yours Sincerely,

Encl: As above.

Copy submitted to the Environmental Engineer, A.P. Pollution Control Board, Regional Office, Visakhapatnam for kind information.

FORM – 1

Returns Regarding Water Consumed During Month of July - 2022

Name & Address	Purpose o	Purpose of which water consumed	Quantity of water consumed	If the meter was out of order the monthly avg. consumption of the water for the past 3 months of working	Qty. of water qualifying for rebate according to the assesses	Remarks
(1)		(2)	(3)	(4)	*(5)	(9)
Gangavaram Port Limited, Gangavaram Post, Peda Gatyada	1) Industrial cooling/ spraying in mine pits or boiler feed.	Total from Municipal mains i. From Municipal water supply mains ii. From well /	21,425 Cum/KL	T .		
Mandal, Visakhapatnam.	2) Domestic Water	i. From Municipal water supply mains ii. From well /	Cum/KL 3819,60		,	

(*) for claiming rebate under Col.7, the assessed shall indicate in the column the analytical and other reports annexed to this return in support of this claim.

For Gangavaram Port Limited

Vice President (Environment)



GANGAVARAM PORT LIMITED

GPL/ENV/APPCB/2022-23/029

Date: 05/08/2022.

To

The Environmental Engineer, A.P. Pollution Control Board Regional Office APPCB Buildings, 3rd Floor Main Road, Madhavadhara VUDA Layout Visakhapatnam- 530 009.

Dear Sir,

Sub:- Monthly CFO Compliance, Environmental Marine & Terrestrial

Monitoring Reports and Water Consumption detains (Form-1) -

Submitted - Reg.

Reff:- 1. CFO & HWA Order No. APPCB/VSP/VSP/113/CFO/HO/2015, dated 13.01.2016, valid up to 31.12.2020.

2. CFO & HWA Order No. APPCB/VSP/VSP/113/CFO/HO/2020, dated 10.09.2020, valid up to 31.12.2025.

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With reference to the above, we are here with submitting the monthly CFO compliance reports and CAAQM, Marine & Terrestrial monitoring results along with Water Consumption details in Form - 1 for the month of July -2022.

Yours Sincerely,

Authorized Signatory

Encl: As above.

Project Office

: Pedagantyada Mandal, Gangavaram (Post), Visakhapatnam - 530 044. Andhra Pradesh, INDIA

Tel.: +91 891 270 1177, 2277, 276 1377, Fax: +91 891 270 3377

Corporate Office: 2nd, 3rd and 4th Floors, "Hansa Plaza", Plot No.798, Road No.36, Jubilee Hills, Hyderabad - 500 033

Tel.: 040 3359 9999, Fax No.: 040 3359 9990

E-mail: port@gangavaram.com, Web: www.gangavaram.com

Compliance of the conditions stipulated in CFO Auto Renewal Order No. APPCB/VSP/VSP/113/CFO/HO/2020- 10/09/2020, valid up to 31.12.2025.

SI.	Condition	Compliance
No. 1.	All other conditions mentioned in Schedules A, B & C of the combined CFO&HWA order issued by the Board vide order dated 13.01.2016 will remain same.	Noted and conditions are being followed as applicable.
2.	The facility shall comply with the standards issued by MoEF&CC / CPCB from time to time.	Noted and condition is being followed.
3.	The industry shall submit Half yearly compliance reports to all the stipulated conditions in Environmental Clearance (EC), Consent for Establishment (CFE) and Consent for Operation (CFO) through website i.e., https://pcb.ap.gov.in by 1st of January and 1st July of every year. The first half yearly compliance reports shall be furnished by the industry and second half yearly compliance reports shall be the audited through NABL accredited third party failing which the Consent Order issued will be cancelled.	Self-certified 1st half yearly compliance report for the period from April 2021 to September 2021 submitted on 29.11.2021 through web site. NABL Accredited Agency certified compliance report for the 2nd half for the period from October 2021 to March 2022 was uploaded through website on 30.05.2022.
4.	The facility shall ensure that dedicated fund is allotted towards Environment Relief Fund (ERF) in the Public Liability Insurance policy and submit a copy of the policy at the Regional Office: Visakhapatnam every year.	GPL is having Public liability Insurance of IFFCO-TOKIO vide Policy No:41063755, dated 28.09.2021, Valid till 14/09/2022 with Premium of Rs-5615/- & ERF of Rs.5615/-
5.	In case of false certification, noncompliance of conditions / directions and discrepancy in furnishing the information by the industry, the Board can withdraw the auto renewed consent and take action under provisions of relevant Acts & Rules.	Noted and condition is being followed.
6.	The facility shall inventorize the storage quantities of hazardous chemicals as per the hazard nature of reactivity / toxicity / flammability / explosive stored/handling in the premises as defined in the Management of Storage, Import of Hazardous Chemicals (MSIHC) Rules, 1989 and the details shall be furnished to the Factories Department and to the Regional Office, APPCB on monthly basis duly certifying the same.	GPL is not handling any Hazardous cargo/Containers/Chemicals.

7.	The facility shall identify major accident hazard chemicals & list out the hazardous chemicals endangered to human health & environment and the details shall be furnished to the Factories Department and to the Regional Office, APPCB time to time duly certifying the same by the industry. Further the facility shall extend training to the working personnel's while handling hazardous chemicals for prevention of accidents and necessary antidotes to ensure the safety, as per the MSIHC Rules, 1989.	GPL is not handling any Hazardous cargo/Containers/Chemicals.
8.	The facility shall submit the copy of the safety audit report and On-Site / Off Site Emergency Plans as applicable after being certified by the Factories Department/concerned authority, to the APPCB, Regional Office from time to time, if the storage quantity of hazardous chemicals is equal to or, in excess of the threshold quantities specified in schedule 2 & 3 of MSIHC Rules, 1989.	An onsite and offsite emergency action plan has been prepared and submitted to APPCB, RO, VSP. Mock drills are being conducted twice in a year.
9.	The facility shall carryout calibration of safety equipments and leak detection systems at regular intervals and shall certify the same with the Factories Department/concerned authority. That certified copy shall be submitted to the APPCB, Regional Office. The facility shall install fluorescent Wind Vane at the highest point in the facility premises.	 GPL install fluorescent Wind Vane at the following two places within the Port premises. 1. On the top of Over Head Tank near Harbour Gate besides GPL Canteen. 2. On the top of Commercial Office Building (COB)
10	The facility shall inventorize the hazardous wastes and its quantities stored within the facility premises as per the Hazardous and Other Wastes (Management and Transboundary Movement) Rules, 2016 (HOWM Rules, 2016) and shall furnish the details to Regional Office, APPCB on monthly basis duly certifying the same by the industry.	GPL is not handling any Hazardous cargo/ Containers/Chemicals. GPL is permitted to handle Used Lubricating oil of 12000 LPA. The generation, storage & disposal details are submitting to APPCB through Form – IV. Latest submission is on 06.06.2022 for the year 2021- 2022.
11	The facility shall allow import of hazardous cargoes only after the importer complies with the MSIHC Rules, 1989.	GPL Not handling any Hazardous cargo/Containers/Chemicals.

Compliance report of the conditions stipulated in Schedule A,B & C of CFO & HWA Order No. APPCB/VSP/VSP/113/CFO/HO/2015, dated 13.01.2016

Compliance of Schedule - A

SI. No.	Condition	Compliance
1.	Any up-set condition in any plant/plants of the industry, which result in, increased effluent/ emission discharge and/ or violation of standards stipulated in this order shall be informed to this Board, under intimation to the Collector and District Magistrate and take immediate action to bring down the discharge / emission below the limits.	All conditions are being followed.
2.	The industry should carryout analysis of waste water discharges or emissions through chimneys for the parameters mentioned in this order on quarterly basis and submit to the Board.	GPL is carrying out 3 rd party monitoring and analysis. As per analysis reports, the samples are meeting the Board standards.
3.	All the rules & regulations notified by Ministry of Law and Justice, Government of India regarding Public Liability Insurance Act, 1991 should be followed as applicable.	Noted and conditions are being followed as applicable.
4.	The industry should put up two sign boards (6×4 ft. each)at publicly visible places at the main gate indicating the products, effluent discharge standards, air emission standards, hazardous waste quantities and validity of CFO and exhibit the CFO order at a prominent place in the factory premises.	Noted and condition is being followed.
5.	Notwithstanding anything contained in this consent order, the Board here by reserves the right and powers to review / revoke any and / or all the conditions imposed herein above and to make such variations as deemed fit for the purpose of the Acts by the Board.	Noted the condition.
6.	The industry shall file the water cess returns in Form-I as required under section (5) of water (Prevention and Control of Pollution) cess Act, 1977 on or before the 5 th of every calendar month, showing the quantity of water consumed in the previous monthly along with water meter readings. The industry shall remit water cess as per the assessment order as and when issued by Board.	Water consumption details of the previous month are being submitted before 5 th of subsequent month in FORM - I. The latest reports for the Month of June, 2022 were submitted on 5 th July, 2022 After introduction of GST, APPCB has instructed all the industries are not required to remit water cess charges from 1 st July, 2017 onwards.

7.	The applicant shall submit Environment statement in Form V before 30 th September every year as per Rule No.14 of E(P) Rules,1986 & amendments thereof.	Complied and Form V was Submitted on 24.09.2021 for the period 2020- 2021
8.	The applicant should make applications through Online for renewal of Consent (under Water Air Acts) and Authorization under HWM Rules at least 120 days before the date of expiry of this order, along with prescribed fee under Water and Air Acts and detailed compliance of CFO conditions for obtaining Consent & HW Authorization of the board. The industry should immediately submit the revised application for consent to this Board in the event of any change in the raw material used, processes employed, quantity of trade effluents & quantity of emissions. Any change in the management shall be informed to the Board, the person authorized should not let out the premises / lend / sell / transfer their industrial premises without obtaining prior permission of the state Pollution Control Board.	GPL has obtained CFO & HWA of the Board vide order dated 13/01/2016 valid up to 31.12.2020 and extended up to 31.12.2025 vide order dated 10.09.2020.
9.	Any person aggrieved by an order made by the state board under section 25, section 26, section 27 of water Act, 1974 or section 21 of Air Act, 1981 may within thirty days from the date on which the order is communicated to him, prefer an appeal as per Andhra Pradesh Water Rules, 1976 and Air Rules 1982, to Appellate authority constituted under section 28 of the Water (prevention and control of pollution) Act, 1974 and section 31 of the Air (prevention and control of pollution) Act, 1981.	Noted and condition will be followed.

Compliance of Schedule - B

SI.	Condition			Compliance			
No.	Water Pollution						
1							
1.	The water consumption quantities are mentioned below:					GPL is submitting water	
	l illeli	S .)upotitu		GPL is submitting water consumption details and water cess
		o. No	Purpose	۱	luantity KLD		1
		1	Gardening/irrigation	-	25		in Form-l regularly.
		2	Dust suppression	٠	1296.0		The industry is consuming water
		<u> </u>	Domestic		40		within consented quantity only.
		4	Ship supply		32.5		within consented quantity only.
		5	miscellaneous		40.6		Provided 2 No. nos of flow meters
			Total	1	1434.1		for quantification of water used for
	Sour	ce c	of water is Visakhapa	tna	m industr	ial	domestic and other purposes.
	1		ipply Co. the followir				domestic and other purposes.
	1		ed water consumptio	_			
	S.		Purpose		Quantity		
	No)			KLD		
	1	_	ıst suppression		1296.0		
	2		mestic purpose		40.00		
	3		ocess, where by water		73.1		
			ts polluted and polluta				
		_	e easily bio degradable			-	
	4		ocessing , where by ater gets polluted and				
			llutants are not easily	hio			
			gradable				
			Total		1409.1		
	Separate water meters shall be maintained						
	1 .		ssessing the quantit				
	for e	each	of the purpose m	ent	ioned abo	ve	
	for Cess assessment purpose.						
2.	The	Gar	ngavaram Port Limi	ted	(GPL) sh	all	GPL has provided separate energy
	prov	ide	separate energy ma	ers	for Sewa	ge	meters for Sewage Treatment Plant
	Trea	tme	nt Plant (STP) and t	or	Air polluti	on	(STP) and separate energy meter for
	Cont	rol	equipments to	rec	ord ener	gy	the Air pollution Control equipments
	cons	ump	otion.				(MDSS) to record energy
							consumption.
	Air P						
1.	1		ngavaram Port Limi				The mitigation measures being
	1		with ambient air qu		•		implemented by GPL ensures that
	1		(Particulate matter s				the ambient air quality parameters
	μ m) - 100 μ g /m ³ ; PM _{2.5} (Particulate matter				conform to the PCB prescribed		
	size less than 2.5 μm) - $60 \mu g$ / m^3 : SO_2 -				standards.		
	80µg /m³ : NO _X - 80µg /m³ ,outside the port						
	premises at the periphery of the industry.						
	Stan		•			as	
	1		ed in the Nationa				
		•	Standards CPCB No			.B-	
	1		:0/90/PCI-I, dated 18	.11.:	2009		
		-	evels:	_	- (*)		
			e (6 AM to 10 PM) - 7		• •		
	Nigh	it tir	ne (10 PM to 6 AM) \cdot	70	dB (A).		

2.	The Gangavaram port limited (GPL) shall maintain 3 CAAQMs with online connectivity to APPCB and maintain records.	GPL installed 3 No. of CAAQM stations to measure the parameters PM 10, PM 2.5, SO ² , NO, NO ² , CO at the following locations and data connected to APPCB website. i. Administrative office towards H.B. Colony (Station 1): ii. Project site office building towards Venkannapalem (Station2) iii. Watch tower – 4 towards Gangavaram village (Station3).As per the data, the SPM values are within Board standards.
3.	The Gangavaram Port Limited (GPL) shall Maintain wind breaking wall all along the Gangavaram village side up to a height 10 mts as wind speed is high in this area	GPL erected wind breaking wall of height 6m on the compound wall of height 3m near Gangavaram village and HB Colony to prevent any dust nuisance towards habitation & maintaining about 50 m width of green belt along port compound wall near Gangavaram (V).
4.	The Gangavaram Port Limited (GPL) shall not establish any other stock yards other than designated stock yards.	GPL has not established any stock yards other than designated stock yards.
5.	The Gangavaram Port Limited (GPL) shall maintain Telescopic chute at ship loading points	GPL is maintaining Telescopic chute at ship loading points.
6.	The Gangavaram port limited (GPL) shall not stock the Materials more than 10mts height where MDSS system available and shall restrict to 6 mts for other stocking heights where tankers water spraying system is maintained in the stockyards.	GPL obtained amendment to this condition vide Amendment to CFO dated 16/09/2016 and the condition was amended as: "GPL shall not stock the materials more than 12 meters height where MDSS system is available and shall maintain stack height of 10 meters at manual stack yards"
7.	The Gangavaram port limited (GPL) shall take up the cleaning of road connected to National Highway in co-ordination with GVMC and R&B Departments.	This condition was deleted vide direction no. 06 vide Order No. 754/APPCB/UH-II/TF/VSP/ 2016, dated 12.08.2016. GVMC is taking up the cleaning of road.
8.	The Gangavaram Port Limited (GPL) shall maintain dusty cargo operations if the wind velocity crosses 20 KMPH and all MDSS sprinklers shall start immediately to maintain AAQ standards	Noted and condition is being followed.
9.	The Gangavaram Port Limited (GPL) shall maintain fully mechanized handling equipments for loading and un loading operations for dusty cargo to the maximum extent possible.	Noted and condition is being followed.

	Gene	eral				
2.	maintain the following records and the				th	e records are being maintained and e available for inspecting officers of e Board.
	follo	WS:			a.	GPL is disposing the municipal solid waste to GVMC.
	S. No	Name of the solid waste	Quantity	Disposal	b.	GPL is disposing the discarded
	1.	Domestic solid waste	10 T/m	Shall be collected segregated and disposed as per MSW Rules in consultation with GVMC Authorities		material & plastic material to authorized recyclers. STP sludge is being turned in to bio-compost and used as manure to green belt. Lead acid batteries are being
	2.	Discarded material, plastic material	10 T/m	Shall be disposed to authorized recyclers only		disposed to the supplier on buy back basis.
	3.	Sludge from STP	1.0 T/m	Shall be composted and used in green belt programme	-	
	4.	Lead acid batteries		Shall be disposed to authorized recyclers		
3.	main	tain green ipulated in	belt in 50	ited (GPL) shall O meters width order dated 07-	A	GPL has developed plantation of 5.0 Lakhs saplings in about 318.21 acres within the Port premises besides existance of Prosopis in an extent of about 150 Acres covering periphery of all yards, roads, buildings and all along conveyor belt. Maintaining 50 m width of green
						belt towards North and North-West direction with special emphasis towards habitation i.e., HB Colony, Peda Gantyada, Venkannapalem, Kongapalem & Gangavaram village.

		Maintaining thick greenbelt at Port Approach road, Railway track side and at Truck parking area along the wind breaking wall towards HB Colony.
		Developed High Density Plantation (Miyawaki) within the Port premises in an extent of 1.0 Acre with 12,120 no. of plantation, as directed by APPCB
		➤ Participated in Green Visakha – Clean Visakha - Green Visakha – Clean Visakha – One million Tree Plantation Programme – GPL completed the plantation of 40,195 as on 31.07.2022 against the target of 50,000
		GPL established exclusive nursery with 80,000 saplings and employed 183 people to maintain and improve the green belt on continuous basis.
		About Rs.1.85 Cr per annum is being spent for the development of green belt in the true spirit.
4.	The Gangavaram Port Limited (GPL) shall not store/ handle any hazardous cargo containers within premises.	GPL is not handling container cargo operations.
5.	All types of the fertilizers shall be stored in the closed warehouses only. The port shall ensure that there shall not be any open storage of urea or any other fertilizer materials and all urea & fertilizer material handling warehouses shall be maintained with effluent collection pits for collection and treatment and then used for green belt in the premises after meeting the standards.	GPL is storing the Fertilizers in closed ware houses and provided leachate collection pits around the area of warehouses and connected to STP.
6.	The Gangavaram Port Limited (GPL) shall store fuel oils used for construction equipment vessels / vehicles in a well designed manner and protect them against fire hazards by construction of compound wall to prevent access to unauthorized elements. The surface run off from storage area shall pass through oil water separator before being discharging. The Gangavaram Port Limited (GPL) shall store fuel oils used for construction equipment vessels / vehicles in a well designed manner and protect them against fire hazards by construction of compound wall to prevent access to	GPL is storing the used oil in drums under a shed.

GPL is having dispensary within the premises and no malaria cases were reported as of now. All anti malarial measures are taken GPL has provided provision for checking vehicle emissions with a task force team including environment and safety department officials. GPL is having a dedicated Environment Management Team headed by Vice President. Complied with the condition.
premises and no malaria cases were reported as of now. All anti malarial measures are taken GPL has provided provision for checking vehicle emissions with a task force team including environment and safety department officials. GPL is having a dedicated Environment Management Team headed by Vice President.
checking vehicle emissions with a task force team including environment and safety department officials. GPL is having a dedicated Environment Management Team headed by Vice President.
Management Team headed by Vice President.
Complied with the condition.
VMRDA (VUDA) is taking necessary precautions to see that no slum development and unauthorized construction occur in the surrounding area of GPL.
GPL is handling the alumina in hoppers and directly through tankers.
 a. Mechanical Dust Suppression System (MDSS): 176 No. of water cannons were installed at stack yards for dust. b. Provided Dust suppression systems at discharge/feeding points of belt conveyors at each transfer tower. c. Laid BT road within the port premises. d. 5 No. of heavy duty sweeping (3 No. existing & 2 New) machines were deployed for cleaning of berths, back up areas and roads.

	 d. All the vehicles involved in transportation of cargo shall be covered with tarpaulin. 	f. Provided dedicated truck/tyre washing facility to wash all the outgoing vehicles
	e. Traffic management measures adopted to avoid traffic congestion and provide empty dusting vehicle washing / dry cleaning system to	g. Provided dedicated truck parking facility.
	clean all out going cargo vehicles.	h. Ensuring continuous water sprinkling on the berths, back up
	f. Sufficient parking facilities based on traffic density / vehicular movements anticipated from the port.	areas, at all transfer points, hauling roads with 20 Mobile DSS tankers for dust suppression.
	g. Adequate water sprinkling provided on roads and at dusty cargo storage areas for suppression of dust	
i	The Gangavaram Port Limited (GPL) shall mplement the following measures in the cargo handling and stacking area:	 i. Established mechanical conveyor system for handling coal & Iron ore to prevent the spillage of cargo and provided closed hoods for the
а	a. The ship un-loader maintained with in-situ water sprinkling system and unloading hoppers provided with	conveyor system to curb fugitive emissions of coal/iron ore particles into the air.
	covers on three sides to control fugitive emissions. Iron ore shall be unloaded through wagon tipplers.	ii. Stacker cum re-claimers are being used for loading and unloading the coal. The railway wagons are being
	 Mechanical stackers cum re-claimers for stacking, transfer and reclamation; Conveyors for transfer of materials to stop manual handling / mobile machines. MDSS in stacking areas. 	loaded mechanically. The Port is having Stacker cum re-claimer-1no., reclaimers-3nos., stackers-3nos., wagon loader-1no., silo of 800 cu.m capacity, ship unloader-2nos, ship loader-1no., wagon tipplier-1no., mobile harbour cranes-5no.
		iii. Mechanical Dust Suppression System (MDSS): 176 No. of water cannons were installed at stack yards for dust suppression by spraying water at high pressure to form blanket of mist on surface of cargo stock to settle the dust.
e	The Gangavaram Port Limited (GPL) shall ensure AAQ standards of the Board on all environmental conditions without fail.	GPL has provided 3 nos AAQ stations with data logger and connected to APPCB website.
n	The Gangavaram Port Limited (GPL) shall maintain standby centrifugal pump so as to ensure uninterrupted operation of MDSS.	Complied. There are 4 no. Centrifugal pumps kept standby.
n	The Gangavaram Port Limited (GPL) shall maintain compliance of all other conditions of CFE orders issued by the Board	Complied with the condition.

18.	The Gangavaram Port Limited (GPL) shall	Complied with the condition.
	comply with Task Force directions and	
	other directions issued by the Board from	
	time to time.	

Compliance of Schedule - C

SI.	Condition	Compliance
No		·
1.	All the rules and regulations notified by Ministry of Environment & Forests,	GPL is following all the rules and regulations notified by Ministry of
	Government of India under the E (P) Act, 1986 in respect of management, handling, transportation and storage of the Hazardous waste should be followed.	Environment & Forests, Government of India under the E(P) Act, 1986 in respect of management, handling, transportation and storage of the Hazardous waste.
2.	The Gangavaram Port Limited (GPL) shall	Complied with the condition.
	not store hazardous waste for more than	Compiled with the conditions
	90 days as per the Hazardous Wastes	
	(Management. Handling and Tran	
	boundary Movement) Rules, 2008 and amendments thereof.	
3.	The Gangavaram Port Limited (GPL) shall	GPL is buying the Lead acid on buy
	dispose Used Lead Acid Batteries to the	back basis.
	manufacturers / dealers on buyback basis	
4.	The Gangavaram Port Limited (GPL) shall maintain 6 copy manifest system for	GPL is following manifest system for disposal of waste oil to APPCB
	transportation of waste generated and a	authorized agencies and submitting
	copy shall be submitted to concern	the copies to the Board.
	Regional Office of APPCB. The driver who	
	transports Hazardous Waste should be	
	well acquainted about the procedure to be followed in case of an emergency	
	during transit. The transporter should	
	carry a Transport Emergency (TREM) Card.	
5.	The Gangavaram Port Limited (GPL) shall	GPL is maintaining records for
	maintain proper records for Hazardous Wastes stated in Authorization in FORM-3	Hazardous Wastes stated in Authorization in Form-3 of CFO Order
	i.e., quantity of Incinerable waste, land	and filing annual returns in Form- 4 to
	disposal waste, recyclable waste etc., and	APPCB.
	file annual returns in Form- 4 as per Rule	Face the course 2001 2002 Faces - 7 - 0
	22(2) of the Hazardous Wastes (Management, Handling & Tran boundary	For the year 2021-2022 Form – 3 & Form – 4 Submitted on 06.06.2022.
	Movement) Rules, 2008 and amendments	+ 30011111111111111111111111111111111111
	thereof	
6.	The Gangavaram Port Limited (GPL) shall	Complied with the condition.
	submit the condition wise compliance report of the conditions stipulated in	GL is submitting the compliance
	Schedule A, B & C of this Order on half	reports on monthly basis.
	yearly basis to Board Office, Hyderabad	
	and concerned Regional Office	

GANGAVARAM PORT LIMITED

(An ISO 9001:2015 & ISO 14001:2015

Certified Company)



Environment Monitoring Report July, 2022

Corporate Office:

2,3,4th Floors, Hansa plaza, Plot No.798, road No.36, Jubilee Hills, Hyderabad - 500033 Phone: 040 – 33599999

Site Office:

Gangavaram (V & Post) Pedagantyada (Mandal) Visakhapatnam – 530 044 Phone: 0891 -2701177

Reference No.:	GPL/July/2022/029	Submitted to:
Monitoring Date:	01.07.2022	
Organization Name:	Gangavaram Port Limited	A.P. Pollution Control Board,
Type Of Sample:	Ambient Air Quality	Regional office, Visakhapatnam
Sampled By:	Gangavaram Port Limited (CAAQ Monitoring Data)	

						Am	bient A	ir Qualit	y 24 hrs	averag	e data							
Station	Stat	ion - 1 - A (AOB)	dministr toward			ding			- 2 - Pro					0.000 (0.000 0.000	n - 3 - Wa			
Parameter	PM10	PM 2.5	SO2	NO	NOz	со	PM10	PM 2.5	so²	NO	NO ²	со	PM10	PM 2.5	SOZ	NO	NO2	со
Day average value	48.68	29.94	34.04	20.87	7.37	0.72	45.11	28.33	48.03	17.76	8.72	0.71	50.30	30.75	32.50	13.90	10.50	0.69
Standard	100 µg/m³	h8/w ₃	80 µg/m³	80 µg/m³	80 µg/m³	4 µg/m³	100 µg/m³	60 µg/m³	80 µg/m³	80 µg/m³	80 µg/m³	4 µg/m³	100 µg/m³	60 µg/m³	hð\w ₃	ha\w ₂	h8/w ₂	4 μg/m ³

Reference No.:	GPL/July/2022/029	Submitted to:
Monitoring Date:	02.07.2022	
Organization Name:	Gangavaram Port Limited	A.P. Pollution Control Board,
Type Of Sample:	Ambient Air Quality	Regional office, Visakhapatnam
Sampled By:	Gangavaram Port Limited (CAAQ Monitoring Data)	

						Am	bient A	ir Qualit	y 24 hrs	average	data							
Station	Stat		Administr) toward			ding			- 2 - Proj rds Ven			67			n - 3 - Wa irds Ven			
Parameter	PM10	PM 2.5	SO ²	NO	NO ²	со	PM10	PM 2.5	SO ²	NO	NO2	co	PM10	PM 2.5	SO ²	NO	NO2	со
Day average value	51.87	31.92	35.90	21.48	7.66	0.74	48.07	30.19	50.48	18.28	9.06	0.72	53.60	32.78	34.29	14.27	10.91	0.70
Standard	100 µg/m³	60 µg/m³	80 µg/m³	80 µg/m³	80 µg/m³	4 µg/m³	100 µg/m³	60 µg/m³	80 µg/m³	80 µg/m³	h80 80	4 µg/m³	100 µg/m³	60 µg/m³	h8\w ₂	h8/w ₃	h8\w ₂	4 μg/m³

Gras Husts

For Gangavaram Port Limited

Action of the second second	022237777422223777	FIRE SAMPLE POWERS.
Reference No.:	GPL/July/2022/029	Submitted to:
Monitoring Date:	03.07.2022	
Organization Name:	Gangavaram Port Limited	A.P. Pollution Control Board,
Type Of Sample:	Ambient Air Quality	Regional office, Visakhapatnam
Sampled By:	Gangavaram Port Limited (CAAQ Monitoring Data)	

						Am	ibient A	ir Qualit	y 24 hr	s averag	je data							
Station	Stat		Administr) toward			ding			- 2 - Pro ards Ven						n - 3 - Wa irds Ven			
Parameter	PM10	PM 2.5	SO ²	NO	NO ²	co	PM10	PM 2.5	SO ²	NO	NO2	со	PM10	PM 2.5	50 ²	NO	NO ²	со
Day average value	48.27	29.71	37.68	22.11	8.02	0.75	44.73	28.11	52.85	18.83	9.48	0.73	49.88	30.51	35.99	14.66	11.41	0.71
Standard	100 µg/m³	60 µg/m³	90 µg/m³	80 µg/m³	h80 80	4 µg/m³	100 µg/m³	60 µg/m³	80 µg/m³	80 µg/m³	h80 80	4 µg/m³	100 µg/m³	60 µg/m³	hð/w ₃	h8\w ₃	80 µg/m³	4 μg/m³

Prepared by: Laur GVNS Nurshing 9/5/910

For Gangavaram Port Limited

Reference No.:	GPL/July/2022/029	Submitted to:
Monitoring Date:	04.07.2022	
Organization Name:	Gangavaram Port Limited	A.P. Pollution Control Board,
Type Of Sample:	Ambient Air Quality	Regional office, Visakhapatnam
Sampled By:	Gangavaram Port Limited (CAAQ Monitoring Data)	

						An	nbient A	ir Quali	ty 24 hrs	s averag	e data							
Station	Stat		Administr) toward			ding			- 2 - Pro ords Ven			_ =				kannap		A ===
Parameter	PM10	PM 2.5	SO ²	NO	NO2	со	PM10	PM 2.5	SO ²	NO	NO ²	со	PM10	PM 2.5	SO ²	NO	NOs	со
Day average value	47.40	29.13	39.29	22.75	8.38	0.77	43.93	27.56	55.06	19.38	9.90	0.75	48.98	29.92	37.54	15.05	11.92	0.73
Standard	100 µg/m³	60 µg/m³	h8\w ₃	80 µg/m³	80 µg/m³	4 µg/m³	100 µg/m³	60 µg/m³	h8\w ₂	h0\w ₃	80 µg/m³	4 µg/m³	100 µg/m³	60 µg/m³	80 pg/m³	80 µg/m³	80 µg/m³	4 µg/m³

Prepared by: Laway
4 VNS Hundy
4 PS 1910

For Gangavaram Port Limiteo

Reference No.:	GPL/July/2022/029	Submitted to:
Monitoring Date:	05:07.2022	
Organization Name:	Gangavaram Port Limited	A.P. Pollution-Control Board,
Type Of Sample:	Ambient Air Quality	Regional office, Visakhapatnam
Sampled By:	Gangavaram Port Limited (CAAQ Monitoring Data)	

						Am	bient A	ir Qualit	y 24 hrs	averag	e data							
Station	Station		inistrativ wards H		/	(AOB)				ject Site kannap					n - 3 - Wa ards Ven			
Parameter	PM10	PM 2.5	SO2	NO	NO ²	со	PM10	PM 2.5	SO2	NO	NOs	со	PM10	PM 2.5	SO ²	NO	NO ²	co
Day average value	46.37	28,58	40.96	23,40	8.75	0.78	42.97	27.04	57.34	19.95	10.34	0.77	47.91	29.36	36.84	37.07	13.99	0.57
Standard	100 µg/m³	60 µg/m³	80 µg/m³	80 µg/m³	80 µg/m³	4 µg/m³	100 µg/m³	60 µg/m³	80 µg/m³	80 µg/m³	h8\m ₃	4 µg/m³	100 µg/m³	60 µg/m³	h8/w ₃	h8\w ₃	hð\w ₂ 80	4 µg/m³

Prepared by: Church
GVNS Hursh
UP. 1910

For Gangavaram Port Limited

Reference No.:	GPL/July/2022/029	Submitted to:
Monitoring Date:	06.07.2022	
Organization Name:	Gangavaram Port Limited	A.P. Pollution Control Board.
Type Of Sample:	Ambient Air Quality	Regional office, Visakhapatnam
Sampled By:	Gangavaram Port Limited (CAAQ Monitoring Data)	

						Ar	nbient A	ir Qualil	ty 24 hrs	averag	e data							
Station	Stat	ion - 1 - / (AOB)	Administr) toward			ding			- 2 - Proj irds Ven						n - 3 - Wa ards Ven			3.0
Parameter	PM10	PM 2.5	SO ²	NO	NO2	со	PM10	PM 2.5	SO ²	NO	NO ²	со	PM10	PM 2.5	SO ²	NO	NO ²	со
Day average value	47.05	28.99	38.24	52.77	8.32	0.98	43.60	27.42	54.45	44.22	9.87	0.97	48.62	29.77	36.05	34.65	11.65	0.89
Standard	100 µg/m³	60 µg/m³	80 pg/m³	80 µg/m³	80 µg/m³	4 µg/m³	100 µg/m³	60 µg/m³	80 µg/m³	80 µg/m³	h8/w ₂	4 µg/m³	100 µg/m³	60 µg/m³	80 µg/m³	h8/w ₃	80 µg/m³	4 µg/m³

Prepared by: CHUT GYNS HUNGS 485 1910

For Gangavaram, Port Limiten

Reference No.:	GPL/July/2022/029	Submitted to:
Monitoring Date:	07.07.2022	
Organization Name:	Gangavaram Port Limited	A.P. Pollution Control Board.
Type Of Sample:	Ambient Air Quality	Regional office, Visakhapatnam
Sampled By:	Gangavaram Port Limited (CAAQ Monitoring Data)	

						Ar	nbient A	ir Qualit	y 24 hrs	average	e data							
Station	Stat		Administr) toward			ding				ect Site kannapa						tch Tow kannapa		621
Parameter	PM10	PM 2.5	SO ²	NO	NO ²	со	PM10	PM 2.5	SO ²	NO	NO2	со	PM10	PM 2.5	SO ²	NO	NO ²	со
Day average value	47.81	29.47	36.86	62.26	7.85	0.70	44.30	27.87	53.00	50.98	9.31	0.69	49.40	30.26	35.33	40.53	11.07	0.68
Standard	100 µg/m³	60 µg/m³	h8/w ₃	h8\w ₃	90 hg/w ₃	4 µg/m³	100 µg/m³	60 µg/m³	80 µg/m³	80 µg/m³	80 80	4 μg/m³	100 µg/m³	60 µg/m³	hg/w ₃	80 µg/m³	hð\w ₂	4 µg/m ³

(Dr. D. Jyothi) Vice President (Environment)

Prepared by: Lough UVNS Hundy UVNS 1910

Reference No.:	GPL/July/2022/029	Submitted to:
Monitoring Date:	08.07.2022	
Organization Name:	Gangavaram Port Limited	A.P. Pollution Control Board,
Type Of Sample:	Ambient Air Quality	Regional office, Visakhapatnam
Sampled By:	Gangavaram Port Limited (CAAQ Monitoring Data)	

Station	Stat			ative Off		ding		Station	- 2 - Pro	ject Site	Office					atch Tow		
		(AOB) toward	s HB Co	lony	y 20 ;		towa	ards Ver	kannap	alem			towa	erds Ven	kannapa	elem	
Parameter	PM10	PM 2.5	SO2	NO	NO2	co	PM10	PM 2.5	SO2	NO	NO2	со	PM10	P/M 2.5	soz	NO	NO ²	со
Day average value	46.33	28.56	39.84	60.83	9.27	0.64	42.93	27.01	56.10	49.85	10.93	0.63	47.87	29.33	38.27	39.54	13.12	0.62
Standard	100 µg/m³	60 µg/m³	80 µg/m³	80 µg/m³	80 µg/m³	4 µg/m³	100 µg/m³	60 µg/m³	80 µg/m³	80 µg/m³	h80 80	4 μg/m ³	100 µg/m³	60 µg/m³	80 µg/m³	80 µg/m³	80 µg/m³	4 µg/m

(Dr. D. Jyothi) Vice President (Environment)

Prepared by:

W/ 1910

Ref erence No.:	GPL/July/2022/029	Submitted to:
Monitoring Date:	09.07.2022	
Organization Name:	Gangavaram Port Limited	A.P. Pollution Control Board,
Type Of Sample:	Ambient Air Quality	Regional office, Visakhapatnam
Sampled By:	Gangavaram Port Limited (CAAQ Monitoring Data)	

						Am	nbient A	ir Qualit	y 24 hrs	s averag	e data							
Station	Stat		Administr) toward			ding			- 2 - Pro irds Ven							atch Tow kannap		
Parameter	PM10	PM 2.5	SO ²	NO	NO ²	co	PM10	PM 2.5	SO ²	NO	NO ²	со	PM10	PM 2.5	SO ²	NO	NO ²	со
Day average value	46.57	28.70	39.00	50.55	10.23	0.52	43.16	27.15	55.30	41.64	12.06	0.50	48.13	29.48	37.43	32.69	14.49	0.49
Standard	100 µg/m³	60 µg/m³	80 µg/m³	hð/w ₂	BO µg/m³	4 µg/m³	100 µg/m³	60 µg/m³	hð/w ₃	80 80	h8/w ₃	4 µg/m³	100 µg/m³	60 µg/m³	80 µg/m³	80 µg/m³	hð\w ₂ 80	4 µg/m³

(Dr. D. Jyothi)
Vice President (Environment)

Prepared by: Ling Lung

Reference No.:	GPL/July/2022/029	Submitted to:
Monitoring Date:	10.07.2022	
Organization Name:	Gangavaram Port Limited	A.P. Pollution Control Board.
Type Of Sample:	Ambient Air Quality	Regional office, Visakhapatnam
Sampled By:	Gangavaram Port Limited (CAAQ Monitoring Data)	

						An	nbient A	ir Quali	y 24 hr	s averag	e data							
Station	Stat	ion - 1 - A (AOB)	dministr			ding			- 2 - Pro irds Ven						n - 3 - Wa rds Ven			
Parameter	PM10	PM 2.5	SO ²	NO	NO ²	со	PM10	PM 2.5	SO ²	NO	NO²	со	PM10	PM 2.5	SO ²	МО	NO ²	со
Day average value	46.83	28.86	36.77	18.23	9.05	0.61	43.39	27.30	52.81	15.84	10.70	0.60	48.39	29.64	35.27	11.08	12.83	0.59
Standard	100 µg/m³	60 µg/m³	h8\w ₃	h8\w ₂	80 µg/m³	4 μg/m³	100 µg/m³	60 µg/m³	80 µg/m³	80 µg/m³	h8\w ₂	4 µg/m³	100 µg/m³	60 µg/m³	80 µg/m³	h8/w ₃	80 µg/m³	4 µg/m³

(Or.D. Jyothi)
Vice President (Environment)

Prepared by: Lung UVNSAUNG US 1910

Reference No.:	GPL/July/2022/029	Submitted to:
Monitoring Date:	11.07.2022	
Organization Name:	Gangavaram Port Limited	A.P. Pollution Control Board,
Type Of Sample:	Ambient Air Quality	Regional office, Visakhapatnam
Sampled By:	Gangavaram Port Limited (CAAQ Monitoring Data)	

						Am	bient A	ir Qualit	y 24 hr	s averag	e data							
Station	Stat	ion - 1 - A (AOB)	dministr			ding				ject Site kannap				100000000000000000000000000000000000000	n - 3 - Wa irds Ven		375 1 155 US 151	
Parameter	PM10	PM 2.5	SO ²	NO	NO ²	со	PM10	PM 2.5	SO ²	NO	NO ²	со	PM10	PM 2.5	50²	NO	NO2	со
Day average value	46.52	28.68	35.62	21.01	8.37	0.73	43.11	27.13	51.54	18.05	9.92	0.72	48.07	29.45	34.19	12.97	11.87	0.71
Standard	100 µg/m³	60 µg/m³	80 µg/m³	h8\w ₃	h8/w ₃	4 µg/m³	100 µg/m³	60 µg/m³	80 µg/m³	80 µg/m³	80 µg/m³	4 µg/m³	100 µg/m³	60 µg/m³	80 µg/m³	h8\w ₃	80 µg/m³	4 µg/m ³

Prepared by: 449 CVN SHUM 4181910

For Gangavaram Port Limited

Reference No.:	GPL/July/2022/029	Submitted to:
Monitoring Date:	12.07.2022	
Organization Name:	Gangavaram Port Limited	A.P. Pollution Control Board.
Type Of Sample:	Ambient Air Quality	Regional office, Visakhapatnam
Sampled By:	Gangavaram Port Limited (CAAQ Monitoring Data)	

						Ar	mbient A	Air Quali	ity 24 hr	s averag	ge data							
Station	Stat		Administ) toward			ding			n - 2 - Pro ards Ven							atch Tow		
Parameter	PM10	PM 2.5	SO ²	NO	NOs	co	PM10	PM 2.5	SO ²	NO	NO2	co	PM10	PM 2.5	SO ²	NO	NO ²	co
Day average value	46.63	28.74	51.02	14,11	8.20	3.30	43.21	27.18	68.33	12,49	9.70	3.29	48.18	29.51	48.70	8.42	11.61	3.25
Standard	100 µg/m³	60 µg/m³	80 µg/m³	80 µg/m³	h8\w ₂	4 μg/m³	100 µg/m³	60 µg/m³	80 µg/m³	80 µg/m³	hð\w ₂ 80	4 µg/m³	100 µg/m³	60 µg/m³	80 µg/m³	80 pg/m³	80 µg/m³	4 µg/m ²

Prepared by: Ling GVN CHUNG UPS 1910 For Gangavaram Port Limited

Reference No.:	GPL/July/2022/029	Submitted to:
Monitoring Date:	13.07.2022	
Organization Name:	Gangavaram Port Limited	A.P. Pollution Control Board,
Type Of Sample:	Ambient Air Quality	Regional office, Visakhapatnam
Sampled By:	Gangavaram Port Limited (CAAQ Monitoring Data)	

						A	mbient A	ir Quali	ty 24 hr	s averag	e data								
Station	Stat	ion - 1 - A (AOB)		ative Of		ding			- 2 - Proj rds Ven							atch Tow kannapa	ower – 4 apalem		
Parameter	PM10	PM 2.5	SO ²	NO	NO ²	со	PM10	PM 2.5	SO ²	NO	NO²	со	PM10	PM 2.5	SO2	NO	NO²	со	
Day average value	46.84	28.86	34.71	14.50	7.23	1.06	43.40	27.30	50.56	12.80	8.59	1.04	48.40	29.64	33.39	8.67	10.26	1.04	
Standard	100 µg/m³	60 µg/m³	h8\w ₃	80 µg/m³	80 µg/m³	4 µg/m³	100 µg/m³	60 µg/m³	80 µg/m³	80 µg/m³	90 pg/m³	4 µg/m³	100 µg/m³	60 µg/m³	80 pg/m³	80 µg/m³	h8\w ₃	4 µg/m³	

Prepared by: Liting LIVNS HUNG (1881910)

For Gangavaram Port Limited

Reference No.:	GPL/July/2022/029	Submitted to:
Monitoring Date:	14.07.2022	
Organization Name:	Gangavaram Port Limited	A.P. Pollution Control Board,
Type Of Sample:	Ambient Air Quality	Regional office, Visakhapatnam
Sampled By:	Gangavaram Port Limited (CAAQ Monitoring Data)	

						AI	notenc A	ur Quan	ty 24 hr	s averag	e oaca									
Station	Stat	ion - 1 - A (AOB)	Administr) toward			ding			· 2 · Pro ards Ven				Station - 3 - Watch Tower - 4 towards Venkannapalem							
Parameter	PM10	PM 2.5	SOZ	NO	NOZ	co	PM10	PM 2.5	50 ²	NO	NO ²	co	PM10	PM 2.5	SO2	NO	NO ²	со		
Day average value	47.13	29.04	36.08	15.47	8.56	0.87	43.67	27.47	52.04	13.58	10.13	0.85	48.70	29.82	34.55	9.31	12.10	0.84		
Standard	100 µg/m³	h8/w ₃	80 µg/m³	80 µg/m³	h8\w ₃	4 µg/m³	100 µg/m³	60 µg/m³	80 µg/m³	80 µg/m³	80 µg/m³	4 μg/m³	100 µg/m³	60 µg/m³	h8/w ₂	h8/w ₂	80 µg/m³	4 μg/m³		

(Dr. D. Jyothi) Vice President (Environment)

Prepared by:

Reference No.:	GPL/July/2022/029	Submitted to:
Monitoring Date:	15.07.2022	
Organization Name:	Gangavaram Port Limited	
Type Of Sample:	Ambient Air Quality	A.P. Pollution Control Board, Regional office, Visakhapatnam
Sampled By:	Gangavaram Port Limited	
Joinpied by.	(CAAQ Monitoring Data)	

						Ar	nbient A	ir Quali	ty 24 hrs	averag	e data							
Station	Stat		Administr) toward			ding			- 2 - Pro erds Ven						n - 3 - Wa ards Ven			
Parameter	PM10	PM 2.5	50²	NO	NO2	со	PM10	PM 2.5	SO ²	NO	NO2	со	PM10	PM 2.5	soz	NO	NO ²	co
Day average value	48.33	29.77	39.90	16.67	9.01	0.75	44.78	28.16	56.06	14.54	10.65	0.74	49.94	30.57	38.29	10.11	12.76	0.73
Standard	100 µg/m³	60 µg/m³	80 µg/m³	h8/w ₂	h8/w ₂	4 µg/m³	100 µg/m³	60 µg/m³	h8/w ₃	h8/w ₃	h8\m ₃	4 µg/m³	100 µg/m³	60 µg/m³	80 µg/m³	80 µg/m³	80 µg/m³	4 µg/m³

Prepared by: Laws arnsman

For Gangavaram Port Limited

Reference No.:	GPL/July/2022/029	Submitted to:
Monitoring Date:	16.07.2022	
Organization Name:	Gangavaram Port Limited	A.P. Pollution Control Board,
Type Of Sample:	Ambient Air Quality	Regional office, Visakhapatnam
Sampled By:	Gangavaram Port Limited (CAAQ Monitoring Data)	

Station	Stat		Administr) toward			ding				ject Site kannap			Station - 3 - Watch Tower - 4 towards Venkannapalem						
Parameter	PM10	PM 2.5	SO ²	NO	NO ²	со	PM10	PM 2.5	SO ²	NO	NO ²	co	PM10	PM 2.5	SO ²	NO	NO ²	co	
Day average value	47.40	29.21	37.69	16.84	8.06	0.98	43.93	27.63	53.81	14.67	9.53	0.97	48.98	30.00	35.72	10.23	11.44	0.93	
Standard	100 µg/m³	60 µg/m³	hð\w ₃	80 µg/m³	80 µg/m³	4 µg/m³	100 µg/m³	60 µg/m³	80 µg/m³	80 µg/m³	80 µg/m³	4 µg/m³	100 µg/m³	60 µg/m³	80 80	80 µg/m³	80 µg/m³	4 µg/m³	

Prepared by: Cong Gras Sarung

For Gangavaram Port Limited

Reference No.:	GPL/July/2022/029	Submitted to:
Monitoring Date:	17.07.2022	
Organization Name:	Gangavaram Port Limited	A.P. Pollution Control Board,
Type Of Sample:	Ambient Air Quality	Regional office, Visakhapatnam
Sampled By:	Gangavaram Port Limited (CAAQ Monitoring Data)	

						Ar	nbient A	ir Quali	ty 24 hr	s averag	ge data							
Station	Stat	ion - 1 - A (AOB)	ding			- 2 - Pro ards Ven				Station - 3 - Watch Tower – 4 towards Venkannapalem								
Parameter	PM10	PM 2.5	SO ²	NO	NO ²	co	PM10	PM 2.5	SO ²	NO	NOs	co	PM10	PM 2.5	SO ²	NO	NO2	со
Day average value	46.81	28.82	33.03	19.86	6.02	0.82	43.36	27.26	48.79	17.00	7.16	0.81	48.38	29.61	31.70	12.24	8.53	0.80
Standard	100 µg/m³	60 µg/m³	80 µg/m³	80 µg/m³	h8/w ₃	4 µg/m³	100 µg/m³	60 µg/m³	80 µg/m³	80 µg/m³	80 µg/m³	4 µg/m³	100 µg/m³	60 µg/m³	80 µg/m³	80 µg/m³	80 µg/m³	4 µg/m

(Dr. D. Jyothi)
Vice President (Environment)

Prepared by: Lines reunt

Reference No.:	GPL/July/2022/029	Submitted to:
Monitoring Date:	18.07.2022	#16
Organization Name:	Gangavaram Port Limited	A.P. Pollution Control Board,
Type Of Sample:	Ambient Air Quality	Regional office, Visakhapatnam
Sampled By:	Gangavaram Port Limited (CAAQ Monitoring Data)	

							mbient /	400.	,		ge outo									
Station	(AOB) towards HB Colony									ject Site kannap		101	Station - 3 - Watch Tower - 4 towards Venkannapalem							
Parameter	PM10	PM 2.5	SO ²	NO	NO ²	со	PM10	PM 2.5	SO ²	NO	NO2	со	PM10	PM 2.5	SO2	NO	NO ²	со		
Day average value	47.46	29.22	37.14	17.47	7.48	1.00	43.98	27.64	53.13	15.17	8.86	0.99	49.04	30.00	35.63	10.64	10.62	0.98		
Standard	100 µg/m³	h8/w ₂	80 µg/m³	h8/w ₃	80 µg/m³	4 μg/m³	100 µg/m³	60 µg/m³	80 µg/m³	80 µg/m³	hð/w ₃	4 µg/m³	100 µg/m³	60 µg/m³	80 µg/m³	80 µg/m³	h8/w ₃	4 µg/m		

(Dr. D. Jyothi) Vice President (Environment)

Prepared by: Ching Kung

Reference No.:	GPL/July/2022/029	Submitted to:				
Monitoring Date:	19.07.2022	a "				
Organization Name:	ganization Name: Gangavaram Port Limited pe Of Sample: Ambient Air Quality	A.P. Pollution Control Board,				
Type Of Sample:	Ambient Air Quality	Regional office, Visakhapatnam				
Sampled By:	Gangavaram Port Limited (CAAQ Monitoring Data)					

Station	Stat	Station - 1 - Administrative Office Building (AOB) towards HB Colony						Station - 2 - Project Site Office towards Venkannapalem						Station - 3 - Watch Tower - 4 towards Venkannapalem						
Parameter	PM10	PM 2.5	SO ²	NO	NO ²	co	PM10	PM 2.5	SO ²	NO	NO ²	co	PM10	PM 2.5	SO ²	NO	NO ²	со		
Day average value	47.23	29.10	33.56	18.49	8.09	0.56	43.76	27.52	49.42	15.99	9.59	0.54	48.80	29.88	32.14	11.33	11.47	0.53		
Standard	100 µg/m³	60 µg/m³	80 µg/m³	h8\w ₃	80 µg/m³	4 µg/m³	100 µg/m³	60 µg/m³	80 µg/m³	80 µg/m³	80 µg/m³	4 µg/m³	100 µg/m³	60 µg/m³	hg/w ₃	80 µg/m³	80 µg/m³	4 µg/m³		

Prepared by: Ling
CIVALS LUMB
CIPS 1910

For Gangavaram Port Limited

Reference No.:	GPL/July/2022/029	Submitted to:			
Monitoring Date:	20.07.2022				
Organization Name:	rganization Name: Gangavaram Port Limited rpe Of Sample: Ambient Air Quality	A.P. Pollution Control Board			
Type Of Sample:	Ambient Air Quality	Regional office, Visakhapatnam			
Sampled By:	Gangavaram Port Limited (CAAQ Monitoring Data)				

Station Parameter	Station - 1 - Administrative Office Building (AOB) towards HB Colony						Station - 2 - Project Site Office towards Venkannapalem						Station - 3 - Watch Tower - 4 towards Venkannapalem					
	PM10	PM 2.5	SO2	NO	NO ²	со	PM10	PM 2.5	SO2	NO	NO2	со	PM10	PM 2.5	SO2	NO	NOs	со
Day average value	48.11	29.64	40.52	18.57	9.90	0.92	44.58	28.04	56.83	16.06	11.71	0.90	49.72	30.44	38.84	11.38	14.04	0.89
Standard	100 µg/m³	60 µg/m³	80 µg/m³	80 µg/m³	80 µg/m³	4 μg/m³	100 µg/m³	60 µg/m³	80 µg/m³	80 µg/m³	80 µg/m³	4 μg/m³	100 µg/m³	60 µg/m³	80 µg/m³	h8\w ₃	80 µg/m³	4 µg/m

Prepared by: Lung with ups/910

For Gangavaram Port Limited

Reference No.:	GPL/July/2022/029	Submitted to:			
Monitoring Date:	21.07.2022	> =			
rganization Name: Gangavaram Port Limited	A.P. Pollution Control Board,				
		Regional office, Visakhapatnam			
Sampled By:	Gangavaram Port Limited (CAAQ Monitoring Data)				

						Ar	nbient A	ir Qualit	y 24 hrs	average	e data								
Station	Station	Station - 1 - Administrative Office Building (AOB) towards HB Colony						Station - 2 - Project Site Office towards Venkannapalem						Station - 3 - Watch Tower - 4 towards Venkannapalem					
Parameter	PM10	PM 2.5	SO ²	NO	NO2	co	PM10	PM 2.5	50 ²	NO	NO2	со	PM10	PM 2.5	SO ²	NO	NO ²	со	
Day average value	48.65	29.96	41.91	18.83	11.27	0.61	45.08	28.35	58.48	16.26	13,30	0.59	50.27	30,77	40.21	11.55	15.98	0.58	
Standard	100 µg/m³	60 µg/m³	h8/w ₃	80 µg/m³	hg/w ₂	4 µg/m³	100 µg/m³	60 µg/m³	80 µg/m³	80 µg/m³	80 µg/m³	4 µg/m³	100 µg/m³	60 µg/m³	80 µg/m³	80 µg/m³	80 µg/m³	4 µg/m³	

Prepared by: Land UNNS rush 4PS 1910

For Gangavaram Port Limiteo

Reference No.:	GPL/July/2022/029	Submitted to:
Monitoring Date:	22.07.2022	
Organization Name:	ganization Name: Gangavaram Port Limited pe Of Sample: Ambient Air Quality	A.P. Pollution Control Board,
Type Of Sample:	Ambient Air Quality	Regional office, Visakhapatnam
Sampled By:	Gangavaram Port Limited (CAAQ Monitoring Data)	\$1

						An	nbient A	ir Qualit	y 24 hr	s averaç	ge data							
Station	Stat		dministr toward			ding	Station - 2 - Project Site Office towards Venkannapalem						Station - 3 - Watch Tower - 4 towards Venkannapalem					
Parameter	PM10	PM 2.5	SO2	NO	NO²	со	PM10	PM 2.5	SO2	NO	NO ²	co	PM10	PM 2.5	SO ²	NO	NO ²	со
Day average value	47.84	29.47	32.98	16.51	7.06	0.50	44.33	27.87	48.73	14.41	8,36	0.48	49.43	30.27	31.62	10.01	10.01	0.47
Standard	100 µg/m³	60 µg/m³	80 µg/m³	80 pg/m ³	80 µg/m³	4 µg/m³	100 µg/m³	60 µg/m³	h8\w ₂	80 µg/m³	80 µg/m³	4 µg/m³	100 µg/m³	60 µg/m³	80 µg/m³	80 µg/m³	80 µg/m³	4 µg/m ³

Prepared by: Low GVNS Hush

For Gangavaram Port Limited

Reference No.:	GPL/July/2022/029	Submitted to:
Monitoring Date:	23.07.2022	
Organization Name:	ganization Name: Gangavaram Port Limited pe Of Sample: Ambient Air Quality	A.P. Pollution Control Board,
Type Of Sample:	Ambient Air Quality	Regional office, Visakhapatnam
Sampled By:	Gangavaram Port Limited (CAAQ Monitoring Data)	64

						An	nbient A	ir Quali	ty 24 hr	s averag	ge data							
Station Parameter	Station - 1 - Administrative Office Building (AOB) towards HB Colony						Station - 2 - Project Site Office towards Venkannapalem						Station - 3 - Watch Tower - 4 towards Venkannapalem					
	PM10	PM 2.5	SO ²	NO	NO2	со	PM10	PM 2.5	SO2	NO	NO ²	со	PM10	PM 2.5	SO ²	NO	NO2	co
Day average value	47.69	29.38	35.71	17.05	6.90	0.87	44,19	27.79	51.60	14.84	8.17	0.86	49.28	30.17	34.17	10.37	9.78	0.85
Standard	100 µg/m³	60 µg/m³	h80 80	80 µg/m³	80 - µg/m³	4 µg/m³	100 µg/m³	60 µg/m³	h8/w ₃	80 µg/m³	80 µg/m³	4 μg/m³	100 µg/m³	60 µg/m³	80 µg/m³	80 µg/m³	80 80	4 µg/m³

Prepared by: Lough CIVNS Harky UPS 1910 For Gangavaram Port Limiteo

Reference No.:	GPL/July/2022/029	Submitted to:
Monitoring Date:	24.07.2022	
Organization Name:	Gangavaram Port Limited	A.P. Pollution Control Board,
Type Of Sample:	Ambient Air Quality	Regional office, Visakhapatnam
Sampled By:	Gangavaram Port Limited (CAAQ Monitoring Data)	

							mbient A	iii Quaiii	y 24 III	a averag	ie nara									
Station	(AOB) towards HB Colony									ect Site kannap			Station - 3 - Watch Tower - 4 towards Venkannapalem							
Parameter	PM10	PM 2.5	SO ²	NO	NO ²	co	PM10	PM 2.5	SO ²	NO	NOs	со	PM10	PM 2.5	SO ²	NO	NO ²	co		
Day average value	48.43	29.85	42.63	15.50	9.98	0.93	44.88	28.24	59.12	13.60	11.77	0.91	50.04	30.65	40.90	9.33	14.14	0.90		
Standard	100 µg/m³	60 µg/m³	80 pg/m³	80 µg/m³	h8\m ₂	4 μg/m³	100 µg/m³	60 µg/m³	80 µg/m³	80 µg/m³	80 µg/m³	4 μg/m³	100 µg/m³	60 µg/m³	80 µg/m³	80 µg/m³	80 µg/m³	4 μg/m ³		

Cryns until

For Gangavaram PortyLimited

Reference No.:	GPL/July/2022/029	Submitted to:
Monitoring Date:	25.07.2022	
Organization Name:	Gangavaram Port Limited	A.P. Pollution Control Board,
Type Of Sample:	Ambient Air Quality	Regional office, Visakhapatnam
Sampled By:	Gangavaram Port Limited (CAAQ Monitoring Data)	

						An	nbient A	ir Quali	ty 24 hr	s avera	ge data								
Station	Station	- 1 - Adm to	inistrativ wards H			(AOB)			- 2 - Pro				Station - 3 - Watch Tower – 4 towards Venkannapalem						
Parameter	PM10	PM 2.5	SO ²	NO	NOs	со	PM10	PM 2.5	SO2	NO	NO2	со	PM10	PM 2.5	SO ²	NO	NO2	со	
Day average value	48.64	29.93	45.24	17.42	9.65	0.35	45.07	28.31	61.97	15.14	11.38	0.34	50.26	30.73	43,36	10.61	13.68	0.33	
Standard	100 µg/m³	60 µg/m³	h0/w ₃	h8\w ₂	h8\w ₃	4 μg/m³	100 µg/m³	60 µg/m³	hð/w ₃	h8/w ₃	80 µg/m³	4 μg/m³	100 µg/m³	60 µg/m³	80 µg/m³	80 µg/m³	h8\m ₂	4 µg/m³	

Prepared by: LANT GVNSAUG GIS 1910

For Gangavaram Port Limited

Reference No.:	GPL/July/2022/029	Submitted to:
Monitoring Date:	26.07.2022	
Organization Name:	Gangavaram Port Limited	A.P. Pollution Control Board,
Type Of Sample:	Ambient Air Quality	Regional office, Visakhapatnam
Sampled By:	Gangavaram Port Limited (CAAQ Monitoring Data)	

						A	mbient A	ir Quali	ty 24 hr	s averag	ge data							
Station	Stat		Administr) toward			ding			- 2 - Pro irds Ven						n - 3 - Wa ards Ven			
Parameter	PM10	PM 2.5	SO ²	NO	NO ²	co	PM10	PM 2.5	SO ²	NO	NO ²	co	PM10	PM 2.5	SO ²	NO	NO ²	со
Day average value	48.16	29.65	46.18	16.10	8.99	0.67	44.65	28.07	63.02	14.08	10.62	0.66	49.79	30.47	44.20	9.73	12.74	0.65
Standard	100 µg/m³	h8/w ₂	80 µg/m³	80 80	h8/w ₂	4 μg/m³	100 µg/m³	60 µg/m³	80 pg/m³	80 µg/m³	80 µg/m³	4 µg/m³	100 µg/m³	60 µg/m³	80 µg/m³	80 µg/m³	80 µg/m³	4 µg/m ³

Prepared by: Lind 4 V N.S Auch 4 PS 1910

For Gangavaram Port Limited

Reference No.:	GPL/July/2022/029	Submitted to:
Monitoring Date:	27.07.2022	
Organization Name:	Gangavaram Port Limited	A.P. Pollution Control Board,
Type Of Sample:	Ambient Air Quality	Regional office, Visakhapatnam
Sampled By:	Gangavaram Port Limited (CAAQ Monitoring Data)	

						An	nbient A	ir Qualit	y 24 hrs	averag	e data							
Station	(AOB) towards HB Colony								- 2 - Proj rds Ven						n - 3 - Wa irds Ven			
Parameter	PM10	PM 2.5	SOZ	NO	NO ²	со	PM10	PM 2.5	SO ²	NO	NO2	co	PM10	PM 2.5	SO ²	NO	NO ²	со
Day average value	48.41	29.78	52.69	17.42	8.80	0.32	44.86	28.17	70.06	15.14	10.41	0.30	50.02	30.58	50.50	10.61	12.49	0.29
Standard	100 µg/m³	60 µg/m³	hB/w ₂	80 µg/m³	80 µg/m³	4 µg/m³	100 µg/m³	60 µg/m³	80 µg/m³	80 µg/m³	80 pg/m³	4 µg/m³	100 µg/m³	60 µg/m³	80 µg/m³	h8\w ₂	80 µg/m³	4 µg/m

Prepared by: Ling

For Gangavaram Port Limiteo

Reference No.:	GPL/July/2022/029	Submitted to:
Monitoring Date:	28.07.2022	
Organization Name:	Gangavaram Port Limited	A.P. Pollution Control Board,
Type Of Sample:	Ambient Air Quality	Regional office, Visakhapatnam
Sampled By:	Gangavaram Port Limited (CAAQ Monitoring Data)	

						Ar	mbient A	ir Quali	ty 24 hr	s averaç	ge data							
Station	Stat	ion - 1 - A (AOB)	dministr			lding			n - 2 - Pro ards Ver							atch Tow		
Parameter	PM10	PM 2.5	SO ²	NO	NOZ	со	PM10	PM 2.5	SO ²	NO	NO²	co	PM10	PM 2.5	SO ²	NO	NOs	со
Day average value	48.72	29.96	55.97	18.14	8.81	0.35	45.15	28.34	73.45	15.71	10.42	0.34	50.35	30.77	53.61	11.10	12.48	0.33
Standard	100 µg/m³	60 µg/m³	80 µg/m³	h8/w ₂	80 µg/m³	4 µg/m³	100 µg/m³	60 µg/m³	80 µg/m³	ha/w ₂	h8\w ₂	4 µg/m³	100 µg/m³	60 µg/m³	80 µg/m³	80 µg/m³	80 µg/m³	4 µg/m ³

For Gangavaram Port Limited

(Dr. D. Jyothi)
Vice President (Environment)

Prepared by: Lawy GVALS tung UPS 1910

Reference No.:	GPL/July/2022/029	Submitted to:
Monitoring Date:	29.07.2022	
Organization Name:	Gangavaram Port Limited	A.P. Pollution Control Board,
Type Of Sample:	Ambient Air Quality	Regional office, Visakhapatnam
Sampled By:	Gangavaram Port Limited (CAAQ Monitoring Data)	

-	_		and the second second			(1)													
Station	Stat	ion - 1 - A (AOB)		ative Of s HB Co		ding			- 2 - Pro ards Ven				Station - 3 - Watch Tower - 4 towards Venkannapalem						
Parameter	PM10	PM 2.5	SO ²	NO	NO ²	co	PM10	PM 2.5	SO ²	NO	NO ²	co	PM10	PM 2.5	50²	NO	NO ²	со	
Day average value	48.49	29.84	51.42	18.23	10.22	0.36	44.94	28.22	68.69	15.78	12.03	0.34	50.11	30.64	49.24	11.15	14.48	0.33	
Standard	100 µg/m³	60 µg/m³	80 µg/m³	80 µg/m³	80 µg/m³	4 µg/m³	100 µg/m³	60 µg/m³	80 µg/m³	h8\w ₂	80 µg/m³	4 μg/m ³	100 µg/m³	60 µg/m³	80 µg/m³	80 µg/m³	80 µg/m³	4 μg/m³	

Prepared by: Lang CIVNS Acust GPS 1910

For Gangavaram Port Limited

Reference No.:	GPL/July/2022/029	Submitted to:
Monitoring Date:	30.07.2022	
Organization Name:	Gangavaram Port Limited	A.P. Pollution Control Board,
Type Of Sample:	Ambient Air Quality	Regional office, Visakhapatnam
Sampled By:	Gangavaram Port Limited (CAAQ Monitoring Data)	

						Ar	nbient A	ir Qualit	y 24 hrs	averag	e data							
Station	Stat	ion - 1 - A (AOB)		ative Of		ding			- 2 - Proj rds Ven			y!			n - 3 - Wa irds Ven			
Parameter	PM10	PM 2.5	SO2	NO	NOs	co	PM10	PM 2.5	SO ²	NO	NO ²	co	PM10	PM 2.5	SOZ	NO	NO ²	со
Day average value	46.89	28.91	45.21	17.93	10.07	0.53	43.45	27.35	62.03	15.55	11.86	0.51	48.46	29.69	43.47	10.96	14.28	0.50
Standard	100 µg/m³	60 µg/m³	h8\m ₃	h8\m ₃	h8\m ₃	4 µg/m³	100 µg/m³	60 µg/m³	80 µg/m³	80 µg/m³	h8\w ₃	4 μg/m³	100 µg/m³	60 µg/m³	80 µg/m³	80 µg/m³	80 µg/m³	4 µg/m ³

Prepared by: LUS UVNS ALUST US 1910

For Gangavaram Port Limited

Reference No.:	GPL/July/2022/029	Submitted to:
Monitoring Date:	31.07.2022	
Organization Name:	Gangavaram Port Limited	A.P. Pollution Control Board,
Type Of Sample:	Ambient Air Quality	Regional office, Visakhapatnam
Sampled By:	Gangavaram Port Limited (CAAQ Monitoring Data)	

						Am	bient Ai	ir Qualit	y 24 hrs	average	e data							
Station	Station		ninistrativ owards H			(AOB)				ject Site					n - 3 - Wa ards Ven			
Parameter	PM10	PM 2.5	SO ²	NO	NO ²	со	PM10	PM 2.5	SO ²	NO	NO²	со	PM10	PM 2.5	SO ²	NO	NO2	со
Day average value	46.88	28.89	44.99	17.66	10.06	0.34	43.45	27.33	61.64	15.33	11.85	0.33	48,44	29.67	43.07	10.78	14.26	0.32
Standard	100 µg/m³	60 µg/m³	80 µg/m³	80 µg/m³	90 pg/m ³	4 μg/m³	100 µg/m³	60 µg/m³	h8/w ₂	h8/w ₃	h8/w ₂	4 µg/m³	100 µg/m³	60 µg/m³	80 µg/m³	80 µg/m³	90 µg/m³	4 µg/m ³

Prepared by: LANG GVNS HUNGT GPS 1910 For Gangavaram Port Limiteo



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Environmental Monitoring Reports

(09 July and 22 July 2022)

Gangavaram Port LTD.
Pedagantyada(Mandal)
Gangavaram (Post)
Visakhapatnam - 530 044





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TEST REPORT ANALYSIS OF SEWAGE WATER SAMPLE

BCL Ref. No.	GPL/03/195	Issued to:
Monitoring Date	July 09, 2022	M/s.Gangavaram Port Ltd.
Reporting Date	July 14, 2022	Gangavaram(Village)
Type of Sample	Sewage Water	PedaGantiyada(Mandalam)
Sample Location	Kanithigeddanalla Near VSP	Visakhapatnam,
Sample Collected by	M/s. Biochem Labs	

S. No.	Parameters	Unit	Result	CPCB Limit
1.	pH	H+Concen	6.04	5.0 - 9.0
2.	Total Suspended Solids	mg/l	236	100
3.	Total Dissolved Solids	mg/l	4068	2100
4.	Oil & Grease	mg/l	4.6	10
5.	COD	mg/l	384	250
6.	BOD	mg/l	62	30
7.	Ammonia Nitrogen	mg/l	2.6	50
8.	Phenolic Compounds	mg/l	0.06	1.0
10.	Nitrate	mg/l	38	50
11.	Nitrite	mg/l	0.8	1.0
11.	Sulphide	mg/l	1.0	1.0
12.	Phosphate	mg/	3.6	5.0
13.	Cyanide	mg/	Nil	0.2
14.	Iron	mg/	3.2	3.0
15.	Aluminium	mg/	1.0	2.0
16.	Copper	mg/	1.8	3.0
17.	Chromium	mg/	1.0	2.0
18.	Zinc	mg/	2.4	5.0
19.	Lead	mg/	0.01	0.1
20.	Manganese	mg/	1.4	2.0
21.	Nickel	mg/	0.8	3.0
22.	Mercury	mg/	0.001	0.01
23.	Cadmium	mg/	0.002	2.0

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TEST REPORT ANALYSIS OF SEWAGE WATER SAMPLE

BCL Ref. No.	GPL/03/196	Issued to:
Monitoring Date	July 09, 2022	M/s.Gangavaram Port Ltd.
Reporting Date	July 14, 2022	Gangavaram(Village)
Type of Sample	Sewage Water	PedaGantiyada(Mandalam)
Sample Location	Culvert -11 at Gangavaram Village	Visakhapatnam.
Sample Collected by	M/s. Biochem Labs	

S. No.	Parameters	Unit	Result	CPCB Limit
1.	pH	H+Concen	6.14	5.0 - 9.0
2.	Total Suspended Solids	mg/l	118	100
3.	Total Dissolved Solids	mg/l	1206	2100
4.	Oil & Grease	mg/l	3.6	10
5.	COD	mg/l	214	250
6.	BOD	mg/l	36	30
7.	Ammonia Nitrogen	mg/l	18	50
8.	Phenolic Compounds	mg/l	1.0	1.0
10.	Nitrate	mg/l	28	50
11.	Nitrite	mg/l	0.6	1.0
11.	Sulphide	mg/l	0.8	1.0
12.	Phosphate	mg/	3.4	5.0
13.	Cyanide	mg/	Nil	0.2
14.	Iron	mg/	1.0	3.0
15.	Aluminium	mg/	0.1	2.0
16.	Copper	mg/	0.6	3.0
17.	Chromium	mg/	0.4	2.0
18.	Zinc	mg/	1.2	5.0
19.	Lead	mg/	0.01	0.1
20.	Manganese	mg/	0.4	2.0
21.	Nickel	mg/	0.8	3.0
22.	Mercury	mg/	<0.01	0.01
23.	Cadmium	mg/	< 0.02	2.0

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TEST REPORT NOISE LEVEL MONITORING

BCL Ref. No.	GPL/ 04/221	Issued to:
Monitoring Date	July 09, 2022	M/s. Gangavaram Port Ltd.
Organization	M/s. Gangavaram Port Ltd.	Gangavaram (Village) PedaGantiyada (Mandalam)
Collected by	M/s. Biochem Labs	Visakhapatnam.

S.	Parameter	Unit	Location	Re	sult	CPC	B Limit	
No.	700 E006040004040	000000		Day time	Night time	Indu	ustrial	
				1.2		Day time	Night time	
1.	Noise Level	Decibels	Cargo area	72	68	75	70	
2.	Noise Level	Decibels	PedaGantyada/ Security Gate	65	60	-	-	
			N. S.		-		-	
		7		Day time	Night time	Resi	dential	
		1		Day time	Night time	Residence Day time		
3.	Noise Level	Decibels	Gangavaram	Day time	Night time	1,000,000	dential Night time	

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TEST REPORT NOISE LEVEL MONITORING

BCL Ref. No.	GPL/ 04/222	Issued to:	
Monitoring Date	July 29, 2022	M/s. Gangavaram Port Ltd.	
Organization	M/s. Gangavaram Port Ltd.	Gangavaram (Village) PedaGantiyada (Mandalam)	
Collected by	M/s. Biochem Labs	Visakhapatnam.	

S.	Parameter	Unit	Location	Re	sult	CPCI	B Limit		
No.				Day time	Day time Night time Inc		ime Night time Industrial		ustrial
						Day time	Night time		
1.	Noise Level	Decibels	Cargo area	70	67	75	70		
2.	Noise Level	Decibels	PedaGantyada/ Security Gate	67	58	-	-		
		7		Day time	Night time	Resi	dential		
		1	FI	Day time	Night time	Residence Day time	dential Night time		
3.	Noise Level	Decibels	Gangavaram	Day time	Night time				

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TEST REPORT ANALYSIS OF MARINE WATER

	Issued to:
July 09, 2022	Mic Consumm Bod I td
July 14, 2022	M/s. Gangavaram Port Ltd. Gangavaram (Village)
Organization M/s. Gangavaram Port Ltd.	
Marine Water (Low Tide / High Tide)	PedaGantiyada (Mandalam) Visakhapatnam.
M/s. Biochem Labs	vioennapatram.
	July 14, 2022 M/s. Gangavaram Port Ltd. Marine Water (Low Tide / High Tide)

S. No	Parameter	Unit		Re	sult	
		2000	Harbou	rBasine	Port Entrar	ce Channel
			Low tide	High tide	Low tide	High tide
1.	Temperature	°C	30.4	31.2	29.7	31.0
2.	pH	H+ conc	8.18	8.16	8.20	8.24
3.	Salinity	PSU	31.6	32.2	31.8	32.0
4.	Turbidity	NTU	22	26	14	12
5.	Total Suspended Solids	mg/l	28	32	16	14
6.	Transparency	Mts.	0.9	0.8	1.2	1.4
7.	Electrical Conductivity	mMHo	32.6	31.6	34.0	32.0

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TEST REPORT ANALYSIS OF MARINE WATER

BCL Ref. No.	GPL/ 05/221	Issued to:
Monitoring Date	July 09, 2022	M/s. Gangavaram Port Ltd.
Reporting Date	July 14, 2022	Gangavaram (Village)
Organization M/s. Gangavaram Port Ltd.		PedaGantiyada (Mandalam)
Type of Sample	Marine Water (Low Tide / High Tide)	Visakhapatnam.
Sample Collected by	M/s. Biochem Labs	

S. No	Parameter	Unit		Re	sult	
			South brake !	Wall Outside	North brake	Wall Outside
			Low tide	High tide	Low tide	High tide
1.	Temperature	°C	32.2	29.8	31.0	32.4
2	pH	H+ conc	8.28	8,20	8.22	8.24
3.	Salinity	PSU	32.0	31.6	32.2	32.4
4.	Turbidity	NTU	12	18	14	16
5.	Total Suspended Solids	mg/l	16	22	18	20
6.	Transparency	Mts.	1.4	1.0	1.2	1.0
7.	Electrical Conductivity	mMHo	32.6	32.4	33.8	34.0

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TEST REPORT ANALYSIS OF MARINE WATER

BCL Ref. No.	GPL/ 05/221	Issued to:
Monitoring Date	July 09, 2022	M/s. Gangavaram Port Ltd.
Reporting Date	July 14, 2022	Gangavaram (Village)
Organization	M/s. Gangavaram Port Ltd.	PedaGantiyada (Mandalam)
Type of Sample	Marine Water (Low Tide / High Tide)	Visakhapatnam.
Sample Collected by	M/s. Biochem Labs	11001012

S. No	Parameter	Unit		R	esult	
			Harbou	rBasine	Port Entran	ce Channel
			Low tide	High tide	Low tide	High tide
1.	Dissolved Oxygen	mg/l	3.2	3.8	4.0	4.2
2.	Biological Oxygen Demand	mg/l	1.4	1.6	1.8	2.0
3.	Oil & Grease	mg/l	1.0	0.8	0.6	0.8
4.	Sulphate	mg/l	1018	1026	1036	1020
5.	Phosphate	mg/l	0.32	0.34	0.24	0.18
6.	Nitrate	mg/l	3.4	2.8	2.4	2.0
7.	Nitrite	mg/l	0.026	0.028	0.022	0.024
8.	Chloride	mg/l	18642	20416	19638	19864
9.	Chromium	ppm	0.024	0.026	0.026	0.020
10.	Mercury	ppm	Nil	Nil	Nii	Nil
11.	Zinc	ppm	0.22	0.2	0.16	0.14
12.	Iron	ppm	0.02	0.028	0.024	0.026
13.	Manganese	ppm	0.026	0.022	0.02	0.018
14.	Cadmium	ppm	Nil	Nil	Nil	Nil

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TEST REPORT ANALYSIS OF MARINE WATER

Sample Collected by	M/s. Biochem Labs		
Type of Sample	Marine Water (Low Tide / High Tide)		
Organization	M/s. Gangavaram Port Ltd.		
Reporting Date	July 14, 2022		
Monitoring Date	July 09, 2022		
BCL Ref. No.	GPL/ 05/221		

M/s. Gangavaram Port Ltd. Gangavaram (Village) PedaGantiyada (Mandalam) Visakhapatnam.

Issued to:

S. No	Parameter	Unit	Result			
	725-200-200-0		South brake Wall Outside		North brake Wall Outside	
			Low tide	High tide	Low tide	High tide
1.	Dissolved Oxygen	mg/l	4.0	3.8	4.2	3.6
2	Biological Oxygen Demand	mg/l	1.6	1.4	1.8	1.6
3.	Oil & Grease	mg/l	0.8	1.0	0.4	0.6
4.	Sulphate	mg/I	1026	1014	1032	1040
5.	Phosphate	mg/l	0.26	0.28	0.3	0.24
6.	Nitrate	mg/l	2.8	2.4	2.0	2.6
7.	Nitrite	mg/I	0.026	0.028	0.02	0.024
8.	Chloride	mg/I	20436	19862	21438	20986
9.	Chromium	ppm	0.026	0.024	0.022	0.02
10.	Mercury	ppm	Nii	Nil	Nii	Nil
11.	Zinc	ppm	0.18	0.14	0.16	0.2
12.	Iron	ppm	0.026	0.022	0.028	0.02
13.	Manganese	ppm	0.02	0.018	0.02	0.018
14.	Cadmium	ppm	Nil	Nil	Nii	Nil

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TEST REPORT ANALYSIS OF MARINE WATER

BCL Ref. No.	GPL/ 05/221	Issued to:	
Monitoring Date July 09, 2022		M/s. Gangavaram Port Ltd.	
Reporting Date	July 14, 2022	Gangavaram (Village)	
Organization M/s. Gangavaram Port Ltd. Type of Sample Marine Water (Low Tide) Sample Collected by M/s. Biochem Labs		PedaGantiyada (Mandalam)	
		Visakhapatnam.	

Station Name: Harbourbasine / Low Tide

S. No	PARAMETERS	UNIT	RESULT
1.	Phytoplankton Count	No. /L	12000
2	Zooplankton Count	No./m ³	1000
3.	Chlorophyll a	mg/m³	3.4
4.	Chlorophyll b	mg/m ³	2.0
5.	Primary Productivity	gC/m ²	3.6
6.	Biomass	mg/m²	2.4

S.No	Species	Total Species count in 1L
Α.	Phytoplankton Species Prorocentrummicans Amphora lineolata Cymbella marina Bacteriastrum delicatulum Thalassionema nitzschioides Chaetoceros dydymus Skeletonemacostatum Thalassiothrixlongissima Cymbella marina	28 10 12 08 26 16 22 06
B.	Zooplankton Species Foraminifera Chaetognatha Amphipoda Cladocera Eggs of fish & larvae	24 06 12 08 10

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TEST REPORT ANALYSIS OF MARINE WATER

BCL Ref. No.	GPL/ 05/221	Issued to:	
Monitoring Date	July 09, 2022	M/s. Gangavaram Port Ltd.	
Reporting Date	July 14, 2022	Gangavaram (Village)	
Organization M/s. Gangavaram Port Ltd.		PedaGantiyada (Mandalam)	
Type of Sample Marine Water (Low Tide)		Visakhapatnam.	
Sample Collected by M/s. Biochem Labs		Trisarii saptarii italii	

Station Name: Port Entrance Channel / Low Tide

S. No	PARAMETERS	UNIT	RESULT
1.	Phytoplankton Count	No. /L	1000
2.	Zooplankton Count	No./m³	600
3.	Chlorophyll a	mg/m ³	2.6
4.	Chlorophyll b	mg/m³	2.8
5.	Primary Productivity	gC/m ²	3.4
6.	Biomass	mg/m ²	2.6

S.No	Species	Total Species count in 1L.
Α.	Phytoplankton Species Prorocentrummicans Amphora lineolata Cymbella marina Bacteriastrum delicatulum Thalassionema nitzschioides Chaetoceros dydymus Skeletonemacostatum Thalassiothrixlongissima Cymbella marina	26 18 30 10 14 08 14 12
В.	Zooplankton Species Foraminifera Chaetognatha Amphipoda Cladocera Eggs of fish & larvae	28 34 18 06 04

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TEST REPORT ANALYSIS OF MARINE WATER

BCL Ref. No.	GPL/ 05/221	Issued to:	
Monitoring Date	July 09, 2022	M/s. Gangavaram Port Ltd.	
Reporting Date	July 14, 2022	Gangavaram (Village)	
Organization	M/s. Gangavaram Port Ltd.	PedaGantiyada (Mandalam)	
Type of Sample	Marine Water (High Tide)	Visakhapatnam.	
Sample Collected by	M/s. Biochem Labs		

Station Name: Harbourbasine / High Tide

S. No	PARAMETERS	UNIT	RESULT
1.	Phytoplankton Count	No. /L	11000
2.	Zooplankton Count	No./m³	1200
3.	Chlorophyll a	mg/m³	3.6
4.	Chlorophyll b	mg/m ³	2.4
5.	Primary Productivity	gC/m ²	3.0
6.	Biomass	mg/m ²	2.8

S.No	Species	Total Species count in 1L
A.	Phytoplankton Species	
	Prorocentrummicans	34
	Amphora lineolata	18
	Cymbella marina	20
	Bacteriastrum delicatulum	12
	Thalassionema nitzschioides	06
	Chaetoceros dydymus	04
	Skeletonemacostatum	08
	Thalassiothrixlongissima	14
	Cymbella marina	12
B.	Zooplankton Species	
	Foraminifera	16
	Chaetognatha	10
	Amphipoda	04
	Cladocera	12
	Eggs of fish & larvae	08

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TEST REPORT ANALYSIS OF MARINE WATER

BCL Ref. No.	GPL/ 05/221	Issued to:	
Monitoring Date	July 09, 2022	M/s. Gangavaram Port Ltd.	
Reporting Date	July 14, 2022	Gangavaram (Village)	
Organization	M/s. Gangavaram Port Ltd.	PedaGantiyada (Mandalam) Visakhapatnam.	
Type of Sample	Marine Water (High Tide)		
Sample Collected by	M/s. Biochem Labs		

Station Name: Port Entrance Channel / High Tide

S. No	PARAMETERS	UNIT	RESULT
1.	Phytoplankton Count	No. /L	14000
2.	Zooplankton Count	No./m ³	1000
3.	Chlorophyll a	mg/m³	2.6
4.	Chlorophyll b	mg/m³	3.0
5.	Primary Productivity	gC/m ²	2.4
6.	Biomass	mg/m²	2.6

S.No	Species	Total Species count in 1L
A.	Phytoplankton Species Prorocentrummicans Amphora lineolata Cymbella marina Bacteriastrum delicatulum Thalassionema nitzschioides Chaetoceros dydymus Skeletonemacostatum Thalassiothrixlongissima Cymbella marina	14 28 10 30 06 10 08 14
B.	Zooplankton Species Foraminifera Chaetognatha Amphipoda Cladocera Eggs of fish & larvae	26 18 10 04 12

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TEST REPORT ANALYSIS OF MARINE WATER

BCL Ref. No.	GPL/ 05/221	Issued to:	
Monitoring Date	July 09, 2022	M/s. Gangavaram Port Ltd.	
Reporting Date	July 14, 2022	Gangavaram (Village)	
Organization	M/s. Gangavaram Port Ltd.	PedaGantiyada (Mandalam)	
Type of Sample	Marine Water (Low Tide)	Visakhapatnam.	
Sample Collected by	M/s. Biochem Labs		

Station Name: South brake Wall outside / Low Tide

S. No	PARAMETERS	UNIT	RESULT
1.	Phytoplankton Count	No. /L	12000
2.	Zooplankton Count	No./m³	800
3.	Chlorophyll a	mg/m³	3.6
4.	Chlorophyll b	mg/m³	2.8
5.	Primary Productivity	gC/m ²	3.2
6.	Biomass	mg/m²	2.4

S.No	Species	Total Species count in 1L
A.	Phytoplankton Species Prorocentrummicans Amphora lineolata Cymbella marina Bacteriastrum delicatulum Thalassionema nitzschioides Chaetoceros dydymus Skeletonemacostatum Thalassiothrixlongissima Cymbella marina	58 36 24 06 30 12 28 32
B.	Zooplankton Species Foraminifera Chaetognatha Amphipoda Cladocera Eggs of fish & larvae	58 26 24 16 06

Analyst





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#2-9-5, Near Samatha College, Sector -9, MVP Colony, Visakhapatnam-530 017. Ph: 0891 - 2551277, 8142222277, 73969 08000 | E-mail: biochemlabs@biochemlabs.in | biochemlabs888@gmail.com | www.biochemlabs.in

TEST REPORT ANALYSIS OF MARINE WATER

BCL Ref. No.	GPL/ 05/221	Issued to:	
Monitoring Date	July 09, 2022	M/s. Gangavaram Port Ltd.	
Reporting Date	July 14, 2022	Gangavaram (Village)	
Organization	M/s. Gangavaram Port Ltd.	PedaGantiyada (Mandalam)	
Type of Sample	Marine Water (Low Tide)	Visakhapatnam.	
Sample Collected by	M/s. Biochem Labs		

Station Name: North brake Wall Outside / Low Tide

S. No	PARAMETERS	UNIT	RESULT
1.	Phytoplankton Count	No. /L	12000
2.	Zooplankton Count	No./m³	1000
3.	Chlorophyll a	mg/m³	3.6
4.	Chlorophyll b	mg/m ³	2.4
5.	Primary Productivity	gC/m ²	3.0
6.	Biomass	mg/m ²	2.8

.No	Species	Total Species count in 1L
A.	Phytoplankton Species Prorocentrummicans Amphora lineolata Cymbella marina Bacteriastrum delicatulum Thalassionema nitzschioides	54 48 38 26 42
	Chaetoceros dydymus Skeletonemacostatum Thalassiothrixlongissima Cymbella marina	08 22 16 14
B.	Zooplankton Species Foraminifera Chaetognatha Amphipoda Cladocera Eggs of fish & larvae	62 32 30 14 08

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TEST REPORT ANALYSIS OF MARINE WATER

BCL Ref. No.	GPL/ 05/221	Issued to:		
Monitoring Date	July 09, 2022	M/s. Gangavaram Port Ltd. Gangavaram (Village) PedaGantiyada (Mandalam) Visakhapatnam.		
Reporting Date	July 14, 2022			
Organization	M/s. Gangavaram Port Ltd.			
Type of Sample	Marine Water (High Tide)			
Sample Collected by	M/s. Biochem Labs			

Station Name: South brake Wall Outside / High Tide

S. No	PARAMETERS	UNIT	RESULT
1.	Phytoplankton Count	No. /L	10000
2.	Zooplankton Count	No./m³	1200
3.	Chlorophyll a	mg/m³	2.8
4.	Chlorophyll b	mg/m ³	2.0
5.	Primary Productivity	gC/m²	3.0
6.	Biomass	mg/m ²	2.6

S.No	Species	Total Species count in 1L
A.	Phytoplankton Species	
1000	Prorocentrummicans	50
	Amphora lineolata	64
	Cymbella marina	28
	Bacteriastrum delicatulum	30
	Thalassionema nitzschioides	24
	Chaetoceros dydymus	06
	Skeletonemacostatum	14
	Thalassiothrixlongissima	28
	Cymbella marina	02
B.	Zooplankton Species	
	Foraminifera	56
	Chaetognatha	24
	Amphipoda	18
	Cladocera	04
	Eggs of fish & larvae	10

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TEST REPORT ANALYSIS OF MARINE WATER

BCL Ref. No. GPL/ 05/221		Issued to:		
Monitoring Date	July 09, 2022	M/s. Gangavaram Port Ltd. Gangavaram (Village)		
Reporting Date	July 14, 2022			
Organization M/s. Gangavaram Port Ltd.		PedaGantiyada (Mandalam)		
Type of Sample	Marine Water (High Tide)	Visakhapatnam.		
Sample Collected by	M/s. Biochem Labs	3.33411.44		

Station Name: North brake Wall Outside / High Tide

S. No	PARAMETERS	UNIT	RESULT
1.	Phytoplankton Count	No. /L	11000
2.	Zooplankton Count	No./m³	1200
3.	Chlorophyll a	mg/m ³	3.8
4.	Chlorophyll b	mg/m ³	2.6
5.	Primary Productivity	gC/m ²	3.4
6.	Biomass	mg/m ²	2.8

S.No	Species	Total Species count in 1L
A.	Phytoplankton Species	
1070	Prorocentrummicans	62
	Amphora lineolata	10
	Cymbella marina	44
	Bacteriastrum delicatulum	20
	Thalassionema nitzschioides	36
	Chaetoceros dydymus	32
	Skeletonemacostatum	18
	Thalassiothrixlongissima	20
	Cymbella marina	05
B.	Zooplankton Species	
	Foraminifera	30
	Chaetognatha	44
	Amphipoda	26
	Cladocera	10
	Eggs of fish & larvae	08

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TEST REPORT ANALYSIS OF MARINE WATER

BCL Ref. No.	GPL/ 05/222	Issued to:			
Monitoring Date	July 30, 2022	M/s. Gangavaram Port Ltd.			
Reporting Date	August 04, 2022	Gangavaram (Village)			
Organization	M/s. Gangavaram Port Ltd.	PedaGantiyada (Mandalam)			
Type of Sample	Marine Water (Low Tide / High Tide)	Visakhapatnam.			
Sample Collected by	M/s. Biochem Labs	ACCUSED BUT OUR SERVER.			

S. No	Parameter	Unit	Result			
2000		200000	HarbourBasine		Port Entrance Chann	
			Low tide	High tide	Low tide	High tide
1.	Temperature	°C	31.8	31.2	32.0	29.8
2.	pH	H+ conc	8.26	8.22	8.24	8.22
3.	Salinity	PSU	32.2	33.6	32.0	33.0
4.	Turbidity	NTU	16	24	12	14
5.	Total Suspended Solids	mg/l	20	32	14	18
6.	Transparency	Mts.	1.2	8.0	1.2	1.4
7.	Electrical Conductivity	mMHo	34.8	30.6	32.0	31.6

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TEST REPORT ANALYSIS OF MARINE WATER

BCL Ref. No.	GPL/ 05/222	Issued to: M/s. Gangavaram Port Ltd. Gangavaram (Village) PedaGantiyada (Mandalam)		
Monitoring Date	July 30, 2022			
Reporting Date	August 04, 2022			
Organization	M/s. Gangavaram Port Ltd.			
Type of Sample	Marine Water (Low Tide / High Tide)	Visakhapatnam.		
Sample Collected by	M/s. Biochem Labs	1.757105874.557057303		

S. No	Parameter	Unit	Result			
		Learner .	South brake Wall Outside		North brake Wall Outsid	
			Low tide	High tide	Low tide	High tide
1.	Temperature	°C	30.6	32.0	29.2	30.6
2.	pH	H+ conc	8.18	8.24	8.20	8.26
3.	Salinity	PSU	32.6	33.6	32.8	33.0
4.	Turbidity	NTU	14	10	14	12
5,	Total Suspended Solids	mg/l	16	18	20	16
6.	Transparency	Mts.	1.2	1.4	1.2	1.4
7.	Electrical Conductivity	mMHo	36.2	32.6	34.2	33.6

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TEST REPORT ANALYSIS OF MARINE WATER

BCL Ref. No.	GPL/ 05/222	Issued to:		
Monitoring Date	July 29, 2022	M/s. Gangavaram Port Ltd.		
Reporting Date	August 03, 2022	Gangavaram (Village) PedaGantiyada (Mandalam) Visakhapatnam.		
Organization	M/s. Gangavaram Port Ltd.			
Type of Sample	Marine Water (Low Tide / High Tide)			
Sample Collected by	M/s. Biochem Labs			

S. No	Parameter	Parameter Unit		R	Result		
			HarbourBasine		Port Entrance	ce Channel	
			Low tide	High tide	Low tide	High tide	
1.	Dissolved Oxygen	mg/l	4.2	4.0	3,8	3.6	
2.	Biological Oxygen Demand	mg/l	2.0	1,8	1.6	1.4	
3.	Oil & Grease	mg/l	1.0	1.4	1.0	0.8	
4.	Sulphate	mg/l	986	968	1014	1036	
5.	Phosphate	mg/l	0.24	0.32	0.28	0.24	
6.	Nitrate	mg/l	3.0	2.4	2.8	2.6	
7.	Nitrite	mg/l	0.024	0.026	0.016	0.018	
8.	Chloride	mg/l	19846	21630	18982	20864	
9.	Chromium	ppm	0.028	0.022	0.018	0.02	
10.	Mercury	ppm	Nil	Nil	Nil	Nil	
11.	Zinc	ppm	0.24	0.18	0.16	0.12	
12.	Iron	ppm	0.022	0.026	0.024	0.02	
13.	Manganese	ppm	0.02	0.02	0.012	0.018	
14.	Cadmium	ppm	Nil	Nil	Nit	Nil	

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Monitoring Date	July 29, 2022	M/s. Gangavaram Port Ltd. Gangavaram (Village) PedaGantiyada (Mandalam) Visakhapatnam.		
Reporting Date	August 03, 2022			
Organization	M/s. Gangavaram Port Ltd.			
Type of Sample	Marine Water (Low Tide / High Tide)			
Sample Collected by	M/s. Biochem Labs			

S. No	Parameter	Unit		R	esult	
			South brake	South brake Wall Outside		Wall Outside
			Low tide	High tide	Low tide	High tide
1.	Dissolved Oxygen	mg/l	3.8	4.0	4.2	3.8
2.	Biological Oxygen Demand	mg/l	1.4	2.2	1.8	1.6
3.	Oil & Grease	mg/l	0.6	0.8	1.0	8.0
4.	Sulphate	mg/l	1018	1026	1048	1052
5.	Phosphate	mg/l	0.34	0.36	0.26	0.26
6.	Nitrate	mg/l	3.0	2.8	2.0	1.8
7.	Nitrite	mg/l	0.022	0.024	0.016	0.02
8.	Chloride	mg/l	19680	20468	19846	20486
9.	Chromium	ppm	0.024	0.02	0.018	0.02
10.	Mercury	ppm	Nil	Nil	Nil	Nil
11.	Zinc	ppm	0,18	0.12	0.16	0.10
12.	Iron	ppm	0.014	0.018	0.024	0.02
13.	Manganese	ppm	0.026	0.02	0.018	0.014
14.	Cadmium	ppm	Nil	Nil	Nil	Nil

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TEST REPORT ANALYSIS OF MARINE WATER

BCL Ref. No.	GPL/ 05/222	Issued to:		
Monitoring Date	July 29, 2022	M/s. Gangavaram Port Ltd.		
Reporting Date	August 03, 2022	Gangavaram (Village)		
Organization M/s. Gangavaram Port Ltd. Type of Sample Marine Water (Low Tide)		PedaGantiyada (Mandalam)		
		Visakhapatnam.		
Sample Collected by	M/s. Biochem Labs	The second secon		

Station Name: Harbourbasine / Low Tide

S. No	PARAMETERS	UNIT	RESULT
1.	Phytoplankton Count	No. /L	12000
2.	Zooplankton Count	No./m ³	1000
3.	Chlorophyll a	mg/m ³	2.8
4.	Chlorophyll b	mg/m ³	2.2
5.	Primary Productivity	gC/m ²	2.4
6.	Biomass	mg/m²	1.8

S.No	Species	Total Species count in 1L
Α.	Phytoplankton Species Prorocentrummicans Amphora lineolata Cymbella marina Bacteriastrum delicatulum Thalassionema nitzschioides Chaetoceros dydymus Skeletonemacostatum Thalassiothrixlongissima Cymbella marina	24 20 10 18 26 06 04 08
В.	Zooplankton Species Foraminifera Chaetognatha Amphipoda Cladocera Eggs of fish & larvae	30 18 04 10 05

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TEST REPORT ANALYSIS OF MARINE WATER

BCL Ref. No. GPL/ 05/222		Issued to:	
Monitoring Date	July 29, 2022	M/s. Gangavaram Port Ltd. Gangavaram (Village) PedaGantiyada (Mandalam Visakhapatnam.	
Reporting Date	August 03, 2022		
Organization	M/s. Gangavaram Port Ltd.		
Type of Sample	Marine Water (Low Tide)		
Sample Collected by	M/s. Biochem Labs		

Station Name: Port Entrance Channel / Low Tide

S. No	PARAMETERS	UNIT	RESULT	
1.	Phytoplankton Count	No. /L	12000	
2.	Zooplankton Count	No./m ³	600	
3.	Chlorophyll a	mg/m ³	3.2	
4.	Chlorophyll b	mg/m ³	2.6	
5.	Primary Productivity	gC/m ²	3.0	
6.	Biomass	mg/m ²	2.8	

S.No	Species	Total Species count in 1L
A.	Phytoplankton Species	
	Prorocentrummicans	28
	Amphora lineolata	12
	Cymbella marina	06
	Bacteriastrum delicatulum	18
	Thalassionema nitzschioides	10
	Chaetoceros dydymus	26
	Skeletonemacostatum	04
	Thalassiothrixlongissima	18
	Cymbella marina	08
B:	Zooplankton Species	0.766
	Foraminifera	24
	Chaetognatha	16
	Amphipoda	12
	Cladocera	02
	Eggs of fish & larvae	06

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BCL Ref. No. GPL/ 05/222		Issued to:		
Monitoring Date	July 29, 2022	M/s. Gangavaram Port Ltd.		
Reporting Date	August 03, 2022	Gangavaram (Village) PedaGantiyada (Mandalam) Visakhapatnam.		
Organization	M/s. Gangavaram Port Ltd.			
Type of Sample	Marine Water (High Tide)			
Sample Collected by	M/s. Biochem Labs			

Station Name: Harbourbasine / High Tide

S. No	PARAMETERS	UNIT	RESULT
1.	Phytoplankton Count	No. /L	10000
2.	Zooplankton Count	No./m³	1200
3.	Chlorophyll a	mg/m ³	2.8
4.	Chlorophyll b	mg/m³	2.6
5.	Primary Productivity	gC/m²	3.4
6.	Biomass	mg/m ²	2.8

.No	Species	Total Species count in 1L
A.	Phytoplankton Species Prorocentrummicans Amphora lineolata Cymbella marina Bacteriastrum delicatulum Thalassionema nitzschioides Chaetoceros dydymus Skeletonemacostatum Thalassiothrixlongissima Cymbella marina	30 06 24 10 22 04 10 08
B.	Zooplankton Species Foraminifera Chaetognatha Amphipoda Cladocera Eggs of fish & larvae	16 02 10 06 02

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BCL Ref. No.	GPL/ 05/222	issued to:	
Monitoring Date	July 29, 2022	M/s. Gangavaram Port Ltd.	
Reporting Date	August 03, 2022	Gangavaram (Village)	
Organization	M/s. Gangavaram Port Ltd.	PedaGantiyada (Mandalam Visakhapatnam.	
Type of Sample	Marine Water (High Tide)		
Sample Collected by	M/s. Biochem Labs		

Station Name: Port Entrance Channel / High Tide

S. No	PARAMETERS	UNIT	RESULT
1.	Phytoplankton Count	No. /L	12000
2.	Zooplankton Count	No./m ³	1400
3.	Chlorophyll a	mg/m ³	3.4
4.	Chlorophyll b	mg/m ³	2.8
5.	Primary Productivity	gC/m ²	3.2
6.	Biomass	mg/m ²	2.8

No.	Species	Total Species count in 1L
Α.	Phytoplankton Species Prorocentrummicans Amphora lineolata Cymbella marina Bacteriastrum delicatulum Thalassionema nitzschioides	32 14 28 04 16
	Chaetoceros dydymus Skeletonemacostatum Thalassiothrixlongissima Cymbella marina	20 18 22 10
r e	Zooplankton Species Foraminifera Chaetognatha Amphipoda Cladocera Eggs of fish & larvae	28 14 12 06 04

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TEST REPORT ANALYSIS OF MARINE WATER

GPL/ 05/222	Issued to:	
July 29, 2022	M/s. Gangavaram Port Ltd.	
August 03, 2022	Gangavaram (Village)	
M/s. Gangavaram Port Ltd.	PedaGantiyada (Mandalam)	
Marine Water (Low Tide)	Visakhapatnam.	
M/s. Biochem Labs		
	July 29, 2022 August 03, 2022 M/s. Gangavaram Port Ltd. Marine Water (Low Tide)	

Station Name: South brake Wall outside / Low Tide

S. No	PARAMETERS	UNIT	RESULT
1.	Phytoplankton Count	No. /L	10000
2.	Zooplankton Count	No./m ³	1200
3.	Chlorophyll a	mg/m ³	3.4
4.	Chlorophyll b	mg/m ³	2.8
5.	Primary Productivity	gC/m ²	3.0
6.	Biomass	mg/m ²	2.4

S.No	Species	Total Species count in 1L
A.	Phytoplankton Species	
	Prorocentrummicans	66
	Amphora lineolata	28
	Cymbella marina	18
	Bacteriastrum delicatulum	06
	Thalassionema nitzschioides	34
	Chaetoceros dydymus	48
	Skeletonemacostatum	30
	Thalassiothrixlongissima	04
	Cymbella marina	10
B.	Zooplankton Species	
	Foraminifera	52
	Chaetognatha	21
	Amphipoda	14
	Cladocera	26
	Eggs of fish & larvae	10

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Monitoring Date	July 29, 2022	M/s. Gangavaram Port Ltd.	
Reporting Date	August 03, 2022	Gangavaram (Village)	
Organization	M/s. Gangavaram Port Ltd.	PedaGantiyada (Mandalam	
Type of Sample	Marine Water (Low Tide)	Visakhapatnam.	
Sample Collected by	M/s. Biochem Labs	The state of the s	

Station Name: North brake Wall Outside / Low Tide

S. No	PARAMETERS	UNIT	RESULT
1.	Phytoplankton Count	No. /L	9000
2.	Zooplankton Count	No./m³	500
3.	Chlorophyll a	mg/m³	3.4
4.	Chlorophyll b	mg/m ³	2.6
5,	Primary Productivity	gC/m ²	3.0
6.	Biomass	mg/m²	2.8

S.No	Species	Total Species count in 1L
Α.	Phytoplankton Species Prorocentrummicans Amphora lineolata Cymbella marina Bacteriastrum delicatulum Thalassionema nitzschioides Chaetoceros dydymus Skeletonemacostatum Thalassiothrixlongissima Cymbella marina	80 46 28 34 06 28 06 20 14
B.	Zooplankton Species Foraminifera Chaetognatha Amphipoda Cladocera Eggs of fish & larvae	26 20 04 10 06

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Reporting Date	August 03, 2022	Gangavaram (Village)	
Organization	M/s. Gangavaram Port Ltd.	PedaGantiyada (Mandalam Visakhapatnam.	
Type of Sample	Marine Water (High Tide)		
Sample Collected by	M/s. Biochem Labs		

Station Name: South brake Wall Outside / High Tide

S. No	PARAMETERS	UNIT	RESULT
1.	Phytoplankton Count	No. /L	10000
2.	Zooplankton Count	No./m ³	800
3.	Chlorophyll a	mg/m ³	2.6
4.	Chlorophyll b	mg/m ³	3.0
5.	Primary Productivity	gC/m ²	3.4
6.	Biomass	mg/m ²	2.8

.No	Species	Total Species count in 1L
Α.	Phytoplankton Species Prorocentrummicans Amphora lineolata Cymbella marina	56 24 36
	Bacteriastrum delicatulum Thalassionema nitzschioides Chaetoceros dydymus Skeletonemacostatum Thalassiothrixlongissima Cymbella marina	08 20 34 10 26
B.	Zooplankton Species Foraminifera Chaetognatha Amphipoda Cladocera Eggs of fish & larvae	28 04 32 10 06

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Monitoring Date	July 29, 2022	M/s. Gangavaram Port Ltd.
Reporting Date	August 03, 2022	Gangavaram (Village)
Organization M/s. Gangavaram Port Ltd.		PedaGantiyada (Mandalam)
Type of Sample Marine Water (High Tide)		Visakhapatnam.
Sample Collected by	M/s. Biochem Labs	

Station Name: North brake Wall Outside / High Tide

S. No	PARAMETERS	UNIT	RESULT
1.	Phytoplankton Count	No. /L	10000
2.	Zooplankton Count	No./m ³	1200
3.	Chlorophyll a	mg/m³	3.8
4.	Chlorophyll b	mg/m ³	2.6
5.	Primary Productivity	gC/m ²	3.2
6.	Biomass	mg/m ²	2.4

S.No	Species	Total Species count in 1L
A.	Phytoplankton Species	
	Prorocentrummicans	62
	Amphora lineolata	35
	Cymbella marina	26
	Bacteriastrum delicatulum	30
	Thalassionema nitzschioides	08
	Chaetoceros dydymus	34
	Skeletonemacostatum	08
	Thalassiothrixlongissima	24
	Cymbella marina	12
B.	Zooplankton Species	
	Foraminifera	24
	Chaetognatha	12
	Amphipoda	16
	Cladocera	04
	Eggs of fish & larvae	12

Analyst





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Centre for Aquaculture & Environmental Sciences

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TEST REPORT ANALYSIS OF SEDIMENT SAMPLE

BCL Ref. No.	GPL/ 06/221	Issued to:
Monitoring Date	July 09, 2022	M/s, Gangavaram Port Ltd.
Reporting Date	July 14, 2022	Gangavaram (Village)
Organization M/s. Gangavaram Port Ltd. Type of Sample Sediment (Low Tide)		PedaGantiyada (Mandalam) Visakhapatnam.

S.No	Parameters	Parameters Unit		Result
	7131		Harbour Basine	Port Entrance Channel
1.	pH	H+ conc	7.04	7.08
2.	Organic matter	%	2.4	1.8
3.	Nitrate	mg/kg	2.8	2.0
4.	Phosphate	mg/kg	1.6	1.4
5.	Oil & Grease	mg/kg	0.18	0.16
6.	Iron	ppm	0.16	0.18
7.	Manganese	ppm	0.14	0.12
8.	Nickel	ppm	0.12	0.14
9.	Chromium	ppm	0.16	0.12
10.	Mercury	ppm	Nil	Nil
11.	Zinc	ppm	0.8	0.6
12.	Lead	ppm	0.01	0.01
13.	Arsenic	ppm	0.01	0.01
14.	Selenium	ppm	0.01	0.01
15.	Copper	ppm	0.18	0.12

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TEST REPORT ANALYSIS OF SEDIMENT SAMPLE

BCL Ref. No.	GPL/ 06/221	Issued to:
Monitoring Date	July 09, 2022	M/s. Gangavaram Port Ltd.
Reporting Date	July 14, 2022	Gangavaram (Village)
Organization M/s. Gangavaram Port Ltd.		PedaGantiyada (Mandalam) Visakhapatnam.
Type of Sample Sediment (Low Tide)		
Sample Collected by	M/s. Biochem Labs	Violent inspection in

S.No	Parameters	Unit	Res	sult	
		1.5.5.5.1	South brake Wall Outside	North brake Wall Outside	
1.	pH	H+ conc	7.06	7.10	
2.	Organic matter	%	1.2	1.0	
3.	Nitrate	mg/kg	2.0	1.6	
4.	Phosphate	mg/kg	0.8	1.0	
5.	Oil & Grease	mg/kg	0.02	0.01	
6.	Iron	ppm	0.14	0.12	
7.	Manganese	ppm	0.16	0.14	
8.	Nickel	ppm	0.12	0.1	
9.	Chromium	ppm	0.14	0.12	
10.	Mercury	ppm	Nil	Nil	
11.	Zinc	ppm	1.0	0.8	
12.	Lead	ppm	0.01	0.01	
13.	Arsenic	ppm	0.01	0.01	
14.	Selenium	ppm	0.01	0.01	
15.	Copper	ppm	0.18	0.14	

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TEST REPORT BENTHIC FAUNAL DIVERSITY

BCL Ref. No.	GPL/ 06/221	Issued to:	
Monitoring Date	July 09, 2022	M/s. Gangavaram Port Ltd.	
Reporting Date July 14, 2022 Organization M/s. Gangavaram Port Ltd.		Gangavaram (Village)	
		PedaGantiyada (Mandalam)	
Type of Sample Sediment (Low Tide)		Visakhapatnam.	
Sample Collected by	M/s. Biochem Labs	The state of the s	

S. No	Species/Group	% Composition	
		HarbourBasine	Port Entrance Channel
1.	Opheliidae sp	32	36
2.	Glyceridae sp	12	10
3.	Nereidae sp	20	24
4.	Aphroditidae sp	80	12
5.	Cirratulidae sp	10	14
6.	Capitella sp	02	08
7.	Amphipoda sp.	18	10
8.	Gastropoda	04	04
9.	Chaetognatha	10	08

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TEST REPORT BENTHIC FAUNAL DIVERSITY

BCL Ref. No.	GPL/ 06/221	Issued to:
Monitoring Date	July 09, 2022	M/s. Gangavaram Port Ltd.
Reporting Date	July 14, 2022	Gangavaram (Village)
Organization M/s. Gangavaram Port Ltd.		PedaGantiyada (Mandalam) Visakhapatnam.
Type of Sample Sediment (Low Tide)		
Sample Collected by	M/s. Biochem Labs	Transfer Mills

S. No	Species/Group	% Compos	sition
		South brake Wall Outside	North brake Wall Outside
1.	Foraminifera	42	54
2.	Amphipoda	26	18
3.	Mytilusedulis	14	14
4.	Gastropod veliger	20	26
5.	Oithona	10	02
6.	Capitella	08	12
7.	Copepod nauplii	22	06
9.	Brachyuran zoea	06	14
8.	Neanthusarenaceodentala	16	08

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TEST REPORT ANALYSIS OF SEDIMENT SAMPLE

BCL Ref. No.	GPL/ 06/222	Issued to:
Monitoring Date	July 29, 2022	M/s. Gangavaram Port Ltd.
Reporting Date	August 03, 2022	Gangavaram (Village) PedaGantiyada (Mandalam)
Organization	M/s. Gangavaram Port Ltd.	
Type of Sample Sediment (Low Tide)		Visakhapatnam.
Sample Collected by	M/s. Biochem Labs	T ISSUE CONTROLLE
W. STON AND STATE OF THE STATE		

S.No	Parameters	Unit	Result			
			Harbour Basine	Port Entrance Channel		
1.	pH	H+ conc	7.10	7.12		
2.	Organic matter	%	2.0	1.6		
3.	Nitrate	mg/kg	1.6	1.2		
4.	Phosphate	mg/kg	1.0	1.0		
5.	Oil & Grease	mg/kg	0.12	0.08		
6.	Iron ppm		0.16	0.14		
7.	Manganese	ppm	0.14	0.12		
8.	Nickel	ppm	0.1	0.14		
9.	Chromium	ppm	0.14	0.12		
10.	Mercury	ppm	Nil	Nil		
11.	Zinc	ppm	1.0	0.8		
12.	Lead			0.01		
13.	Arsenic			0.01		
14.	Selenium	ppm	0.01 0.01			
15.	Copper	ppm	om 0.20 0.14			

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TEST REPORT ANALYSIS OF SEDIMENT SAMPLE

BCL Ref, No.	GPL/ 06/222	Issued to:		
Monitoring Date	July 29, 2022	M/s. Gangavaram Port Ltd.		
Reporting Date	August 03, 2022			
Organization	M/s. Gangavaram Port Ltd.	 Gangavaram (Village) PedaGantiyada (Mandalam 		
Type of Sample	Sediment (Low Tide)	Visakhapatnam.		
Sample Collected by	M/s. Biochem Labs	visaviapaulalli,		

S.No	Parameters	Unit	Result				
21.000	112000000000000000000000000000000000000	755209-7	South brake Wall Outside	North brake Wall Outside 7.06			
1.	pH	H+ conc	7.12				
2.	Organic matter	%	1.0	0.8			
3.	Nitrate	mg/kg	2.0	1.2			
4.	Phosphate	mg/kg	1.8	1.0			
5.	Oil & Grease	mg/kg	0.02	0.04			
6.	Iron	ppm	0.14	0.12			
7.	Manganese	ppm	0.12	0.1			
8.	Nickel	ppm 0.1		0.12			
9.	Chromium	ppm	0.14	0.1			
10.	Mercury	ppm	Nil	Nil			
11.	Zinc	ppm	1.0	0.8			
12.			0.01				
13.	Arsenic	The state of the s		0.01			
14.	Selenium	The state of the s		0.01			
15.	Copper	ppm	0.16	0.12			

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TEST REPORT BENTHIC FAUNAL DIVERSITY

BCL Ref. No.	GPL/ 06/222	Issued to:		
Monitoring Date	July 29, 2022	Mis Consequences Port Ltd		
Reporting Date	August 03, 2022	M/s. Gangavaram Port Ltd.		
Organization	M/s. Gangavaram Port Ltd.	Gangavaram (Village) PedaGantiyada (Mandalam)		
Type of Sample	Sediment (Low Tide)	Visakhapatnam,		
Sample Collected by	M/s. Biochem Labs	visakiiapatiidiii.		

S. No	Species/Group	% Composition				
		Harbour Basine	Port Entrance Channel			
1.	Eunicidae sp.	22	30			
2.	Paraonidae sp.	10	14			
3.	Syllidae sp	04	20			
4.	Sabellidae sp	08	10			
5.	Oithona sp.	10	26			
6.	Capitella sp.	12	14			
7.	Syllidae sp	14	06			
9.	Amphipoda sp. 02		08			
8.	Nematoda sp.	08	06			

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TEST REPORT BENTHIC FAUNAL DIVERSITY

Type of Sample Sediment (Low Tide) Visakhapatnam.	BCL Ref. No.	GPL/ 06/222	Issued to:		
Reporting Date August 03, 2022 Gangavaram (Village) Organization M/s. Gangavaram Port Ltd. PedaGantiyada (Manda Type of Sample Sediment (Low Tide) Visakhapatnam.	Monitoring Date	July 29, 2022	M/s Gangayaram Port Ltd		
Organization M/s. Gangavaram Port Ltd. PedaGantiyada (Manda Type of Sample Sediment (Low Tide) Visakhapatnam.	Reporting Date	August 03, 2022			
Type of Sample Sediment (Low Tide) Visakhapatnam.	Organization	M/s. Gangavaram Port Ltd.	PedaGantiyada (Mandalam)		
	Type of Sample	Sediment (Low Tide)			
Sample Collected by M/s. Biochem Labs	Sample Collected by	M/s. Biochem Labs			

S. No	Species/Group	% Composition				
		South brake Wall Outside	North brake Wall Outside			
1.	Capitella sp.	54	48			
2.	Syllidae sp	32	24			
3.	Amphipoda sp.	06	12			
4.	Nematoda sp.	34	06			
5.	Capitella sp.	10	24			
6.	Syllidae sp	26	08			
7.	Paraonidae sp.	12	16			
9.	Syllidae sp	10	10			
8.	Sabellidae sp	08	02			

Analyst





GANGAVARAM PORT LIMITED

GPL/ENV/APPCB/2022-23/031

Date: 05/09/2022.

To

The Environmental Engineer, A.P. Pollution Control Board Regional Office APPCB Buildings, 3rd Floor Main Road, Madhavadhara VUDA Layout Visakhapatnam- 530 009.

Dear Sir.

Sub:-Monthly CFO Compliance, Environmental Marine & Terrestrial

Monitoring Reports and Water Consumption detains (Form-1) -

Submitted - Reg.

Reff:-1. CFO & HWA Order No. APPCB/VSP/VSP/113/CFO/HO/2015. dated 13.01.2016, valid up to 31.12.2020.

2. CFO & HWA Order No. APPCB/VSP/VSP/113/CFO/HO/2020,

dated 10.09.2020, valid up to 31.12.2025.

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With reference to the above, we are here with submitting the monthly CFO compliance reports and CAAQM, Marine & Terrestrial monitoring results along with Water Consumption details in Form - 1 for the month of August -2022.

Yours Sincerely,

Authorized Signatory

Encl: As above.

Project Office

: Pedagantyada Mandal, Gangavaram (Post), Visakhapatnam - 530 044. Andhra Pradesh, INDIA

Tel.: +91 891 270 1177, 2277, 276 1377, Fax: +91 891 270 3377

Corporate Office: 2nd, 3rd and 4th Floors, "Hansa Plaza", Plot No.798, Road No.36, Jubilee Hills, Hyderabad - 500 033

Tel.: 040 3359 9999, Fax No.: 040 3359 9990

E-mail: port@gangavaram.com, Web: www.gangavaram.com

Compliance of the conditions stipulated in CFO Auto Renewal Order No. APPCB/VSP/VSP/113/CFO/HO/2020- 10/09/2020, valid up to 31.12.2025.

SI.	Condition	Compliance
No. 1.	All other conditions mentioned in Schedules	Noted and conditions are being
	A, B & C of the combined CFO&HWA order	followed as applicable.
	issued by the Board vide order dated	
2.	13.01.2016 will remain same. The facility shall comply with the standards	Noted and condition is being
۷.	issued by MoEF&CC / CPCB from time to	followed.
	time.	
3.	The industry shall submit Half yearly compliance reports to all the stipulated conditions in Environmental Clearance (EC), Consent for Establishment (CFE) and Consent for Operation (CFO) through	Self-certified 1 st half yearly compliance report for the period from April 2021 to September 2021 submitted on 29.11.2021 through web site.
	website i.e., https://pcb.ap.gov.in by 1st of January and 1st July of every year. The first half yearly compliance reports shall be furnished by the industry and second half yearly compliance reports shall be the audited through NABL accredited third party failing which the Consent Order issued will be cancelled.	NABL Accredited Agency certified compliance report for the 2 nd half for the period from October 2021 to March 2022 was uploaded through website on 30.05.2022.
4.	The facility shall ensure that dedicated fund is allotted towards Environment Relief Fund (ERF) in the Public Liability Insurance policy and submit a copy of the policy at the Regional Office: Visakhapatnam every year.	GPL is having Public liability Insurance of IFFCO-TOKIO vide Policy No:41063755, dated 28.09.2021, Valid till 14/09/2022 with Premium of Rs-5615/- & ERF of Rs.5615/-
5.	In case of false certification, noncompliance of conditions / directions and discrepancy in furnishing the information by the industry, the Board can withdraw the auto renewed consent and take action under provisions of relevant Acts & Rules.	Noted and condition is being followed.
6.	The facility shall inventorize the storage quantities of hazardous chemicals as per the hazard nature of reactivity / toxicity / flammability / explosive stored/handling in the premises as defined in the Management of Storage, Import of Hazardous Chemicals (MSIHC) Rules, 1989 and the details shall be furnished to the Factories Department and to the Regional Office, APPCB on monthly basis duly certifying the same.	GPL is not handling any Hazardous cargo/Containers/Chemicals.

7.	The facility shall identify major accident hazard chemicals & list out the hazardous chemicals endangered to human health & environment and the details shall be furnished to the Factories Department and to the Regional Office, APPCB time to time duly certifying the same by the industry. Further the facility shall extend training to the working personnel's while handling hazardous chemicals for prevention of accidents and necessary antidotes to ensure the safety, as per the MSIHC Rules, 1989.	GPL is not handling any Hazardous cargo/Containers/Chemicals.
8.	The facility shall submit the copy of the safety audit report and On-Site / Off Site Emergency Plans as applicable after being certified by the Factories Department/concerned authority, to the APPCB, Regional Office from time to time, if the storage quantity of hazardous chemicals is equal to or, in excess of the threshold quantities specified in schedule 2 & 3 of MSIHC Rules, 1989.	An onsite and offsite emergency action plan has been prepared and submitted to APPCB, RO, VSP. Mock drills are being conducted twice in a year.
9.	The facility shall carryout calibration of safety equipments and leak detection systems at regular intervals and shall certify the same with the Factories Department/concerned authority. That certified copy shall be submitted to the APPCB, Regional Office. The facility shall install fluorescent Wind Vane at the highest point in the facility premises.	 GPL install fluorescent Wind Vane at the following two places within the Port premises. 1. On the top of Over Head Tank near Harbour Gate besides GPL Canteen. 2. On the top of Commercial Office Building (COB)
10	The facility shall inventorize the hazardous wastes and its quantities stored within the facility premises as per the Hazardous and Other Wastes (Management and Transboundary Movement) Rules, 2016 (HOWM Rules, 2016) and shall furnish the details to Regional Office, APPCB on monthly basis duly certifying the same by the industry.	GPL is not handling any Hazardous cargo/ Containers/Chemicals. GPL is permitted to handle Used Lubricating oil of 12000 LPA. The generation, storage & disposal details are submitting to APPCB through Form – IV. Latest submission is on 06.06.2022 for the year 2021-2022.
11	The facility shall allow import of hazardous cargoes only after the importer complies with the MSIHC Rules, 1989.	GPL Not handling any Hazardous cargo/Containers/Chemicals.

Compliance report of the conditions stipulated in Schedule A,B & C of CFO & HWA Order No. APPCB/VSP/VSP/113/CFO/HO/2015, dated 13.01.2016

Compliance of Schedule - A

SI. No.	Condition	Compliance
1.	Any up-set condition in any plant/plants of the industry, which result in, increased effluent/ emission discharge and/ or violation of standards stipulated in this order shall be informed to this Board, under intimation to the Collector and District Magistrate and take immediate action to bring down the discharge / emission below the limits.	All conditions are being followed.
2.	The industry should carryout analysis of waste water discharges or emissions through chimneys for the parameters mentioned in this order on quarterly basis and submit to the Board.	GPL is carrying out 3 rd party monitoring and analysis. As per analysis reports, the samples are meeting the Board standards.
3.	All the rules & regulations notified by Ministry of Law and Justice, Government of India regarding Public Liability Insurance Act, 1991 should be followed as applicable.	Noted and conditions are being followed as applicable.
4.	The industry should put up two sign boards (6×4 ft. each)at publicly visible places at the main gate indicating the products, effluent discharge standards, air emission standards, hazardous waste quantities and validity of CFO and exhibit the CFO order at a prominent place in the factory premises.	Noted and condition is being followed.
5.	Notwithstanding anything contained in this consent order, the Board here by reserves the right and powers to review / revoke any and / or all the conditions imposed herein above and to make such variations as deemed fit for the purpose of the Acts by the Board.	Noted the condition.
6.	The industry shall file the water cess returns in Form-I as required under section (5) of water (Prevention and Control of Pollution) cess Act, 1977 on or before the 5 th of every calendar month, showing the quantity of water consumed in the previous monthly along with water meter readings. The industry shall remit water cess as per the assessment order as and when issued by Board.	Water consumption details of the previous month are being submitted before 5 th of subsequent month in FORM - I. The latest reports for the Month of July, 2022 were submitted through e.mail 17 th August, 2022 After introduction of GST, APPCB has instructed all the industries are not required to remit water cess charges from 1 st July, 2017 onwards.

7.	The applicant shall submit Environment	Complied and Form V was Submitted
	statement in Form V before 30 th	on 24.09.2021 for the period 2020-
	September every year as per Rule No.14	2021
	of E(P) Rules,1986 & amendments	
	thereof.	
8.	The applicant should make applications	GPL has obtained CFO & HWA of the
	through Online for renewal of Consent	Board vide order dated 13/01/2016
	(under Water Air Acts) and Authorization	valid up to 31.12.2020 and extended
	under HWM Rules at least 120 days	up to 31.12.2025 vide order dated
	before the date of expiry of this order,	10.09.2020.
	along with prescribed fee under Water	
	and Air Acts and detailed compliance of	
	CFO conditions for obtaining Consent &	
	HW Authorization of the board. The	
	industry should immediately submit the	
	revised application for consent to this	
	Board in the event of any change in the	
	raw material used, processes employed,	
	quantity of trade effluents & quantity of	
	emissions. Any change in the	
	management shall be informed to the	
	Board, the person authorized should not	
	let out the premises / lend / sell / transfer	
	their industrial premises without	
	obtaining prior permission of the state	
	Pollution Control Board.	
9.	Any person aggrieved by an order made	Noted and condition will be followed.
	by the state board under section	
	25,section 26,section 27 of water Act,	
	1974 or section 21 of Air Act,1981 may	
	within thirty days from the date on which	
	the order is communicated to him, prefer	
	an appeal as per Andhra Pradesh Water	
	Rules,1976 and Air Rules 1982, to	
	Appellate authority constituted under	
	section 28 of the Water (prevention and	
	control of pollution) Act,1974 and section	
	31 of the Air (prevention and control of	
	pollution) Act,1981.	

Compliance of Schedule - B

SI.	Condition			Compliance			
No.							
	Water Pollution						
1.	The water consumption quantities are						
	men	mentioned below:			GPL is submitting water		
		S. No	Purpose		Jantity KLD		consumption details and water cess
		1	Gardening/irrigation		25		in Form-l regularly.
	-	2	Dust suppression	12	296.0		The industry is appropriate water
	-	3	Domestic	12	40		The industry is consuming water within consented quantity only.
	•	4	Ship supply		32.5		within consented quantity only.
	•	5	miscellaneous		40.6		Provided 2 No. nos of flow meters
	-		Total	14	434.1		for quantification of water used for
	Sour	се	of water is Visakhapat	tnar	m industri	al	domestic and other purposes.
	wate	er st	ipply Co. the following	g is	the		comeseio ene cener perposes.
	pern	nitte	ed water consumption	٦.			
	S.		Purpose		Quantity		
	No	_			KLD		
	1	_	ıst suppression		1296.0		
	2	_	mestic purpose		40.00	_	
	3		ocess, where by water its polluted and pollutar	o t c	73.1		
		_	e easily bio degradable.				
	4		ocessing, where by				
			ater gets polluted and				
			llutants are not easily b	oio			
		de	gradable				
			Total		1409.1]	
			e water meters shall				
			essessing the quantity	-			
			n of the purpose me		oned abov	∕e	
			assessment purpose.		(ODI) I		001
2.			ngavaram Port Limit		• •		GPL has provided separate energy
			separate energy mate				meters for Sewage Treatment Plant
			ent Plant (STP) and fo				(STP) and separate energy meter for
	Cont		equipments to r ption.	eco	ord energ	Эy	the Air pollution Control equipments (MDSS) to record energy
	COITS	UIII	ption.				consumption.
	Air E	olli	ıtion				Consumption.
1.			ngavaram Port Limit	-ed	(GPI) sha	all	The mitigation measures being
''			with ambient air qu				implemented by GPL ensures that
		•	(Particulate matter si	•			the ambient air quality parameters
							conform to the PCB prescribed
	μ m) - 100 μ g /m³; PM $_{2.5}$ (Particulate matter size less than 2.5 μ m) - 60 μ g / m³ : SO $_2$ - 80 μ g /m³ : NO $_X$ - 80 μ g /m³ ,outside the port premises at the periphery of the industry. Standards for other parameters as mentioned in the National Ambient Air				standards.		
				as			
				۱i۲			
	Qual	ity	Standards CPCB Not	tifica	ation No.	B-	
	-	•	:0/90/PCI-I, dated 18.				
			evels:				
	-		e (6 AM to 10 PM) - 75				
	Nigh	t tir	me (10 PM to 6 AM) -	70 (dB (A).		

2.	The Gangavaram port limited (GPL) shall maintain 3 CAAQMs with online connectivity to APPCB and maintain records.	GPL installed 3 No. of CAAQM stations to measure the parameters PM 10, PM 2.5, SO ² , NO, NO ² , CO at the following locations and data connected to APPCB website. i. Administrative office towards H.B. Colony (Station 1): ii. Project site office building towards Venkannapalem (Station2) iii. Watch tower – 4 towards Gangavaram village (Station3).As per the data, the SPM values are within Board standards.
3.	The Gangavaram Port Limited (GPL) shall Maintain wind breaking wall all along the Gangavaram village side up to a height 10 mts as wind speed is high in this area	GPL erected wind breaking wall of height 6m on the compound wall of height 3m near Gangavaram village and HB Colony to prevent any dust nuisance towards habitation & maintaining about 50 m width of green belt along port compound wall near Gangavaram (V).
4.	The Gangavaram Port Limited (GPL) shall not establish any other stock yards other than designated stock yards.	GPL has not established any stock yards other than designated stock yards.
5.	The Gangavaram Port Limited (GPL) shall maintain Telescopic chute at ship loading points	GPL is maintaining Telescopic chute at ship loading points.
6.	The Gangavaram port limited (GPL) shall not stock the Materials more than 10mts height where MDSS system available and shall restrict to 6 mts for other stocking heights where tankers water spraying system is maintained in the stockyards.	GPL obtained amendment to this condition vide Amendment to CFO dated 16/09/2016 and the condition was amended as: "GPL shall not stock the materials more than 12 meters height where MDSS system is available and shall maintain stack height of 10 meters at manual stack yards"
7.	The Gangavaram port limited (GPL) shall take up the cleaning of road connected to National Highway in co-ordination with GVMC and R&B Departments.	This condition was deleted vide direction no. 06 vide Order No. 754/APPCB/UH-II/TF/VSP/ 2016, dated 12.08.2016. GVMC is taking up the cleaning of road.
8.	The Gangavaram Port Limited (GPL) shall maintain dusty cargo operations if the wind velocity crosses 20 KMPH and all MDSS sprinklers shall start immediately to maintain AAQ standards	Noted and condition is being followed.
9.	The Gangavaram Port Limited (GPL) shall maintain fully mechanized handling equipments for loading and un loading operations for dusty cargo to the maximum extent possible.	Noted and condition is being followed.

	Gene	eral				
2.	main same inspe a. C b. L c. H g d. Ir e. W	tain the form of the stand of the section of the se	ollowing remade avers of the lang materia for polon hazard ad dispose took. The port Limited in the lang material for the language of the lan	al wise details. Iution control ous solid waste	are	e records are being maintained and a available for inspecting officers of a Board.
	follo		0300 (14011	1102010003/ 03	a.	GPL is disposing the municipal solid waste to GVMC.
	S. No	Name of the solid	Quantity	Disposal	b.	GPL is disposing the discarded
	1.	waste Domestic solid waste	10 T/m	Shall be collected segregated and disposed as per MSW Rules in consultation with GVMC Authorities	c.	material & plastic material to authorized recyclers. STP sludge is being turned in to bio-compost and used as manure to green belt. Lead acid batteries are being
	2.	Discarded material, plastic material	10 T/m	Shall be disposed to authorized recyclers only		disposed to the supplier on buy back basis.
	3.	Sludge from STP	1.0 T/m	Shall be composted and used in green belt programme		
	4.	Lead acid batteries		Shall be disposed to authorized recyclers		
3.	main	tain green ipulated in	belt in 50	ited (GPL) shall D meters width order dated 07-	A	GPL has developed plantation of 5.0 Lakhs saplings in about 318.21 acres within the Port premises besides existance of Prosopis in an extent of about 150 Acres covering periphery of all yards, roads, buildings and all along conveyor belt. Maintaining 50 m width of green
						belt towards North and North-West direction with special emphasis towards habitation i.e., HB Colony, Peda Gantyada, Venkannapalem, Kongapalem & Gangavaram village.

		Maintaining thick greenbelt at Port Approach road, Railway track side and at Truck parking area along the wind breaking wall towards HB Colony.
		Developed High Density Plantation (Miyawaki) within the Port premises in an extent of 1.0 Acre with 12,120 no. of plantation, as directed by APPCB
		Participated in Green Visakha – Clean Visakha – Green Visakha – Clean Visakha – One million Tree Plantation Programme – GPL completed the targeted plantation of 50,000 by 18.08.2022 against the target of 50,000
		GPL established exclusive nursery with 80,000 saplings and employed 183 people to maintain and improve the green belt on continuous basis.
		About Rs.1.85 Cr per annum is being spent for the development of green belt in the true spirit.
4.	The Gangavaram Port Limited (GPL) shall not store/ handle any hazardous cargo containers within premises.	GPL is not handling container cargo operations.
5.	All types of the fertilizers shall be stored in the closed warehouses only. The port shall ensure that there shall not be any open storage of urea or any other fertilizer materials and all urea & fertilizer material handling warehouses shall be maintained with effluent collection pits for collection and treatment and then used for green belt in the premises after meeting the standards.	GPL is storing the Fertilizers in closed ware houses and provided leachate collection pits around the area of warehouses and connected to STP.
6.	The Gangavaram Port Limited (GPL) shall store fuel oils used for construction equipment vessels / vehicles in a well designed manner and protect them against fire hazards by construction of compound wall to prevent access to unauthorized elements. The surface run off from storage area shall pass through oil water separator before being discharging. The Gangavaram Port Limited (GPL) shall store fuel oils used for construction equipment vessels / vehicles in a well designed manner and protect them against fire hazards by construction of compound wall to prevent access to	GPL is storing the used oil in drums under a shed.

unauthorized elements. The surface run off from storage area shall pass through oil water separator before being discharging. 7. The Gangavaram Port Limited (GPL) shall maintain the Malaria control programme and Health facilities in the operation phase. Vector control programmes. Control of all breeding ground shall be	GPL is having dispensary within the premises and no malaria cases were reported as of now. All anti malarial measures are taken
discharging. 7. The Gangavaram Port Limited (GPL) shall maintain the Malaria control programme and Health facilities in the operation phase. Vector control programmes. Control of all breeding ground shall be	premises and no malaria cases were reported as of now.
7. The Gangavaram Port Limited (GPL) shall maintain the Malaria control programme and Health facilities in the operation phase. Vector control programmes. Control of all breeding ground shall be	premises and no malaria cases were reported as of now.
carried out by the use of larvicide's in addition to control of adult mosquitoes. The health team should include a trained entomologist.	
8. The Gangavaram Port Limited (GPL) shall maintain a task force to check the vehicle emissions on permanent basis. The Gangavaram Port Limited (GPL) shall maintain a task force to check the vehicle emissions on permanent basis.	GPL has provided provision for checking vehicle emissions with a task force team including environment and safety department officials.
9. The Gangavaram Port Limited (GPL) shall constitute an Environment Management cell with qualified and trained staff.	GPL is having a dedicated Environment Management Team headed by Vice President.
10. The Gangavaram Port Limited (GPL) shall maintain onsite and offsite emergency action plan after carrying out risk analysis and hazop studies	Complied with the condition.
11. The Gangavaram Port Limited (GPL) with VUDA shall ensure that no slum development and unauthorized construction occur in the surrounding area.	VMRDA (VUDA) is taking necessary precautions to see that no slum development and unauthorized construction occur in the surrounding area of GPL.
12. The Gangavaram Port Limited (GPL shall handle alumina in completely closed enclosures. It shall also furnish an action plan to install mechanized system.	GPL is handling the alumina in hoppers and directly through tankers.
 The Gangavaram Port Limited (GPL) shall implement fallowing for controlling fugitive emission: a. Adequate dust controlling measures should be undertaken for loading and unloading operations for dusty cargo. b. Closed conveyor belt with water sprinkling arrangement for suppression of dust while conveyor dusty cargo likes coal, iron ore & alumina. c. Vehicle movement minimized / eliminated by implementing mechanical operations. 	 a. Mechanical Dust Suppression System (MDSS): 176 No. of water cannons were installed at stack yards for dust. b. Provided Dust suppression systems at discharge/feeding points of belt conveyors at each transfer tower. c. Laid BT road within the port premises. d. 5 No. of heavy duty sweeping (3 No. existing & 2 New) machines were deployed for cleaning of berths, back up areas and roads. e. Covering the outgoing cargo vehicles with tarpaulin.

	d. All the vehicles involved in transportation of cargo shall be covered with tarpaulin.	f. Provided dedicated truck/tyre washing facility to wash all the outgoing vehicles
	e. Traffic management measures adopted to avoid traffic congestion and provide empty dusting vehicle washing / dry cleaning system to	g. Provided dedicated truck parking facility.
	clean all out going cargo vehicles.	h. Ensuring continuous water sprinkling on the berths, back up
	 f. Sufficient parking facilities based on traffic density / vehicular movements anticipated from the port. 	areas, at all transfer points, hauling roads with 20 Mobile DSS tankers for dust suppression.
	g. Adequate water sprinkling provided on roads and at dusty cargo storage areas for suppression of dust	
14.	The Gangavaram Port Limited (GPL) shall implement the following measures in the cargo handling and stacking area:	i. Established mechanical conveyor system for handling coal & Iron ore to prevent the spillage of cargo and provided closed hoods for the
	a. The ship un-loader maintained with in-situ water sprinkling system and unloading hoppers provided with	conveyor system to curb fugitive emissions of coal/iron ore particles into the air.
	covers on three sides to control fugitive emissions. Iron ore shall be unloaded through wagon tipplers. b. Mechanical stackers cum re-claimers	ii. Stacker cum re-claimers are being used for loading and unloading the coal. The railway wagons are being
	for stacking, transfer and reclamation; Conveyors for transfer of materials to stop manual handling / mobile machines. c. MDSS in stacking areas.	loaded mechanically. The Port is having Stacker cum re-claimer-1no., reclaimers-3nos., stackers-3nos., wagon loader-1no., silo of 800 cu.m capacity, ship unloader-2nos, ship loader-1no., wagon tipplier-1no., mobile harbour cranes-5no.
		iii. Mechanical Dust Suppression System (MDSS): 176 No. of water cannons were installed at stack yards for dust suppression by spraying water at high pressure to form blanket of mist on surface of cargo stock to settle the dust.
15.	The Gangavaram Port Limited (GPL) shall ensure AAQ standards of the Board on all environmental conditions without fail.	GPL has provided 3 nos AAQ stations with data logger and connected to APPCB website.
16.	The Gangavaram Port Limited (GPL) shall maintain standby centrifugal pump so as to ensure uninterrupted operation of MDSS.	Complied. There are 4 no. Centrifugal pumps kept standby.
17.	The Gangavaram Port Limited (GPL) shall maintain compliance of all other conditions of CFE orders issued by the Board	Complied with the condition.

18.	The Gangavaram Port Limited (GPL) shall	Complied with the condition.
	comply with Task Force directions and	
	other directions issued by the Board from	
	time to time.	

Compliance of Schedule - C

SI.	Condition	Compliance
No		·
1.	All the rules and regulations notified by Ministry of Environment & Forests, Government of India under the E (P) Act, 1986 in respect of management, handling, transportation and storage of the Hazardous waste should be followed.	GPL is following all the rules and regulations notified by Ministry of Environment & Forests, Government of India under the E(P) Act, 1986 in respect of management, handling, transportation and storage of the Hazardous waste.
2.	The Gangavaram Port Limited (GPL) shall not store hazardous waste for more than 90 days as per the Hazardous Wastes (Management. Handling and Tran boundary Movement) Rules, 2008 and amendments thereof.	Complied with the condition.
3.	The Gangavaram Port Limited (GPL) shall dispose Used Lead Acid Batteries to the manufacturers / dealers on buyback basis	GPL is buying the Lead acid on buy back basis.
4.	The Gangavaram Port Limited (GPL) shall maintain 6 copy manifest system for transportation of waste generated and a copy shall be submitted to concern Regional Office of APPCB. The driver who transports Hazardous Waste should be well acquainted about the procedure to be followed in case of an emergency during transit. The transporter should carry a Transport Emergency (TREM) Card.	GPL is following manifest system for disposal of waste oil to APPCB authorized agencies and submitting the copies to the Board.
5.	The Gangavaram Port Limited (GPL) shall maintain proper records for Hazardous Wastes stated in Authorization in FORM-3 i.e., quantity of Incinerable waste, land disposal waste, recyclable waste etc., and file annual returns in Form- 4 as per Rule 22(2) of the Hazardous Wastes (Management, Handling & Tran boundary Movement) Rules, 2008 and amendments thereof	GPL is maintaining records for Hazardous Wastes stated in Authorization in Form-3 of CFO Order and filing annual returns in Form- 4 to APPCB. For the year 2021-2022 Form - 3 & Form - 4 Submitted on 06.06.2022.
6.	The Gangavaram Port Limited (GPL) shall submit the condition wise compliance report of the conditions stipulated in Schedule A, B & C of this Order on half yearly basis to Board Office, Hyderabad and concerned Regional Office	Complied with the condition. GL is submitting the compliance reports on monthly basis.

GANGAVARAM PORT LIMITED

(An ISO 9001:2015 & ISO 14001:2015

Certified Company)



Environment Monitoring ReportAugust, 2022

Corporate Office:

2,3,4th Floors, Hansa plaza, Plot No.798, road No.36, Jubilee Hills, Hyderabad - 500033 Phone: 040 – 33599999

Site Office:

Gangavaram (V & Post) Pedagantyada (Mandal) Visakhapatnam – 530 044 Phone: 0891 -2701177

Reference No.:	GPL/July/2022/029	Submitted to:
Monitoring Date:	01.08.2022	
ganization Name:	Organization Name: Gangavaram Port Limited	A.P. Pollution Control Board,
Type Of Sample;	Ambient Air Quality	Regional office, Visakhapatnam
Sampled By:	Gangavaram Port Limited (CAAQ Monitoring Data)	

Station - 1 - Administrative Office Building (AOB) towards HB Colony PM10 PM SO² NO NO² C 47.85 29.50 49.63 17.80 11.35 0.9 100 60 80 80 80 4 19/m³ µg/m³

Prepared by: 1465

G.V.N.S. Murthy, GPS 1910

Por Langavaram Port Lanited

(Dr. DOyothi)

Reference No.:	GPL/July/2022/029	Submitted to:
Monitoring Date:	02.08.2022	
Organization Name:	Organization Name: Gangavaram Port Limited	A.P. Pollution Control Board,
Type Of Sample:	Ambient Air Quality	Regional office, Visakhapatnam
Sampled By:	Gangavaram Port Limited (CAAQ Monitoring Data)	

	Station - 3 - Watch Tower - 4 towards Venkannapalem	SO ² NO NO ² CO	15.87 10.97 0.33 48.95 29.99 40.50 11.23 13.15 0.32	80 80 4 µg/m³ µg/m³ µg/m³
	Station -	P.M 2.5	29.99 4	60 pg/m³ p
		PM10	48.95	100 µg/m³
		00	0.33	4 µg/m³
data	Office	NOs	10.97	80 µg/m³
average	ect Site	0 N	15.87	80 µg/m³
Ambient Air Quality 24 hrs average data	Station - 2 - Project Site Office towards Venkannapalem	\$0°	27.63 58.70	80 µg/m³
r Quality	Station	P.M 2.5	27.63	60 µg/m³
bient Ai		PM10	43.90	100 µg/m³
Am	gui	8	0.34	4 µg/m³
	ice Build lony	NO	9.28	80 µg/m³
	ative Off	0	18.34 9.28	80 µg/m³
	 1 - Administrative Office E (AOB) towards HB Colony 	202		80 µg/m³
	Station - 1 - Administrative Office Building (AOB) towards HB Colony	P.M 2.5	47.37 29.20 42.29	60 µg/m³
	Stati	PM10	47.37	100 µg/m³
	Station	Parameter	Day average value	Standard

Prepared by: Lifert G.V.N.S. Murthy, GPS 1910

For Gangavaram Port Limited

Vice Prasident (Environment)

Reference No.:	GPL/July/2022/029	Submitted to:
Monitoring Date:	03.08.2022	
ganization Name:	Organization Name: Gangavaram Port Limited	A.P. Pollution Control Board,
Type Of Sample:	Ambient Air Quality	Regional office, Visakhapatnam
Sampled By:	Gangavaram Port Limited (CAAQ Monitoring Data)	

						Am	Dient Al	d'alle	Ambient Air Quality 24 hrs average data	average	e data							
Station	Stat	(AOB)	Administr) toward	Station - 1 - Administrative Office Building (AOB) towards HB Colony	ice Build	gui		Station	Station - 2 - Project Site Office towards Venkannapalem	ect Site	Office			Station	Station - 3 - Watch Tower - 4 towards Venkannapalem	tch Tow	er - 4	
Parameter	PM10	P.M 2.5	\$0 ₂	ON	NO	8	PM10	P.M 2.5	SO ²	NO NO	NO2	8	PM10	P.M.	\$0 ₂	0	NO	8
Day average value	47.06	29.01	36.00	47.06 29.01 36.00 18.12 6.64 0.23 43.61	6.64	0.23	43.61	27.44	27.44 52.00 15.70 7.90 0.22 48.63 29.79 34.45 11.08	15.70	7,90	0.22	48.63	29.79	34,45	11.08	9.41	0.21
Standard	100 µg/m³	60 µg/m³	80 µg/m³	80 µg/m³	80 µg/m³	80 4 µg/m³ µg/m³	100 µg/m³	60 hg/m³	80 µg/m³	80 µg/m³	80 µg/m³	4 µg/m³	100 µg/m³	60 µg/m³	80 µg/m³	80 µg/m³	80 µg/m³	4 μg/m³

Prepared by: / July G.V.N.S. Murthy, GPS 1910

(Dr.O. Jyothi)

Reference No.: Monitoring Date:	GPL/July/2022/029 04.08.2022	Submitted to:
zation Name:	Organization Name: Gangavaram Port Limited	A.P. Pollution Control Board,
Type Of Sample:	Ambient Air Quality	Regional office, Visakhapatnam
Sampled By:	Gangavaram Port Limited (CAAQ Monitoring Data)	

		00	0.25	4 μg/m³
	er - 4	NO2	9.37	80 µg/m³
	Station - 3 - Watch Tower - 4 towards Venkannapalem	ON.	10.11	80 µg/m³
	- 3 - Wa	50s	34.84	80 µg/m³
	Station	P.M 2.5	29.56	60 µg/m³
		PM10	48.24 29.56 34.84 10.11	100 µg/m³
		00	0,26	4 µg/m³
e data	Office	NO2	7.88	80 µg/m³
averag	Station - 2 - Project Site Office towards Venkannapalem	NO	14.52	80 µg/m³
y 24 hrs	-2 - Pro	20s	27.23 52.34 14.52	80 µg/m³
r Qualit	Station	P.M 2.5	27.23	60 µ9/m³
Ambient Air Quality 24 hrs average data		DM10	43.26	100 µg/m³
Am	ling	00	0.27	4 µg/m³
	ice Build Iony	NO2	J - 1	80 80 4 µg/m³ µg/m³
	ative Off s HB Co	ON.	16.66	80 µg/m³
	-1-Administrative Office B (AOB) towards HB Colony	203	36,37 16.66 6.62	80 µg/m³
	Station - 1 - Administrative Office Building (AOB) towards HB Colony	P.M 2.5	28.79	60 µg/m³
	Stati	DM10	46.69	100 µg/m³
	Station	Parameter	Day average value	Standard

For Gangavaram Part Limiteo

Prepared by: / twr G.V.N.S. Murthy, GPS 1910

T. J. C. C.

Vice President (Environment)

Reference No.:	GPL/July/2022/029	Submitted to:
Monitoring Date:	05.08.2022	
ganization Name:	Organization Name: Gangavaram Port Limited	A.P. Pollution Control Board,
Type Of Sample:	Ambient Air Quality	Regional office, Visakhapatnam
Sampled By:	Gangavaram Port Limited (CAAQ Monitoring Data)	20

						Am	Ambient Air Quality 24 hrs average data	ir Qualit	y 24 hrs	average	e data							
Station	Stat	(AOB)	Administr) toward	Station - 1 - Administrative Office Building (AOB) towards HB Colony	fice Build lony	guit		Station	- 2 - Proj	Station - 2 - Project Site Office towards Venkannapalem	Office			Station	Station - 3 - Watch Tower - 4 towards Venkannapalem	tch Tow	er - 4 lem	
Parameter	PM10	2.5	503	ON.	NO2	8	PM10	P.M 2.5	205	ON.	NO2	8	PM10	P.M 2.5	S02	0 N	NO2	8
Day average value	46.88	28.91	37.54	28.91 37.54 16.25	7.49	0.47 43.44	43.44	27.34	53.62	27.34 53.62 14.20 8.88	8.88	0,46	48.44	0,46 48,44 29.69 35.88	35.88	9.83 10.61	10.61	0.45
Standard	100 µg/m³	60 µg/m³	80 µg/m³	80 µ9/m³	80 µg/m³	4 µg/m³	100 mg/m³	60 µg/m³	80 µg/m³	80 µg/m³	80 µg/m³	4 µg/m³	100 µg/m³	60 µg/m³	80 µg/m³	80 µg/m³	80 µg/m³	4 μg/m³

For Gangavaram Port Limited

Prepared by: AHGGV.N.S. Murthy, GPS 1910

Vice President (Environment)

Reference No.:	GPL/July/2022/029	Submitted to:
Monitoring Date:	06.08.2022	
rganization Name:	Organization Name: Gangavaram Port Limited	A.P. Pollution Control Board,
Type Of Sample:	Ambient Air Quality	Regional office, Visakhapatnam
Sampled By:	Gangavaram Port Limited (CAAQ Monitoring Data)	

	Station - 3 - Watch Tower - 4 towards Venkannapalem	PM10 PM SO ² NO NO ² CO	0.60 48.68 29.83 34.97 9.65 11.06 0.59	100 60 80 80 4 µg/m³ µg/m³ µg/m³ µg/m³ µg/m³
		8	09'0	80 4 µg/m³ µg/m³
e data	Office	NO2	9.27	80 µg/m³
averag	ect Site	NO.	13.96	80 µg/m³
y 24 hrs	Station - 2 - Project Site Office towards Venkannapalem	20 ₂	52,49 13.96	80 µg/m³
r Quality	Station	P.M 2.5	27.47	60 µg/m³
Ambient Air Quality 24 hrs average data		PM10	43,65	100 µg/m³
A	ing	8	0.61	4 µg/m³
	ice Build Iony	NO2	7.81	80 µg/m³
	stive Off	NO No	15.95	80 µg/m³
	Station - 1 - Administrative Office Building (AOB) towards HB Colony	SO2	47,11 29.04 36.47 15.95	80 µg/m³
	(AOB)	P.M 2.5	29.04	60 µg/m³
	Stat	PM10	47.11	100 µg/m³
	Station	Parameter	Day average value	Standard

Prepared by: Assty. GPS 1910

For Gangavaram Port Limited

(Dr. &. Iyothi) Vice President (Environment)

Reference No.:	GPL/July/2022/029	Submitted to:
Monitoring Date:	07.08.2022	
rganization Name:	Organization Name: Gangavaram Port Limited	A.P. Pollution Control Board,
Type Of Sample:	Ambient Air Quality	Regional office, Visakhapatnam
Sampled By:	Gangavaram Port Limited (CAAQ Monitoring Data)	

For Gangavaram Port Limited

(Dr. D. Jyothi)

Prepared by: Appl G.V.N.S. Murthy, GPS 1910

Reference No.: GPL/July/2022/029 Submitted to: Monitoring Date: 08.08.2022 Organization Name: Gangavaram Port Limited A.P. Pollution Control Board. Type Of Sample: Ambient Air Quality Regional offlice, Visakhapatnam
--

						Am	Ambient Air Quality 24 hrs average data	r Qualit	y 24 hrs	averag	e data							
Station	Stat	Station - 1 - Administrative Office Building (AOB) towards HB Colony	-1 - Administrative Office ((AOB) towards HB Colony	rative Offi	fice Build	guip		Station	Station - 2 - Project Site Office towards Venkannapalem	ect Site Kannapa	Office			Station	Station - 3 - Watch Tower - 4 towards Venkannapalem	kannapa	er - 4	
Parameter	PM10	P.M.	S02	ON.	NO2	8	PM10	P.M 2.5	SO2	ON.	NO2	8	PM10	P.M 2.5	S0 ²	9	NO2	8
Day average value	47.69	47.69 29.40 37.05 13.46 8.04 0.86 44.19	37.05	13,46	8.04	0.86	44.19	27.81	27.81 53.21 11.97	11.97	9.55	0.84	49.28	30.19	35.57	35.57 7.97 11.40 0.83	11.40	0.83
Standard	100 µg/m³	60 µg/m³	80 hg/m³	80 µg/m³	80 µg/m³	4 µg/m³	100 µg/m²	60 µg/m³	80 µg/m³	80 µg/m³	80 µg/m³	4 μg/m³	100 µg/m³	60 µg/m³	80 µg/m³	80 µg/m³	80 µg/m³	4 µg/m³

Prepared by: / pkgr G.V.N.S. Murthy, GPS 1910

For Gangavaraminad Limited

Vice President (Environment)

Ref erence No.:	GPL/July/2022/029	Submitted to:
Monitoring Date:	09,08,2022	
Organization Name:	Gangavaram Port Limited	London Continuity O O A
Type Of Sample:	Ambient Air Quality	Regional office, Visakhapatnam
Sampled By:	Gangavaram Port Limited (CAAQ Monitoring Data)	

Station Station -1 - Administrative Office Building Station -2 - Project Site Office Station -2 - Project Site Office Station -3 - Watch Tower - 4 towards Venkannapalem towa							An	Ambient Air Quality 24 hrs average data	r Qualit	y 24 hrs	averag	e data							
PM10 PM SO ² NO NO PM10 PM SO ² NO NO PM10 PM SO ² NO NO NO NO NO SO PM10 PM10 SO NO NO<	Station	Stat	ion - 1 - ,	Administ) toward	rative Of	fice Buil	ding		Station	- 2 - Proj	ect Site	Office			Station	rds Ven	tch Tow	er - 4	
47.52 29.30 36.31 14.71 8.07 0.69 44.03 27.71 52.41 12.97 9.57 0.68 49.10 30.09 34.82 8.81 11.45 1100 60 80 80 8 100m³ μg/m³ μ	Parameter	PM10	P.M 2.5	205	9	NO2	8	DM10	P.M 2.5	205	02	NO2	9	PM10	P.M 2.5	205	ON.	NOs	8
100 60 80 80 80 4 100 60 80 80 8 4 100 80 80 80 8 4 100 60 80 80 80 80 80 80 80 80 80 80 80 80 80	Day average value	47.52	29.30		14.71	8.07	69.0	44.03	27.71		12.97	9,57	0,68	49.10	30.09	34.82	8.81	11.45	0.67
	Standard	100 µg/m³				80 µg/m³	4 μg/m³	100 µg/m³			80 µ9/m³		4 µg/m³	100 µg/m³	60 µg/m³	80 µg/m³	80 µg/m³	80 µg/m³	4 µg/m³

For Gangavaram Port Limited

[Dr. D. Jyothi)

Vice President (Environment)

Prepared by: And G.V.N.S. Murthy, GPS 1910

Rererence No.: Monitoring Date:	GPL/July/2022/029 10.08.2022	Submitted to:
ization Name:	Organization Name: Gangavaram Port Limited	A.P. Pollution Control Board,
Type Of Sample:	Ambient Air Quality	Regional office, Visakhapatnam
Sampled By:	Gangavaram Port Limited (CAAG Monitoring Data)	

		8	5 0.94	n³ µg/m³
	ver - 4	NO.	11.45	80 µg/m³
	kannap	8	9.13	80 hg/m³
	Station - 3 - Watch Tower - 4 towards Venkannapalem	S02	37,55	80 µg/m³
	Station	P.M 2.5	30.03 37.55	60 µg/m³
		PM10	49.00	100 µg/m³
		8.	0.95	4 µg/m³
e data	Office	NO2	9.57	80 µg/m³
s averag	ect Site kannapa	ON.	13.36	80 µg/m³
y 24 hr.	Station · 2 · Project Site Office towards Venkannapalem	SO2	27.66 55.39	80 µg/m³
Ambient Air Quality 24 hrs average data	Station	P.M 2.5	27.66	60 µg/m³
nbient A		PM10	43,95	100 µg/m³
A	guip	8	0.97	4 µg/m³
	fice Built	Nos	39.17 15.20 8.08 0.97	80 4 µg/m³ µg/m³
	ative of s HB Co	9	15.20	80 µg/m³
	 1 - Administrative Office E (AOB) towards HB Colony 	205	39.17	80 µg/m³
	Station · 1 · Administrative Office Building (AOB) towards HB Colony	2.5	29,24	60 µg/m³
	Stati	PM10	47.42	100 µg/m³
	Station	Parameter	Day average value	Standard

For Gangavaram Port Limited

(Or. B. Jyothi)

G.V.N.S. Murthy, GPS 1910 Prepared by: 2 pur

Reference No.:	GPL/July/2022/029	Submitted to:
Monitoring Date:	11.08.2022	
zation Name:	Organization Name: Gangavaram Port Limited	A.P. Pollution Control Board,
Type Of Sample:	Ambient Air Quality	Regional office, Visakhapatnam
Sampled By:	Gangavaram Port Limited (CAAQ Monitoring Data)	

						An	nbient A	ir Qualit	Ambient Air Quality 24 hrs average data	averag	e data							
Station	Stat	ion - 1 - A (AOB)	Station - 1 - Administrative Office Building (AOB) towards HB Colony	rative Of Is HB Co	fice Build	guib		Station	Station - 2 - Project Site Office towards Venkannapalem	ect Site	Office			Station	Station - 3 - Watch Tower - 4 towards Venkannapalem	tch Towe	r - 4 lem	
Parameter	PM10	P.M 2.5	S0 ²	9	NO2	8	PM10	P.M 2.5	205	02	NO2	8	PM10	P.M 2.5	\$0°	ON.	NO2	8
Day average value	47.38	29.22	38.46	38.46 16.59	8.59	1.10	43.91	27.64	27.64 54.59 14.46 10.15 1.09	14.46	10.15		48.96	30.00	30.00 36.87	10.06 12.18	12.18	1.08
Standard	100 µg/m³	60 µg/m³	80 µg/m³	80 µg/m³	80 µg/m³	4 µg/m³	100 µg/m³	60 pg/m³	80 µg/m³	80 µg/m³	80 µg/m³	4 µg/m³	100 µg/m³	60 µg/m³	80 µg/m³	80 µg/m³	80 µg/m³	4 μg/m³

or Gangavaram Port Limited

Vice President (Environment)

Prepared by: / pur G.V.N.S. Murthy, GPS 1910

Reference No.:	GPL/July/2022/029	Submitted to:
Monitoring Date:	12,08,2022	
Organization Name:	Organization Name: Gangavaram Port Limited	A.P. Pollution Control Board,
Type Of Sample:	Ambient Air Quality	Regional office, Visakhapatnam
Sampled By:	Gangavaram Port Limited (CAAQ Monitoring Data)	

		8	1.03	4 пру/т³
	er - 4	NO2	12.62	80 µg/m³
	Station - 3 - Watch Tower - 4 towards Venkannapalem	0	10,43	80 µg/m³
	n - 3 - Wa	50s	41.19	80 µg/m³
	Statio	P.M 2.5	14.91 10.52 1.04 49.51 30.34 41.19	60 µg/m³
		PM10	49.51	100 µg/m³
		8	1.04	4 µg/m³
e data	Office	NO2	10.52	80 µg/m³
s averag	Station - 2 - Project Site Office towards Venkannapalem	ON.	14,91	80 µg/m³
y 24 hr	· 2 · Proj	205	27.94 59.45	80 µg/m³
ir Qualit	Station	P.M 2.5	27.94	60 µg/m³
Ambient Air Quality 24 hrs average data		PM10	44.40	100 µg/m³
An	ding	8	1.05	4 µ9/m³
	fice Build	NO2	8.91	80 µg/m³
	ative Of s HB Co	NO	17.14	80 µg/m³
	Station - 1 - Administrative Office Building (AOB) towards HB Colony	50 ₂	47.91 29.54 42.96 17.14	80 µg/m³
	(AOB)	P.M 2.5	29.54	60 µg/m³
	Stati	PM10	47.91	100 µg/m³
	Station	Parameter	Day average value	Standard

For Gangavaram, Port Limited

(Dr. D. Jyothi)

G.V.N.S. Murthy, GPS 1910

Reference No.: GPL/July/2022/029 Submitted to: Monitoring Date: 13.08.2022 Organization Name: Gangavaram Port Limited Type Of Sample: Ambient Air Quality Regional office, Visakhapatnam
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		8	0.85	4 µg/m³
	r - 4 lem	NOs	12.80 0.85	80 µg/m³
	Station - 3 - Watch Tower - 4 towards Venkannapalem	02	9,46	80 µg/m³
	rds Ven	\$0 ₂	39.14	80 µg/m³
	Station	P.M 2.5	30.28	60 µg/m³
		PM10	13.75 10.66 0.86 49,41 30.28	100 µg/m³
		8	0.86	4 μg/m³
e data	Office slem	NO.	10.66	80 1g/m³
eserage :	Station - 2 - Project Site Office towards Venkannapalem	ON.	13.75	80 13 µg/m³ µ
y 24 hrs	- 2 - Proj	205	27.89 57.22	80 m/g
r Qualit	Station	P.M 2.5	27.89	60 µg/m³
Ambient Air Quality 24 hrs average data		PM10	44.31	100 µg/m³
Am	(AOB)	00	0.87	4 µg/m³
	Building y	NO ₂	9.04	80 µg/m³
	e Office B Colon	0 N		80 µg/m³
	dministrative Office B towards HB Colony	205	40.83 15.69	80 µg/m³
	1 - Admi	2.5	29.48	60 µg/m³
	Station · 1 · Administrative Office Building (AOB) towards HB Colony	PM10	47,82	100 µg/m³
	Station	Parameter	Day average value	Standard

For Gangavaram Pom Limited

(Dr. D.Syothi)

Vice President (Environment)

G.V.N.S. Murthy, GPS 1910

Prepared by: Cum

Reference No.:	GPL/July/2022/029	Submitted to:
Monitoring Date:	14.08.2022	
nization Name:	Organization Name: Gangavaram Port Limited	A.P. Pollution Control Board,
Type Of Sample:	Ambient Air Quality	Regional office, Visakhapatnam
Sampled By:	Gangavaram Port Limited (CAAQ Monitoring Data)	

						Ą	Ambient Air Quality 24 hrs average data	ir Qualit	y 24 hr	averag	e data							
Station	Stat	Station - 1 - Administrative Office Building (AOB) towards HB Colony	Maministr	-1-Administrative Office E (AOB) towards HB Colony	fice Build	ding		Station	Station · 2 · Project Site Office towards Venkannapalem	ect Site	Office			Statio	n - 3 - Wa	Station - 3 · Watch Tower - 4 towards Venkannapalem	r - 4 lem	
Parameter	PM10	P.M.	SO ²	0	NO2	8	PM10	P.M 2.5	SO2	ON.	NO2	8	PM10	P.M 2.5	203	NO	NO.	8
Day average value	47.43	29.25	37.93	13.92	8.77	0.62	43.95	27.67	27.67 54.10	12.34	12.34 10.37	0.61	49.01	49.01 30.04 36.34	36.34	8.28	12.45	09'0
Standard	100 µg/m³	60 µg/m³	80 µg/m³	80 µg/m³	80 µg/m³	4 µg/m³	100 µg/m³	60 µg/m³	80 µg/m³	80 µg/m³	80 80 µg/m³ µg/m³	4 µg/m³	100 µg/m³	60 µg/m³	80 µg/m³	80 µg/m³	80 µg/m³	4 µg/m³

For Gangavaram Rort Limiteo

(Dr. D. Jyothi)

Prepared by: Aurthy, GPS 1910

		8	0.77	4 μg/m³
	er - 4	NO2	12,43	80 µg/m³
	tch Tow	0 N	9.29	80 µg/m³
	Station - 3 - Watch Tower - 4 towards Venkannapalem	\$0 ₂	30.10 37.64	80 µg/m³
	Station	P.M 2.5	30.10	60 µg/m³
		PM10	49.11	100 µg/m³
		8	0.78	4 µg/m³
e data	Office	NO2	55.47 13.54 10.36 0.78	80 µg/m³
Ambient Air Quality 24 hrs average data	ect Site	0	13.54	80 µg/m³
/ 24 hrs	Station - 2 - Project Site Office towards Venkannapalem	205	55.47	80 µg/m³
r Quality	Station	P.M 2.5	27.72	60 µg/m³
bient Ai	100,524	PM10	44.04	100 µg/m³
A	guit	8	62.0	4 µg/m³
	fice Build lony	NO2	8.76	80 µg/m³
	ative Off S HB Co	0N		80 µg/m³
	Station - 1 - Administrative Office Building (AOB) towards HB Colony	205	39.22 15.43	80 µg/m³
	0n - 1 - A (A0B)	P.M 2.5	29.30	60 µg/m³
	Stati	PM10	47.52	100 µg/m³
	Station	Parameter	Day average value	Standard

For Gangavaram Port Limited

(Dr. D. Syothi) Vice President (Environment)

Prepared by: Lings GPS 1910

Reference No.:	GPL/July/2022/029	Submitted to:
Monitoring Date:	16.08.2022	
stion Name:	Organization Name: Gangavaram Port Limited	A.P. Pollution Control Board,
Type Of Sample:	Ambient Air Quality	Regional office, Visakhapatnam
Sampled By:	Gangavaram Port Limited (CAAQ Monitoring Data)	

	r - 4 lem	NO2 CO	13.83 0.64	80 4 µg/m³ µg/m³
	Station - 3 - Watch Tower - 4 towards Venkannapalem	ON.	66.6	80 µg/m³
	rds Ven	SO ²	49.65 30.42 38.60	80 µg/m³
	Station	P.M 2.5	30.42	60 µg/m³
		PM10	49.65	100 µg/m³
		8	56.56 14.39 11.54 0.65	80 4 µg/m³ µg/m³
e data	Office	NO2	11.54	
saverag	ect Site	00	14.39	80 µg/m³
y 24 hrs	Station - 2 - Project Site Office towards Venkannapalem	205	56.56	80 µg/m³
ir Qualit	Station towa	P. 2.5	28.02	60 µg/m³
Ambient Air Quality 24 hrs average data		PM10	44.52	100 µg/m³
Ą	guip	8	79:0	4 μg/m³
	fice Build lony	NO2	77.6	80 µg/m³
	ative Off s HB Co	ON.	16.49	80 µg/m³
	· 1 · Administrative Office E (AOB) towards HB Colony	203	40.21	80 µg/m³
	Station · 1 · Administrative Office Building (AOB) towards HB Colony	P. 2.5	29.62 40.21 16.49	60 µg/m³
	Stati	PM10	48.05	100 µg/m³
	Station	Parameter	Day average value	Standard

For Gangavaram Port Limited

(Dr. D. Jyothi) Vice President (Environment)

Prepared by: Ling G.V.N.S. Murthy, GPS 1910

Monitoring Date: 17.08.2022	Reference No.: GPL/July/2022/029 Submitted to:
Organization Name: Gangavaram Port Limited A.P. Pollution Control Board, Type Of Sample: Ambient Air Quality	17.08.2022 Gangavaram Port Limited Ambient Air Quality
	17.08.2022 Gangavaram Port Limited

						Ā	nbient A	ir Quali	Ambient Air Quality 24 hrs average data	s avera	ge data							
Station	Stat	Station - 1 - Administrative Office Building (AOB) towards HB Colony	Administr	-1 - Administrative Office E (AOB) towards HB Colony	fice Build	guig		Station	Station - 2 - Project Site Office towards Venkannapalem	ect Site Kannapa	Office			Statio	ards Ven	Station - 3 - Watch Tower - 4 towards Venkannapalem	en 4	
Parameter	PM10	P.M 2.5	SO ²	ON.	NO2	8	PM10	P.M 2.5	502	9	NO2	8	PM10	P.M.	205	ON.	NO2	8
Day average value	48.82	30,10	41.75	30,10 41,75 16.64 9,20	9.20	0.81 45.24	45.24	28,47	28.47 58.22	14.51	14.51 10.87 0.80	0.80	50.45	30.91	30.91 40.06	10.10	13.02	0.79
Standard	100 µg/m³	60 hg/m³	80 µg/m³	80 µg/m³	80 µg/m³	4 μg/m³	100 µg/m³	60 µg/m³	80 µg/m³	80 µ9/m³	80 µg/m³	4 μg/m³	100 µg/m³	60 µg/m³	80 µg/m³	80 µg/m³	80 µg/m³	4 μg/m³

For Gangevaram Port Limited

(Dr. 6. Jyothi)

Prepared by: / Jun 6.V.N.S. Murthy, GPS 1910

Reference No.:	GPL/July/2022/029	Submitted to:
Monitoring Date:	18.08.2022	
Janization Name:	Organization Name: Gangavaram Port Limited	A.P. Pollution Control Board,
Type Of Sample:	Ambient Air Quality	Regional office, Visakhapatnam
Sampled By:	Gangavaram Port Limited (CAAQ Monitoring Data)	

Ambient Air Quality 24 hrs average data	Station - 1 - Administrative Office Building Station - 2 - Project Site Office Station - 3 - Watch Tower - 4 (AOB) towards HB Colony towards Venkannapalem	SO ² NO NO ² CO PM10 PM SO ² NO NO ² CO PM10 PM SO ² NO NO ² CO	0 39.61 17.15 7.93 0.73 45.39 28.57 55.90 14.92 9.38 0.71 50.62 31.01 38.05 10.43 11.24 0.71	80 80 80 4 100 60 80 80 8 4 100 60 80 80 4 100 60 80 80 4 100 80 80 8 4 100 80 80 80 80 80 80 80 80 80 80 80 80 8
Ambie	ninistrative Office Building	NO NO2 CO	7.93 0.73	80 80 4 µg/m³ µg/m³
	Station Station - 1 - Adm (AOB) to	Parameter PM10 PM 8	average 48.98 30.20 3	Standard 100 60 µg/m³ µg/m³ µi

For Gangavaram Pont Limited

(Dr. D. Jyothi)

Prepared by: Land

o.: GPL/July/2022/029 Submitted to:	ate: 19.08.2022	Organization Name: Gangavaram Port Limited A.P. Pollution Control Board,	ole: Ambient Air Quality Regional office, Visakhapatnam	Gangavaram Port Limited
Reference No.:	Monitoring Date:	inization Na	Type Of Sample:	Sampled By:

			75			A	mbient /	Air Quali	Ambient Air Quality 24 hrs average data	s avera	ge data							
Station	Stat	Station - 1 - Administrative Office Building (AOB) towards HB Colony	Administ	 1 - Administrative Office E (AOB) towards HB Colony 	fice Built	ding		Station	Station - 2 - Project Site Office towards Venkannapalem	ect Site	Office			Statio	ards Ver	Station - 3 - Watch Tower - 4 towards Venkannapalem	er - 4 lem	
Parameter	PM10	PM 2.5	205	ON	NO2	8	PM10	P.M.	205	02	NO2	8	PM10	P.M 2.5	203	ON.	NO2	8
Day average value	48.27	48.27 29.76 42.31 14,38 10.36 0.84 44.73	42.31	14,38	10.36	0.84	44.73	28.15	58.80 12.71 12.22 0.83 49.88	12.71	12.22	0.83	49.88	30.56 40.52	40.52	8.59	14.66 0.82	0.82
Standard	100 µg/m³	60 µg/m³	80 µg/m³	80 80 µg/m³ µg/m³	80 µg/m³	4 μg/m³	100 µg/m³	60 µg/m³	80 µg/m³	80 µg/m³	80 µg/m³	4 µg/m³	100 µg/m³	60 µg/m³	80 µg/m³	80 µ9/m³	80 µg/m³	4 μg/m³

Prepared by: Aug G.V.N.S. Murthy, GPS 1910

For Gangavaram Port Limited

(Dr. D. Jyothi) Vice President (Environment)

Reference No.:	GPL/July/2022/029	Submitted to:
Monitoring Date:	20.08.2022	
ganization Name:	Organization Name: Gangavaram Port Limited	A.P. Pollution Control Board,
Type Of Sample:	Ambient Air Quality	Regional office, Visakhapatnam
Sampled By:	Gangavaram Port Limited (CAAQ Monitoring Data)	

						ď	mbient /	Air Qual	ty 24 h	Ambient Air Quality 24 hrs average data	ge data							
Station	Stat	Station - 1 - Administrative Office Building (AOB) towards HB Colony	dministr	 1 - Administrative Office ((AOB) towards HB Colony 	fice Build	guib		Station	· 2 · Pro	Station - 2 - Project Site Office towards Venkannapalem	Office	83		Statio	ards Ver	Station - 3 - Watch Tower - 4 towards Venkannapalem	er - 4	
Parameter	PM10	P.M.	205	ON.	₂ O _N	8	PM10	P.M 2.5	S02	o _N	NO2	8	PM10	P.M.	205	Q.	NO2	8
Day average value	48.29	29.76	41.12	29.76 41.12 17.73	9.23	0,86 44,75	44.75	28.16	57,41	15,37	28.16 57.41 15.37 10.91 0.85	0.85	49.90	30.57	39.30	49.90 30.57 39.30 10.82 13.08	13.08	0.84
Standard	100 µg/m³	60 µg/m³	80 µg/m³	80 80 µg/m³ µg/m³	80 µg/m³	4 µg/m³	100 µg/m³	60 µg/m³	80 µg/m³	80 µg/m³	80 µg/m³	4 µg/m³	100 µg/m³	60 µg/m³	80 µg/m³	80 µg/m³	80 µg/m³	4 µg/m³

For Gangavaram Port Limited

(Dr. D. Jyothi) Vice President (Environment)

Prepared by: Aurthy, GPS 1910

Reference No.:	GPL/Julv/2022/029	Submitted to:
Monitoring Date:	21.08.2022	
ganization Name:	Organization Name: Gangavaram Port Limited	A.P. Pollution Control Board,
Type Of Sample:	Ambient Air Quality	Regional office, Visakhapatnam
Sampled By:	Gangavaram Port Limited (CAAQ Monitoring Data)	

						An	bient A	ir Quality	Ambient Air Quality 24 hrs average data	average	data							
Station	Stal	(A08)	Station - 1 - Administrative Office Building (AOB) towards HB Colony	rative Of	fice Build	guip		Station	Station - 2 - Project Site Office towards Venkannapalem	ect Site	Office			Station	Station - 3 - Watch Tower - 4 towards Venkannapalem	tch Tow	er - 4	
Parameter	PM10	P.M 2.5	S02	0	NO2	8	PM10	P.M.	20s	o _N	NO2	8	PM10	PM 2.5	\$0 ₂	ON.	NOs	8
Day average value	48.18	29,70	29.70 39.62	16.12	8.59	0.71	44.65	28.10	28.10 55.89 14.10 10.16 0.69 49.79 30.50	14.10	10.16	0.69	49.79	30.50	37.97 9.75 12.17 0.68	9.75	12.17	0.68
Standard	100 µg/m³	60 µg/m³	80 µg/m³	80 µg/m³	80 µg/m³	4 µg/m³	100 µg/m³	60 µg/m³	80 µg/m³	80 80 4 100 µg/m³ µg/m³ µg/m³	80 µg/m³	4 µg/m³	100 µg/m³	60 µg/m³	80 µg/m³	80 µg/m³	80 80 4 µg/m³ µg/m³	4 μg/m³

For Gangavaram Port

Prepared by: And G.V.N.S. Murthy, GPS 1910

(Dr. D. Jyothi)

Reference No.:	GPL/July/2022/029	Submitted to:
Monitoring Date:	22.08.2022	
anization Name:	Organization Name: Gangavaram Port Limited	A.P. Pollution Control Board,
Type Of Sample:	Ambient Air Quality	Regional office, Visakhapatnam
Sampled By:	Gangavaram Port Limited (CAAQ Monitoring Data)	

						Am	Ambient Air Quality 24 hrs average data	r Qualit	y 24 hrs	averag	e data							
Station	Stat	Station - 1 - Administrative Office Building (AOB) towards HB Colony	Administr	-1-Administrative Office E (AOB) towards HB Colony	lce Build	- Guj		Station	Station - 2 - Project Site Office towards Venkannapalem	ect Site	Office			Station	Station - 3 - Watch Tower - 4 towards Venkannapalem	tch Towe	r - 4 lem	
Parameter	PM10	P.M.	SO ²	ON	NO ²	8	PM10	P.M 2.5	S02	02	NO2	8	PM10	P.M 2.5	203	NO	NO.	8
Day average value	48.39	48.39 29.84 68.21	68.21	22.65	8.01	0.89	44.84	28.22	28.22 87.00 19.10 9.50 0.88 50.00 30.64 65.51 14.10 11.36 0.87	19.10	9.50	0.88	50.00	30.64	65.51	14.10	11.36	0.87
Standard	100 µg/m³	60 µg/m³	80 µg/m³	80 µg/m³	80 4 µg/m³ µg/m³	4 µg/m³	100 µg/m³	60 µg/m³	60 80 80 80 4 4 199/m³ μg/m³ μg/m³	80 µg/m³	80 µg/m³	4 µg/m³	100 µg/m³	60 µg/m³	80 µg/m³	80 µg/m³	80 µg/m³	4 μg/m³

For Gangavaram Port Limiteo

Prepared by: Aury, GPS 1910

2.2750X

(Dr. D'. Jyothi) Vice President (Environment)

GPL/July/2022/029 Submitted to:	:e: 23.08.2022	Organization Name: Gangavaram Port Limited A.P. Pollution Control Board,	e: Ambient Air Quality Regional office, Visakhapatnam	Gangavaram Port Limited
Reference No.:	Monitoring Date:	Organization Na	Type Of Sample:	Sampled By:

		8	0.30	4 µg/m³
	r- 4 em	NO2	12.25	80 µg/m³
	Station - 3 - Watch Tower - 4 towards Venkannapalem	ON.	11.48	80 µg/m³
	rds Ven	\$0 ₂	40.67	80 µg/m³
	Station	P.M 2.5	30.26	60 µ9/m³
		PM10	27.87 58.79 16.17 10.24 0.31 49.38 30.26 40.67 11.48	100 µg/m³
		8	0.31	80 4 µg/m³ µg/m³
e data	Office	NO2	10.24	80 µg/m³
s averag	Station - 2 - Project Site Office towards Venkannapalem	9	16.17	80 µg/m³
y 24 hr	- 2 - Proj	502	58.79	80 m/6n s
ir Qualit	Station	P.M 2.5	27.87	60 µg/m³
Ambient Air Quality 24 hrs average data		PM10	44.29	100 µg/m³
An	guip	8	0.32	4 µg/m³
	Station - 1 - Administrative Office Building (AOB) towards HB Colony	NO2	8.66	80 µg/m³
	ative Of	8	18.71	80 µg/m³
	 1 - Administrative Office B (AOB) towards HB Colony 	503	47.79 29,46 42.36	80 µg/m³
	(AOB)	P.5	29,46	60 µg/m³
	Stat	PM10	47.79	100 µg/m³
	Station	Parameter	Day average value	Standard

For Gangavaram Port Limited

(Dr. D. Syothi)

Prepared by: Log G.V.N.S. Murthy, GPS 1910

Reference No.:	GPL/July/2022/029	Submitted to:
Monitoring Date:	24.08.2022	
nization Name:	Organization Name: Gangavaram Port Limited	A.P. Pollution Control Board,
Type Of Sample:	Ambient Air Quality	Regional office, Visakhapatnam
Sampled By:	Gangavaram Port Limited (CAAQ Monitoring Data)	

						Am	Ambient Air Quality 24 hrs average data	r Qualit	y 24 hrs	averag	e data							
Station	Stat	Station - 1 - Administrative Office Building (AOB) towards HB Colony	dministr	-1 - Administrative Office E (AOB) towards HB Colony	fice Build	guip		Station	Station · 2 · Project Site Office towards Venkannapalem	ect Site Kannapa	Office			Station	rds Ven	Station · 3 · Watch Tower - 4 towards Venkannapalem	er - 4	
Parameter	PM10	P.M.	SO ²	ON.	NO2	8	PM10	P.M 2.5	SO2	ON.	NO2	8	PM10	PM 2.5	205	9	NO2	8
Day average value	45.80	45.80 28.23	37.61	37.61 14.74	8.91	0.39	45.44	26.71	53.71	12.99	26.71 53.71 12.99 10.54 0.37 47.33	0.37	47.33	28.99 36.11	36.11	8.82	12.62	0.36
Standard	100 µg/m³	60 µg/m³	80 µg/m³	80 µg/m³	80 µg/m³	4 µg/m³	100 µg/m³	60 µg/m³	80 µg/m³	80 µg/m³	80 µg/m³	4 µg/m³	4 100 µg/m³ µg/m³	60 µg/m³	80 µg/m³	80 µg/m³	80 µg/m³	4 µg/m³

For Gangavaram Port Limited

(Dr. D. Jyothi)

Vice President (Environment)

Prepared by: / Junf G.V.N.S. Murthy, GPS 1910

The particular of the same	000000000000000000000000000000000000000	
Reference No.:	GPL/July/2022/029	Submitted to:
Monitoring Date:	25.08.2022	
anization Name:	Organization Name: Gangavaram Port Limited	A.P. Pollution Control Board,
Type Of Sample:	Ambient Air Quality	Regional office, Visakhapatnam
Sampled By:	Gangavaram Port Limited (CAAQ Monitoring Data)	

						Arr	Ambient Air Quality 24 hrs average data	ir Qualit	y 24 hrs	averag	e data							
Station	Station	Station - 1 - Administrative Office Building (AOB) towards HB Colony	inistrativ	dministrative Office B towards HB Colony	Building	(AOB)		Station	Station - 2 - Project Site Office towards Venkannapalem	ect Site	Office			Statio	ards Ver	Station - 3 - Watch Tower - 4 towards Venkannapalem	er - 4	
Parameter	PM10	P.M.	205	ON	NO2	8	PM10	P.5	205	ON.	NO2	8	PM10	P.M 2.5	\$0\$	02	NO2	8
Day average value	43.88	27.05	36.24	16.68	9.45	0.34	40.67	25.59	52.18	14.54 11.12	11.12	0.33	45.35	27.78	27.78 34.82		10.12 13.34	0.32
Standard	100 µg/m³	60 µg/m³	80 µg/m³	80 µg/m³	80 µg/m³	4 µg/m³	100 µg/m³	60 µg/m³	80 µg/m³	80 µg/m³	80 µg/m³	4 Jg/m³	100 µg/m³	60 µg/m³	80 µg/m³	80 µg/m³	80 µg/m³	4 µg/m³

G.V.N.S. Murthy, GPS 1910

For Gangavaram Port Limiteo

To Supering (Dr. B. Jyothi)

Vice President (Environment)

Reference No.:	GPL/July/2022/029	Submitted to:
Monitoring Date:	26.08.2022	
ganization Name:	Organization Name: Gangavaram Port Limited	A.P. Pollution Control Board,
Type Of Sample:	Ambient Air Quality	Regional office, Visakhapatnam
Sampled By:	Gangavaram Port Limited (CAAG Monitoring Data)	

Station	Stat	(AOB)	Station - 1 - Administrative Office Building (AOB) towards HB Colony	rative Of	fice Build	guib		Station	Station - 2 - Project Site Office towards Venkannapalem	ect Site	Office		8	Station	rds Ven	Station - 3 - Watch Tower - 4 towards Venkannapalem	er - 4 lem	
Parameter	PM10	P.M.	203	ON.	NO2	00	PM10	P.M 2.5	503	ON.	NO.	8	PM10	P.M 2.5	\$0°	02	NO.	8
Day average value	42.06	42.06 25.93	32.84	32.84 17.23		7.84 0.39	38.98	24.53	24.53 48.60 14.98	14.98	9.30	0.37 43,46	43,46	26.63	31.44	31.44 10.49	11.11	0.36
Standard	100 µg/m³	60 µg/m³	80 µg/m³	80 µg/m³	80 µg/m³	4 μg/m³	100 µg/m³	60 µg/m³	80 µ9/m³	80 µg/m³	80 4 µg/m³ µg/m³	4 µg/m³	100 µg/m³	60 µg/m³	80 µg/m³	80 µg/m³	80 µg/m³	4 µg/m³

For Gangavaram Port Limited

(Dr. D. Syothi)
Vice President (Environment)

Prepared by: / plue G.V.N.S. Murthy, GPS 1910

GPL/July/2022/029 Submitted to:	27.08.2022	Organization Name: Gangavaram Port Limited A.P. Pollution Control Board,	Ambient Air Quality Regional office, Visakhapatnam	Gangavaram Port Limited (CAAG Monitoring Data)
Reference No.:	Monitoring Date:	Organization Name:	Type Of Sample:	Sampled By:

Station	Station	-1 - Adm	dnistrativ wards H	Station - 1 - Administrative Office Building (AOB) towards HB Colony	Building y	(AOB)		Station	Station - 2 - Project Site Office towards Venkannapalem	ect Site	Office			Station	Station · 3 · Watch Tower - 4 towards Venkannapalem	tch Tow	er - 4	
Parameter	PM10	P.M.	S0 ²	02	NO2	00	PM10	P.M 2.5	203	ON.	NO2	8	DM10	P.M.	205	ON.	NO	8
Day average value	48.66	30.00	33.90	48.66 30.00 33.90 17.00 7.92 0.44 45.10	7.92	0.44	45.10	28.38	28.38 49,70 14.80 9.39	14.80		0.43	50,29	0.43 50.29 30.81 32.54 10.34 11.21	32.54	10.34	11.21	0.42
Standard	100 µg/m³	60 mg/m³	80 µg/m³	80 µg/m³	80 µg/m³	4 µg/m³	100 µg/m³	60 µg/m³	80 µg/m³	80 µg/m³	80 µg/m³	4 µg/m³	100 µg/m³	60 µg/m³	80 µg/m³	80 hg/m³	80 µg/m³	4 μg/m³

For Gangavaram Port Limiteo

(Dr. D. Jyothi)

Vice President (Environment)

Prepared by: / purs. GPS 1910

Reference No.:	GPL/July/2022/029	Submitted to:
Monitoring Date:	28.08.2022	
ganization Name:	Organization Name: Gangavaram Port Limited	A.P. Pollution Control Board,
Type Of Sample:	Ambient Air Quality	Regional office, Visakhapatnam
Sampled By:	Gangavaram Port Limited (CAAQ Monitoring Data)	16.

Prepared by: Apr

For Gangavaram Port Himited

(Dr. D. Jyothi) Vice President (Environment)

						Ā	mbient /	Nir Quali	Ambient Air Quality 24 hrs average data	s averag	le data							
Station	Stat	Station - 1 - Administrative Office Building (AOB) towards HB Colony	Administr	 1 - Administrative Office E (AOB) towards HB Colony 	fice Built	ding		Station	Station - 2 - Project Site Office towards Venkannapalem	ject Site kannapa	Office			Station	rds Ven	Station · 3 · Watch Tower - 4 towards Venkannapalem	er - 4 lem	
Parameter	PM10	P.M.	SO ²	9	NO2	8	PM10	P.M.	205	NO	NO2	8	PM10	P.M 2.5	205	9	NO2	8
Day average value	48,25	29.75	42.93	17.16	17.16 13.28 0.32	0.32	44.71	28.14	28.14 59.46 14.92 15.68	14.92		0.31	49.86	0.31 49.86 30.55	41.21	41.21 10.44 18.84 0.30	18.84	0.30
Standard	100 µg/m³	60 µg/m³	80 µg/m³	80 µg/m³	80 4 µg/m³ µg/m³	4 µg/m³	100 µg/m³	60 µg/m³	80 µg/m³	80 µg/m³	80 4 µg/m³ µg/m³	4 µg/m³	100 µg/m³	60 µg/m³	80 µg/m³	80 µ9/m³	80 µg/m³	4 μg/m³

For Gangavaram Port Limited

Prepared by: / prepared 6.V.N.S. Murthy, GPS 1910

(Dr. 6. Jyothi)

Reference No.:	GPL/July/2022/029	Submitted to:
Monitoring Date:	30,08,2022	
inization Name:	Organization Name: Gangavaram Port Limited	A.P. Pollution Control Board,
Type Of Sample:	Ambient Air Quality	Regional office, Visakhapatnam
Sampled By:	Gangavaram Port Limited (CAAQ Monitoring Data)	

						A	nbient A	ir Qualit	Ambient Air Quality 24 hrs average data	average	data							
Station	Stat	Station - 1 - Administrative Office Building (AOB) towards HB Colony	 11 Administrative Office E (AOB) towards HB Colony 	ative Off s HB Co	ice Build Iony	fing		Station	Station - 2 - Project Site Office towards Venkannapalem	ect Site	Office			Station	rds Ven	Station - 3 - Watch Tower - 4 towards Venkannapalem	er - 4 lem	
Parameter	PM10	PM 2.5	502	ON.	NO2	8	PM10	P.M.	SO ²	ON.	*ON	8	PM10	P.M 2.5	SO ²	ON.	NO ²	8
Day average value	48.09	48.09 29.65		42.31 17.56 10.21 0.19	10.21	0.19	44.56	28.05	28.05 58.86 15.25 12.04 0.17	15.25	12.04	0.17	49.69	30.45	49.69 30.45 40.65	10.71 14.45	14,45	0,16
Standard	100 µg/m³	60 µg/m³	80 µg/m³	80 µg/m³	80 µg/m³	4 µg/m³	100 µg/m³	60 µg/m³	80 µg/m³	80 µg/m³	80 4 100 µg/m³ µg/m³	4 µg/m³		60 µg/m³	80 µg/m³	80 µg/m³	80 µg/m³	4 µg/m³

Prepared by: Appl G.V.N.S. Murthy, GPS 1910

For Gangavaram Port Limited

(Dr. D. Jyothi) Vice President (Environment)

: GPL/July/2022/029 Submitted to:	ite: 31,08,2022	Organization Name: Gangavaram Port Limited A.P. Pollution Control Board,	le: Ambient Air Quality Regional office, Visakhapatnam	Gangavaram Port Limited
Reference No.:	Monitoring Date:	ganization N	Type Of Sample:	Sampled By:

		8	0.33	4 µg/m³
	er - 4	NO2	11.58	80 m ₃ /m ³
	tch Tow	02	10.05	80 µg/m³
	Station - 3 - Watch Tower - 4 towards Venkannapalem	SO2	39.77	80 µg/m³
	Station	P.M 2.5	30.34	60 µg/m³
		PM10	0.34 49.51 30.34 39.77 10.05 11.58	
		8	0.34	80 4 100 µg/m³ µg/m³ µg/m³
data	Office	NO2	99.6	80 µg/m³
average	Station - 2 - Project Site Offlice towards Venkannapalem	o _N	27.94 57.81 14.46 9.66	80 µg/m³
24 hrs	. 2 - Proj	203	57.81	
. Quality	Station	P.M 2.5	27.94	60 80 µg/m³ µg/m³
Ambient Air Quality 24 hrs average data		PM10	44.40	100 µg/m³
Am	(AOB)	8	0.35	4 µg/m³
	Building	NO2	8.16	80 µg/m³
	e Office B Colon	ON.	16.57	80 µg/m³
	Station - 1 - Administrative Office Building (AOB) towards HB Colony	\$0 ₂	47.91 29.54 41.45 16.57	80 µg/m³
	1 - Adm	P.M 2.5	29.54	60 µg/m³
	Station	PM10	47.91	100 µg/m³
	Station	Parameter	Day average value	Standard

For Gangavaram Port Limited

(Dr. D. Jyothi)

Prepared by: Lun G.V.N.S. Murthy, GPS 1910



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Environmental Monitoring Reports

(13 August and 27 August 2022)

Gangavaram Port LTD.
Pedagantyada(Mandal)
Gangavaram (Post)
Visakhapatnam - 530 044





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TEST REPORT ANALYSIS OF GROUND WATER SAMPLE

BCL Ref. No.	GPL/02/198	Issued to:
Monitoring Date	August 13, 2022	Ws. Gangavaram Port Ltd.
Reporting Date	August 18, 2022	Gangavaram (Village)
Organization	M/s. Gangavaram Port Ltd.	PedaGantiyada (Mandalam)
Type of Sample	Ground Water	Visakhapatnam.
Location	North bounder wall open well	1
Sample Collected by	M/s. Biochem Labs	
Reference Standard	IS: 10500, 1991	

S. No.	Parameter	Unit	Result	Limit IS: 10500
1.	Temperature	*C	29.4	
2.	pH	H+ concen.	7.0	6.5-8.5
3.	Total Hardness	mg/l	282	300
4.	Calcium (as Ca)	mg/l	42	75
5.	Magnesium (as Mg)	mg/l	20	30
6.	Chlorides	mg/l	56	250
7.	Manganese	mg/l	0.02	0.1
8.	Copper	mg/l	0.016	0.05
9.	Total Alkalinity	mg/l	110	200
10.	Total Dissolved Solids	mg/l	480	500
11.	Sulphate	mg/l	40	200
12.	Dissolved Oxygen	mg/l	2.8	- 5
13.	Nitrite (as NO ₂)	mg/l	0.016	0.02
14.	Iron	mg/l	0.14	0.3
15.	Fluoride	mg/l	0.9	1.0
16.	Oil & Grease	mg/l	BDL	0.01
17.	Chromium (as Cr+6)	mg/l	0.01	0.05
18.	Cyanide	mg/l	NIL	0.05
19.	Zinc	mg/l	0.8	5.0
20.	Phenolic Compound	mg/l	NIL	0.001
21.	Free Residual Chlorine	mg/l	0.04	0.2
22.	Total Coli forms Count	MPN Index/100ml	6	1-11
23.	E.coli	Cfu/mi	Absent	Absent

Analyst





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TEST REPORT ANALYSIS OF GROUND WATER SAMPLE

BCL Ref. No.	GPL/02/197	Issued to:
Monitoring Date	August 13, 2022	M/s. Gangavaram Port Ltd.
Reporting Date	August 18, 2022	Gangavaram (Village)
Organization	M/s. Gangavaram Port Ltd.	PedaGantiyada (Mandalam)
Type of Sample	Ground Water	Visakhapatnam.
Location	Gangavaram Village	
Sample Collected by	M/s. Biochem Labs	
Reference Standard	IS: 10500, 1991	

S. No.	Parameter	Unit	Result	Limit IS: 10500
1.	Temperature	°C	30.6	-
2.	pH	H+ concen.	7.12	6.5-8.5
3.	Total Hardness	mg/l	286	300
4.	Calcium (as Ca)	mg/l	50	75
5.	Magnesium (as Mg)	mg/l	28	30
6.	Chlorides	mg/l	112	250
7.	Manganese	mg/l	0.016	0.1
8.	Copper	mg/l	0.014	0.05
9.	Total Alkalinity	mg/l	60	200
10.	Total Dissolved Solids	mg/l	496	500
11.	Sulphate	mg/l	52	200
12.	Dissolved Oxygen	mg/l	3.0	
13.	Nitrite (as NO ₂)	mg/l	0.016	0.02
14.	Iron	mg/l	0.14	0,3
15.	Fluoride	mg/l	0.8	1.0
16.	Oil & Grease	mg/l	BDL	0.01
17.	Chromium (as Cr*6)	mg/l	0.016	0.05
18.	Cyanide	mg/l	NIL	0.05
19.	Zinc	mg/l	0.6	5.0
20.	Phenolic Compound	mg/l	NIL	0.001
21.	Free Residual Chlorine	mg/l	0.12	0.2
22.	Total Coli forms Count	MPN Index/100ml	10	1-11
23.	E.coli	Cfu/ml	Absent	Absent

Analyst





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TEST REPORT NOISE LEVEL MONITORING

BCL Ref. No.	GPL/ 04/224	Issued to:	
Monitoring Date	August 27, 2022	M/s. Gangavaram Port Ltd.	
Organization	M/s. Gangavaram Port Ltd.	Gangavaram (Village) PedaGantiyada (Mandalam)	
Collected by	M/s. Biochem Labs	Visakhapatnam.	

S.	Parameter	Unit	Location	Re	sult	CPCI	B Limit		
No.			Day time Night time Industri		Day time Night time			Day time Night time Industr	ustrial
				-1.55	Day time	Night time			
1.	Noise Level	Decibels	Cargo area	72	66	75	70		
2.	Noise Level	Decibels	PedaGantyada/ Security Gate	64	60	a .			
		7	ALC: YOU	Day time	Night time	Resid	dential		
		/		Day time	Night time	Residence Day time	dential Night time		
3.	Noise Level	Decibels	Gangavaram	Day time	Night time	Language Granter	THE STATE OF THE S		

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TEST REPORT NOISE LEVEL MONITORING

BCL Ref. No.	GPL/ 04/223	Issued to:
Monitoring Date	August 13, 2022	M/s. Gangavaram Port Ltd.
Organization	M/s. Gangavaram Port Ltd.	Gangavaram (Village) PedaGantiyada (Mandalam)
Collected by	M/s. Biochem Labs	Visakhapatnam.

S.	Parameter	Unit	Location	Re	sult	CPCI	B Limit	
No.			Day time Night time Inc		Day time Night time		dustrial	
						Day time	Night time	
1.	Noise Level	Decibels	Cargo area	70	68	75	70	
2.	Noise Level	Decibels	PedaGantyada/ Security Gate	66	62	-	(5)	
	1	-/-	- To	Day time	Night time	Resi	dential	
		7	1	Day time	Night time	Residence Day time	dential Night time	
3.	Noise Level	Decibels	Gangavaram	Day time	Night time		21 22 1 (22 2 2 2 2 2 2 2 2 2 2 2 2 2 2	

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TEST REPORT ANALYSIS OF MARINE WATER

BCL Ref. No.	GPL/ 05/223	Issued to:		
Monitoring Date	August 13, 2022	M/s. Gangavaram Port Ltd.		
Reporting Date	August 18, 2022	Gangavaram (Village)		
Organization	M/s. Gangavaram Port Ltd.	PedaGantiyada (Mandalam)		
Type of Sample	Marine Water (Low Tide / High Tide)	Visakhapatnam.		
Sample Collected by	M/s. Biochem Labs	Trouble indication in the state of the state		

S. No	Parameter	Unit	Result				
				rBasine	Port Entrance Channe		
			Low tide	High tide	Low tide	High tide	
1.	Temperature	°C	32.4	31.5	30.7	31.0	
2.	pH	H+ conc	8.16	8.22	8.20	8.18	
3.	Salinity	PSU	31,8	32.0	31.6	32.0	
4.	Turbidity	NTU	30	24	14	10	
5.	Total Suspended Solids	mg/l	34	22	18	12	
6.	Transparency	Mts.	1.0	1.0	1.2	1.6	
7.	Electrical Conductivity	mMHo	32.8	31.4	34.0	32.0	

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TEST REPORT ANALYSIS OF MARINE WATER

BCL Ref. No.	GPL/ 05/223	Issued to:
Monitoring Date	August 13, 2022	M/s. Gangavaram Port Ltd.
Reporting Date	August 18, 2022	Gangavaram (Village)
Organization	M/s. Gangavaram Port Ltd.	PedaGantiyada (Mandalam)
Type of Sample	Marine Water (Low Tide / High Tide)	Visakhapatnam.
Sample Collected by	M/s. Biochem Labs	

S. No	Parameter	Unit	Result				
		NAME OF TAXABLE PARTY.	South brake	Wall Outside	North brake Wall Outside		
			Low tide	High tide	Low tide	High tide	
1.	Temperature	°C	32.0	29.6	31.0	32.4	
2.	pH	H+ conc	8.24	8.20	8.22	8.26	
3.	Salinity	PSU	32.0	31.8	32.2	32.6	
4.	Turbidity	NTU	14	18	20	16	
5.	Total Suspended Solids	mg/l	18	22	24	18	
6.	Transparency	Mts.	1.4	1.2	1.0	1.0	
7.	Electrical Conductivity	mMHo	32.2	32.4	31.8	33.0	

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TEST REPORT ANALYSIS OF MARINE WATER

BCL Ref. No.	GPL/ 05/223
Monitoring Date	August 13, 2022
Reporting Date	August 18, 2022
Organization	M/s. Gangavaram Port Ltd.
Type of Sample	Marine Water (Low Tide / High Tide)
Sample Collected by	M/s. Biochem Labs

M/s. Gangavaram Port Ltd. Gangavaram (Village) PedaGantiyada (Mandalam) Visakhapatnam.

Issued to:

S. No	Parameter	Unit	Result				
			HarbourBasine		Port Entrane	ce Channel	
			Low tide	High tide	Low tide	High tide	
1.	Dissolved Oxygen	mg/l	4.0	3.8	4.0	4.2	
2.	Biological Oxygen Demand	mg/l	1,6	1.6	1.8	2.0	
3.	Oil & Grease	mg/l	0.8	0.6	0.4	0.8	
4.	Sulphate	mg/l	1048	1032	1018	1034	
5.	Phosphate	mg/l	0.36	0.34	0.24	0.28	
6.	Nitrate	mg/l	3.2	2.8	2.6	2.0	
7.	Nitrite	mg/l	0.024	0.028	0.022	0.026	
8.	Chloride	mg/l	20684	19842	19690	18968	
9.	Chromium	ppm	0.022	0.026	0.024	0.020	
10.	Mercury	ppm	Nil	Nil	Nil	Nil	
11.	Zinc	ppm	0.24	0.2	0.16	0.18	
12	Iron	ppm	0.02	0.022	0.024	0.028	
13.	Manganese	ppm	0.026	0.024	0,02	0.016	
14.	Cadmium	ppm	Nil	Nil	Nil	Nil	

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TEST REPORT ANALYSIS OF MARINE WATER

BCL Ref. No.	GPL/ 05/223	Issued to:
Monitoring Date	August 13, 2022	M/s. Gangavaram Port Ltd.
Reporting Date	August 18, 2022	Gangavaram (Village)
Organization M/s. Gangavaram Port Ltd.		PedaGantiyada (Mandalam)
Type of Sample	Marine Water (Low Tide / High Tide)	Visakhapatnam,
Sample Collected by	M/s. Biochem Labs	Trouble position in

S. No	Parameter	Unit		R	Result		
	A SAME AND CONTRACTOR	South brake V	Wall Outside	North brake V	all Outside		
			Low tide	High tide	Low tide	High tide	
1.	Dissolved Oxygen	mg/l	4.2	3.8	4.2	4.0	
2.	Biological Oxygen Demand	rng/l	2.0	1.6	1.8	1.8	
3.	Oil & Grease	mg/l	0.6	0.6	0.4	0.6	
4.	Sulphate	mg/l	1028	1036	1054	1040	
5.	Phosphate	mg/l	0.24	0.28	0.32	0.24	
6.	Nitrate	mg/l	2.6	2.4	2.2	2.6	
7.	Nitrite	mg/l	0.024	0.028	0.02	0.028	
8.	Chloride	mg/l	19482	18638	21432	19296	
9.	Chromium	ppm	0.028	0.024	0.026	0.02	
10.	Mercury	ppm	Nil	Nil	Nil	Nil	
11.	Zinc	ppm	0.18	0.12	0.16	0.24	
12.	Iron	ppm	0.024	0.022	0.02	0.02	
13.	Manganese	ppm	0.026	0.018	0.02	0.018	
14.	Cadmium	ppm	Nil	Nil	Nil	Nil	

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TEST REPORT ANALYSIS OF MARINE WATER

BCL Ref. No.	GPL/ 05/223	Issued to:
Monitoring Date	August 13, 2022	M/s. Gangavaram Port Ltd.
Reporting Date	August 18, 2022	Gangavaram (Village)
Organization M/s. Gangavaram Port Ltd.		PedaGantiyada (Mandalam)
Type of Sample	Marine Water (Low Tide)	Visakhapatnam.
Sample Collected by	M/s. Biochem Labs	vioantapatiani.

Station Name: Harbourbasine / Low Tide

S. No	PARAMETERS	UNIT	RESULT
1.	Phytoplankton Count	No. /L	14000
2	Zooplankton Count	No./m³	1000
3.	Chlorophyll a	mg/m ³	3.2
4.	Chlorophyll b	mg/m³	2.0
5.	Primary Productivity	gC/m ²	3.8
6.	Biomass	mg/m ²	2.4

S.No	Species	Total Species count in 1L
Α.	Phytoplankton Species Prorocentrummicans Amphora lineolata Cymbella marina Bacteriastrum delicatulum Thalassionema nitzschioides Chaetoceros dydymus Skeletonemacostatum Thalassiothrixlongissima Cymbella marina	14 26 12 10 26 18 26 06
В.	Zooplankton Species Foraminifera Chaetognatha Amphipoda Cladocera Eggs of fish & larvae	28 04 18 06 16

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TEST REPORT ANALYSIS OF MARINE WATER

BCL Ref. No.	GPL/ 05/223	Issued to:
Monitoring Date	August 13, 2022	M/s. Gangavaram Port Ltd.
Reporting Date	August 18, 2022	Gangavaram (Village)
Organization	M/s. Gangavaram Port Ltd.	PedaGantiyada (Mandalam)
Type of Sample Marine Water (Low Tide)		Visakhapatnam.
Sample Collected by	M/s. Biochem Labs	

Station Name: Port Entrance Channel / Low Tide

S. No	PARAMETERS	UNIT	RESULT	
1.	Phytoplankton Count	No. /L	10000	
2.	Zooplankton Count	No./m³	800	
3.	Chlorophyll a	mg/m³	2.2	
4.	Chlorophyll b	mg/m³	2.8	
5.	Primary Productivity	gC/m ²	3.4	
6.	Biomass	mg/m ²	2.0	

S.No	Species	Total Species count in 1L
Α.	Phytoplankton Species Prorocentrummicans Amphora lineolata Cymbella marina Bacteriastrum delicatulum Thalassionema nitzschioides Chaetoceros dydymus Skeletonemacostatum Thalassiothrixlongissima Cymbella marina	24 18 16 10 14 06 14 12
B.	Zooplankton Species Foraminifera Chaetognatha Amphipoda Cladocera Eggs of fish & larvae	24 34 12 06 08

Analyst





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TEST REPORT ANALYSIS OF MARINE WATER

DOL Def Me	CDLLASIONS	The send has
BCL Ref. No.	GPL/ 05/223	Issued to:
Monitoring Date	August 13, 2022	M/s. Gangavaram Port Ltd.
Reporting Date	August 18, 2022	Gangavaram (Village)
Organization M/s. Gangavaram Port Ltd.		PedaGantiyada (Mandalam)
Type of Sample	Marine Water (High Tide)	Visakhapatnam.
Sample Collected by	M/s. Biochem Labs	Treats repositions,

Station Name: Harbourbasine / High Tide

S. No	PARAMETERS	UNIT	RESULT
1.	Phytoplankton Count	No. /L	11000
2.	Zooplankton Count	No./m³	1400
3.	Chlorophyll a	mg/m ³	3.8
4.	Chlorophyll b	mg/m ³	2.4
5.	Primary Productivity	gC/m ²	3.0
6.	Biomass	mg/m ²	2.6

S.No	Species	Total Species count in 1L
Α.	Phytoplankton Species Prorocentrummicans Amphora lineolata Cymbella marina Bacteriastrum delicatulum Thalassionema nitzschloides Chaetoceros dydymus Skeletonemacostatum Thalassiothrixlongissima	36 18 24 12 08 04 08
	Cymbella marina	12
В.	Zooplankton Species Foraminifera Chaetognatha Amphipoda Cladocera Eggs of fish & larvae	14 10 08 10 06

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TEST REPORT ANALYSIS OF MARINE WATER

BCL Ref. No.	GPL/ 05/223	Issued to:
Monitoring Date	August 13, 2022	M/s Consequence Book Ltd
Reporting Date	August 18, 2022	M/s. Gangavaram Port Ltd.
Organization	M/s. Gangavaram Port Ltd.	Gangavaram (Village) PedaGantiyada (Mandalam)
Type of Sample	Marine Water (High Tide)	Visakhapatnam.
Sample Collected by	M/s. Biochem Labs	visakiiapatiiaiii,

Station Name: Port Entrance Channel / High Tide

S. No	PARAMETERS	UNIT	RESULT
1,	Phytoplankton Count	No. /L	12000
2.	Zooplankton Count	No./m³	1000
3.	Chlorophyll a	mg/m ³	2.8
4.	Chlorophyll b	mg/m³	3.0
5.	Primary Productivity	gC/m ²	2.2
6.	Biomass	mg/m²	2.6

S.No	Species	Total Species count in 1L
Α.	Phytoplankton Species Prorocentrummicans Amphora lineolata Cymbella marina Bacteriastrum delicatulum Thalassionema nitzschioides Chaetoceros dydymus Skeletonemacostatum Thalassiothrixlongissima Cymbella marina	18 24 12 30 06 12 08 14
В.	Zooplankton Species Foraminifera Chaetognatha Amphipoda Cladocera Eggs of fish & larvae	22 18 12 04 10

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TEST REPORT ANALYSIS OF MARINE WATER

BCL Ref. No.	GPL/ 05/223	Issued to:
Monitoring Date	August 13, 2022	M/s. Gangavaram Port Ltd.
Reporting Date	August 18, 2022	Gangavaram (Village)
Organization	M/s. Gangavaram Port Ltd.	PedaGantiyada (Mandalam)
Type of Sample	Marine Water (Low Tide)	Visakhapatnam.
Sample Collected by	M/s. Biochem Labs	The state of the s

Station Name: South brake Wall outside / Low Tide

S. No	PARAMETERS	UNIT	RESULT
1.	Phytoplankton Count	No. /L	12000
2.	Zooplankton Count	No./m ³	600
3.	Chlorophyll a	mg/m³	3.4
4.	Chlorophyll b	mg/m ³	2.8
5.	Primary Productivity	gC/m ²	3.0
6.	Biomass	mg/m ²	2.4

s.No	Species	Total Species count in 1L
Α.	Phytoplankton Species	- 100
	Prorocentrummicans	64
	Amphora lineolata	36
	Cymbella marina	28
	Bacteriastrum delicatulum	04
	Thalassionema nitzschioides	30
	Chaetoceros dydymus	18
	Skeletonemacostatum	26
	Thalassiothrixlongissima	32
	Cymbella marina	14
B.	Zooplankton Species	
	Foraminifera	46
	Chaetognatha	28
	Amphipoda	24
	Cladocera	18
	Eggs of fish & larvae	06

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TEST REPORT ANALYSIS OF MARINE WATER

BCL Ref. No.	GPL/ 05/223	Issued to:	
Monitoring Date	August 13, 2022	M/s. Gangavaram Port Ltd.	
Reporting Date	August 18, 2022	Gangavaram (Village)	
Organization M/s. Gangavaram Port Lt		PedaGantiyada (Mandalam)	
Type of Sample	Marine Water (Low Tide)	Visakhapatnam.	
Sample Collected by	M/s. Biochem Labs		

Station Name: North brake Wall Outside / Low Tide

S. No	PARAMETERS	UNIT	RESULT
1.	Phytoplankton Count	No. /L	12000
2.	Zooplankton Count	No./m ³	1000
3.	Chlorophyll a	mg/m³	3.8
4.	Chlorophyll b	mg/m³	2.6
5.	Primary Productivity	gC/m ²	3.0
6.	Biomass	mg/m ²	2.2

S.No	Species	Total Species count in 1L
A.	Phytoplankton Species	
	Prorocentrummicans	62
	Amphora lineolata	48
	Cymbella marina	20
	Bacteriastrum delicatulum	26
	Thalassionema nitzschioides	42
	Chaetoceros dydymus	08
	Skeletonemacostatum	20
	Thalassiothrixlongissima	16
	Cymbella marina	10
B.	Zooplankton Species	
	Foraminifera	44
	Chaetognatha	32
	Amphipoda	28
	Cladocera	14
	Eggs of fish & larvae	06

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TEST REPORT ANALYSIS OF MARINE WATER

BCL Ref. No.	GPL/ 05/223	Issued to:	
Monitoring Date	August 13, 2022	M/s. Gangavaram Port Ltd.	
Reporting Date	August 18, 2022	Gangavaram (Village)	
Organization M/s. Gangavaram Port Ltd. Type of Sample Marine Water (High Tide)		PedaGantiyada (Mandalam) Visakhapatnam.	

Station Name: South brake Wall Outside / High Tide

S. No	PARAMETERS	UNIT	RESULT
1.	Phytoplankton Count	No. /L	10000
2.	Zooplankton Count	No./m³	1200
3.	Chlorophyll a	mg/m ³	2.4
4.	Chlorophyll b	mg/m ³	2.0
5.	Primary Productivity	gC/m ²	3.2
6.	Biomass	mg/m²	2.6

.No	Species	Total Species count in 1L
Α.	Phytoplankton Species Prorocentrummicans Amphora lineolata Cymbella marina Bacteriastrum delicatulum Thalassionema nitzschioides Chaetoceros dydymus	30 64 28 32 24 08
	Skeletonemacostatum Thalassiothrixlongissima Cymbella marina	14 28 04
3.	Zooplankton Species Foraminifera Chaetognatha	50 24
	Amphipoda Cladocera Eggs of fish & larvae	16 04 12

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TEST REPORT ANALYSIS OF MARINE WATER

BCL Ref. No.	GPL/ 05/223	Issued to:	
Monitoring Date	August 13, 2022	M/s. Gangavaram Port Ltd.	
Reporting Date	August 18, 2022	Gangavaram (Village)	
Organization	M/s. Gangavaram Port Ltd.	PedaGantiyada (Mandalam)	
Type of Sample	Marine Water (High Tide)	Visakhapatnam.	
Sample Collected by	M/s. Biochem Labs		

Station Name: North brake Wall Outside / High Tide

S. No	PARAMETERS	UNIT	RESULT
1.	Phytoplankton Count	No. /L	11000
2.	Zooplankton Count	No./m³	1400
3.	Chlorophyll a	mg/m³	3.4
4.	Chlorophyll b	mg/m³	2.6
5.	Primary Productivity	gC/m ²	3.0
6.	Biomass	mg/m ²	2.8

S.No	Species	Total Species count in 1L
A.	Phytoplankton Species	
	Prorocentrummicans	60
	Amphora lineolata	10
	Cymbella marina	42
	Bacteriastrum delicatulum	20
	Thalassionema nitzschioides	28
	Chaetoceros dydymus	32
	Skeletonemacostatum	18
	Thalassiothrixlongissima	24
	Cymbella marina	05
B.	Zooplankton Species	F 200 TO
	Foraminifera	32
	Chaetognatha	44
	Amphipoda	24
	Cladocera	10
	Eggs of fish & larvae	08

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TEST REPORT ANALYSIS OF MARINE WATER

BCL Ref. No.	GPL/ 05/224	Issued to:		
Monitoring Date	August 27, 2022	M/s Canana Dad I M		
Reporting Date	September 01, 2022	M/s. Gangavaram Port Ltd.		
Organization	M/s. Gangavaram Port Ltd.	 Gangavaram (Village) PedaGantiyada (Mandalam) 		
Type of Sample	Marine Water (Low Tide / High Tide)	Visakhapatnam.		
Sample Collected by	M/s. Biochem Labs	7 Tournapariant.		

S. No	Parameter	Unit	Result			
			HarbourBasine		Port Entrance Channel	
			Low tide	High tide	Low tide	High tide
1.	Temperature	°C	31.0	29.2	32.0	30.8
2.	pH	H+ conc	8.18	8.22	8.24	8.20
3.	Salinity	PSU	32.6	33.0	32.2	33.0
4.	Turbidity	NTU	20	28	10	14
5.	Total Suspended Solids	mg/l	24	30	14	16
6.	Transparency	Mts.	1.0	0.8	1.4	1.2
7.	Electrical Conductivity	mMHo	36.8	32.6	35.0	31.6

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TEST REPORT ANALYSIS OF MARINE WATER

BCL Ref. No.	GPL/ 05/224 Issued to:		
Monitoring Date	August 27, 2022	M/s. Gangavaram Port Ltd.	
Reporting Date	September 01, 2022	Gangavaram (Village)	
Organization	M/s. Gangavaram Port Ltd.	PedaGantiyada (Mandalam)	
Type of Sample	Marine Water (Low Tide / High Tide)	Visakhapatnam.	
Sample Collected by	M/s. Biochem Labs		

S. No	Parameter	Unit	Result			
			South brake Wall Outside		North brake Wall Outside	
			Low tide	High tide	Low tide	High tide
1.	Temperature	°C	30.8	32.4	29.2	31.6
2.	pH	H+ conc	8.22	8.24	8.20	8.26
3.	Salinity	PSU	32.8	33.6	32.4	33.0
4.	Turbidity	NTU	10	12	8	12
5.	Total Suspended Solids	mg/l	14	16	12	18
6.	Transparency	Mts.	1.4	1.2	1.6	1.4
7,	Electrical Conductivity	mMHo	36.8	31.6	34.0	33.6







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TEST REPORT ANALYSIS OF MARINE WATER

BCL Ref. No.	GPL/ 05/224	Issued to:	
Monitoring Date	August 27, 2022	M/s. Gangavaram Port Ltd.	
Reporting Date	September 01, 2022	- Gangavaram (Village)	
Organization	M/s. Gangavaram Port Ltd.	PedaGantiyada (Mandalam)	
Type of Sample	Marine Water (Low Tide / High Tide)	Visakhapatnam.	
Sample Collected by	M/s. Biochem Labs		

S. No	Parameter	Unit		R	esult	
			HarbourBasine		Port Entrance Chan	ce Channel
			Low tide	High tide	Low tide	High tide
1	Dissolved Oxygen	mg/l	4.0	3.8	3.8	4.2
2	Biological Oxygen Demand	mg/l	1.8	1.6	1.4	2.0
3.	Oil & Grease	mg/l	0.8	1.2	0.6	0.8
4.	Sulphate	mg/l	1014	986	1028	1036
5.	Phosphate	mg/l	0.26	0.24	0.28	0.22
6.	Nitrate	mg/l	3.0	2.6	2.4	2.6
7.	Nitrite	mg/l	0.028	0.026	0.012	0.018
8.	Chloride	mg/l	20648	19836	21062	20824
9.	Chromium	ppm	0.026	0.024	0.018	0.022
10.	Mercury	ppm	Nil	Nil	Nil	Nil
11.	Zinc	ppm	0.2	0.18	0.12	0.12
12.	Iron	ppm	0.022	0.024	0.028	0.02
13.	Manganese	ppm	0.02	0.018	0.012	0.016
14.	Cadmium	ppm	Nil	Nil	Nil	Nil

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TEST REPORT ANALYSIS OF MARINE WATER

BCL Ref. No.	GPL/ 05/224	Issued to
Monitoring Date	August 27, 2022	M/s. Gan
Reporting Date	September 01, 2022	- Gangava
Organization	M/s. Gangavaram Port Ltd.	PedaGan
Type of Sample	Marine Water (Low Tide / High Tide)	Visakhar
Sample Collected by	M/s. Biochem Labs	, iodia iop

M/s. Gangavaram Port Ltd.

Gangavaram (Village) PedaGantiyada (Mandalam) Visakhapatnam.

S. No	Parameter	Unit		R	esult	
			South brake Wall Outside		North brake W	/all Outside
			Low tide	High tide	Low tide	High tide
1.	Dissolved Oxygen	mg/l	4.4	4.0	4.2	3.8
2	Biological Oxygen Demand	mg/l	2.2	1.8	2.0	1,6
3.	Oil & Grease	mg/l	0.6	8.0	1.0	0.4
4.	Sulphate	mg/l	1056	1020	1048	1034
5	Phosphate	mg/l	0.32	0.36	0.26	0.28
6.	Nitrate	mg/l	3.0	2.4	2.0	1.8
7.	Nitrite	mg/l	0.028	0.024	0.014	0.02
8.	Chloride	mg/l	21438	19864	20692	19890
9.	Chromium	ppm	0.026	0.02	0.018	0.024
10.	P* reury	ppm	Nil	Nil	Nil	Nil
11.	Zinc	ppm	0.16	0.12	0.14	0.10
12.	Iron	ppm	0.012	0.018	0.028	0.02
13.	Manganese	ppm	0.024	0.02	0.012	0.014
14.	Cadmium	ppm	Nil	Nil	Nil	Nil

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TEST REPORT ANALYSIS OF MARINE WATER

IICL Ref. No.	GPL/ 05/224	Issued to:	
Monitoring Date	August 27, 2022	M/s. Gangavaram Port Ltd.	
Reporting Date	September 01, 2022	Gangavaram (Village)	
Organization	M/s. Gangavaram Port Ltd.	PedaGantiyada (Mandalam)	
Type of Sample	Marine Water (Low Tide)	Visakhapatnam.	
Sample Collected by	M/s. Biochem Labs		

Station Name: Harbourbasine / Low Tide

S. No	PARAMETERS	UNIT	RESULT
1.	Phytoplankton Count	No. /L	14000
2	Zooplankton Count	No./m ³	1000
3.	Chlorophyll a	mg/m ³	2.6
4.	Chlorophyll b	mg/m ³	2.2
5.	Primary Productivity	gC/m ²	2.0
6.	Biomass	mg/m ²	1.8

.No	Species	Total Species count in 1L
A.	Phytoplankton Species	
	Prorocentrummicans	18
	Amphora lineolata	20
	Cymbella marina	12
	Bacteriastrum delicatulum	18
	Thalassionema nitzschioides	26
	Chaetoceros dydymus	14
	Skeletonemacostatum	06
	Thalassiothrixlongissima	08
	Cymbella marina	12
B.	Zooplankton Species	
	Foraminifera	26
	Chaetognatha	18
	Amphipoda	10
	Cladocera	12
	Eggs of fish & larvae	05

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TEST REPORT ANALYSIS OF MARINE WATER

BCL Ref. No.	GPL/ 05/224	Issued to:	
Monitoring Date	August 27, 2022	M/s. Gangavaram Port Ltd. Gangavaram (Village)	
Reporting Date	September 01, 2022		
Organization	M/s. Gangavaram Port Ltd.	PedaGantiyada (Mandalam)	
ype of Sample Marine Water (Low Tide)		Visakhapatnam.	
Sample Collected by	M/s. Biochem Labs	T ISSUE ISPATITUE II.	

Station Name: Port Entrance Channel / Low Tide

S. No	PARAMETERS	UNIT	RESULT
1.	Phytoplankton Count	No. /L	14000
2.	Zooplankton Count	No./m³	1000
3.	Chlorophyll a	mg/m ³	3.8
4.	Chlorophyll b	mg/m ³	2.4
5.	Primary Productivity	gC/m ²	3.0
6.	Biomass	mg/m²	2.2

.No	Species	Total Species count in 1L
Α.	Phytoplankton Species Prorocentrummicans Amphora lineolata Cymbella marina Bacteriastrum delicatulum Thalassionema nitzschioides Chaetoceros dydymus Skeletonemacostatum Thalassiothrixlongissima Cymbella marina	20 12 06 14 10 26 02 18 04
В.	Zooplankton Species Foraminifera Chaetognatha Amphipoda Cladocera Eggs of fish & larvae	22 16 10 02 06

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TEST REPORT ANALYSIS OF MARINE WATER

GPL/ 05/224	M/s. Gangavaram Port Ltd. Gangavaram (Village)	
August 27, 2022		
September 01, 2022		
M/s. Gangavaram Port Ltd.	PedaGantiyada (Mandalam)	
Marine Water (High Tide)	Visakhapatnam.	
M/s. Biochem Labs		
	August 27, 2022 September 01, 2022 M/s. Gangavaram Port Ltd. Marine Water (High Tide)	

Station Name: Harbourbasine / High Tide

S. No	PARAMETERS	UNIT	RESULT
1.	Phytoplankton Count	No. /L	10000
2.	Zooplankton Count	No./m³	1200
3.	Chlorophyll a	mg/m ³	2.4
4.	Chlorophyll b	mg/m³	2.6
5.	Primary Productivity	gC/m ²	3.0
6.	Biomass	mg/m²	2.8

.No	Species	Total Species count in 1L
Α.	Phytoplankton Species Prorocentrummicans Amphora lineolata Cymbella marina Bacteriastrum delicatulum Thalassionema nitzschioldes Chaetoceros dydymus Skeletonemacostatum Thalassiothrixlongissima Cymbella marina	32 06 20 10 28 04 10 06
В.	Zooplankton Species Foraminifera Chaetognatha Amphipoda Cladocera Eggs of fish & larvae	14 02 18 06 04

Analyst

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TEST REPORT ANALYSIS OF MARINE WATER

BCL Ref. No.	GPL/ 05/224	Issued to:		
Monitoring Date	August 27, 2022	M/s. Gangavaram Port Ltd.		
Reporting Date	September 01, 2022	Gangavaram (Village)		
Organization	M/s. Gangavaram Port Ltd.	PedaGantiyada (Mandalam)		
Type of Sample	Marine Water (High Tide)	Visakhapatnam.		
Sample Collected by	M/s. Biochem Labs			

Station Name: Port Entrance Channel / High Tide

S. No	PARAMETERS	UNIT	RESULT
1	Phytoplankton Count	No. /L	12000
2.	Zooplankton Count	No./m ³	1000
3.	Chlorophyll a	mg/m³	3.6
4.	Chlorophyll b	mg/m ³	2.8
5.	Primary Productivity	gC/m ²	3.0
6.	Biomass	mg/m²	2.8

S.No	Species	Total Species count in 1L
A.	Phytoplankton Species	
100	Prorocentrummicans	38
	Amphora lineolata	14
	Cymbella marina	26
	Bacteriastrum delicatulum	04
	Thalassionema nitzschioides	10
	Chaetoceros dydymus	20
	Skeletonemacostatum	12
	Thalassiothrixlongissima	22
	Cymbella marina	10
В.	Zooplankton Species	
400	Foraminifera	22
	Chaetognatha	14
	Amphipoda	10
	Cladocera	06
	Eggs of fish & larvae	02

Anatyst

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Centre for Aquaculture & Environmental Sciences

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TEST REPORT ANALYSIS OF MARINE WATER

BCL Ref. No.	GPL/ 05/224	Issued to:	
Monitoring Date	August 27, 2022	M/s. Gangavaram Port Ltd.	
Reporting Date	September 01, 2022	Gangavaram (Village)	
Organization	M/s. Gangavaram Port Ltd.	PedaGantiyada (Mandalam)	
Type of Sample	Marine Water (Low Tide)	Visakhapatnam.	
Sample Collected by M/s. Biochem Labs		Trouver report fairt.	

Station Name: South brake Wall outside / Low Tide

S. No	PARAMETERS	UNIT	RESULT
1.	Phytoplankton Count	No. /L	10000
2.	Zooplankton Count	No./m ³	1200
3.	Chlorophyll a	mg/m ³	3.2
4.	Chlorophyll b	mg/m³	2.8
5.	Primary Productivity	gC/m ²	3.0
6.	Biomass	mg/m ²	2.6

S.No	Species	Total Species count in 1L
Α,	Phytoplankton Species Prorocentrummicans Amphora lineolata Cymbella marina Bacteriastrum delicatulum Thalassionema nitzschioides Chaetoceros dydymus Skeletonemacostatum Thalassiothrixlongissima Cymbella marina	54 28 18 02 34 42 30 04
В.	Zooplankton Species Foraminifera Chaetognatha Amphipoda Cladocera Eggs of fish & larvae	34 20 14 22 14

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TEST REPORT ANALYSIS OF MARINE WATER

BCL Ref. No.	GPL/ 05/224	Issued to:		
Monitoring Date	August 27, 2022	M/s. Gangavaram Port Ltd.		
Reporting Date	September 01, 2022	Gangavaram (Village)		
Organization	M/s. Gangavaram Port Ltd.	PedaGantiyada (Mandalam Visakhapatnam.		
Type of Sample	Marine Water (Low Tide)			
Sample Collected by	M/s. Biochem Labs	,		

Station Name: North brake Wall Outside / Low Tide

S. No	PARAMETERS	UNIT	RESULT
1.	Phytoplankton Count	No. /L	10000
2	Zooplankton Count	No./m³	1200
3.	Chlorophyll a	mg/m ³	3.2
4	Chlorophyll b	mg/m³	2.6
5.	Primary Productivity	gC/m ²	3.0
6.	Biomass	mg/m ²	2,4

.No	Species	Total Species count in 1L
Α.	Phytoplankton Species Prorocentrummicans Amphora lineolata Cymbella marina Bacteriastrum delicatulum Thalassionema nitzschioides Chaetoceros dydymus Skeletonemacostatum Thalassiothrixlongissima Cymbella marina	82 46 28 36 06 24 06 28 10
В.	Zooplankton Species Foraminifera Chaetognatha Amphipoda Cladocera Eggs of fish & larvae	28 20 04 12 06

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TEST REPORT ANALYSIS OF MARINE WATER

BCL Ref. No.	GPL/ 05/224	Issued to:		
Monitoring Date	August 27, 2022	Mis Conscioned Bort Ltd		
Reporting Date	September 01, 2022	M/s. Gangavaram Port Ltd. Gangavaram (Village)		
Organization	M/s. Gangavaram Port Ltd.	PedaGantiyada (Mandalam		
Type of Sample	Marine Water (High Tide)	Visakhapatnam.		
Sample Collected by	M/s. Biochem Labs			

Station Name: South brake Wall Outside / High Tide

S. No	PARAMETERS	UNIT	RESULT
1.	Phytoplankton Count	No. /L	10000
2.	Zooplankton Count	No./m³	1000
3.	Chlorophyll a	mg/m³	2.8
4.	Chlorophyll b	mg/m ³	3.0
5.	Primary Productivity	gC/m ²	3.4
6.	Biomass	mg/m²	2.6

S.No	Species	Total Species count in 1L
A.	Phytoplankton Species	
	Prorocentrummicans	82
	Amphora lineolata	24
	Cymbella marina	40
	Bacteriastrum delicatulum	06
	Thalassionema nitzschioides	20
	Chaetoceros dydymus	38
	Skeletonemacostatum	10
	Thalassiothrixlongissima	26
	Cymbella marina	04
B.	Zooplankton Species	
	Foraminifera	22
	Chaetognatha	04
	Amphipoda	32
	Cladocera	16
	Eggs of fish & larvae	04

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TEST REPORT ANALYSIS OF MARINE WATER

BCL Ref. No.	GPL/ 05/224	Issued to: M/s, Gangavaram Port Ltd.	
Monitoring Date	August 27, 2022		
Reporting Date	September 01, 2022	Gangavaram (Village)	
Organization	M/s. Gangavaram Port Ltd.	PedaGantiyada (Mandalam)	
Type of Sample	Marine Water (High Tide)	Visakhapatnam.	
Sample Collected by	M/s. Biochem Labs		

Station Name: North brake Wall Outside / High Tide

S. No	PARAMETERS	UNIT	RESULT
1.	Phytoplankton Count	No. /L	10000
2.	Zooplankton Count	No./m³	1200
3.	Chlorophyll a	mg/m³	3.6
4.	Chlorophyll b	mg/m³	2.4
5.	Primary Productivity	gC/m ²	3.2
6.	Biomass	mg/m ²	2.8

S.No	Species	Total Species count in 1L
Α.	Phytoplankton Species	
	Prorocentrummicans	64
	Amphora lineolata	35
	Cymbella marina	28
	Bacteriastrum delicatulum	30
	Thalassionema nitzschioides	08
	Chaetoceros dydymus	32
	Skeletonemacostatum	08
	Thalassiothrixlongissima	26
	Cymbella marina	12
B.	Zooplankton Species	
	Foraminifera	28
	Chaetognatha	12
	Amphipoda	18
	Cladocera	04
	Eggs of fish & larvae	10

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TEST REPORT ANALYSIS OF SEDIMENT SAMPLE

BCL Ref. No.	GPL/ 06/223	Issued to:		
Monitoring Date	August 13, 2022	M/s. Gangavaram Port Ltd.		
Reporting Date	August 18, 2022	Gangavaram (Village)		
Organization	M/s. Gangavaram Port Ltd.	PedaGantiyada (Mandalam)		
Type of Sample	Sediment (Low Tide)	Visakhapatnam.		
Sample Collected by	M/s. Biochem Labs			

S.No	Parameters	Unit	Result		
			Harbour Basine	Port Entrance Channel	
1.	pH	H+ conc	6.96	7.02	
2.	Organic matter	%	2.0	1.6	
3.	Nitrate	mg/kg	2.8	2.0	
4.	Phosphate	mg/kg	1.4	1.2	
5.	Oil & Grease	mg/kg	0.18	0.16	
6.	Iron	ppm	0.16	0.14	
7.	Manganese	ppm	0.14	0.1	
8.	Nickel	ppm	0.1	0.14	
9.	Chromium	ppm	0.14	0.16	
10.	Mercury	ppm	Nil	Nil	
11.	Zinc	ppm	0.8	0.6	
12.	Lead	ppm	0.01	0.01	
13.	Arsenic	ppm	0.01	0.01	
14.	Selenium	ppm	0.01	0.01	
15.	Copper	ppm	0.16	0.18	

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TEST REPORT ANALYSIS OF SEDIMENT SAMPLE

BCL Ref. No.	GPL/ 06/223	Issued to:	
Monitoring Date August 13, 2022 Reporting Date August 18, 2022		M/s. Gangavaram Port Ltd. Gangavaram (Village)	
Type of Sample Sediment (Low Tide)		Visakhapatnam.	
Sample Collected by	M/s. Biochem Labs	Troub Companies	

S.No	Parameters	Unit	Result		
			South brake Wall Outside	North brake Wall Outside	
1.	pH	H+ conc	7.04	7.06	
2.	Organic matter	%	1.2	1.0	
3.	Nitrate	mg/kg	2.0	1.4	
4.	Phosphate	mg/kg	0.8	1.0	
5.	Oil & Grease	mg/kg	0.02	0.01	
6.	Iron .	ppm	0.18	0.14	
7.	Manganese	ppm	0,16	0.12	
8.	Nickel	ppm	0.14	0.1	
9.	Chromium	ppm	0.16	0.12	
10.	Mercury	ppm	Nil	Nil	
11.	Zinc	ppm	1.0	0.8	
12.	Lead	ppm	0.01	0.01	
13.	Arsenic	ppm	0.01	0.01	
14.	Selenium	ppm	0.01	0.01	
15.	Copper	ppm	0.14	0.12	

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TEST REPORT BENTHIC FAUNAL DIVERSITY

BCL Ref. No. GPL/ 06/223		
August 13, 2022	M/s. Gangavaram Port Ltd.	
Monitoring Date August 13, 2022 Reporting Date August 18, 2022		
M/s. Gangavaram Port Ltd.	 Gangavaram (Village) PedaGantiyada (Mandalam) 	
Organization M/s. Gangavaram Port Ltd. Type of Sample Sediment (Low Tide)		
M/s. Biochem Labs	Visakhapatnam.	
	August 13, 2022 August 18, 2022 M/s. Gangavaram Port Ltd. Sediment (Low Tide)	

S. No	Species/Group	% Composition		
		HarbourBasine	Port Entrance Channel	
1.	Opheliidae sp	18	24	
2.	Glyceridae sp	12	10	
3.	Nereidae sp	24	06	
4.	Aphroditidae sp	02	12	
5.	Cirratulidae sp	10	16	
6.	Capitella sp	02	08	
7.	Amphipoda sp.	16	10	
8.	Gastropoda	04	06	
9.	Chaetognatha	0	08	

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TEST REPORT BENTHIC FAUNAL DIVERSITY

GPL/ 06/223	Issued to:	
August 13, 2022	M/s. Gangavaram Port Ltd.	
August 18, 2022	Gangavaram (Village)	
M/s. Gangavaram Port Ltd.	PedaGantiyada (Mandalam)	
Organization M/s. Gangavaram Port Ltd. Type of Sample Sediment (Low Tide) Sample Collected by M/s. Biochem Labs		

S. No	Species/Group	% Composition		
		South brake Wall Outside	North brake Wall Outside	
1.	Foraminifera	48	56	
2.	Amphipoda	26	18	
3.	Mytilusedulis	14	20	
4.	Gastropod veliger	26	12	
5.	Oithona	10	06	
6.	Capitella	08	12	
7.	Copepod nauplii	20	06	
9.	Brachyuran zoea	06	14	
8.	Neanthusarenaceodentala	18	02	

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TEST REPORT ANALYSIS OF SEDIMENT SAMPLE

BCL Ref. No.	Issued to:	
Monitoring Date	August 27, 2022	M/s. Gangavaram Port Ltd.
Reporting Date	Gangavaram (Village) PedaGantiyada (Mandalam)	
Organization		
Type of Sample	Sediment (Low Tide)	Visakhapatnam.
Sample Collected by	Visakriapatriam.	

S.No	Parameters	Unit		Result	
			Harbour Basine	Port Entrance Channe	
1.	pH	H+ conc	6.98	7.06	
2.	Organic matter	%	2.2	1.8	
3.	Nitrate	mg/kg	1.8	1.2	
4.	Phosphate	mg/kg	1.0	1.0	
5.	Oil & Grease	mg/kg	0.12	0.08	
6.	Iron	ppm	0.18	0.12	
7.	Manganese	ppm	0.14	0.16	
8.	Nickel	ppm	0.12	0.14	
9.	Chromium	ppm	0.16	0.12	
10.	Mercury	ppm	Nil	Nil	
11.	Zinc	ppm	1.0	0.8	
12.	Lead	ppm	0.01	0.01	
13.	Arsenic	ppm	0.01	0.01	
14.	Selenium	ppm	0.01 0.01		
15.	Copper	ppm	0.20	0.18	

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TEST REPORT ANALYSIS OF SEDIMENT SAMPLE

Sample Collected by	M/s. Biochem Labs	- Comment of the Comment		
Type of Sample	Visakhapatnam.			
Organization	M/s. Gangavaram Port Ltd. Sediment (Low Tide)	PedaGantiyada (Mandalam)		
Reporting Date	Gangavaram (Village)			
Monitoring Date	August 27, 2022	M/s. Gangavaram Port Ltd.		
BCL Ref. No.	GPL/ 06/224	Issued to:		

S.No	Parameters	Parameters Unit Re		sult		
			South brake Wall Outside	North brake Wall Outside 7.06		
1.	pH	pH H+ conc				7.04
2.	Organic matter	%	1.0	0.8		
3.	Nitrate	mg/kg	2.0	1.4		
4.	Phosphate	mg/kg	1,6	1.0		
5.	Oil & Grease	mg/kg	0.02	0.04		
6.	Iron	ppm	~ ~ .			
7.	Manganese	ppm	0.12	0.1		
8.	Nickel			0.12		
9.	Chromium	ppm	0.14	0.1		
10.	Mercury	ppm	Nil	Nil		
11.	Zinc	ppm	1.0	0.8		
12.	Lead	ppm	0.01	0.01		
13.	Arsenic			0.01		
14.	Selenium	ppm	0.01 0.01			
15.	Copper	ppm	0.18	0.14		

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TEST REPORT BENTHIC FAUNAL DIVERSITY

BCL Ref. No.	Issued to:		
Monitoring Date			
Reporting Date	September 01, 2022	M/s. Gangavaram Port Ltd. Gangavaram (Village)	
Organization	PedaGantiyada (Mandalam		
Type of Sample	Sediment (Low Tide)	Visakhapatnam.	
Sample Collected by	M/s. Biochem Labs	The same and the s	

S. No	Species/Group	% Com	position	
		Harbour Basine	Port Entrance Channel	
1.	Eunicidae sp.	20	26	
2.	Paraonidae sp.	10	14	
3.	Syllidae sp	06	18 10	
4.	Sabellidae sp	08		
5.	Oithona sp.	10	16	
6.	Capitella sp.	06	14	
7.	Syllidae sp	12	06	
9.	Amphipoda sp.	02	04	
8.	Nematoda sp.	08	06	

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TEST REPORT BENTHIC FAUNAL DIVERSITY

BCL Ref. No.	Issued to:		
Monitoring Date	August 27, 2022	M/s. Gangavaram Port Ltd.	
Reporting Date	September 01, 2022	Gangavaram (Village)	
Organization	M/s. Gangavaram Port Ltd.	PedaGantiyada (Mandalam	
Type of Sample	Sediment (Low Tide)	Visakhapatnam.	
Sample Collected by	M/s. Biochem Labs		

S. No	Species/Group	% Composition			
		South brake Wall Outside	North brake Wall Outside		
1.	Capitella sp.	62	56		
2.	Syllidae sp	32	24		
3.	Amphipoda sp.	08	10		
4.	Nematoda sp.	34	06		
5.	Capitella sp.	10	12		
6.	Syllidae sp	24	08		
7.	Paraonidae sp.	12	10		
9.	Syllidae sp	18	14		
В.	Sabellidae sp	06	02		

Analyst





GANGAVARAM PORT LIMITED

GPL/ENV/APPCB/2022-23/030

Date: 05.09.2022.

To

Sr. Environmental Engineer, CESS Andhra Pradesh Pollution Control Board. D.no:33-26-14D/2. Near Sunrise Hospital, Pushpa Hotel Center, Chalamalavari Street, Kasturibaipet, Vijayawada-520010. Andhra Pradesh.

Dear Sir,

Sub: Water Consumption Cess Statement - Reg.

Please find enclosed herewith the water consumption statement in FORM -1 for the month of August - 2022, prepared under the Water (Prevention and Control of Pollution) Cess Act, 1977.

We request you to kindly consider the same.

Thanking you

Yours Sincerely,

Authorized Signatory

Encl: As above.

Copy submitted to the Environmental Engineer, A.P. Pollution Control Board, Regional Office, Visakhapatnam for kind information.

Project Office

: Pedagantyada Mandal, Gangavaram (Post), Visakhapatnam - 530 044. Andhra Pradesh, INDIA

Tel.: +91 891 270 1177, 2277, 276 1377, Fax: +91 891 270 3377

Corporate Office: 2nd, 3rd and 4th Floors, "Hansa Plaza", Plot No.798, Road No.36, Jubilee Hills, Hyderabad - 500 033

Tel.: 040 3359 9999, Fax No.: 040 3359 9990

E-mail: port@gangavaram.com, Web: www.gangavaram.com

FORM - 1

Returns Regarding Water Consumed During Month of August - 2022

(*) for claiming rebate under Col.7, the assessed shall indicate in the column the analytical and other reports annexed to this return in support of this claim.

For Gangavaram Port Limited

Vice President (Environment)





GPL/ENV/APPCB/2022-23/038

Date: 06/10/2022.

To .

The Environmental Engineer, A.P. Pollution Control Board Regional Office APPCB Buildings, 3rd Floor Main Road, Madhavadhara VUDA Layout Visakhapatnam- 530 009.

Dear Sir,

Sub:- Monthly CFO Compliance, Environmental Marine & Terrestrial Monitoring Reports and Water Consumption detains (Form-1) -Submitted - Reg.

1. CFO & HWA Order No. APPCB/VSP/VSP/113/CFO/HO/2015, Ref:dated 13.01.2016, valid up to 31.12.2020.

> 2. CFO & HWA Order No. APPCB/VSP/VSP/113/CFO/HO/2020, dated 10.09.2020, valid up to 31.12.2025.

> > രരര

With reference to the above, we are here with submitting the monthly CFO compliance reports and CAAQM, Marine & Terrestrial monitoring results along with Water Consumption details in Form - 1 for the month of September -2022.

Yours Sincerely,

Encl: As above.

Project Office

: Pedagantyada Mandal, Gangavaram (Post), Visakhapatnam - 530 044. Andhra Pradesh, INDIA

Tel.: +91 891 270 1177, 2277, 276 1377, Fax: +91 891 270 3377

Corporate Office: 2nd, 3rd and 4th Floors, "Hansa Plaza", Plot No.798, Road No.36, Jubilee Hills, Hyderabad - 500 033

Tel.: 040 3359 9999, Fax No.: 040 3359 9990

F-mail · nort@gangavaram.com. Web : www.gangavaram.com

Compliance report of the conditions stipulated in Schedule A,B & C of CFO & HWA Order No. APPCB/VSP/VSP/113/CFO/HO/2015, dated 13.01.2016

Compliance of Schedule - A

SI. No.	Condition	Compliance
1.	Any up-set condition in any plant/plants of the industry, which result in, increased effluent/ emission discharge and/ or violation of standards stipulated in this order shall be informed to this Board, under intimation to the Collector and District Magistrate and take immediate action to bring down the discharge / emission below the limits.	All conditions are being followed.
2.	The industry should carryout analysis of waste water discharges or emissions through chimneys for the parameters mentioned in this order on quarterly basis and submit to the Board.	GPL is carrying out 3 rd party monitoring and analysis. As per analysis reports, the samples are meeting the Board standards.
3.	All the rules & regulations notified by Ministry of Law and Justice, Government of India regarding Public Liability Insurance Act, 1991 should be followed as applicable.	Noted and conditions are being followed as applicable.
4.	The industry should put up two sign boards (6×4 ft. each)at publicly visible places at the main gate indicating the products, effluent discharge standards, air emission standards, hazardous waste quantities and validity of CFO and exhibit the CFO order at a prominent place in the factory premises.	Noted and condition is being followed.
5.	Notwithstanding anything contained in this consent order, the Board here by reserves the right and powers to review / revoke any and / or all the conditions imposed herein above and to make such variations as deemed fit for the purpose of the Acts by the Board.	Noted the condition.
6.	The industry shall file the water cess returns in Form-I as required under section (5) of water (Prevention and Control of Pollution) cess Act, 1977 on or before the 5 th of every calendar month, showing the quantity of water consumed in the previous monthly along with water meter readings. The industry shall remit water cess as per the assessment order as and when issued by Board.	Water consumption details of the previous month are being submitted before 5 th of subsequent month in FORM - I. The latest reports for the Month of August, 2022 were submitted through e.mail 17 th September, 2022 After introduction of GST, APPCB has instructed all the industries are not required to remit water cess charges from 1 st July, 2017 onwards.

7.	The applicant shall submit Environment statement in Form V before 30 th September every year as per Rule No.14 of E(P) Rules,1986 & amendments thereof.	Complied and Form V was Submitted on 30.09.2022 for the period 2021-2022
8.	The applicant should make applications through Online for renewal of Consent (under Water Air Acts) and Authorization under HWM Rules at least 120 days before the date of expiry of this order, along with prescribed fee under Water and Air Acts and detailed compliance of CFO conditions for obtaining Consent & HW Authorization of the board. The industry should immediately submit the revised application for consent to this Board in the event of any change in the raw material used, processes employed, quantity of trade effluents & quantity of emissions. Any change in the management shall be informed to the Board, the person authorized should not let out the premises / lend / sell / transfer their industrial premises without obtaining prior permission of the state Pollution Control Board.	GPL has obtained CFO & HWA of the Board vide order dated 13/01/2016 valid up to 31.12.2020 and extended up to 31.12.2025 vide order dated 10.09.2020.
9.	Any person aggrieved by an order made by the state board under section 25, section 26, section 27 of water Act, 1974 or section 21 of Air Act, 1981 may within thirty days from the date on which the order is communicated to him, prefer an appeal as per Andhra Pradesh Water Rules, 1976 and Air Rules 1982, to Appellate authority constituted under section 28 of the Water (prevention and control of pollution) Act, 1974 and section 31 of the Air (prevention and control of pollution) Act, 1981.	Noted and condition will be followed.

Compliance of Schedule - B

SI.			Condition		Condition		
No.	164 -		- U k.!				
	Water Pollution The water consumption quantities are						
1.	The water consumption quantities are mentioned below:			GPL is submitting water			
	men	S.	Purpose	0.	Jantity		GPL is submitting water consumption details and water cess
		o. No	Pulpose		KLD		in Form-I regularly.
	-	1	Gardening/irrigation		25		in i omi-i regularly.
		2	Dust suppression	12	296.0		The industry is consuming water
		3	Domestic		40		within consented quantity only.
		4	Ship supply		32.5		within democritical quarterey empt
		5	miscellaneous	4	40.6		Provided 2 No. nos of flow meters
			Total	14	434.1		for quantification of water used for
			of water is Visakhapal			эl	domestic and other purposes.
			upply Co. the following	_	the		·
	· —	iitte	ed water consumption	า.		1	
	S.		Purpose		Quantity		
	No	_	ush supposessing		KLD 1296.0		
	2	_	ust suppression omestic purpose		40.00		
	3		ocess, where by water		73.1		
			ts polluted and pollutar	nts	73.1		
			e easily bio degradable.				
	4		ocessing , where by				
			ater gets polluted and				
			llutants are not easily b	oio			
		de	gradable		44004		
			Total	<u> </u>	1409.1		
			e water meters shall assessing the quantity				
			of the purpose me	-			
			assessment purpose.			C	
2.			ngavaram Port Limit		(GDI) sha	11	GPL has provided separate energy
۷.			separate energy mat		` '		meters for Sewage Treatment Plant
			ent Plant (STP) and f				(STP) and separate energy meter for
	Cont		equipments to r				the Air pollution Control equipments
			ption.			,,	(MDSS) to record energy
							consumption.
	Air P	ollu	ıtion				·
1.			ngavaram Port Limit	ed	(GPL) sha	ıll	The mitigation measures being
			with ambient air qu		•		implemented by GPL ensures that
	of Pi	M_{10}^{1}	(Particulate matter si	ize İ	ess than 1	0	the ambient air quality parameters
	µm)	- 10	00µg /m³; PM _{2.5} (Par	ticu	late matte	٩٢	conform to the PCB prescribed
	size	size less than 2.5 μ m) - 60 μ g / m ³ : SO ₂ -		-	standards.		
	$80\mu g / m^3$: $NO_X - 80\mu g / m^3$, outside the port premises at the periphery of the industry.		rt				
	Standards for other parameters as		-				
	mentioned in the National Ambient Air						
	Quality Standards CPCB Notification No.B-			3-			
			20/90/PCI-I, dated 18.	11.2	2009		
			evels:	-	. (0)		
	-		e (6 AM to 10 PM) - 75				
	Nigh	t tir	me (10 PM to 6 AM) -	/0 (aB (A).		

2.	The Gangavaram port limited (GPL) shall maintain 3 CAAQMs with online connectivity to APPCB and maintain records.	GPL installed 3 No. of CAAQM stations to measure the parameters PM 10, PM 2.5, SO², NO, NO², CO at the following locations and data connected to APPCB website. i. Administrative office towards H.B. Colony (Station 1): ii. Project site office building towards Venkannapalem (Station2) iii. Watch tower – 4 towards Gangavaram village (Station3).As per the data, the SPM values are within Board standards.
3.	The Gangavaram Port Limited (GPL) shall Maintain wind breaking wall all along the Gangavaram village side up to a height 10 mts as wind speed is high in this area	GPL erected wind breaking wall of height 6m on the compound wall of height 3m near Gangavaram village and HB Colony to prevent any dust nuisance towards habitation & maintaining about 50 m width of green belt along port compound wall near Gangavaram (V).
4.	The Gangavaram Port Limited (GPL) shall not establish any other stock yards other than designated stock yards.	GPL has not established any stock yards other than designated stock yards.
5.	The Gangavaram Port Limited (GPL) shall maintain Telescopic chute at ship loading points	GPL is maintaining Telescopic chute at ship loading points.
6.	The Gangavaram port limited (GPL) shall not stock the Materials more than 10mts height where MDSS system available and shall restrict to 6 mts for other stocking heights where tankers water spraying system is maintained in the stockyards.	GPL obtained amendment to this condition vide Amendment to CFO dated 16/09/2016 and the condition was amended as: "GPL shall not stock the materials more than 12 meters height where MDSS system is available and shall maintain stack height of 10 meters at manual stack yards"
7.	The Gangavaram port limited (GPL) shall take up the cleaning of road connected to National Highway in co-ordination with GVMC and R&B Departments.	This condition was deleted vide direction no. 06 vide Order No. 754/APPCB/UH-II/TF/VSP/ 2016, dated 12.08.2016. GVMC is taking up the cleaning of road.
8.	The Gangavaram Port Limited (GPL) shall maintain dusty cargo operations if the wind velocity crosses 20 KMPH and all MDSS sprinklers shall start immediately to maintain AAQ standards	Noted and condition is being followed.
9.	The Gangavaram Port Limited (GPL) shall maintain fully mechanized handling equipments for loading and un loading operations for dusty cargo to the maximum extent possible.	Noted and condition is being followed.

	Gene	ral				
2.	main same inspe a. C b. L sy c. H g d. Ir e. N	tain the form of the shall be ecting office argo handling books ystems. In azardous/nenerated arapection botanifest cop.	ollowing remade avers of the lang materia for polon hazard ad dispose took. The port Limital of the lang material dispose took.	al wise details. Iution control ous solid waste	are	e records are being maintained and e available for inspecting officers of e Board.
	follo		0300 (14011	1102010003/ 03	a.	GPL is disposing the municipal solid waste to GVMC.
	S. No	Name of the solid	Quantity	Disposal	h	GPL is disposing the discarded
	1.	waste Domestic solid waste	10 T/m	Shall be collected segregated and disposed as per MSW Rules in consultation with GVMC Authorities	C.	material & plastic material to authorized recyclers. STP sludge is being turned in to bio-compost and used as manure to green belt. Lead acid batteries are being
	2.	Discarded material, plastic material	10 T/m	Shall be disposed to authorized recyclers only	-	disposed to the supplier on buy back basis.
	3.	Sludge from STP	1.0 T/m	Shall be composted and used in green belt programme		
	4.	Lead acid batteries		Shall be disposed to authorized recyclers	-	
3.	main	tain green ipulated in	belt in 50	ited (GPL) shall D meters width order dated 07-	>	GPL has developed plantation of 5.0 Lakhs saplings in about 318.21 acres within the Port premises besides existance of Prosopis in an extent of about 150 Acres covering periphery of all yards, roads, buildings and all along conveyor belt.
					\	Maintaining 50 m width of green belt towards North and North-West direction with special emphasis towards habitation i.e., HB Colony, Peda Gantyada, Venkannapalem, Kongapalem & Gangavaram village.

		Maintaining thick greenbelt at Port Approach road, Railway track side and at Truck parking area along the wind breaking wall towards HB Colony.
		Developed High Density Plantation (Miyawaki) within the Port premises in an extent of 1.0 Acre with 12,120 no. of plantation, as directed by APPCB
		Participated in Green Visakha – Clean Visakha - Green Visakha – Clean Visakha – One million Tree Plantation Programme – GPL completed the targeted plantation of 50,000 by 18.08.2022 against the target of 50,000
		➢ GPL established exclusive nursery with 80,000 saplings and employed 183 people to maintain and improve the green belt on continuous basis.
		About Rs.1.85 Cr per annum is being spent for the development of green belt in the true spirit.
4.	The Gangavaram Port Limited (GPL) shall not store/ handle any hazardous cargo containers within premises.	GPL is not handling hazardous cargo.
5.	All types of the fertilizers shall be stored in the closed warehouses only. The port shall ensure that there shall not be any open storage of urea or any other fertilizer materials and all urea & fertilizer material handling warehouses shall be maintained with effluent collection pits for collection and treatment and then used for green belt in the premises after meeting the standards.	GPL is storing the Fertilizers in closed ware houses and provided leachate collection pits around the area of warehouses and connected to STP.
6.	The Gangavaram Port Limited (GPL) shall store fuel oils used for construction equipment vessels / vehicles in a well designed manner and protect them against fire hazards by construction of compound wall to prevent access to unauthorized elements. The surface run off from storage area shall pass through oil water separator before being discharging. The Gangavaram Port Limited (GPL) shall store fuel oils used for construction equipment vessels / vehicles in a well designed manner and protect them against fire hazards by construction of compound wall to prevent access to	GPL is storing the used oil in drums under a shed.

unauthorized elements. The surface run off from storage area shall pass through oil water separator before being discharging. 7. The Gangavaram Port Limited (GPL) shall maintain the Malaria control programme and Health facilities in the operation phase. Vector control programmes. Control of all breeding ground shall be	GPL is having dispensary within the premises and no malaria cases were reported as of now. All anti malarial measures are taken
discharging. 7. The Gangavaram Port Limited (GPL) shall maintain the Malaria control programme and Health facilities in the operation phase. Vector control programmes.	premises and no malaria cases were reported as of now.
7. The Gangavaram Port Limited (GPL) shall maintain the Malaria control programme and Health facilities in the operation phase. Vector control programmes.	premises and no malaria cases were reported as of now.
carried out by the use of larvicide's in addition to control of adult mosquitoes. The health team should include a trained entomologist.	
8. The Gangavaram Port Limited (GPL) shall maintain a task force to check the vehicle emissions on permanent basis. The Gangavaram Port Limited (GPL) shall maintain a task force to check the vehicle emissions on permanent basis.	GPL has provided provision for checking vehicle emissions with a task force team including environment and safety department officials.
9. The Gangavaram Port Limited (GPL) shall constitute an Environment Management cell with qualified and trained staff.	GPL is having a dedicated Environment Management Team headed by Vice President.
10. The Gangavaram Port Limited (GPL) shall maintain onsite and offsite emergency action plan after carrying out risk analysis and hazop studies	Complied with the condition.
11. The Gangavaram Port Limited (GPL) with VUDA shall ensure that no slum development and unauthorized construction occur in the surrounding area.	VMRDA (VUDA) is taking necessary precautions to see that no slum development and unauthorized construction occur in the surrounding area of GPL.
12. The Gangavaram Port Limited (GPL shall handle alumina in completely closed enclosures. It shall also furnish an action plan to install mechanized system.	GPL is handling the alumina in hoppers and directly through tankers.
 The Gangavaram Port Limited (GPL) shall implement fallowing for controlling fugitive emission: a. Adequate dust controlling measures should be undertaken for loading and unloading operations for dusty cargo. b. Closed conveyor belt with water sprinkling arrangement for suppression of dust while conveyor dusty cargo likes coal, iron ore & alumina. c. Vehicle movement minimized / eliminated by implementing mechanical operations. 	 a. Mechanical Dust Suppression System (MDSS): 176 No. of water cannons were installed at stack yards for dust. b. Provided Dust suppression systems at discharge/feeding points of belt conveyors at each transfer tower. c. Laid BT road within the port premises. d. 5 No. of heavy duty sweeping (3 No. existing & 2 New) machines were deployed for cleaning of berths, back up areas and roads. e. Covering the outgoing cargo vehicles with tarpaulin.

	d. All the vehicles involved in transportation of cargo shall be covered with tarpaulin.	f. Provided dedicated truck/tyre washing facility to wash all the outgoing vehicles
	e. Traffic management measures adopted to avoid traffic congestion and provide empty dusting vehicle washing / dry cleaning system to	g. Provided dedicated truck parking facility.
	clean all out going cargo vehicles.	h. Ensuring continuous water sprinkling on the berths, back up
	 f. Sufficient parking facilities based on traffic density / vehicular movements anticipated from the port. 	areas, at all transfer points, hauling roads with 20 Mobile DSS tankers for dust suppression.
	g. Adequate water sprinkling provided on roads and at dusty cargo storage areas for suppression of dust	
14.	The Gangavaram Port Limited (GPL) shall implement the following measures in the cargo handling and stacking area:	i. Established mechanical conveyor system for handling coal & Iron ore to prevent the spillage of cargo and provided closed hoods for the
	 The ship un-loader maintained with in-situ water sprinkling system and unloading hoppers provided with 	conveyor system to curb fugitive emissions of coal/iron ore particles into the air.
	covers on three sides to control fugitive emissions. Iron ore shall be unloaded through wagon tipplers. b. Mechanical stackers cum re-claimers	ii. Stacker cum re-claimers are being used for loading and unloading the coal. The railway wagons are being
	for stacking, transfer and reclamation; Conveyors for transfer of materials to stop manual handling / mobile machines. c. MDSS in stacking areas.	loaded mechanically. The Port is having Stacker cum re-claimer-1no., reclaimers-3nos., stackers-3nos., wagon loader-1no., silo of 800 cu.m capacity, ship unloader-2nos, ship loader-1no., wagon tipplier-1no., mobile harbour cranes-5no.
		iii. Mechanical Dust Suppression System (MDSS): 176 No. of water cannons were installed at stack yards for dust suppression by spraying water at high pressure to form blanket of mist on surface of cargo stock to settle the dust.
15.	The Gangavaram Port Limited (GPL) shall ensure AAQ standards of the Board on all environmental conditions without fail.	GPL has provided 3 nos AAQ stations with data logger and connected to APPCB website.
16.	The Gangavaram Port Limited (GPL) shall maintain standby centrifugal pump so as to ensure uninterrupted operation of MDSS.	Complied. There are 4 no. Centrifugal pumps kept standby.
17.	The Gangavaram Port Limited (GPL) shall maintain compliance of all other conditions of CFE orders issued by the Board	Complied with the condition.

18.	The Gangavaram Port Limited (GPL) shall	Complied with the condition.
	comply with Task Force directions and	
	other directions issued by the Board from	
	time to time.	

Compliance of Schedule - C

SI.	Condition	Compliance
No		
1.	All the rules and regulations notified by Ministry of Environment & Forests, Government of India under the E (P) Act, 1986 in respect of management, handling, transportation and storage of the Hazardous waste should be followed.	GPL is following all the rules and regulations notified by Ministry of Environment & Forests, Government of India under the E(P) Act, 1986 in respect of management, handling, transportation and storage of the Hazardous waste.
2.	The Gangavaram Port Limited (GPL) shall not store hazardous waste for more than 90 days as per the Hazardous Wastes (Management. Handling and Tran boundary Movement) Rules, 2008 and amendments thereof.	Complied with the condition.
3.	The Gangavaram Port Limited (GPL) shall dispose Used Lead Acid Batteries to the manufacturers / dealers on buyback basis	GPL is buying the Lead acid on buy back basis.
4.	The Gangavaram Port Limited (GPL) shall maintain 6 copy manifest system for transportation of waste generated and a copy shall be submitted to concern Regional Office of APPCB. The driver who transports Hazardous Waste should be well acquainted about the procedure to be followed in case of an emergency during transit. The transporter should carry a Transport Emergency (TREM) Card.	GPL is following manifest system for disposal of waste oil to APPCB authorized agencies and submitting the copies to the Board.
5.	The Gangavaram Port Limited (GPL) shall maintain proper records for Hazardous Wastes stated in Authorization in FORM-3 i.e., quantity of Incinerable waste, land disposal waste, recyclable waste etc., and file annual returns in Form- 4 as per Rule 22(2) of the Hazardous Wastes (Management, Handling & Tran boundary Movement) Rules, 2008 and amendments thereof	GPL is maintaining records for Hazardous Wastes stated in Authorization in Form-3 of CFO Order and filing annual returns in Form- 4 to APPCB. For the year 2021-2022 Form – 3 & Form – 4 Submitted on 06.06.2022.
6.	The Gangavaram Port Limited (GPL) shall submit the condition wise compliance report of the conditions stipulated in Schedule A, B & C of this Order on half yearly basis to Board Office, Hyderabad and concerned Regional Office	Complied with the condition. GL is submitting the compliance reports on monthly basis.

Compliance of the conditions stipulated in CFO Auto Renewal Order No. APPCB/VSP/VSP/113/CFO/HO/2020- 10/09/2020, valid up to 31.12.2025.

SI.	Condition	Compliance
No. 1.	All other conditions mentioned in Schedules	Noted and conditions are being
	A, B & C of the combined CFO&HWA order	followed as applicable.
	issued by the Board vide order dated	
2.	13.01.2016 will remain same. The facility shall comply with the standards	Noted and condition is being
۷.	issued by MoEF&CC / CPCB from time to	followed.
	time.	
3.	The industry shall submit Half yearly compliance reports to all the stipulated conditions in Environmental Clearance (EC), Consent for Establishment (CFE) and	Self-certified 1 st half yearly compliance report for the period from April 2021 to September 2021 submitted on 29.11.2021
	Consent for Operation (CFO) through	through web site.
	website i.e., https://pcb.ap.gov.in by 1st of January and 1st July of every year. The first	NABL Accredited Agency
	half yearly compliance reports shall be	certified compliance report for
	furnished by the industry and second half	the 2 nd half for the period from October 2021 to March 2022
	yearly compliance reports shall be the audited through NABL accredited third party	was uploaded through website
	failing which the Consent Order issued will	on 30.05.2022.
	be cancelled.	
4.	The facility shall ensure that dedicated fund is allotted towards Environment Relief Fund	GPL is having Public liability Insurance of IFFCO-TOKIO vide
	(ERF) in the Public Liability Insurance policy and submit a copy of the policy at the	Policy No:41072639, dated 15.09.2022, Valid till 14/09/2023
	Regional Office: Visakhapatnam every year.	with Premium of Rs-5925/- & ERF of Rs.5925/-
5.	In case of false certification, noncompliance	Noted and condition is being
	of conditions / directions and discrepancy in furnishing the information by the industry,	followed.
	the Board can withdraw the auto renewed	
	consent and take action under provisions of	
6	relevant Acts & Rules.	CDI is ask bandling any
6.	The facility shall inventorize the storage quantities of hazardous chemicals as per the	GPL is not handling any Hazardous
	hazard nature of reactivity / toxicity /	cargo/Containers/Chemicals.
	flammability / explosive stored/handling in	
	the premises as defined in the Management of Storage Import of Hazardous Chemicals	
	of Storage, Import of Hazardous Chemicals (MSIHC) Rules, 1989 and the details shall be	
	furnished to the Factories Department and	
	to the Regional Office, APPCB on monthly	
	basis duly certifying the same.	

7.	The facility shall identify major accident hazard chemicals & list out the hazardous chemicals endangered to human health & environment and the details shall be furnished to the Factories Department and to the Regional Office, APPCB time to time duly certifying the same by the industry. Further the facility shall extend training to the working personnel's while handling hazardous chemicals for prevention of accidents and necessary antidotes to ensure the safety, as per the MSIHC Rules, 1989.	GPL is not handling any Hazardous cargo/Containers/Chemicals.
8.	The facility shall submit the copy of the safety audit report and On-Site / Off Site Emergency Plans as applicable after being certified by the Factories Department/concerned authority, to the APPCB, Regional Office from time to time, if the storage quantity of hazardous chemicals is equal to or, in excess of the threshold quantities specified in schedule 2 & 3 of MSIHC Rules, 1989.	An onsite and offsite emergency action plan has been prepared and submitted to APPCB, RO, VSP. Mock drills are being conducted twice in a year.
9.	The facility shall carryout calibration of safety equipments and leak detection systems at regular intervals and shall certify the same with the Factories Department/concerned authority. That certified copy shall be submitted to the APPCB, Regional Office. The facility shall install fluorescent Wind Vane at the highest point in the facility premises.	 GPL install fluorescent Wind Vane at the following two places within the Port premises. 1. On the top of Over Head Tank near Harbour Gate besides GPL Canteen. 2. On the top of Commercial Office Building (COB)
10	The facility shall inventorize the hazardous wastes and its quantities stored within the facility premises as per the Hazardous and Other Wastes (Management and Transboundary Movement) Rules, 2016 (HOWM Rules, 2016) and shall furnish the details to Regional Office, APPCB on monthly basis duly certifying the same by the industry.	GPL is not handling any Hazardous cargo/ Containers/Chemicals. GPL is permitted to handle Used Lubricating oil of 12000 LPA. The generation, storage & disposal details are submitting to APPCB through Form – IV. Latest submission is on 06.06.2022 for the year 2021-2022.
11	The facility shall allow import of hazardous cargoes only after the importer complies with the MSIHC Rules, 1989.	GPL Not handling any Hazardous cargo/Containers/Chemicals.

GANGAVARAM PORT LIMITED

(An ISO 9001:2015 & ISO 14001:2015

Certified Company)



Environment Monitoring Report September, 2022

Corporate Office:

2,3,4th Floors, Hansa plaza, Plot No.798, road No.36, Jubilee Hills, Hyderabad - 500033 Phone: 040 – 33599999

Site Office:

Gangavaram (V & Post) Pedagantyada (Mandal) Visakhapatnam – 530 044 Phone: 0891 -2701177

Reference No.:	GPL/September/2022/038	Submitted to:
Date:	01.09.2022	
Organization Name:	Gangavaram Port Limited	A.P. Pollution Control Board,
Type Of Sample:	Ambient Air Quality	Regional office, Visakhapatnam
Sampled By:	Gangavaram Port Limited (CAAQ Monitoring Data)	

						Am	Ambient Air Quality 24 hrs average data	r Qualit	y 24 nrs	averag	e data							
Station	Stat	(AOB)	Administ Coward	Station - 1 - Administrative Office Building (AOB) towards HB Colony	fice Build	ding		Station	Station - 2 - Project Site Office towards Venkannapalem	ect Site	Office			Station	rds Ven	Station - 3 - Watch Tower - 4 towards Venkannapalem	er - 4	
Parameter	PM10	P.M.	502	9	NO	8	PM10	P.M 2.5	205	0	NO2	8	PM10	P.M.	20s	00	NOZ	8
Day average value	47.73	29,43	37.12	47.73 29.43 37.12 17.22 6.76	6.76	0.16 44.23	44.23	27.84	53.20 14.97	14.97	8.03	0.15	49,32	49.32 30.22 35.67 10.48	35.67	10.48	9.59	0.14
Standard	100 µg/m³	60 µg/m³	80 hg/m³	80 19/m³	80 µg/m³	4 m/m	100 F	60 µg/m³	80 µg/m³	80 µg/m³	80 µg/m³	4 µg/m³	100 µg/m³	60 µg/m³	80 µg/m³	80 µg/m³	80 µg/m³	4 µg/m³

For Gangavaram Port Limited

Prepared by: Lings G.V.N.S. Murthy, GPS 1910

(Dr. b. Jyothi) Vice President (Environment)

Reference No.:	GPL/September/2022/038	Submitted to:
Date:	02.09.2022	
Organization Name:	Organization Name: Gangavaram Port Limited	A.P. Pollution Control Board,
Type Of Sample:	Ambient Air Quality	Regional office, Visakhapatnam
Sampled By:	Gangavaram Port Limited (CAAQ Monitoring Data)	

						Am	Ambient Air Quality 24 hrs average data	r Qualit	y 24 hrs	average	e data							
Station	Stat	ion - 1 - / (AOB)	Administ) toward	Station - 1 - Administrative Office Building (AOB) towards HB Colony	fice Bulk	Guip		Station	Station - 2 - Project Site Office towards Venkannapalem	ect Site	Office		8-0	Station	1 - 3 - Wa	Station - 3 - Watch Tower - 4 towards Venkannapalem	er - 4 slem	
Parameter	PM10	2.5	205	02	NO2	8	PM10	P.M 2.5	20s	ON.	NOs	8	PM10	P. 2.5	503	ON	NO	8
Day average value	47.59		34.73	29.34 34.73 17.75	6,38	71.0	44.09	27.76	50.52 15.40	15.40	7.60	0.15	49.17	30.14 33.19 10.83	33.19	10.83	9.05	0.14
Standard	100 m/gu	60 µg/m³	80 µg/m³	80 µg/m³	80 µg/m³	4 µg/m³	100 µg/m²	60 µg/m³	80 µg/m³	80 µg/m³	80 µg/m³	4 µg/m³	100 µg/m³	60 µg/m³	80 µg/m³	80 µg/m³	80 µg/m³	4 µg/m³

For Gangavaram Pont Limited

(Dr. D. Jyothi) Vice President (Environment)

Prepared by: Lybra G.V.N.S. Murthy, GPS 1910

Reference No.:	GPL/September/2022/038	Submitted to:
Date:	03.09.2022	
Organization Name:	sme: Gangavaram Port Limited	A.P. Pollution Control Board,
Type Of Sample;	Ambient Air Quality	Regional office, Visakhapatnam
Sampled By:	Gangavaram Port Limited (CAAQ Monitoring Data)	

			š			Am	bient Ai	r Quality	Ambient Air Quality 24 hrs average data	average	e data							
Station	Stat	(A08)	Station - 1 - Administrative Office Building (AOB) towards HB Colony	rative Off	fice Build Iony	guip		Station	Station - 2 - Project Site Office towards Venkannapalem	ect Site kannapa	Office			Station	rds Ven	Station - 3 - Watch Tower - 4 towards Venkannapalem	er - 4	
Parameter	PM10	P.M.	S0 ²	ON.	NO2	8	PM10	P.M.	SO2	ON.	NO2	8	PM10	2.5 2.5	205	NO	NO2	8
Day average value	47.90	29.53	47.90 29.53 44.97 16.83 10.18 0.41	16.83	10.18	0.41	44.39	27.94 6	61.72	61.72 14.66 12.02		0,40	0.40 49,50 30.33 43.21 10.22 14,44	30,33	43.21	10.22		0.39
Standard	100 m/gu	60 µg/m³	80 µg/m³	80 µg/m³	80 µg/m³	4 μg/m³	100 µg/m³	60 m/6rl	80 ug/m³	80 µg/m³	80 µg/m³	4 µg/m³	100 µg/m²	60 µg/m³	80 µg/m³	80 µg/m³	80 µg/m³	4 µg/m³

For Gangavaram Rort Limited

Vice President (Environment)

Prepared by: Lydy GPS 1910 G.V.N.S. Murthy, GPS 1910

Reference No.:	GPL/September/2022/038	Submitted to:
Date:	04,09.2022	57
Organization Name:	Gangavaram Port Limited	A.P. Pollution Control Board,
Type Of Sample:	Ambient Air Quality	Regional office, Visakhapatnam
Sampled By:	Gangavaram Port Limited (CAAQ Monitoring Data)	

			*!			Ā	Ambient Air Quality 24 hrs average data	ir Qualit	y 24 hrs	average	e data							
Station	Sta	Station - 1 - Administrative Office Building (AOB) towards HB Colony	 1 - Administrative Office E (AOB) towards HB Colony 	rative Of Is HB Co	fice Buil	ding		Station	Station - 2 - Project Site Office towards Venkannapalem	ect Site	Office			Station	1 - 3 - Wa	Station - 3 - Watch Tower - 4 towards Venkannapalem	er - 4	
Parameter	PM10	P.M 2.5	SO2	ON	NO ₂	8	PM10	P.M.	\$0 ₂	ON.	NO2	8	PM10	PM 2.5	\$0°	NO	NO2	8
Day average value	48.11	48.11 29.67 42.13 16.72 9.38	42.13	16.72		0.36	44.59	28.06	58.60 14.58 11.06 0.35	14.58	11.06		49.72	49.72 30.47 40.41 10.15 13.27	40.41	10.15	13.27	0.34
Standard	100 µg/m³	60 µg/m³	80 µg/m³	80 µg/m³	80 4 100 µg/m³ µg/m³ µg/m³	4 μg/m³	100 µg/m³	60 µg/m³	80 µg/m³	80 µg/m³	80 4 µg/m³ µg/m³	4 µg/m³	100 m/gu	60 µ9/m³	80 µg/m³	80 µg/m³	80 µg/m³	4 µg/m³

Vice President (Environment)

Prepared by: Lung G.V.N.S. Murthy, GPS 1910

Reference No.:	GPL/September/2022/038	Submitted to:
Date:	05.09.2022	
Organization Name:	Gangavaram Port Limited	A.P. Pollution Control Board,
Type Of Sample:	Ambient Air Quality	Regional office, Visakhapatnam
Sampled By:	Gangavaram Port Limited (CAAQ Monitoring Data)	

Station - 1 - Administrative Office Building Station - 2 - Project Site Office Station - 3 - Watch Tower - 4 towards Venkannapalem Station - 3 - Watch Tower - 4 towards Venkannapalem Station - 3 - Watch Tower - 4 towards Venkannapalem Power of towards Venkannapalem Station - 3 - Watch Tower - 4 towards Venkannapalem Power of towards Venkannapalem Station - 3 - Watch Tower - 4 towards Venkannapalem Power of towards Venkannapale							An	Ambient Air Quality 24 hrs average data	ir Qualit	y 24 hrs	averag	e data							
PM10 PM SO ² NO NO PM10 PM SO ² NO NO NO PM10 NO	Station	Stat	(A0B)	dministr	s HB Co	fice Build Iony	ding		Station	-2 - Pro	lect Site	Office			Station	rds Ven	tch Towi	er - 4	
47.97 29.58 35.42 17.33 7.31 0.41 44.46 27.98 51.39 15.06 8.68 0.40 49.57 30.38 34.00 10.56 10.37 10.9 60 80 80 80 4 100 60 80 80 80 80 80 80 80 80 80 80 80 80 80	Parameter	PM10	P.M 2.5	S02	ON	NO.	00	PM10	P.M 2.5	S02	ON.	NO2	00	DM10	P.M.	205	ON N	NOs	8
100 60 80 80 80 4 100 60 80 80 8 80 80 80 80 80 80 80 80 80 80	Day average value	47.97	29,58		17.33	7.31	0.41	44.46	27.98	51.39	11111		0.40	49.57	30.38	34.00	10.56	10.37	0.39
	Standard	100 µg/m³	60 µ9/m³		80 µg/m³	80 µg/m³	4 μg/m³	100 µg/m³	60 µg/m³	80 µg/m³	80 µg/m³	80 µg/m³	4 µg/m³	100 µg/m³	60 µg/m³	80 µg/m³	80 µg/m³	80 µg/m³	4 µg/m³

Vice President (Environment)

Prepared by: Liver G.V.N.S. Murthy, GPS 1910

Reference No.:	GPL/September/2022/038	Submitted to:
Date:	06.09.2022	
rganization Name:	Organization Name: Gangavaram Port Limited	A.P. Pollution Control Board,
Type Of Sample:	Ambient Air Quality	Regional office, Visakhapatnam
Sampled By:	Gangavaram Port Limited (CAAQ Monitoring Data)	

	1 .		11/12/11	
	er - 4	NO2	9.78	80 µg/m³
	tch Towe	ON.	9.86	80 µg/m³
	Station - 3 - Watch Tower - 4 towards Venkannapalem	205	46.42	80 µg/m³
	Station	P.M 2.5	30,42	60 µg/m³
		PM10	49.64 30.42	100 µg/m³
		8	0.36	4 µg/m³
e data	Office	NO	8.20	80 µg/m³
average	Station · 2 · Project Site Office towards Venkannapalem	ON	14.24	80 µg/m³
/ 24 hrs	ds Veni	205	65.31	80 µg/m³
r Quality	Station	P.M 2.5	28,02	60 µg/m³
Ambient Air Quality 24 hrs average data		PM10	44.51	100 µg/m³
Am	(AOB)	8	0.37	4 µg/m³
	Building /	NO2	6,90	80 µg/m³
	e Office B Colony	00		80 µg/m³
	dministrative Office E towards HB Colony	SO ²	48,46	80 µg/m³
	1 - Admi tov	P.5	29,62 48,46 16,30	60 µ9/m³
	Station · 1 · Administrative Office Building (AOB) towards HB Colony	PM10	48.04	100 µg/m³
	2000	2000	997A.C	1857

Day average value Standard

Parameter

Station

For Gangavaram Port Limited

pg/m3

4

0.34

8

Vice President (Environment)

G.V.N.S. Murthy, GPS 1910

Prepared by: Chief

Reference No.:	GPL/September/2022/038	Submitted to:
Organization Name:	Gangavaram Port Limited	A.P. Pollution Control Board.
Type Of Sample:	Ambient Air Quality	Regional office, Visakhapatnam
Sampled By:	Gangavaram Port Limited (CAAQ Monitoring Data)	

Station - 1 - Administrative Office Building Station - 2 - Project Site Office Station - 2 - Project Site Office Station - 3 - Watch Tower - 4 towards Venkannapalem Station - 3 - Watch Tower - 4 towards Venkannapalem Station - 3 - Watch Tower - 4 towards Venkannapalem COMM No. PM PM <th></th> <th></th> <th></th> <th></th> <th></th> <th></th> <th>An</th> <th>nblent A</th> <th>ir Qualit</th> <th>Ambient Air Quality 24 hrs average data</th> <th>average</th> <th>e data</th> <th></th> <th></th> <th></th> <th></th> <th></th> <th></th> <th></th>							An	nblent A	ir Qualit	Ambient Air Quality 24 hrs average data	average	e data							
PM10 PM SO ² NO NO PM10 PM SO ² NO NO PM10 PM SO ² NO	Station	Stal	tion - 1 -) (AOB)	Administr toward	rative Of Is HB Co	fice Built	guip		Station	· 2 · Proj	ect Site	Office			Station	rds Ven	tch Tow	er - 4	
48.12 29.67 48.30 15.06 10.41 0.31 44.59 28.07 65.30 13.25 12.30 0.30 49.72 30.47 46.30 9.04 14.76 100 60 80 80 80 80 80 80 80 80 80 80 80 80 80	Parameter	PM10	P.M.	SO ²	o _N	NO.	8	PM10	P.M.	SO2	0	NOs	8	PM10	P. 2.5	SO2	92	NO2	8
100 60 80 80 80 4 100 60 80 80 8 80 80 80 80 80 80 80 80 80 80	Day average value	48.12	29.67	48.30	15.06	10.41	0.31	44,59		65.30		12.30	0.30	49.72	30.47	46.30	9.04	14.76	0.29
	Standard	100 µg/m³				80 µg/m³	4 μg/m³		60 µg/m³	80 µg/m³	80 µg/m³	80 µg/m³	4 µg/m³		60 µg/m³	80 µg/m³	80 µg/m³	80 µg/m³	4 µg/m³

Vice President (Environment)

Prepared by: Cury G.V.N.S. Murthy, GPS 1910

Reference No.:	GPL/September/2022/038	Submitted to:
Date:	08,09,2022	
Organization Name:	ame: Gangavaram Port Limited	A.P. Pollution Control Board,
Type Of Sample:	Ambient Air Quality	Regional office, Visakhapatnam
Sampled By:	Gangavaram Port Limited (CAAQ Monitoring Data)	

						Am	bient A	Ambient Air Quality 24 hrs average data	y 24 hr	s averag	e data							
Station	Stat	Station - 1 - Administrative Office Building (AOB) towards HB Colony	 1 - Administrative Office B (AOB) towards HB Colony 	s HB Co	fice Buils	ding		Station	Station - 2 - Project Site Office towards Venkannapalem	ject Site	Office			Station	Station - 3 - Watch Tower - 4 towards Venkannapalem	kannap	er - 4	
Parameter	PM10	P.M.	SO ²	ON.	NO2	8	PM10	P.M.	205	9	NO2	8	PM10	P.M.	205	ON	NOZ	8
Day average value	47.62	47.62 29.36 40.81 14.92 11.83 0.17	40.81	14.92	11.83	0.17	44.12	27.78	57.18	57.18 13.13	13,99	0.16	49.20	30.16	39.35	8.94	16.76	0.15
Standard	100 µg/m³	60 µg/m³	80 µg/m³	80 µg/m³	80 4 µg/m³ µg/m³		100 µg/m³	60 µg/m³	80 m³/m³	80 µg/m³	80 µ8/m³	4 µg/m³	100 µg/m³	60 µg/m³	80 µg/m³	80 µg/m³	80 µg/m³	4 µg/m³

ror Sangavaram Port Limiteo

DEPT. A

(Dr. D. Mothi) Vice President (Environment)

Prepared by: Chart G.V.N.S. Murthy, GPS 1910

erence No.:	GPL/September/2022/038	Submitted to:
Date:	09.09.2022	55
Organization Name:	Gangavaram Port Limited	
Type Of Sample:	Ambient Air Quality	Regional office, Visakhapatnam
Sampled By:	Gangavaram Port Limited (CAAQ Monitoring Data)	

Station - 1 - Administrative Office Building Station - 2 - Project Site Office Station - 3 - Watch Tower - 4 towards Venkannapalem Station - 3 - Watch Tower - 4 towards Venkannapalem Station - 3 - Watch Tower - 4 towards Venkannapalem Station - 3 - Watch Tower - 4 towards Venkannapalem Station - 3 - Watch Tower - 4 towards Venkannapalem Station - 3 - Watch Tower - 4 towards Venkannapalem Station - 3 - Watch Towards Venkannapalem No. 7 CO PMI PMI PMI PMI PMI PMI No. 2 - 5 NO NO <th></th> <th></th> <th></th> <th></th> <th></th> <th></th> <th>An</th> <th>Ambient Air Quality 24 hrs average data</th> <th>r Qualit</th> <th>y 24 hrs</th> <th>averag.</th> <th>e data</th> <th></th> <th></th> <th></th> <th></th> <th></th> <th></th> <th>1</th>							An	Ambient Air Quality 24 hrs average data	r Qualit	y 24 hrs	averag.	e data							1
PM10 PM SO ² NO PM10 PM10 SO ² NO NO PM10 PM10 SO ² NO NO </th <th>Station</th> <th>Stat</th> <th>(A08</th> <th>Administr) toward</th> <th>rative Of Is HB Co</th> <th>fice Bulk</th> <th>ding</th> <th></th> <th>Station</th> <th>- 2 - Proj</th> <th>ect Site kannapa</th> <th>Office</th> <th></th> <th></th> <th>Station</th> <th>rds Ven</th> <th>tch Tow</th> <th>er - 4</th> <th></th>	Station	Stat	(A08	Administr) toward	rative Of Is HB Co	fice Bulk	ding		Station	- 2 - Proj	ect Site kannapa	Office			Station	rds Ven	tch Tow	er - 4	
47.58 29.34 40.28 15.60 8.10 0.21 44.09 27.75 56.74 13.68 9.56 0.20 49.16 30.13 38.62 9.40 11.47 100 60 80 80 80 4 100 60 80 80 80 80 80 80 80 80 80 80 80 80 80	Parameter	PM10	P.M.	205	ON.	NO2	8	PM10	P.M 2.5	S02	ON.	NO	8	PM10	PM 2.5	SO2	02	NOs	8
100 60 80 80 80 4 100 60 80 80 8 80 80 80 80 80 80 80 80 80 80	Day average value	47.58	29.34	40.28	15.60	8.10		44.09	27.75	56.74			0.20	49.16	30.13		9.40	11,47	61.0
	Standard	100 m/gr		80 µg/m³	80 m/6ri	80 µg/m³	4 µg/m³	100 tm/gu	60 µg/m³	80 ug/m³	80 hg/m³	80 19/m²	4 µg/m³		60 µg/m³	80 µg/m³		80 µg/m³	4 µg/m³

(Dr. D. Jyothi)

Prepared by: Liver G.V.N.S. Murthy, GPS 1910

Reference No.:	GPL/September/2022/038	Submitted to:
Date:	10.09,2022	
Organization Name:	Gangavaram Port Limited	A.P. Pollution Control Board,
Type Of Sample:	Ambient Air Quality	Regional office, Visakhapatnam
Sampled By:	Gangavaram Port Limited (CAAQ Monitoring Data)	

						A	nbient A	ir Quali	ty 24 hr	Ambient Air Quality 24 hrs average data	e data							
Station	Sta	Station - 1 - Administrative Office Building (AOB) towards HB Colony	 1 - Administrative Office E (AOB) towards HB Colony 	rative Of	fice Bull	ding		Station	-2 - Pro	Station - 2 - Project Site Office towards Venkannapalem	Office			Station	Station · 3 · Watch Tower - 4 towards Venkannapalem	kannap	er - 4	
Parameter	PM10	P.M 2.5	\$0\$	NO NO	NO2	8	PM10	P.M.	SO2	ON.	NOs	8	PM10	P.M.	205	ON	NO.	8
Day average value	47.82	47.82 29,48 41,28 14,02 7.89	41.28	14.02	7.89	0.72	44.31	27.89	57.63	27.89 57.63 12.41 9.33 0.70	9.33		49.41	49.41 30,28	39.58	8.34	11.20	0.69
Standard	100 µg/m³	60 µg/m³	80 µg/m³	80 µg/m³	80 4 µg/m³ µg/m³	4 µg/m³	100 µg/m³	60 µg/m³	80 µg/m³	80 µg/m³	80 µg/m³	4 µg/m³	100 m/gu	60 µg/m³	80 µg/m³	80 µg/m³	80 µg/m³	4 µg/m³

Prepared by: Living G.V.N.S. Murchy, GPS 1910

(Dr. D. Iyothi)

Reference No.:	GPL/September/2022/038	Submitted to:
Date:	11.09.2022	
Organization Name:	Gangavaram Port Limited	A.P. Pollution Control Board,
Type Of Sample:	Ambient Air Quality	Regional office, Visakhapatnam
Sampled By;	Gangavaram Port Limited (CAAQ Monitoring Data)	

Station					20000	Dienic V	Allibration Andrick 24 his average data	V 64 1110	Reish	0,000							
-	 1 - Administrative Office B (AOB) towards HB Colony 	inistrat	tive Offi HB Cold	ce Build	6u		Station	Station - 2 - Project Site Office towards Venkannapalem	ect Site	Office			Station	Station · 3 · Watch Tower - 4 towards Venkannapalem	tch Tow	er - 4	
Parameter PM10 P.	PM S	50°	8	ZON	8	P/M10	P.M 2.5	\$0 ₂	ON.	NO2	00	PM10	P.M.	\$0°	0N	NOs	8
average 48.08 29.65 value	.65 40	09'0	40.60 15.57 8.36		0.86	44.56	28.05	56.83	13.65	06'6	0.85	49.68	30.45	38.81	9.38	11.86	0.84
Standard 100 6 µg/m³ µg/	60 E	80 µg/m³	80 µg/m³	80 µg/m³	4 µg/m³	100 µg/m³	60 µg/m³	80 µg/m³	80 µg/m³	80 µg/m³	4 µg/m³	100 µg/m³	60 µg/m³	80 µg/m³	80 µg/m³	80 µg/m³	4 μg/m³

Vice President (Environment)

Prepared by: Auril GPS 1910

Station - 1 - Administrative Office Building Station - 2 - Project Site Office Station - 3 - Watch Tower - 4 towards Venkannapalem Station - 3 - Watch Tower - 4 towards Venkannapalem Parameter PM10 PM 2.5 SO ² NO NO							A	nbient /	Ambient Air Quality 24 hrs average data	ty 24 hr	s averag	te data							
PM10 PM SO² NO PM10 PM SO² NO NO² CO PM10 PM SO² NO NO² CO PM10 PM3 SO² NO NO² CO PM10 PM3 SO² NO NO² CO PM10 PM3 SO² NO NO²	Station	Sta	(AOB)	Administ) toward	rative Of	fice Buil	ding		Station	· 2 · Proj	ect Site kannapa	Office			Statio	n - 3 - W	atch Towe	em lem	
47.82 29.49 45.41 17.73 9.35 0.42 44.31 27.89 63.44 15.50 11.07 0.40 49.41 30.29 43.56 10.72 13.26 10.00 60 80 80 80 80 10.00 80 80 80 80 80 80 80 80 80 80 80 80 8	Parameter	PM10	P.M 2.5	SO2	0	NO2	00	PM10	P.M 2.5	205	NO	NO2	8	PM10	P.M.	203	No.	NOs	8
100 60 80 80 80 4 100 60 80 80 4 100 80 80 80 80 80 80 80 80 80 80 80 80 8	Day average value	47.82	29.49	45.41	17.73		0.42	44.31	27.89	63.44	15.50		0.40	49.41	30.29	43.56	10.72	13.26	0.39
	Standard	100 µg/m³	60 μg/m³			80 µg/m³	4 μg/m³	100 µg/m³	60 µg/m³	80 µg/m³	80 µg/m³	80 µ9/m³		100 µg/m³	60 µg/m³		80 µg/m³	80 µg/m³	4 µg/m³

For Gangavaram Port Limited

(Dr. D. Jyothi)

Vice President (Environment)

Prepared by: / Jahr 6.V.N.S. Murthy, GPS 1910

Reference No.:	GPL/September/2022/038	Submitted to:
Date:	13.09.2022	
Organization Name:	ime: Gangavaram Port Limited	A.P. Pollution Control Board,
Type Of Sample:	Ambient Air Quality	Regional office, Visakhapatnam
Sampled By:	Gangavaram Port Limited (CAAQ Monitoring Data)	

						An	Ambient Air	ir Qualit	y 24 hr	Quality 24 hrs average data	e data							
Station	Stat	Station - 1 - Administrative Office Building (AOB) towards HB Colony	 1 - Administrative Office E (AOB) towards HB Colony 	rative Of Is HB Co	fice Build	guip		Station	- 2 - Pro	Station - 2 - Project Site Office towards Venkannapalem	Office			Station	n - 3 - Wa	Station · 3 · Watch Tower - 4 towards Venkannapalem	er - 4	
Parameter	PM10	P.M.	503	9	NOs	8	PM10	P.M.	SO2	ON.	NO	8	PM10	P.M.	205	NO	NO2	8
Day average value	48.09	29.65	35.87	20.14	6.79	0,52	0.52 44.56	28.05	51.87	51.87 17.21 8.02	8.02	0.50	49,69		30.45 34.37	12.43	9.63	0,49
Standard	100 µg/m³	60 µ9/m³	80 µg/m³	80 µg/m³	80 µg/m³	4 µg/m³	100 µg/m³	60 t	80 µg/m³	80 µg/m³	80 µg/m³	4 µg/m³	100 µg/m³	60 µg/m³	80 µg/m³	80 µg/m³	80 µg/m³	4 µg/m³

Prepared by: / Just G.V.N.S. Murthy, GPS 1910

(Dr. D. Jyothi) Vice President (Environment)

Reference No.:	GPL/September/2022/038	Submitted to:
Date:	14.09.2022	
Organization Name:	ime: Gangavaram Port Limited	A.P. Pollution Control Board,
Type Of Sample:	Ambient Air Quality	Regional office, Visakhapatnam
Sampled By:	Gangavaram Port Limited (CAAQ Monitoring Data)	

						Am	bient A	ir Qualit	Ambient Air Quality 24 hrs average data	averag	e data							
Station	Sta	Station - 1 - Administrative Office Building (AOB) towards HB Colony	Administra Loward	-1 - Administrative Office 8 (AOB) towards HB Colony	fice Bullo	flng		Station	Station - 2 - Project Site Office towards Venkannapalem	ect Site	Office			Statio	n - 3 - Wa	Station - 3 - Watch Tower - 4 towards Venkannapalem	r - 4	
Parameter	PM10	P.M.	S02	9	NO2	8	PM10	P.M 2.5	203	NO	NO.	9	PM10	P.M 2.5	SO2	NO	NO2	8
Day average value	48.56	29.95		38.84 16.09 7.91	7,91	0.87	45.00	28,33	55.02	14.07 9.38	9.38	0.86	50.18	30.75	37.23	9.73	11.21	0.85
Standard	100 m/gu	60 µg/m³	80 µg/m³	80 µg/m³	80 µg/m³	4 µg/m³	100 µg/m³	60 µg/m³	80 µg/m³	80 µg/m³	80 µg/m³	4 µg/m³	100 µg/m³	60 µg/m³	80 µg/m³	80 µg/m³	80 µg/m³	4 µg/m³

For Gangavaram Born Limited

(Dr. D. Jyothi)

Vice President (Environment)

Prepared by: Like

Reference No.:	GPL/September/2022/038	Submitted to:
Date:	15.09.2022	
Organization Name:	Gangavaram Port Limited	
Type Of Sample:	Ambient Air Quality	Regional office, Visakhapatnam
0	Gangavaram Port Limited	
sampled by:	(CAAQ Monitoring Data)	

						Am	Ambient Air Quality 24 hrs average data	ir Qualit	y 24 hrs	s averag	e data							
Station	Stat	ion - 1 - A (AOB)	 1 - Administrative Office E (AOB) towards HB Colony 	rative Of Is HB Co	Station · 1 · Administrative Office Building (AOB) towards HB Colony	guir		Station	Station - 2 - Project Site Office towards Venkannapalem	ect Site	Office			Station	rds Ven	Station - 3 - Watch Tower - 4 towards Venkannapalem	er - 4	
Parameter	PM10	P.M 2.5	SO2	ON.	NO2	8	P.W.10	P.M.	205	ON.	NO2	8	PM10	P. 2.5	20s	02	NO2	8
Day average value	48.94	30,18	44.74	17.01	48.94 30.18 44.74 17.01 10.78	1.12	45.35	28.55	61.37	14.81	28.55 61.37 14.81 12.73 1,10	1,10	50.57	50.57 30.99 42.98 10,34 15.28	42.98	10,34	15.28	1.09
Standard	100 µg/m³	60 µg/m³	80 µg/m³	80 µg/m³	80 µg/m³	4 µg/m³	100 µg/m³	60 µg/m³		80 80 µg/m³ µg/m³	80 4 100 µg/m³ µg/m³	4 µg/m³	100 µg/m³	60 µg/m³	80 µg/m³	80 µg/m³	80 80 4 µg/m³ µg/m³	4 µg/m³

For Gangavaram Port Limited

(Dr. D. Jyothi)

Vice President (Environment)

Prepared by: Land G.V.N.S. Murthy, GPS 1910

Reference No.:	GPL/September/2022/038	Submitted to:
Date;	16.09.2022	
Organization Name:	Gangavaram Port Limited	A.P. Pollution Control Board,
Type Of Sample:	Ambient Air Quality	Regional office, Visakhapatnam
Sampled By:	Gangavaram Port Limited (CAAQ Monitoring Data)	

						A	Ambient Air Quality 24 hrs average data	ir Qualit	y 24 hr	saverag	e data							
Station	Stat	Station - 1 - Administrative Office Building (AOB) towards HB Colony	-1 - Administrative Office B (AOB) towards HB Colony	rative Of Is HB Co	fice Build	guig		Station	Station - 2 - Project Site Office towards Venkannapalem	ect Site	Office			Station	n - 3 - Wa	Station - 3 - Watch Tower - 4 towards Venkannapalem	r - 4 lem	
Parameter	PM10	P.M 2.5	203	0	NO2	8	PM10	P.M.	205	ON.	NO2	8	DM10	P.M 2.5	≥05	ON	NO2	8
Day average value	48.43	29.86	39,49	17.41	10,38	0.67	44.88	28.25	55,74	15.13	28.25 55,74 15.13 12.25 0.66	0.66	50.04	50.04 30.67	37.79	10.61	14.73	0,65
Standard	100 µg/m³	60 µ9/m³	80 µg/m³	80 µg/m³	80 µg/m³	4 μg/m³	100 m/gu	60 µg/m³	80 µg/m³	80 µg/m³	80 4 µg/m³ µg/m³		100 µg/m³	60 µg/m³	80 µg/m³	80 µg/m³	80 µg/m³	4 µg/m³

Vice President (Environment)

Prepared by: CLEAT G.V.N.S. Murthy, GPS 1910

Reference No.:	GPL/September/2022/038	Submitted to:
Date:	17.09.2022	
Organization Name:	Gangavaram Port Limited	A.P. Pollution Control Board,
Type Of Sample:	Ambient Air Quality	Regional office, Visakhapatnam
Sampled By:	Gangavaram Port Limited (CAAQ Monitoring Data)	

						An	Ambient Air (ir Qualit	Quality 24 hrs average data	s averag	e data							
Station	Stat	(AOB)	Administr) toward	Station - 1 - Administrative Office Building (AOB) towards HB Colony	fice Build lony	guit		Station	Station - 2 - Project Site Office towards Venkannapalem	ect Site	Office			Statio	n - 3 - W.	Station - 3 - Watch Tower - 4 towards Venkannapalem	er - 4	
Parameter	PM10	P.M.	503	ON	NO	8	PM10	P.M 2.5	20s	2	NOs	8	PM10	P.M.	203	ON	NO2	8
Day average value	48.59	29.96	37.14	37.14 18.46	8.33	0.69	45.03	28.34	53,10 15,97	15,97	9.83	0.67	50.21	30.77	35.72	11.31	11.82	0,66
Standard	100 µg/m³	60 µg/m³	80 µg/m³	80 µg/m³	80 µg/m³	4 µg/m³	100 Fm/gu	60 µg/m³	80 µg/m³	80 m/6rd	80 7 µg/m³ µ	4 µg/m³	100 mg/m³	60 µg/m³	80 µg/m³	80 µg/m³	80 µg/m³	4 µg/m³

For Gangavaram/Post Limiteo

GPS 1910

Prepared by: Chirty, GPS 1910

Reference No.:	GPL/September/2022/038	Submitted to:
Date:	18.09.2022	
Organization Name:	Gangavaram Port Limited	A.P. Pollution Control Board,
Type Of Sample:	Ambient Air Quality	Regional office, Visakhapatnam
Sampled By:	Gangavaram Port Limited (CAAQ Monitoring Data)	

						Ā	nbient A	ilr Quali	ty 24 hr	Ambient Air Quality 24 hrs average data	ge data							
Station	Stat	Station - 1 - Administrative Office Building (AOB) towards HB Colony	 1 - Administrative Office ((AOB) towards HB Colony 	ative Off	ice Build	guip		Station	· 2 · Pro	Station - 2 - Project Site Office towards Venkannapalem	Office			Statio	n - 3 - Wa	Station · 3 · Watch Tower - 4 towards Venkannapalem	r - 4	
arameter	PM10	P.M 2.5	203	ON ON	NOs	8	PM10	P.M 2.5	202	9	NOs	8	PM10	P.M.	SO ²	ON.	NON	8
Day average value	48,80	48,80 30.09 40.92	40.92	16.72	8.65	0,50	45.22	28.47	57.35	14,57	10.23	0.48	50.43	28.47 57,35 14,57 10.23 0.48 50.43 30.90	39.25	10,14	10,14 12,26 0.47	0.47
Standard	100 mg/m³	60 µg/m³	80 µg/m³	80 hg/m³	80 µg/m³	4 µg/m³	100 µg/m³	60 µg/m³	80 µg/m³	80 µg/m³	80 4 µg/m³ µg/m³	4 µg/m³	100 m/gu	60 µg/m³	80 µg/m³	80 µg/m³	80 µg/m³	4 µg/m³

(Dr. D. yothi)

Prepared by: Curif G.V.N.S. Murthy, GPS 1910

Reference No.:	GPL/September/2022/038	Submitted to:
Date:	19.09.2022	
Organization Name:	sme: Gangavaram Port Limited	A.P. Pollution Control Board,
Type Of Sample:	Ambient Air Quality	Regional office, Visakhapatnam
Sampled By:	Gangavaram Port Limited (CAAQ Monitoring Data)	

						Ā	Ambient Air Quality 24 hrs average data	ir Quali	ty 24 hr	s averag	e data							
Station	Stat	Station - 1 - Administrative Office Building (AOB) towards HB Colony	Administr toward	 1 - Administrative Office ((AOB) towards HB Colony 	fice Bulk	guip		Station	- 2 - Pro	Station - 2 - Project Site Office towards Venkannapalem	Office	3		Static	ards Ver	Station - 3 - Watch Tower - 4 towards Venkannapalem	er - 4	
Parameter	PM10	P.M 2.5	SO ²	ON.	NO	8	PM10	P.M 2.5	SOZ	02	NOs	8	PM10	P.M 2.5	S02	NO	NOz	8
Day average value	48.58	29.96 38.76 15.84	38.76	15.84	8.19	0,47	45,02	28.34	28.34 54.33 13.80	13.80	9.69	0.46	50.2	30.77 3	37,18	9,60	11.62	0.45
Standard	100 µg/m³	60 µ9/m³	80 µ3/m³	80 µg/m³	80 µg/m³	4 μg/m³	100 µg/m³	60 µ9/m³	80 µg/m³	80 µg/m³	80 µg/m³	4 µg/m³	100 µg/m³	60 µg/m³	80 µg/m³	80 µg/m³	80 µg/m³	4 µg/m³

Vice President (Environment)

Prepared by: April G.V.N.S. Murthy, GPS 1910

Reference No.:	GPL/September/2022/038	Submitted to:
Date;	20.09.2022	-
Organization Name:	Gangavaram Port Limited	A.P. Pollution Control Board,
Type Of Sample:	Ambient Air Quality	Regional office, Visakhapatnam
Sampled By:	Gangavaram Port Limited (CAAQ Monitoring Data)	

Station Station - 1 - Administrative Office Building Station - 2 - Project Site Office Station - 3 - Watch Tower - 4 towards Venkannapalem Station - 3 - Watch Tower - 4 towards Venkannapalem Parameter PM10 PM SO ² NO PM10 PM SO ² NO PM10 PM10 PM SO ² NO NO ² CO PM10 PM SO ² NO NO <							A	Ambient Air Quality 24 hrs average data	Air Quali	ty 24 hr	s averag	ge data							
PM10 PM SO ² NO NO PM10 PM SO ² NO NO PM10 PM SO ² NO NO PM10 PM2 SO ² NO	Station	Stat	ion - 1 - A (AOB)	Administr Coward	rative Of Is HB Co	fice Build Jony	ding		Station	-2 - Pro	ject Site kannapa	Office	in		Statio	n · 3 · Wa	stch Tow	er - 4 slem	
48.85 30.12 39.19 30.19 8.02 0.75 45.27 28.50 55.39 25.36 9.49 0.74 50.48 30.94 38.31 19.13 11.40 100 60 80 80 4 100 60 80 80 8 19/m³ μg/m³ μg/m	Parameter	PM10	P.M.	205	9	NO2	8	PM10	P.M 2.5	\$0s	ON.	×0N	00	DM10	P.M 2.5	20s	ON	NO2	03
100 60 80 80 80 4 100 60 80 80 4 100 80 80 80 8 4 100 80 80 8 80 8	Day average value	48.85			30,19	8.02		45.27	28.50		25.36	9,49			30.94		19.13	11.40	0.73
	Standard	100 rm/grl	60 µg/m³	_	80 µg/m³		4 µg/m³	100 µg/m³	60 µg/m³		80 µg/m³	80 µg/m³	4 µg/m³	100 уш/ш ²	60 µg/m³	80 µg/m³	80 hg/m³		4 µg/m³

Prepared by: Little G.V.N.S. Murthy, GPS 1910

(Dr. D. Jyothi)
Vice President (Environment)

Reference No.:	GPL/September/2022/038	Submitted to:
Date:	21.09,2022	
Organization Name:	Gangavaram Port Limited	A.P. Pollution Control Board,
Type Of Sample:	Ambient Air Quality	Regional office, Visakhapatnam
Sampled By:	Gangavaram Port Limited (CAAQ Monitoring Data)	

Station - 1 - Administrative Office Building (AOB) Station - 2 - Project Site Office to Station - 2 - Project Site Office to Mile and Station - 3 - Watch Tower - 4 towards Venkannapalem Station - 3 - Watch Tower - 4 towards Venkannapalem Station - 3 - Watch Tower - 4 towards Venkannapalem Parameter PM10 PM SO² NO NO² CO PM10 PM PM NO² SO² NO NO² NO NO </th <th></th> <th></th> <th></th> <th></th> <th></th> <th></th> <th>An</th> <th>Ambient Air Quality 24 hrs average data</th> <th>r Quality</th> <th>7 24 hrs</th> <th>average</th> <th>data</th> <th></th> <th></th> <th></th> <th></th> <th></th> <th></th> <th></th>							An	Ambient Air Quality 24 hrs average data	r Quality	7 24 hrs	average	data							
PM10 PM SO ² NO NO PM10 PM SO ² NO NO PM10 PM SO ² NO NO PM10 SO ² NO NO NO PM10 SO ² NO NO NO PM10 SO ² NO	Station	Station	-1-Adm	ninistrativ wards F	ve Office	Building	(AOB)		Station	- 2 - Proje	ect Site (Office			Station	rds Ven	tch Tow	sr - 4 lem	
48.99 30.21 40.72 17.35 8.60 0.51 45.40 28.58 54.38 14.36 9.68 0.47 50.63 31.03 37.24 10.00 100 60 80 80 4 100 60 80 80 80 4 100 60 80 80 4 100 60 80 80 80 100/m³ μg/m³	Parameter	PM10	P.M 2.5	80°	ON.	NO ²	8	PM10	P.M 2.5	203	ON.	NOS	8	PM10	P.M 2.5	50s	ON.	NO	8
100 60 80 80 80 4 100 60 80 80 4 100 60 80 80 80 9 4 100 60 80 80 90 80 90 80 90 80 90/m³ μg/m³	Day average value	48.99	30,21	40.72	17.35	8.60	0.51	45.40	28.58		14.36	9,68	0.47	0.63	31.03	37.24	10.06	5 11.61 0	0,46
	Standard	100 µg/m³	60 µg/m³	80 µg/m³	100	80 µg/m³	4 µg/m³	100 µg/m³	60 µg/m³	80 µg/m³	80 µg/m³		4 µg/m³	100 µg/m³	60 µg/m³	80 µg/m³		80 µg/m³	4 µg/m³

Vice President (Environment)

Prepared by: Luig G.V.N.S. Murthy, GPS 1910

Reference No.:	GPL/September/2022/038	Submitted to:
Date:	22.09.2022	28
anization Name:	Organization Name: Gangavaram Port Limited	A.P. Pollution Control Board,
'ype Of Sample:	Ambient Air Quality	Regional office, Visakhapatnam
Sampled By:	Gangavaram Port Limited (CAAQ Monitoring Data)	

		200	6 0.48	n ³ µg/m ³
	ver - 4	NO	12.16	80 µg/m³
	tch Tov kannap	8	10.54	80 µg/m³
	Station - 3 - Watch Tower - 4 towards Venkannapalem	203	39.01	80 µg/m³
	Station	P.M 2.5	31,16	60 µg/m³
		PM10	50.84	100 mg/m³
		9		4 µg/m³
e data	Office	NO2	28.70 56.97 15.04 10.15 0.49	80 µg/m³
averag	ect Site	NO	15.04	80 m ₂ /m ₃
/ 24 hrs	Station - 2 - Project Site Office towards Venkannapalem	203	56.97	80 µg/m³
r Quality	Station	P.M 2.5	28.70	60 µg/m³
Ambient Air Quality 24 hrs average data		PM10	45.59	100 Fm/gu
Am	Sing	8	0.48	4 µg/m³
	ice Build Iony	NO.	8.20	80 µg/m³
	ative Off s HB Co	ON.	16.56	80 µg/m³
	 1 - Administrative Office E (AOB) towards HB Colony 	SO2	38.87	80 µg/m³
	Station - 1 - Administrative Office Building (AOB) towards HB Colony	P.M 2.5	30.34 38.87 16.56 8.20 0.48	60 µg/m³
	Stati	PM10	49.21	100 µg/m³
(4	Station	Parameter	Day average value	Standard

Vice President (Environment)

G.V.N.S. Murthy, GPS 1910

Reference No.:	GPL/September/2022/038	Submitted to:
Date:	23.09.2022	
Organization Name:	Gangavaram Port Limited	A.P. Pollution Control Board,
Type Of Sample:	Ambient Air Quality	Regional office, Visakhapatnam
Sampled By:	Gangavaram Port Limited (CAAQ Monitoring Data)	

						Αu	Ambient Air Quality 24 hrs average data	ir Qualit	y 24 hrs	averag	e data			8				
Station	Sta	Station - 1 - Administrative Office Building (AOB) towards HB Colony	 1 - Administrative Office E (AOB) towards HB Colony 	s HB Co	fice Build	guip		Station	tation - 2 - Project Site Office towards Venkannapalem	ect Site	Office			Statio	n - 3 - Wa	Station - 3 - Watch Tower - 4 towards Venkannapalem	er - 4 lem	
Parameter	PM10	P.M 2.5	\$0 ₂	o _N	NO	8	PM10	P.M 2.5	\$0§	No	NO2	8	PM10	P.M.	50°	NO	NO2	8
Day average value	52.85	32.34	32.34 40.64	17.31 8.58		0.51	48.98	30,59	56.97	56.97 15.04 10.15 0.49	10.15	0.49	54.61	33.22	35.76	10.08	11.63	0.46
Standard	100 µg/m³	60 µg/m³	80 µg/m³	80 µg/m³	80 µg/m³	4 µg/m³	100 m/gu	60 µg/m³	80 µg/m³	80 µg/m³	80 hg/m³	4 µg/m³	100 µg/m³	60 µg/m³	80 µg/m³	80 hg/m²	80 µg/m³	4 µg/m³

(Or.-B. Jyothi)
Vice President (Environment)

Prepared by: / wird G.V.N.S. Murthy, GPS 1910

Reference No.:	GPL/September/2022/038	Submitted to:
Date:	24,09,2022	
Organization Name:	Organization Name: Gangavaram Port Limited	A.P. Pollution Control Board,
Type Of Sample:	Ambient Air Quality	Regional office, Visakhapatnam
Sampled By:	Gangavaram Port Limited (CAAQ Monitoring Data)	

						An	nbient A	ir Qualit	Ambient Air Quality 24 hrs average data	average	e data							
Station	Stat	(A08)	Administa) toward	Station - 1 - Administrative Office Building (AOB) towards HB Colony	fice Built	Guib		Station	Station · 2 · Project Site Office towards Venkannapalem	ect Site	Office			Station	rds Ven	Station - 3 - Watch Tower - 4 towards Venkannapalem	er - 4	
Parameter	PM10	P.M 2.5	50 ²	02	NO2	8	PM10	P.M 2.5	502	N _O	NO2	8	PM10	P.M.	SO2	ON	NO2	8
Day average value	52.11		31,99 38,95	16,59	8.22	0.49	48.29	30,26	30,26 54.60	14.41	14.41 9.72 0.47	0.47	53,85	53.85 32.86	37.25	37.25 10.52 12.14	12.14	0.48
Standard	100 µg/m³	60 µ9/m³	80 hg/m³	80 µg/m³	80 µg/m³	4 µg/m³	100 µg/m³	60 µg/m³	80 µg/m³	80 µg/m³	80 µg/m³	4 µg/m³	100 µg/m³	60 µg/m³	80 µg/m³	80 µg/m³	80 µg/m³	4 µg/m³

Or. B. Jyothij

Prepared by: List

Reference No.:	GPL/September/2022/038	Submitted to:
Date:	25.09.2022	
rganization Name:	Organization Name: Gangavaram Port Limited	A.P. Pollution Control Board,
Type Of Sample:	Ambient Air Quality	Regional office, Visakhapatnam
Sampled By:	Gangavaram Port Limited (CAAQ Monitoring Data)	

Station - 1 - Administrative Office Building Station - 2 - Project Site Office Station - 3 - Watch Tower - 4 towards Venkannapalem Station - 3 - Watch Tower - 4 towards Venkannapalem PM10 PM Solution Size Solution Size Solution Size Solution Size Solution Solution Size Solution Size Solution Size Solution S							A	nbient A	ir Qualit	Ambient Air Quality 24 hrs average data	s averag	e data							
PM10 PM SO ² NO PM10 PM SO ² NO NO PM10 PM10 <th>Station</th> <th>Sta</th> <th>tion - 1 - A (AOB)</th> <th>Administ) toward</th> <th>rative Of</th> <th>fice Built</th> <th>ding</th> <th></th> <th>Station</th> <th>- 2 - Proj</th> <th>ect Site</th> <th>Office</th> <th></th> <th></th> <th>Statio</th> <th>ards Ven</th> <th>stch Towe</th> <th>r - 4 lem</th> <th></th>	Station	Sta	tion - 1 - A (AOB)	Administ) toward	rative Of	fice Built	ding		Station	- 2 - Proj	ect Site	Office			Statio	ards Ven	stch Towe	r - 4 lem	
51.52 31.68 40.57 17.28 8.56 0.51 47.74 29.97 56.87 15.01 10.13 0.49 53.23 32.53 38.80 10.10 11.65 10.00 80 80 80 80 80 80 80 80 80 80 80 80 8	Parameter	PM10	P.M 2.5	SO2	ON.	NO2	00	PM10	P.M 2.5	SO2	ON	NO2	03	DW10	P.M.	\$0s	ON.	NOZ	8
60 80 80 80 4 100 60 80 80 8 4 100 80 80 80 8 4 100 60 80 80 80 80 90 90 90 90 90/m³ μg/m³	Day average value	51.52	31.68	40.57	17.28	8.56	0.51	47.74	29.97	56.87	15.01	10.13		53.23		38.80	10.10		0.46
	Standard	100 µg/m³		80 µg/m³	80 µg/m³	80 µg/m³	4 µg/m³	100 µg/m³	60 µg/m³	80 µg/m³	020	80 µg/m³	4 µg/m³	100 m/grl	60 µg/m³	80 µg/m³	80 µg/m³		4 μg/m³

(Dr. D-Arcthi)
Vice President (Environment)

Prepared by: Lift G.V.N.S. Murthy, GPS 1910

Reference No.:	GPL/September/2022/038	Submitted to:
Date:	26.09.2022	
Organization Name:	Gangavaram Port Limited	A.P. Pollution Control Board,
rype Of Sample:	Ambient Air Quality	Regional office, Visakhapatnam
Sampled By:	Gangavaram Port Limited (CAAQ Monitoring Data)	

15 10 10 10 10 10 10 10 10 10 10 10 10 10	Ambient Air Quality 24 hrs average data	ice Building Station - 2 - Project Site Office Station - 3 - Watch Tower - 4 Iony towards Venkannapalem	NO ² CO PM10 PM SO ² NO NO ² CO PM10 PM SO ² NO NO ² CO	8.23 0.49 47.80 29.96 54.69 14.44 9.74 0.47 53.30 32.53 37.31 10.50 12.12 0.48	80 4 100 60 80 80 4 100 60 80 80 4 100 60 80 80 4 4 100 60 80 80 80 80 80 80 80 80 80 80 80 80 80
Station - 1 - Administrative Office Building Station - 2 - Project Site (AOB) towards HB Colony PM10 PM SO ² NO NO ² CO PM10 PM SO ² NO S1.59 31.68 39.01 16.61 8.23 0.49 47.80 29.96 54.69 14.44	e data	Office	e ve		80 4 ug/m³ ug/r
Station - 1 - Administrative Office Building (AOB) towards HB Colony PM10 PM SO ² NO NO ² CO 51.59 31.68 39.01 16.61 8.23 0.44 100 60 80 80 80 4	average	ect Site (cannapal	0	14.44	80 uo/m³
Station - 1 - Administrative Office Building (AOB) towards HB Colony PM10 PM SO ² NO NO ² CO 51.59 31.68 39.01 16.61 8.23 0.44 100 60 80 80 80 4	y 24 hrs	- 2 - Proje rds Venk	S02	54,69	
Station - 1 - Administrative Office Building (AOB) towards HB Colony PM10 PM SO ² NO NO ² CO 51.59 31.68 39.01 16.61 8.23 0.44 100 60 80 80 80 4	ir Qualit	Station	P.M 2.5	29.96	
Station - 1 - Administrative Office Building (AOB) towards HB Colony PM10 PM SO ² NO NO ² CO 51.59 31.68 39.01 16.61 8.23 0.44 100 60 80 80 80 4	Dient A		PM10	_	100
15 10 10 10 10 10 10 10 10 10 10 10 10 10	54.5	guib	8	_	
15 10 10 10 10 10 10 10 10 10 10 10 10 10		fice Build lony	NOs	8.23	80
51.		ative Off s HB Co	NO	16,61	80
71. ST.		toward	\$0 ₅	39.01	80
71. ST. 20.		0n - 1 - A (AOB)	P.M 2.5	31.68	60 ua/m³
Station Parameter Day average value Standard		Stati	PM10		100
		Station	Parameter	Day average value	Standard

For Gangavaram Port Limited

To Control (Dr. 9. Iyomi)

Vice President (Environment)

Prepared by: Ching G.V.N.S. Murthy, GPS 1910

Reference No.:	GPL/September/2022/038	Submitted to:
Date:	27.09.2022	
Organization Name;	Gangavaram Port Limited	A.P. Pollution Control Board,
Type Of Sample:	Ambient Air Quality	Regional office, Visakhapatnam
Sampled By:	Gangavaram Port Limited (CAAQ Monitoring Data)	

						AH	Dient A	Ambient Air Quality 24 hrs average data	CIII 47 /	delane								
Station	Stat	(AOB)	Administ) toward	Station - 1 - Administrative Office Building (AOB) towards HB Colony	fice Built	ding		Station	Station - 2 - Project Site Office towards Venkannapalem	ect Site	Office			Station	Station - 3 - Watch Tower - 4 towards Venkannapalem	tch Tow	er - 4	
Parameter	PM10	P.M 2.5	\$05	ON	NO2	8	PM10	P.M.	\$0s	ON.	NO2	8	PM10	P.M 2.5	203	ON	NO2	8
Day average value	52.15	32.03	39.01	39.01 16.02	7.94	0.47	48.32	30.29	52.73	13.92	9.39	0.46	53.88	32.88	35.98	9,75	11.25	0.45
Standard	100 µg/m³	60 µg/m³	80 µg/m³	80 µg/m³	80 µg/m³	4 μg/m³	100 µg/m³	60 µg/m³	80 µg/m³	80 µg/m³	80 µg/m³	4 µg/m³	100 µg/m³	60 µg/m³	80 µg/m³	80 µg/m³	80 µg/m³	4 µg/m³

Vice President (Environment)

Prepared by: Lind G.V.N.S. Murthy, GPS 1910

GPL/September/2022/038 Submitted to:	28.09.2022	Organization Name: Gangavaram Port Limited A.P. Pollution Control Board,	Ambient Air Quality Regional office, Visakhapatnam	Gangavaram Port Limited
Reference No.:	Date:	Organization Nam	Type Of Sample:	Sampled By:

Station - 1 - Administrative Office Bullding Station - 2 - Project Site Office Station - 2 - Project Site Office Station - 3 - Watch Tower - 4 towards Venkannapalem Station - 3 - Watch Tower - 4 towards Venkannapalem Station - 3 - Watch Tower - 4 towards Venkannapalem COMM No.2 - 4 towards Venkannapalem Station - 3 - Watch Tower - 4 towards Venkannapalem COMM No.2 - 4 towards Venkannapalem No	100						A	nbient A	ir Quali	ty 24 hr	Ambient Air Quality 24 hrs average data	e data				55			
PM10 PM SO ² NO NO PM10 PM SO ² NO NO NO NO NO NO NO PM10 PM10 PM10 PM10 SO ² NO NO NO PM10 SO ² NO <	Station	Stat	ion - 1 - A (AOB)	Administr	s HB Co	fice Bull	guip		Station	3rds Ven	ject Site	Office			Station	rds Ven	tch Tow	er - 4	
51.31 31.53 51.03 15.27 13.26 0.39 47.55 29.83 68.41 13.42 15.53 0.38 53.02 32.38 48.87 9.19 100 60 80 80 4 100 60 80 80 109/m³ μg/m³ μg	arameter	PM10	P.M.	SO ²	9	NO2	8	PM10	P.M.	SO2	ON.	NO.	8	PM10	P.M.	205	ON.	NO	8
100 60 80 80 80 4 100 60 80 80 4 100 60 80 80 8 4 100 60 80 80 9 80 9 80 9 80 9 80 9 80 9 8	Day average value	51.31	31.53	51.03	15.27	13.26	0.39	47.55	29.83	68.41	13.42	15.53	0.38	53.02	32.38	48.87			0.37
	Standard	100 µg/m³	60 µg/m³	80 m/6d	80 µg/m³	80 µg/m³	4 µg/m³	100 µg/m³	60 µg/m³	80 hg/m³	80 hg/m³	80 m/g/m	4 µg/m³	100 µg/m³	60 µg/m³	80 µg/m³	80 µg/m³	80 µg/m³	4 µg/m³

Prepared by: Land

(Dr. D. Nothi)

Reference No.:	GPL/September/2022/038	Submitted to:
Date:	29.09.2022	
Organization Name:	Gangavaram Port Limited	A.P. Pollution Control Board,
Type Of Sample:	Ambient Air Quality	Regional office, Visakhapatnam
Sampled By:	Gangavaram Port Limited (CAAQ Monitoring Data)	

						Am	Ambient Air Quality 24 hrs average data	ir Qualit	y 24 hrs	averag	e data							
Station	Stat	Station - 1 - Administrative Office Building (AOB) towards HB Colony	Administr	-1 - Administrative Office B (AOB) towards HB Colony	fice Buil	ding		Station	Station - 2 - Project Site Office towards Venkannapalem	ect Site	Office		£ ±	Station	Station - 3 - Watch Tower - 4 towards Venkannapalem	tch Towi	er - 4	
Parameter	PM10	P.M 2.5	SO ²	o _N	20N	8	PM10	P.M.	SO ²	O _N	ž0N	8	PM10	P.M.	\$0°	00	NO2	8
Day average value	49.45	30,45	44.91	30.45 44.91 15.87 13.83 0.28	13.83	0.28	45.80	28.80	28.80 61.59	13.89 16.22	16.22	0.27	51.07	31.27	42.91	9,58	19.61	0.25
Standard	100 µg/m³	60 hg/m³	80 µg/m³	80 µg/m³	80 µg/m³	4 µg/m³	100 µg/m³	60 µg/m³	80 µg/m³	80 µg/m³	80 µg/m³	4 µg/m³	100 µg/m³	60 µg/m³	80 µg/m³	80 µg/m³	80 µg/m³	4 µg/m³

(Dr. Bolyothi)
Vice President (Environment)

Prepared by: Australy, GPS 1910

Reference No.:	GPL/September/2022/038	Submitted to:
Date:	30.09.2022	
Organization Name:	Gangavaram Port Limited	A.P. Pollution Control Board.
Type Of Sample:	Ambient Air Quality	Regional office, Visakhapatnam
Sampled By:	Gangavaram Port Limited (CAAQ Monitoring Data)	

						Ā	nbient A	ir Qualit	Ambient Air Quality 24 hrs average data	average	data							
Station	Stat	Station - 1 - Administrative Office Building (AOB) towards HB Colony	 1 - Administrative Office ((AOB) towards HB Colony 	ative Off s HB Co	fice Build lony	guip		Station	Station - 2 - Project Site Office towards Venkannapalem	ect Site	Office			Statio	n - 3 - Wa	Station - 3 - Watch Tower - 4	er - 4	
Parameter	PM10	P.M.	203	02	NO	8	PM10	P.M 2.5	SO2	NO	NO	8	PM10	P.M 2.5	SO2	ON ON	No	8
Day average value	49.89	30,71	30,71 37.96	17.53 9.27	9.27	0.25	46.23	29.05	54.00	15.23 10.92		0.24	51.55	14.7	36.32	36.32 10.69 13.15	13,15	0.23
Standard	100 µg/m³	60 µ9/m³	80 µg/m³	80 µg/m³	80 4 µg/m³ µg/m³	4 µg/m³	100 µg/m³	60 µg/m³	80 µg/m³	80 µg/m³	80 µg/m³	4 g/m³	100 m/gu	60 µg/m³	80 µg/m³	80 80 µg/m³ µg/m³	80 µg/m³	4 µg/m³

(Dr. 0-1yothi)
Vice President (Environment)

Prepared by: Clust G.V.N.S. Murthy, GPS 1910



An ISO 9001: 2015 Certified Lab

Centre for Aquaculture & Environmental Sciences

#2-9-5, Near Samatha College, Sector -9, MVP Colony, Visakhapatnam-530 017. Ph: 0891 - 2551277, 8142222277, 73969 08000 | E-mail: biochemlabs@blochemlabs.in | biochemlabs888@gmail.com | www.biochemlabs.in

Environmental Monitoring Reports

(10 September and 24 September 2022)

Gangavaram Port LTD.
Pedagantyada(Mandal)
Gangavaram (Post)
Visakhapatnam - 530 044





An ISO 9001: 2015 Certified Lab

Centre for Aquaculture & Environmental Sciences

#2-9-5, Near Samatha College, Sector -9, MVP Colony, Visakhapatnam-530 017. Ph. 0891 - 2551277, 8142222277, 73969 08000 | E-mail: biochemlabs@biochemlabs.in | biochemlabs888@gmail.com | www.biochemlabs.in

TEST REPORT ANALYSIS OF GROUND WATER SAMPLE

BCL Ref. No.	GPL/02/199	Issued to:
Monitoring Date	September 10, 2022	M/s. Gangavaram Port Ltd.
Reporting Date	September 15, 2022	Gangavaram (Village)
Organization	M/s. Gangavaram Port Ltd.	PedaGantiyada (Mandalam)
Type of Sample	Ground Water	Visakhapatnam.
Location	Gangavaram Village	
Sample Collected by	M/s. Biochem Labs	
Reference Standard	IS: 10500, 1991	11 200

S. No.	Parameter	Unit	Result	Limit IS: 10500
1.	Temperature	°C	31.6	
2.	pH	H+ concen.	7.10	6.5-8.5
3.	Total Hardness	mg/l	282	300
4.	Calcium (as Ca)	mg/l	54	75
5.	Magnesium (as Mg)	mg/l	28	30
6.	Chlorides	mg/l	116	250
7.	Manganese	mg/l	0.012	0.1
8.	Copper	mg/l	0.016	0.05
9.	Total Alkalinity	mg/l	48	200
10.	Total Dissolved Solids	mg/l	490	500
11.	Sulphate	mg/l	54	200
12.	Dissolved Oxygen	mg/l	3.0	
13.	Nitrite (as NO ₂)	mg/l	0.018	0.02
14.	Iron	mg/l	0.14	0.3
15.	Fluoride	mg/l	0.6	1.0
16.	Oil & Grease	mg/l	BDL	0.01
17.	Chromium (as Cr+5)	mg/l	0.014	0.05
18.	Cyanide	mg/l	NIL	0.05
19.	Zinc	mg/l	8.0	5.0
20.	Phenolic Compound	mg/l	NIL	0.001
21.	Free Residual Chlorine	mg/l	0.14	0.2
22	Total Coli forms Count	MPN Index/100ml	8	1-11
23.	E.coli	Cfu/mi	Absent	Absent

Analyst





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TEST REPORT ANALYSIS OF GROUND WATER SAMPLE

BCL Ref. No.	GPL/02/200	Issued to:
Monitoring Date	September 10, 2022	M/s. Gangavaram Port Ltd.
Reporting Date	September 15, 2022	Gangavaram (Village)
Organization	M/s. Gangavaram Port Ltd.	PedaGantiyada (Mandalam)
Type of Sample	Ground Water	Visakhapatnam.
Location	North bounder wall open well	
Sample Collected by	M/s. Biochem Labs	
Reference Standard	IS: 10500, 1991	

S. No.	Parameter	Unit	Result	Limit IS: 10500
1.	Temperature	°C	29.8	-
2.	pH	H+ concen.	6.96	6.5-8.5
3.	Total Hardness	mg/l	268	300
4.	Calcium (as Ca)	mg/l	40	75
5.	Magnesium (as Mg)	mg/l	24	30
6.	Chlorides	mg/l	50	250
7.	Manganese	mg/l	0.02	0.1
8,	Copper	mg/l	0.018	0.05
9.	Total Alkalinity	mg/l	64	200
10.	Total Dissolved Solids	mg/l	482	500
11.	Sulphate	mg/l	40	200
12.	Dissolved Oxygen	mg/l	2.8	
13.	Nitrite (as NO ₂)	mg/l	0.016	0.02
14.	Iron	mg/l	0.18	0.3
15.	Fluoride	mg/l	0.5	1.0
16.	Oil & Grease	mg/l	BDL	0.01
17	Chromium (as Cr ⁺⁶)	mg/l	0.01	0.05
18.	Cyanide	mg/l	NIL	0.05
19,	Zinc	mg/l	0.6	5.0
20.	Phenolic Compound	mg/l	NIL	0.001
21.	Free Residual Chlorine	mg/l	0.04	0.2
22.	Total Coli forms Count	MPN Index/100ml	6	1-11
23.	E.coli	Cfu/ml	Absent	Absent

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TEST REPORT NOISE LEVEL MONITORING

BCL Ref. No.	GPL/ 04/225	Issued to:	
Monitoring Date	September 10, 2022	M/s. Gangavaram Port Ltd.	
Organization	M/s. Gangavaram Port Ltd.	Gangavaram (Village) PedaGantiyada (Mandalam)	
Collected by	M/s. Biochem Labs	Visakhapatnam.	

S.	Parameter	Unit	Location	Re	sult	CPCI	B Limit
No.				Day time	Night time	Indu	ustrial
						Day time	Night time
1.	Noise Level	Decibels	Cargo area	72	66	75	70
2.	Noise Level	Decibels	PedaGantyada/ Security Gate	68	64	-	-
			4	Day time	Night time	Resid	dential
		1	15	Day time	Night time	Residence Day time	dential Night time
3.	Noise Level	Decibels	Gangavaram	Day time	Night time		1910 081919

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TEST REPORT NOISE LEVEL MONITORING

BCL Ref. No.	GPL/ 04/226	Issued to:		
Monitoring Date	September 24, 2022	M/s. Gangavaram Port Ltd.		
Organization	M/s. Gangavaram Port Ltd.	Gangavaram (Village) PedaGantiyada (Mandalam)		
Collected by	M/s. Biochem Labs	Visakhapatnam.		

S.	Parameter	Unit	Location	Re	sult	CPCI	3 Limit
No.	110001450036005	/Americos	THE PROPERTY OF	Day time	Night time	Industrial	
10,000				12		Day time	Night time
1.	Noise Level	Decibels	Cargo area	70	64	75	70
2.	Noise Level	Decibels	PedaGantyada/ Security Gate	66	60	-	•
			44	Day time	Night time	Resi	dential
	1			The second second second		The state of the s	
				1	I III	Day time	Night time
3.	Noise Level	Decibels	Gangavaram	48	34	Day time	Night time

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TEST REPORT ANALYSIS OF MARINE WATER

BCL Ref. No.	GPL/ 05/225	Issued to:		
Monitoring Date September 10, 2022		M/s. Gangavaram Port Ltd.		
Reporting Date	September 15, 2022	Gangavaram (Village)		
Organization M/s. Gangavaram Port Ltd.		PedaGantiyada (Mandalam)		
Type of Sample	Marine Water (Low Tide / High Tide)	Visakhapatnam.		
Sample Collected by	M/s. Biochem Labs			

S. No	Parameter	Unit	Result				
			HarbourBasine		Port Entrance Channe		
			Low tide	High tide	Low tide	High tide	
9.	Temperature	°C	33.4	34.5	33.7	34.0	
2.	pН	H+ conc	8.20	8.18	8.202	8,16	
3.	Salinity	PSU	32.0	32.4	31.8	32.0	
4.	Turbidity	NTU	28	20	14	12	
5.	Total Suspended Solids	mg/l	32	26	16	10	
6.	Transparency	Mts.	0.8	1.0	1.2	1.4	
7.	Electrical Conductivity	mMHo	33,8	32.4	34.0	35.0	

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TEST REPORT ANALYSIS OF MARINE WATER

BCL Ref. No.	GPL/ 05/225	Issued to:			
Monitoring Date September 10, 2022		M/s. Gangavaram Port Ltd.			
Reporting Date	September 15, 2022	Gangavaram (Village)			
Organization	M/s. Gangavaram Port Ltd.	PedaGantiyada (Mandalam) Visakhapatnam.			
Type of Sample	Marine Water (Low Tide / High Tide)				
Sample Collected by	M/s. Biochem Labs				

S. No	Parameter	Unit	Result				
			South brake Wall Outside		North brake Wall Outside		
			Low tide	High tide	Low tide	High tide	
1.	Temperature	°C	33.0	32.6	34.0	32.6	
2	pH	H+ conc	8.26	8.24	8.22	8.20	
3.	Salinity	PSU	32.4	31.8	32.0	32.2	
4.	Turbidity	NTU	12	14	10	16	
5.	Total Suspended Solids	mg/l	16	18	12	14	
6.	Transparency	Mts.	1.4	1.2	1.6	1.4	
7.	Electrical Conductivity	mMHo	34.2	36.4	32.8	33.0	

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TEST REPORT ANALYSIS OF MARINE WATER

BCL Ref. No.	GPL/ 05/225
Monitoring Date	September 10, 2022
Reporting Date	September 15, 2022
Organization	M/s. Gangavaram Port Ltd.
Type of Sample	Marine Water (Low Tide / High Tide)
Sample Collected by	M/s. Biochem Labs

M/s. Gangavaram Port Ltd. Gangavaram (Village) PedaGantiyada (Mandalam) Visakhapatnam.

Issued to:

S. No	Parameter	Unit	Result				
			Harbou	rBasine	Port Entrance Chann		
	1		Low tide	High tide	Low tide	High tide	
1.	Dissolved Oxygen	mg/l	3.6	3.8	4.0	4.2	
2.	Biological Oxygen Demand	mg/l	1.0	1.4	1.8	2.0	
3.	Oil & Grease	mg/l	1.0	8.0	0.6	0.4	
4	Sulphate	mg/l	994	1018	1038	1020	
5.	Phosphate	mg/l	0.32	0.34	0.26	0.24	
6.	Nitrate	mg/l	3.4	2.4	2.6	2.2	
7.	Nitrite	mg/l	0.026	0.028	0.022	0.024	
8.	Chloride	mg/l	20438	21468	19892	20868	
9.	Chromium	ppm	0.024	0.026	0.028	0.020	
10.	Mercury	ppm	Nil	Nil	Nil	Nil	
11.	Zinc	ppm	0.22	0.2	0,14	0.18	
12.	Iron	ppm	0.02	0.026	0.024	0.028	
13.	Manganese	ppm	0.028	0.024	0.02	0.014	
14.	Cadmium	ppm	Nil	NR	Nil	Nil	

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TEST REPORT ANALYSIS OF MARINE WATER

BCL Ref. No.	GPL/ 05/225
Monitoring Date	September 10, 2022
Reporting Date	September 15, 2022
Organization	M/s. Gangavaram Port Ltd.
Type of Sample	Marine Water (Low Tide / High Tide)
Sample Collected by	M/s. Biochem Labs

M/s. Gangavaram Port Ltd. Gangavaram (Village) PedaGantiyada (Mandalam) Visakhapatnam.

Issued to:

S. No	Parameter	Unit	Result				
			South brake	South brake Wall Outside		/all Outside	
			Low tide	High tide	Low tide	High tide	
1.	Dissolved Oxygen	mg/l	4.0	3.8	4.0	4.2	
2.	Biological Oxygen Demand	mg/l	1.8	1.4	1.6	2.0	
3.	Oil & Grease	mg/l	0.6	0.8	0.4	0.2	
4.	Sulphate	mg/l	1048	1024	1062	1036	
5.	Phosphate	mg/l	0.26	0.22	0.28	0.24	
6.	Nitrate	mg/l	2.8	2.4	2.0	2.6	
7.	Nitrite	mg/l	0.026	0.028	0.022	0.028	
8.	Chloride	mg/l	21436	19868	20642	19496	
9.	Chromium	ppm	0.024	0.026	0.028	0.02	
10.	Mercury	ppm	Nil	Nil	Nil	Nil	
11.	Zinc	ppm	0.16	0.12	0.14	0.24	
12	Iron	ppm	0.026	0.028	0.02	0.02	
13.	Manganese	ppm	0.024	0.018	0.02	0.016	
14.	Cadmium	ppm	Nil	Nil	Nil	Nil	

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TEST REPORT ANALYSIS OF MARINE WATER

BCL Ref. No.	GPL/ 05/225	Issued to:
Monitoring Date	September 10, 2022	M/s. Gangavaram Port Ltd.
Reporting Date	September 15, 2022	Gangavaram (Village)
Organization	M/s. Gangavaram Port Ltd.	PedaGantiyada (Mandalam)
Type of Sample	Marine Water (Low Tide)	Visakhapatnam.
Sample Collected by	M/s. Biochem Labs	

Station Name: Harbourbasine / Low Tide

S. No	PARAMETERS	UNIT	RESULT
3.140	Phytoplankton Count	No. /L	12000
2	Zooplankton Count	No./m³	1000
3.	Chlorophyll a	mg/m ³	3.6
4.	Chlorophyll b	mg/m³	2.0
5.	Primary Productivity	gC/m ²	3.4
6.	Biomass	mg/m²	2.8

S.No	Species	Total Species count in 1L
Α.	Phytoplankton Species Prorocentrummicans Amphora lineolata Cymbella marina Bacteriastrum delicatulum Thalassionema nitzschioides Chaetoceros dydymus Skeletonemacostatum Thalassiothrixlongissima Cymbelia marina	22 16 12 10 30 08 20 04 10
B.	Zooplankton Species Foraminifera Chaetognatha Amphipoda Cladocera Eggs of fish & larvae	20 12 18 04 18

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TEST REPORT ANALYSIS OF MARINE WATER

BCL Ref. No.	GPL/ 05/225	Issued to:
Monitoring Date	September 10, 2022	M/s. Gangavaram Port Ltd.
Reporting Date	September 15, 2022	Gangavaram (Village)
Organization	M/s. Gangavaram Port Ltd.	PedaGantiyada (Mandalam)
Type of Sample	Marine Water (Low Tide)	Visakhapatnam.
Sample Collected by	M/s. Biochem Labs	Tisch trapation.

Station Name: Port Entrance Channel / Low Tide

S. No	PARAMETERS	UNIT	RESULT
1.	Phytoplankton Count	No. /L	10000
2.	Zooplankton Count	No./m ³	1000
3.	Chlorophyll a	mg/m ³	2.8
4.	Chlorophyll b	mg/m ³	2.6
5.	Primary Productivity	gC/m ²	3.4
6.	Biomass	mg/m²	2.0

.No	Species	Total Species count in 1L
A.	Phytoplankton Species Prorocentrummicans Amphora lineolata Cymbella marina Bacteriastrum delicatulum Thalassionema nitzschioides Chaetoceros dydymus Skeletonemacostatum Thalassiothrixlongissima Cymbella marina	14 18 04 10 12 06 22 12
3.	Zooplankton Species Foraminifera Chaetognatha Amphipoda Cladocera Eggs of fish & larvae	26 30 12 14 06

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TEST REPORT ANALYSIS OF MARINE WATER

BCL Ref. No.	GPL/ 05/225	Issued to:
Monitoring Date	September 10, 2022	M/s. Gangavaram Port Ltd.
Reporting Date	September 15, 2022	Gangavaram (Village)
Organization	M/s. Gangavaram Port Ltd.	PedaGantiyada (Mandalam)
Type of Sample	Marine Water (High Tide)	Visakhapatnam.
Sample Collected by	M/s. Biochem Labs	332533950

Station Name: Harbourbasine / High Tide

S. No	PARAMETERS	UNIT	RESULT
1.	Phytoplankton Count	No. /L	11000
2.	Zooplankton Count	No./m ³	1200
3.	Chlorophyll a	mg/m ³	3.6
4.	Chlorophyll b	mg/m ³	2.4
5.	Primary Productivity	gC/m ²	3.2
6.	Biomass	mg/m ²	2.8

S.No	Species	Total Species count in 1L
A.	Phytoplankton Species Prorocentrummicans Amphora lineolata Cymbella marina Bacteriastrum delicatulum Thalassionema nitzschioides Chaetoceros dydymus Skeletonemacostatum Thalassiothrixlongissima Cymbella marina	30 18 10 12 06 14 08 10
B.	Zooplankton Species Foraminifera Chaetognatha Amphipoda Cladocera Eggs of fish & larvae	18 10 04 10 16

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TEST REPORT ANALYSIS OF MARINE WATER

Type of Sample Sample Collected by	Marine Water (High Tide) M/s, Biochem Labs	Visakhapatnam.
Organization	M/s. Gangavaram Port Ltd.	PedaGantiyada (Mandalam)
Reporting Date	September 15, 2022	Gangavaram (Village)
Monitoring Date	September 10, 2022	M/s. Gangavaram Port Ltd.
BCL Ref. No.	GPL/ 05/225	Issued to:

Station Name: Port Entrance Channel / High Tide

S. No	PARAMETERS	UNIT	RESULT
1.	Phytoplankton Count	No. /L	14000
2.	Zooplankton Count	No./m ³	1000
3.	Chlorophyll a	mg/m³	3.8
4.	Chlorophyll b	mg/m³	3.2
5.	Primary Productivity	gC/m ²	2.2
6.	Biomass	mg/m²	2.8

S.No	Species	Total Species count in 1L
Α.	Phytoplankton Species Prorocentrummicans Amphora lineolata Cymbella marina Bacteriastrum delicatulum Thalassionema nitzschioides Chaetoceros dydymus Skeletonemacostatum Thalassiothrixlongissima Cymbella marina	26 08 12 32 06 18 04 22
B.	Zooplankton Species Foraminifera Chaetognatha Amphipoda Cladocera Eggs of fish & larvae	12 18 20 04 12

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TEST REPORT ANALYSIS OF MARINE WATER

BCL Ref. No.	GPL/ 05/225	Issued to:
Monitoring Date	September 10, 2022	M/s. Gangavaram Port Ltd.
Reporting Date	September 15, 2022	Gangavaram (Village)
Organization	M/s. Gangavaram Port Ltd.	PedaGantiyada (Mandalam)
Type of Sample	Marine Water (Low Tide)	Visakhapatnam.
Sample Collected by	M/s. Biochem Labs	0.0000000000000000000000000000000000000

Station Name: South brake Wall outside / Low Tide

S. No	PARAMETERS	UNIT	RESULT
1.	Phytoplankton Count	No. /L	12000
2.	Zooplankton Count	No./m³	800
3.	Chlorophyll a	mg/m³	3.6
4.	Chlorophyll b	mg/m³	2.8
5.	Primary Productivity	gC/m ²	3.2
6.	Biomass	mg/m²	2.4

.No	Species	Total Species count in 1L
Α.	Phytoplankton Species Prorocentrummicans Amphora lineolata Cymbella marina Bacteriastrum delicatulum Thalassionema nitzschioides Chaetoceros dydymus Skeletonemacostatum Thalassiothrixlongissima Cymbella marina	70 36 24 10 30 06 26 38
B.	Zooplankton Species Foraminifera Chaetognatha Amphipoda Cladocera Eggs of fish & larvae	54 28 22 18 04

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TEST REPORT ANALYSIS OF MARINE WATER

BCL Ref. No.	GPL/ 05/225	Issued to:
Monitoring Date	September 10, 2022	Mis Consmisses Bod Ltd
Reporting Date	September 15, 2022	M/s. Gangavaram Port Ltd. Gangavaram (Village)
Organization	M/s. Gangavaram Port Ltd.	PedaGantiyada (Mandalam)
Type of Sample	Marine Water (Low Tide)	Visakhapatnam.
Sample Collected by	M/s. Biochem Labs	viouviapatitetti.

Station Name: North brake Wall Outside / Low Tide

S. No	PARAMETERS	UNIT	RESULT
1.	Phytoplankton Count	No. /L.	10000
2.	Zooplankton Count	No./m³	1200
3.	Chlorophyll a	mg/m ³	3.4
4.	Chlorophyll b	mg/m ³	2,6
5.	Primary Productivity	gC/m ²	3.8
6.	Biomass	mg/m²	2.6

S.No	Species	Total Species count in 1L
A.	Phytoplankton Species	
	Prorocentrummicans	80
	Amphora lineolata	48
	Cymbella marina	36
	Bacteriastrum delicatulum	28
	Thalassionema nitzschioides	42
	Chaetoceros dydymus	08
	Skeletonemacostatum	12
	Thalassiothrixlongissima	16
	Cymbella marina	04
B.	Zooplankton Species	
	Foraminifera	48
	Chaetognatha	32
	Amphipoda	26
	Cladocera	14
	Eggs of fish & larvae	02

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TEST REPORT ANALYSIS OF MARINE WATER

BCL Ref. No.	GPL/ 05/225	Issued to:
Monitoring Date	September 10, 2022	M/s. Gangavaram Port Ltd.
Reporting Date	September 15, 2022	Gangavaram (Village)
Organization M/s. Gangavaram Port Ltd.		PedaGantiyada (Mandalam)
Type of Sample	Marine Water (High Tide)	Visakhapatnam.
Sample Collected by	M/s. Biochem Labs	Violettiaparticiti.
	The contract of the contract o	

Station Name: South brake Wall Outside / High Tide

S. No	PARAMETERS	UNIT	RESULT
1.	Phytoplankton Count	No. /L	10000
2.	Zooplankton Count	No./m³	1200
3.	Chlorophyll a	mg/m³	2.6
4.	Chlorophyll b	mg/m ³	3.0
5.	Primary Productivity	gC/m ²	3.2
6.	Biomass	mg/m ²	2.8

S.No	Species	Total Species count in 1L
A.	Phytoplankton Species Prorocentrummicans Amphora lineolata Cymbella marina Bacteriastrum delicatulum Thalassionema nitzschioides Chaetoceros dydymus Skeletonemacostatum Thalassiothrixlongissima Cymbella marina	48 64 20 06 24 12 14 28 08
B.	Zooplankton Species Foraminifera Chaetognatha Amphipoda Cladocera Eggs of fish & larvae	54 26 16 08 12

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TEST REPORT ANALYSIS OF MARINE WATER

BCL Ref. No.	GPL/ 05/225	Issued to:
Monitoring Date	September 10, 2022	M/s. Gangavaram Port Ltd.
Reporting Date	September 15, 2022	Gangavaram (Village)
Organization	M/s. Gangavaram Port Ltd.	PedaGantiyada (Mandalam)
Type of Sample	Marine Water (High Tide)	Visakhapatnam.
Sample Collected by	M/s. Biochem Labs	Figure in part in it.

Station Name: North brake Wall Outside / High Tide

S. No	PARAMETERS	UNIT	RESULT
1.	Phytoplankton Count	No. /L.	11000
2.	Zooplankton Count	No./m ³	1200
3.	Chlorophyll a	mg/m ³	3.8
4.	Chlorophyll b	mg/m ³	2.6
5.	Primary Productivity	gC/m ²	3.2
6.	Biomass	mg/m²	2.8

S.No	Species	Total Species count in 1L
A.	Phytoplankton Species Prorocentrummicans Amphora lineolata Cymbella marina Bacteriastrum delicatulum Thalassionema nitzschioides Chaetoceros dydymus Skeletonemacostatum Thalassiothrixlongissima Cymbella marina	88 10 42 24 06 32 10 24
В.	Zooplankton Species Foraminifera Chaetognatha Amphipoda Cladocera Eggs of fish & larvae	36 40 24 12 08

Analyst





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TEST REPORT ANALYSIS OF MARINE WATER

BCL Ref. No.	GPL/ 05/226	Issued to:
Monitoring Date	September 24, 2022	M/s. Gangavaram Port Ltd.
Reporting Date	September 29, 2022	- Gangavaram (Village)
Organization	M/s. Gangavaram Port Ltd.	- PedaGantiyada (Mandalam)
Type of Sample	Marine Water (Low Tide / High Tide)	Visakhapatnam.
Sample Collected by	M/s. Biochem Labs	V Israel Indigential India

S. No	Parameter	Parameter Unit		Result				
		1	Harbou	rBasine	Port Entrar	ice Channel		
			Low tide	High tide	Low tide	High tide		
1.	Temperature	°C	33.0	32.2	32.6	31.8		
2	pH	H+ conc	8.16	8.20	8.24	8.22		
3.	Salinity	PSU	31.6	33.0	32.4	33.0		
4.	Turbidity	NTU	36	28	12	14		
5.	Total Suspended Solids	mg/l	40	30	14	18		
6.	Transparency	Mts.	0.6	0.8	1.4	1.2		
7.	Electrical Conductivity	mMHo	36.4	38.6	35,2	34.6		

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TEST REPORT ANALYSIS OF MARINE WATER

BCL Ref. No.	GPL/ 05/226	Issued to:
Monitoring Date	September 24, 2022	M/s. Gangavaram Port Ltd.
Reporting Date	September 29, 2022	Gangavaram (Village)
Organization	M/s. Gangavaram Port Ltd.	PedaGantiyada (Mandalam)
Type of Sample	Marine Water (Low Tide / High Tide)	Visakhapatnam.
Sample Collected by	M/s. Biochem Labs	

S. No	Parameter	Unit	Result				
			South brake	Wall Outside	North brake	Wall Outside	
			Low tide	High tide	Low tide	High tide	
1,	Temperature	°C	31.8	32.0	31.2	31.6	
2.	pH	H+ conc	8.26	8.28	8.24	8.26	
3.	Salinity	PSU	32.4	33.6	32.0	33.0	
4.	Turbidity	NTU	14	12	8	10	
5.	Total Suspended Solids	mg/l	18	16	10	12	
6.	Transparency	Mts.	1.4	1.2	1.8	1.6	
7.	Electrical Conductivity	mMHo	36.4	32.6	34.0	33.8	

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TEST REPORT ANALYSIS OF MARINE WATER

BCL Ref. No.	GPL/ 05/226	Issued to:
Monitoring Date	September 24, 2022	M/s. Gangavaram Port Ltd.
Reporting Date	September 29, 2022	Gangavaram (Village)
Organization	M/s. Gangavaram Port Ltd.	PedaGantiyada (Mandalam)
Type of Sample	Marine Water (Low Tide / High Tide)	Visakhapatnam.
Sample Collected by	M/s. Biochem Labs	The state of the s

S. No	Parameter	Unit		R	esult	
			Harbou	rBasine	Port Entran	ce Channel
			Low tide	High tide	Low tide	High tide
1.	Dissolved Oxygen	mg/l	3.8	3.8	4.0	4.2
2.	Biological Oxygen Demand	mg/l	1.6	1.4	1.8	2.0
3.	Oil & Grease	mg/l	1.2	1.0	0.8	0.8
4.	Sulphate	mg/l	1026	986	1034	1040
5.	Phosphate	mg/l	0.28	0.24	0.22	0.20
6.	Nitrate	mg/l	3.2	2.6	2.8	2.6
7.	Nitrite	mg/l	0.024	0.026	0.016	0.018
8.	Chloride	mg/l	21840	19684	20438	21692
9.	Chromium	ppm	0.028	0.026	0.024	0.022
10.	Mercury	ppm	Nil	Nii	Nil	Nil
11.	Zinc	ppm	0.18	0.14	0,16	0.12
12	Iron	ppm	0.022	0.024	0.03	0.02
13.	Manganese	ppm	0.02	0.016	0.014	0.016
14.	Cadmium	ppm	Nil	Nil	Nil	Nil

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TEST REPORT ANALYSIS OF MARINE WATER

BCL Ref. No.	GPL/ 05/226
Monitoring Date	September 24, 2022
Reporting Date	September 29, 2022
Organization	M/s. Gangavaram Port Ltd.
Type of Sample	Marine Water (Low Tide / High Tide)
Sample Collected by	M/s, Biochem Labs

M/s. Gangavaram Port Ltd. Gangavaram (Village) PedaGantiyada (Mandalam) Visakhapatnam.

Issued to:

S. No	Parameter Unit		Result				
	15		South brake	Wall Outside	North brake Wall Outside		
			Low tide	High tide	Low tide	High tide	
1.	Dissolved Oxygen	mg/l	3.8	4.0	3.6	4.2	
2	Biological Oxygen Demand	mg/l	1.6	1.8	1.4	2.0	
3	Oil & Grease	mg/l	0.6	0.8	1.0	0.8	
4	Sulphate	mg/l	1018	1026	1048	1052	
5.	Phosphate	mg/l	0.34	0.36	0.24	0.28	
6.	Nitrate	mg/l	3.0	2.8	2.0	1.6	
7.	Nitrite	mg/l	0.022	0.024	0.018	0.02	
8.	Chloride	mg/l	20684	21438	21268	20824	
9.	Chromium	ppm	0.028	0.02	0.016	0.024	
10.	Mercury	ppm	Nil	Nil	Nil	Nil	
11.	Zinc	ppm	0.14	0.12	0.16	0.10	
12.	Iron	ppm	0.016	0.018	0.024	0.02	
13.	Manganese	ppm	0.022	0.02	0.018	0.014	
14.	Cadmium	ppm	Nil	Nil	Nil	Nil	

Analyst





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TEST REPORT ANALYSIS OF MARINE WATER

GPL/ 05/226	Issued to:
September 24, 2022	M/s. Gangavaram Port Ltd.
September 29, 2022	Gangavaram (Village)
M/s. Gangavaram Port Ltd.	PedaGantiyada (Mandalam)
Marine Water (Low Tide)	Visakhapatnam.
M/s. Biochem Labs	riounitaposituiti.
	September 24, 2022 September 29, 2022 M/s. Gangavaram Port Ltd. Marine Water (Low Tide)

Station Name: Harbourbasine / Low Tide

S. No	PARAMETERS	UNIT	RESULT
1.	Phytoplankton Count	No. /L	12000
2.	Zooplankton Count	No./m³	800
3.	Chlorophyll a	mg/m³	3.4
4.	Chlorophyll b	mg/m ³	3.2
5.	Primary Productivity	gC/m ²	2.0
6.	Biomass	mg/m²	1.6

S.No	Species	Total Species count in 1L
A.	Phytoplankton Species Prorocentrummicans Amphora lineolata Cymbella marina Bacteriastrum delicatulum Thalassionema nitzschioides Chaetoceros dydymus Skeletonemacostatum Thalassiothrixlongissima Cymbella marina	14 20 12 10 08 14 06 12
B.	Zooplankton Species Foraminifera Chaetognatha Amphipoda Cladocera Eggs of fish & larvae	24 18 12 06 05

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TEST REPORT ANALYSIS OF MARINE WATER

BCL Ref. No.	GPL/ 05/226	Issued to:	
Monitoring Date	September 24, 2022	M/s. Gangavaram Port Ltd.	
Reporting Date	September 29, 2022	Gangavaram (Village)	
Organization	M/s. Gangavaram Port Ltd.	PedaGantiyada (Mandalam)	
Type of Sample Marine Water (Low Tide)		Visakhapatnam.	
Sample Collected by	M/s. Biochem Labs	Transcription II	

Station Name: Port Entrance Channel / Low Tide

S. No	PARAMETERS	UNIT	RESULT	
1.	Phytoplankton Count	No. /L	12000	
2.	Zooplankton Count	No./m³	1000	
3.	Chlorophyll a	mg/m³	3.6	
4.	Chlorophyll b	mg/m³	2.4	
5.	Primary Productivity	gC/m ²	3.4	
6.	Biomass	mg/m²	2.2	

S.No	Species	Total Species count in 1L
Α.	Phytoplankton Species Prorocentrummicans Amphora lineolata Cymbella marina Bacteriastrum delicatulum Thalassionema nitzschioides Chaetoceros dydymus Skeletonemacostatum	10 12 06 18 10 24
	Thalassiothrixlongissima Cymbella marina	02 18 06
B.	Zooplankton Species Foraminifera Chaetognatha Amphipoda Cladocera Eggs of fish & larvae	20 08 10 02 12

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TEST REPORT ANALYSIS OF MARINE WATER

BCL Ref. No.	GPL/ 05/226	Issued to:	
Monitoring Date	September 24, 2022	M/s. Gangavaram Port Ltd. Gangavaram (Village) PedaGantiyada (Mandalam) Visakhapatnam.	
Reporting Date	September 29, 2022		
Organization	M/s. Gangavaram Port Ltd.		
Type of Sample	Marine Water (High Tide)		
Sample Collected by	M/s. Biochem Labs		

Station Name: Harbourbasine / High Tide

S. No	PARAMETERS	UNIT	RESULT
1.	Phytoplankton Count	No. /L	10000
2.	Zooplankton Count	No./m³	1000
3.	Chlorophyll a	mg/m³	2.8
4.	Chlorophyll b	mg/m ³	3.6
5.	Primary Productivity	gC/m²	3.2
6.	Biomass	mg/m²	2.8

.No	Species	Total Species count in 1L
A.	Phytoplankton Species	
	Prorocentrummicans	20
	Amphora lineolata	12
	Cymbella marina	20
	Bacteriastrum delicatulum	04
	Thalassionema nitzschioides	28
	Chaetoceros dydymus	12
	Skeletonemacostatum	10
	Thalassiothrixlongissima	06
	Cymbella marina	10
B.	Zooplankton Species	
	Foraminifera	16
	Chaetognatha	06
	Amphipoda	18
	Cladocera	10
	Eggs of fish & larvae	04

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TEST REPORT ANALYSIS OF MARINE WATER

BCL Ref. No.	GPL/ 05/226	Issued to:	
Monitoring Date	September 24, 2022		
Reporting Date	September 29, 2022	M/s. Gangavaram Port Ltd.	
Organization	M/s. Gangavaram Port Ltd.	Gangavaram (Village)	
Type of Sample	Marine Water (High Tide)	PedaGantiyada (Mandalam Visakhapatnam.	
Sample Collected by	M/s. Biochem Labs	visaknapatnam.	

Station Name: Port Entrance Channel / High Tide

S. No	PARAMETERS	UNIT	RESULT
1.	Phytoplankton Count	No. /L	12000
2.	Zooplankton Count	No./m ³	1000
3.	Chlorophyll a	mg/m ³	3.4
4.	Chlorophyll b	mg/m ³	2.6
5.	Primary Productivity	gC/m ²	3.0
6.	Biomass	mg/m²	2.4

S.No	Species	Total Species count in 1L
A.	Phytoplankton Species Prorocentrummicans	
	Amphora lineolata	30
	Cymbella marina	14 22
	Bacteriastrum delicatulum	18
	Thalassionema nitzschioides	10
	Chaetoceros dydymus	20
	Skeletonemacostatum	06
	Thalassiothrixlongissima	22
-	Cymbella marina	10
B.	Zooplankton Species	6000
	Foraminifera	20
	Chaetognatha	14
	Amphipoda	12
	Cladocera	06
	Eggs of fish & larvae	08

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TEST REPORT ANALYSIS OF MARINE WATER

BCL Ref. No.	GPL/ 05/226	Issued to:
Monitoring Date	September 24, 2022	M/s. Gangavaram Port Ltd.
Reporting Date	September 29, 2022	Gangavaram (Village)
Organization	M/s. Gangavaram Port Ltd.	PedaGantiyada (Mandalam)
Type of Sample	Marine Water (Low Tide)	Visakhapatnam.
Sample Collected by	M/s. Biochem Labs	1.00

Station Name: South brake Wall outside / Low Tide

S. No	PARAMETERS	UNIT	RESULT
1.	Phytoplankton Count	No. /L	10000
2.	Zooplankton Count	No./m³	1000
3.	Chlorophyll a	mg/m³	3.6
4.	Chlorophyll b	mg/m ³	2.8
5.	Primary Productivity	gC/m ²	3.4
6.	Biomass	mg/m ²	2,6

S.No	Species	Total Species count in 1L
Α.	Phytoplankton Species	68
	Prorocentrummicans Amphora lineolata	28
	Cymbella marina	18
	Bacteriastrum delicatulum	10
	Thalassionema nitzschioides	34
	Chaetoceros dydymus	08
	Skeletonemacostatum	30
	Thalassiothrixlongissima	04
	Cymbella marina	10
B.	Zooplankton Species	
	Foraminifera	38
	Chaetognatha	20
	Amphipoda	06
	Cladocera	22
	Eggs of fish & larvae	14

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TEST REPORT ANALYSIS OF MARINE WATER

BCL Ref. No.	GPL/ 05/226	4.000.00.4.000.00	
Monitoring Date	September 24, 2022	M/s. Gangavaram Port Ltd. Gangavaram (Village)	
Reporting Date	September 29, 2022		
Organization	M/s. Gangavaram Port Ltd.		
Type of Sample	Marine Water (Low Tide)	PedaGantiyada (Mandalam)	
Sample Collected by	M/s. Biochem Labs	Visakhapatnam.	

Station Name: North brake Wall Outside / Low Tide

S. No	PARAMETERS	UNIT	
1.	Phytoplankton Count	The state of the s	RESULT
2.		No. /L	12000
3.	Zooplankton Count	No./m ³	1200
	Chlorophyll a	mg/m ³	3.4
4.	Chlorophyll b	mg/m ³	2.6
5.	Primary Productivity	gC/m ²	700000
6.	Biomass		3.2
		mg/m ²	2.4

S.No	Species	Total Casalas
Α.	Phytoplankton Species Prorocentrummicans Amphora lineolata Cymbella marina Bacteriastrum delicatulum Thalassionema nitzschioides Chaetoceros dydymus Skeletonemacostatum Thalassiothrixlongissima Cymbella marina	Total Species count in 1L 80 46 28 34 06 24 04 28
В.	Zooplankton Species Foraminifera Chaetognatha Amphipoda Cladocera Eggs of fish & larvae	32 20 04 18 06

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TEST REPORT ANALYSIS OF MARINE WATER

BCL Ref. No.	GPL/ 05/226	Issued to:		
Monitoring Date	September 24, 2022			
Reporting Date September 29, 2022		M/s. Gangavaram Port Ltd.		
Organization	M/s. Gangavaram Port Ltd.	Gangavaram (Village) PedaGantiyada (Mandalam Visakhapatnam.		
Type of Sample	Marine Water (High Tide)			
Sample Collected by	M/s. Biochem Labs			

Station Name: South brake Wall Outside / High Tide

S. No	PARAMETERS	UNIT	RESULT
1.	Phytoplankton Count	No. /L	10000
2.	Zooplankton Count	No./m³	1200
3.	Chlorophyll a	mg/m ³	2.6
4.	Chlorophyll b	mg/m ³	3.0
5.	Primary Productivity	gC/m²	3.2
6.	Biomass	mg/m ²	2.6

No.	Species	Total Species count in 1L
V	Phytoplankton Species Prorocentrummicans Amphora lineolata Cymbella marina Bacteriastrum delicatulum Thalassionema nitzschioides Chaetoceros dydymus Skeletonemacostatum Thalassiothrixlongissima Cymbella marina	66 24 42 06 20 34 10 26
3,	Zooplankton Species Foraminifera Chaetognatha Amphipoda Cladocera Eggs of fish & larvae	26 04 30 16 08

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TEST REPORT ANALYSIS OF MARINE WATER

BCL Ref. No.	GPL/ 05/226	Issued to:	
Monitoring Date	September 24, 2022	Mis Consmission Book Ltd	
Reporting Date	September 29, 2022	M/s. Gangavaram Port Ltd.	
Organization	M/s. Gangavaram Port Ltd.	Gangavaram (Village) PedaGantiyada (Mandalam Visakhapatnam.	
Type of Sample	Marine Water (High Tide)		
Sample Collected by	M/s. Biochem Labs	visakiiapatiaiii.	

Station Name: North brake Wall Outside / High Tide

S. No	PARAMETERS	UNIT	RESULT
1.	Phytoplankton Count	No. /L	10000
2.	Zooplankton Count	No./m ³	1200
3.	Chlorophyll a	mg/m³	3.2
4.	Chlorophyll b	mg/m ³	2.8
5.	Primary Productivity	gC/m²	3.2
6.	Biomass	mg/m ²	2.0

S.No	Species	Total Species count in 1L
Α.	Phytoplankton Species Prorocentrummicans Amphora lineolata Cymbella marina Bacteriastrum delicatulum	80 35 26 30
	Thalassionema nitzschioides Chaetoceros dydymus Skeletonemacostatum Thalassiothrixlongissima Cymbella marina	08 46 04 26 10
В.	Zooplankton Species Foraminifera Chaetognatha Amphipoda Cladocera Eggs of fish & larvae	22 10 18 06 10

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TEST REPORT ANALYSIS OF SEDIMENT SAMPLE

BCL Ref. No.	GPL/ 06/225	Issued to:	
Monitoring Date	September 10, 2022	M/a Congoverem Bod Ltd	
Reporting Date	September 15, 2022	 M/s. Gangavaram Port Ltd. Gangavaram (Village) PedaGantiyada (Mandalam) Visakhapatnam. 	
Organization	M/s. Gangavaram Port Ltd.		
Type of Sample	Sediment (Low Tide)		
Sample Collected by	M/s. Biochem Labs	viountapatriairi.	

S.No	Parameters	Unit	Result	
			Harbour Basine	Port Entrance Channel
1.	pH	H+ conc	6.90	7.04
2.	Organic matter	%	2.2	1.8
3.	Nitrate	mg/kg	2.6	2.0
4.	Phosphate	mg/kg	1.8	1.2
5.	Oil & Grease	mg/kg	0.14	0.1
6.	Iron	ppm	0.16	0.14
7.	Manganese	ppm	0.12	0.16
8.	Nickel	ppm	0.1	0.12
9.	Chromium	ppm	0.16	0.14
10.	Mercury	ppm	Nil	Nil
11.	Zinc	ppm	0.8	0.6
12.	Lead	ppm	0.01	0.01
13.	Arsenic	ppm	0.01	0.01
14.	Selenium	ppm	0.01	0.01
15.	Copper	ppm	0.18	0.14

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TEST REPORT ANALYSIS OF SEDIMENT SAMPLE

BCL Ref. No.	GPL/ 06/225	Issued to:	
Monitoring Date	September 10, 2022	Mfs Consumos Port Ltd	
Reporting Date	September 15, 2022	M/s. Gangavaram Port Ltd. Gangavaram (Village) PedaGantiyada (Mandalam)	
Organization	M/s. Gangavaram Port Ltd.		
Type of Sample	Sediment (Low Tide)	Visakhapatnam.	
Sample Collected by M/s. Biochem Labs		visakilapatilalii.	

S.No	Parameters	Unit	Result	
			South brake Wall Outside	North brake Wall Outside
1.	pH	H+ conc	6.84	6.94
2.	Organic matter	%	1.0	1.0
3.	Nitrate	mg/kg	2.0	1.6
4.	Phosphate	mg/kg	0.8	1.0
5.	Oil & Grease	mg/kg	0.02	0.01
6.	Iron	ppm	0.18	0.14
7.	Manganese	ppm	0.18	0.16
8.	Nickel	ppm	0.14	0.12
9.	Chromium	ppm	0.16	0.14
10.	Mercury	ppm	Nil	Nii
11.	Zinc	ppm	1.0	0.8
12.	Lead	ppm	0.01	0.01
13.	Arsenic	ppm	0.01	0.01
14.	Selenium	ppm	0.01	0.01
15.	Copper	ppm	0.16	0.18

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TEST REPORT BENTHIC FAUNAL DIVERSITY

BCL Ref. No.	GPL/ 06/225	Issued to:
Monitoring Date	September 10, 2022	M/s, Gangavaram Port Ltd.
Reporting Date	September 15, 2022	Gangavaram (Village)
Organization M/s. Gangavaram Port Ltd.		PedaGantiyada (Mandalam)
Type of Sample	Sediment (Low Tide)	Visakhapatnam.
Sample Collected by	M/s. Biochem Labs	100 2-200 St. 100 St.

S. No	Species/Group	% Composition	
		HarbourBasine	Port Entrance Channel
1.	Opheliidae sp	16	26
2.	Glyceridae sp	12	18
3.	Nereidae sp	26	20
4.	Aphroditidae sp	14	12
5.	Cirratulidae sp	08	36
6.	Capitella sp	26	08
7.	Amphipoda sp.	12	22
8.	Gastropoda	18	10
9.	Chaetognatha	04	06

Analyst





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Centre for Aquaculture & Environmental Sciences

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TEST REPORT BENTHIC FAUNAL DIVERSITY

BCL Ref. No.	GPL/ 06/225	Issued to:	
Monitoring Date September 10, 2022		M/s. Gangavaram Port Ltd.	
Reporting Date	September 15, 2022	Gangavaram (Village)	
Organization M/s. Gangavaram Port Ltd. Type of Sample Sediment (Low Tide)		PedaGantiyada (Mandalam) Visakhapatnam.	

S. No	Species/Group	% Composition	
		South brake Wall Outside	North brake Wall Outside
1.	Foraminifera	50	42
2.	Amphipoda	26	18
3.	Mytilusedulis	28	20
4.	Gastropod veliger	0	38
5.	Oithona	14	06
6.	Capitella	02	14
7.	Copepod nauplii	22	0
9.	Brachyuran zoea	06	14
8.	Neanthusarenaceodentala	10	16

Analyst





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TEST REPORT ANALYSIS OF SEDIMENT SAMPLE

BCL Ref. No.	GPL/ 06/226	Issued to:
Monitoring Date	September 24, 2022	M/s. Gangavaram Port Ltd.
Reporting Date	September 29, 2022	Gangavaram (Village)
Organization	M/s. Gangavaram Port Ltd.	PedaGantiyada (Mandalam)
Type of Sample	Sediment (Low Tide)	Visakhapatnam.
Sample Collected by	M/s. Biochem Labs	

S.No	Parameters	Unit		Result	
*****	real sandminaterial estimat	Harbour Basine	Port Entrance Channel		
1.	На	H+ conc	6.86	7.0	
2.	Organic matter	%	2.0	1.6	
3.	Nitrate	mg/kg	1.6	1.2	
4.	Phosphate	mg/kg	1.4	1.0	
5.	Oil & Grease	mg/kg	0.12	0.08	
6.	Iron	ppm	0.18	0.14	
7.	Manganese	ppm	0.16	0.12	
8.	Nickel	ppm	0.18	0.16	
9.	Chromium	ppm	0.16	0.12	
10.	Mercury	ppm	Nil	Nil	
11.	Zinc	ppm	1.0	0.8	
12.	Lead	ppm	0.01	0.01	
13.	Arsenic	ppm	0.01	0.01	
14.	Selenium	ppm	0.01	0.01	
15.	Copper	ppm	0.20	0.16	

Analyst





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TEST REPORT ANALYSIS OF SEDIMENT SAMPLE

Sample Collected by	M/s. Biochem Labs		
Type of Sample Sediment (Low Tide)		PedaGantiyada (Mandalam) Visakhapatnam.	
Organization	ganization M/s. Gangavaram Port Ltd.		
Reporting Date	September 29, 2022	Gangavaram (Village)	
Monitoring Date	September 24, 2022	M/s. Gangavaram Port Ltd.	
BCL Ref. No.	GPL/ 06/226	Issued to:	

S.No	Parameters I	Unit Res		ult	
			South brake Wall Outside	North brake Wall Outside	
1.	pH	H+ conc	6.92	6.96	
2.	Organic matter	%	1.0	0.8	
3.	Nitrate	mg/kg	2.0	1.2	
4.	Phosphate	mg/kg	1.4	1.0	
5.	Oil & Grease	mg/kg	0.02	0.04	
6.	Iron	ppm	0.14	0.12	
7.	Manganese	ppm	0.12	0.1	
8.	Nickel	ppm	0.1	0.12	
9.	Chromium	ppm	0.12	0.1	
10.	Mercury	ppm	Nil	Nil	
11.	Zinc	ppm	1.0	0.8	
12.	Lead	ppm	0.01	0.01	
13.	Arsenic	ppm	0.01	0.01	
14.	Selenium	ppm	0.01	0.01	
15.	Copper	ppm	0.12	0.1	

Analyst





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TEST REPORT BENTHIC FAUNAL DIVERSITY

BCL Ref. No.	GPL/ 06/226	Issued to:
Monitoring Date	September 24, 2022	M/s. Gangavaram Port Ltd.
Reporting Date	September 29, 2022	Gangavaram (Village)
Organization M/s. Gangavaram Port Ltd. Type of Sample Sediment (Low Tide)		PedaGantiyada (Mandalam)
		Visakhapatnam,
Sample Collected by	M/s. Biochem Labs	

S. No	Species/Group	% Composition	
40.00		Harbour Basine	Port Entrance Channel
1.	Eunicidae sp.	14	36
2	Paraonidae sp.	10	14
3	Syllidae sp	28	28
4	Sabellidae sp	08	10
- 6	Oithona sp.	20	30
6	Capitella sp.	06	14
7	Syllidae sp	12	22
9.	Amphipoda sp.	16	04
8	Nematoda sp.	10	12

Analyst





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TEST REPORT BENTHIC FAUNAL DIVERSITY

GPL/ 06/226	Issued to:	
September 24, 2022	M/s. Gangavaram Port Ltd.	
September 29, 2022	Gangavaram (Village)	
reporting Date September 29, 2022 Organization M/s. Gangavaram Port Ltd.		
Sediment (Low Tide)	 PedaGantiyada (Mandalam) Visakhapatnam. 	
M/s. Biochem Labs	Promise page and the III	
	September 24, 2022 September 29, 2022 M/s. Gangavaram Port Ltd. Sediment (Low Tide)	

S. No	Species/Group	% Composition		
		South brake Wall Outside	North brake Wall Outside	
1.	Capitella sp.	48	36	
2.	Syllidae sp	32	24	
3.	Amphipoda sp.	10	10	
4.	Nematoda sp.	34	14	
5.	Capitella sp.	12	12	
6.	Syllidae sp	24	08	
7.	Paraonidae sp.	06	04	
9.	Syllidae sp	18	14	
8.	Sabellidae sp	04	02	

Analyst





GANGAVARAM PORT LIMITED

GPL/ENV/APPCB/2022-23/037

Date: 06.10.2022.

To

Sr. Environmental Engineer, CESS Andhra Pradesh Pollution Control Board, D.no:33-26-14D/2. Near Sunrise Hospital, Pushpa Hotel Center, Chalamalavari Street, Kasturibaipet, Vijayawada-520010. Andhra Pradesh.

Dear Sir.

Sub: Water Consumption Cess Statement - Reg.

Please find enclosed herewith the water consumption statement in FORM -1 for the month of September - 2022, prepared under the Water (Prevention and Control of Pollution) Cess Act, 1977.

We request you to kindly consider the same.

Thanking you

Yours Sincerely,

Encl: As above.

Copy submitted to the Environmental Engineer, A.P. Pollution Control Board, Regional Office, Visakhapatnam for kind information.

Project Office

: Pedagantyada Mandal, Gangavaram (Post), Visakhapatnam - 530 044. Andhra Pradesh, INDIA

Tel.: +91 891 270 1177, 2277, 276 1377, Fax: +91 891 270 3377

Corporate Office: 2nd, 3rd and 4th Floors, "Hansa Plaza", Plot No.798, Road No.36, Jubilee Hills, Hyderabad - 500 033

Tel.: 040 3359 9999, Fax No.: 040 3359 9990

F-mail: nort@nannavaram.com. Web: www.nannavaram.com

FORM - 1

Returns Regarding Water Consumed During Month of September - 2022

Name & Address	Purpose of w	Purpose of which water consumed	Quantity of water consumed	If the meter was out of order the monthly avg. consumption of the water for the past 3 months of working period	Qty, of water qualifying for rebate according to the assesses	Remarks
(1)		(2)	(3)	(4)	*(5)	(9)
	1) Industrial	Total from Municipal				
Gangavaram Port	cooling/	mains	23,438			
Limited,	spraying in	i. From Municipal water	Cum/KL	(F	19	
Gangavaram Post,	mine pits or	supply mains	<i>D</i> 1			
Peda Gatyada	boiler feed,	ii. From well / tube well.				
Mandal,	2) Domoctio	i. From Municipal water				
Visakhapatnam.	V/atec	supply mains	Cum/KL	n		
	אסרבו	ii. From well / tube well	4802.0			

(*) for claiming rebate under Col.7, the assessed shall indicate in the column the analytical and other reports annexed to this return in support of this claim.

For Gangavaram Port Limited

Vice President (Environment)