



ನವ ಮಂಗಳೂರು ಬಂದರು ಪ್ರಾಧಿಕಾರ
नव मंगलूर पत्तन प्राधिकरण
NEW MANGALORE PORT AUTHORITY
(Fully Solar Powered)

भारत सरकार (पत्तन, पोत परिवहन और जलमार्ग मंत्रालय)
Govt of India (Ministry of Ports, Shipping and Waterways)
ಪಣಂಬೂರು ಪಗಮ್ಬೂರು Panambur / ಮಂಗಳೂರು ಮಂಗಲೂರು Mangalore - 575010



No. 3/11/EMP/CE(C)/2022-23/TS/

Date:18-07-2023

To:

The Regional Officer
Ministry of Environment , Forest & Climate Change
Regional Office (South Zone), 4th Floor, E&F Wings,
KendriyaSadana, 17th Main Road, II Block,
Koramangala,
BANGALORE – 560 034.
Email: roszmon@yahoo.in &
rosz.bng-mef@nic.in

Sir,

Sub: Submission of half yearly Compliance report from **October- 2022 to March -2023**
for the Environmental Clearance issued by MOEF&CC -reg

- Ref: 1. EC No: PD/26017/11//98-PDZ(CRZ) issued on 13-05-1999.
2. EC No. PD/26018/12//98-PDZ(CRZ) issued on 19-05-1999
3. EC No. J-16011/13/2002-IA-III issued on 16-01-2003
4. EC No 10-54/2007-IA-III issued on 29-07-2008
5. EC No: 11-2/2010-IA-III issued on 19-09-2011
6. EC No: 11-2/2010-IA-III issued on 14-12-2016

With reference to the subject cited above, please find enclosed here with the revised half yearly Compliance report on stipulated environmental clearance terms and conditions along with tabulated test results on Air samples, Drinking water samples, Waste Water (STP), Noise level ,DG stack emission from **October- 2022 to March -2023**-for information.

The compliance report is submitted for the EC No: PD/26017/11//98-PDZ(CRZ) issued on 13-05-1999 & EC No. PD/26018/12//98-PDZ(CRZ) issued on 19-05-1999. The soft copy of same information is mailed to rosz.bng-mef@nic.in and roszmon@yahoo.in. The half yearly Compliance report from **October-2022 to March -2023**- is also uploaded in Port website www.newmangaloreport.gov.in for your kind information

Thanking you,

Encl: As above

Yours faithfully,

Chief Engineer (Civil)

ದೂರವಾಣಿ / ದೂರಭಾಷ / Phone : 0824- 2407341, 2887399

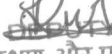
आईएसओ 9001:2015, 14001:2015 एवं आईएसपीएस अनुपालनकर्ता पत्तन

An ISO 9001:2015, 14001:2015 & ISPS Compliant Port


Environmental Clearances Compliance Report

1. EC No: PD/26017/11//98-PDZ(CRZ) issued on 13-05-1999 and
2. EC No. PD/26018/12//98-PDZ(CRZ) issued on 19-05-1999


Sl. No	EC Conditions:	Remarks
1	All construction design/drawings relating to construction activities must have the approval of the concerned State Govt. Departments/Agencies. Ground water should not be tapped for construction activities.	Statutory approval were obtained at the time of construction and work is completed
2	Adequate provision for all infrastructural facilities such as water supply, fuel, sanitation etc. must be extended for labourers during the construction period in order to avoid damage to the environment.	During the project work provision for all infra structural facilities like water supply, Sanitation etc., was provided for labourers
3	Dredging operations, if any, should be undertaken in consultation with either the Central Water and Power Research Station, Pune or the National Institute of Oceanography, Goa to ensure that dredging operations do not cause adverse impact on water quality and marine productivity in the vicinity. Dredging operation as far as possible should be kept to the minimum for avoiding any adverse impact on marine life.	Capital dredging operations conducted during the project work in consultation with CWPRS, Pune and all necessary precautions were taken to avoid any adverse impact on marine life
4	Disposal sites for excavated material should be so designed that the revised land use after dumping and changes in the land use pattern do not interfere with the natural damage.	The excavated material of the project work was used for Reclamation of Tannirbhavi beach and didn't interfere with natural damage
5	To meet any emergency situation, adequate foam containers should be kept ready with supporting fire fighting system and water pipeline.	Fire fighting system & water pipeline was provided at construction area Annexure-I
6	The staff posted in sensitive areas should be trained in implementation of the Crisis Management Plan already drawn by the authorities. Mock drill(s) for this purpose should be conducted on a regular basis. Provisions of Dock Safety Act and the guidelines issued by the DG,FASLI/CLI, Bombay for the safety and health of the dock workers should be followed.	During the project work safety and health of the dock workers was considered. In-house Medical facility was provided and regularly Mock drills for different situations was provided
7	For development of green buffer including mangroves wherever feasible, the authorities should start growing large nursery of multipurpose species such as Eucalyptus, Casurina, Dalbergia, Terminalia etc. The norm of about 2000-2500 trees per hectare maybe adopted for raising of green belt.	The Port developed 250 acre land near kudupu and Bondel quarry area for plantation Port has developed its own Nursery and many species such as Eucalyptus, Casurina, Dalbergia, Terminalia etc were planted near beach side


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		Port has developed 30% Green belt area Annexure-II
8	To prevent discharge of sewage and other liquid wastes including ballast into marine environment, adequate system for collection, treatment and disposal of liquid wastes must be provided to the satisfaction of Karnataka Pollution Control Board.	Sewage Treatment Plant with 1.2 MLD capacity was constructed to treat the sewage and other liquid waste including ballast as per the KSPCB Annexure-III
9	Adequate noise control measures must be provided to maintain noise level at various workplaces within the standard prescribed by the competent authorities. If need be, ear plugs and ear muffs should be provided to the workers in the port area.	Acoustic DG sets were used for the project work and the Noise level was maintained within the standard as per KSPCB
10	The quality of treated effluents, solid wastes and emissions must conform to the standards laid down by the competent authority including Central/State Pollution Control Boards.	Environmental Monitoring was conducted regularly through Third party and the reports were submitted to KSPCB & MOEF&CC
11	An Environmental Cell should be immediately made operational with adequate laboratory facilities, equipments and a mobile van for collecting air samples. The record and the data should be submitted with proper analysis and corrective measures required, if any, for maintaining the levels within the prescribed limits to the Regional Office of the ministry of Environment & Forests at Bangalore, which shall be monitoring these conditions stipulated for according the Environment approval. The Environmental Cell should coordinate and monitor environmental mitigative measures executed in the New Mangalore Port area.	An Environmental cell is functioned effectively to mitigate the Environmental pollution. Port is submitting the air and water quality reports to MOEF&CC and KSPCB Port will install CAAQMS shortly. Annexure-IV
12	Necessary leakage detection devices with early warning system must be provided at strategic locations.	Complied
13	Standby DG sets must be provided to ensure uninterrupted power supply to the pump house and the fire fighting system.	Acoustic DG sets were used for the project work to supply power
14	Third party inspection should be ensured during construction and operation phases with adequate insurance cover. The project authorities should confirm on regular intervals of six months to the Ministry about the implementation of the suggested safeguard measures and the data/report should be opened for inspection by the Team which would be constituted by the Ministry, if found necessary.	KSPCB and Director, MOEF&CC, Bangalore inspected the Port and verified the compliance reports maintained by the Ports From 26-11-2021 to 30-11-2020 a performance audit on conservation of Marine Ecosystems was conducted by Mr. Bala Ravi Senior audit officer, Accountant General AMG-I, Bangalore & Verifies



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		AMG-I, Bangalore & Verifies MOEF&CC compliance report
15	Full support should be extended to the Regional Office of the Ministry of Environment & Forests at Bangalore during inspection of the project monitoring purposes by the project proponents by furnishing full details and action plans including action taken report on mitigative measures.	Complied
16	Adequate funding provisions, year-wise and item-wise, must be made for implementation of the above mentioned safeguard measures.	Complied
17	No other chemical product save those mentioned in the Annex III appended to Govt. of India Notification in the Ministry of Environment & Forests, S.O. No.494 (E) dated July 9, 1997 will be allowed to handle/store in any port area.	Complied
18	The project authorities would ensure that safety regulations and guidelines issued by Oil Safety Directorate in the Govt. of India, Ministry of Petroleum & Natural Gas are implemented.	Complying with all the stipulations
19	The approval of the Chief Controller of Explosives (CCO & E) shall be obtained for operational purpose before undertaking any storage/handling activity.	Complying with all the stipulations



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F.NO.11-2/2010-IA-III 19/SEP/2011		
Development of 4 berths in the western dock arm		
Sl. No.	Specific Conditions	Remarks
1	"Consent for Establishment" shall be obtained from State Pollution Control Board under Air and Water Act and a copy shall be submitted to the Ministry before start of any construction work at the site.	Obtained. Valid up to 5 year from 23/05/2014.
2	The authenticate map of the HTL/LTL together with their respective coordinates at discrete intervals shall be submitted so as to identify them later on the ground if and when necessary.	Submitted to MOEF on 08.12.2014
3	The project shall be executed in such a manner that there shall not be any disturbance to the fishing activity.	The Project is taken up within the security compound of the operating Port. Hence the fishing activity is not affected during the course of execution of the project.
4	It shall be ensured that there is no displacement of people, houses or fishing activity as a result of the project.	The Project is taken up within the security compound of the operating Port. Hence there is no displacement of people, houses or fishing activity during the course of execution of the project.
5	No construction work other than those permitted in Coastal Regulation Zone Notification shall be carried out in Coastal Regulation Zone area.	Constructed as per CRZ Notification
6	The project proponent shall set up separate environmental management cell for effective implementation of the stipulated environmental safeguards under the supervision of a Senior Executive.	Environmental cell headed by the Environmental officer under the supervision of Chief Engineer Civil for effective implementation of the stipulated environmental safeguards has been setup.


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7	The funds earmarked for environment management plan shall be included in the budget and this shall not be diverted for any other purposes.	An amount of Rs 50 lakhs towards Fire fighting and environmental mitigation measures and Rs 80 lakhs towards Environmental and social concern has been earmarked in the Estimate.
General conditions		
1	Appropriate measures must be taken while undertaking digging activities to avoid any likely degradation of water quality.	The excavated material and the bore muck shall be disposed at designated areas away from the Sea/water bodies. The dredged material has been dumped at the designated dumping ground suggested by the CWPRS.
2	Full support shall be extended to the officers of this Ministry/Regional Office at Bangaluru by the project proponent during inspection of the project for monitoring purposes by furnishing full details and action plan including action taken reports in respect of mitigation measures and other environmental protection activities.	Full support and cooperation will be extended to the officers of Ministry/Regional Office.
3	A six-monthly monitoring report shall need to be submitted by the project proponents to the Regional Office of this Ministry at Bangaluru regarding the implementation of the stipulated conditions	Complied Statement of Monitoring report of Air, water, Noise, from October 2022 –March 2023
4	Ministry of Environment & Forests or any other competent authority may stipulate any additional conditions or modify the existing ones, if necessary in the interest of environment and the same shall be complied with.	No additional conditions stipulated or proposed
5	The Ministry reserves the right to revoke this clearance if any of the conditions stipulated are not complied with the satisfaction of the Ministry.	Complying with all the stipulations
6	In the event of a change in project profile or change in the implementation agency, a fresh reference shall be made to the Ministry of Environment and Forests.	Complied


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7	The project proponents shall inform the Regional Office as well as the Ministry, the date of financial closure and final approval of the project by the concerned authorities and the date of start of land development work.	Project Completed on 31.08.2016.
8	A copy of the clearance letter shall be marked to concerned Panchayat/local NGO, if any, from whom any suggestion/ representation has been made/ received while processing the proposal.	At the time of construction informed
9	Karnataka Pollution Control Board shall display a copy of the clearance letter at the Regional Office, District Industries Center and Collector's Office/Tahsildar's office for 30 days.	Pertains to KSPCB
10	These stipulations would be enforced among others under the provisions of water (Preservation and Control of Pollution) Act 1974, the Air(Preservation and Control of Pollution) Act, 1981, the Environment (Protection) Act 1986 , the Public liability (Insurance Act,1991 and EIA notification 1994, including the amendments and rules made thereafter.	Complied
11	All other statutory clearances such as the approvals for storage of diesel from Chief controller of Explosives, Fire department, Civil Aviation department , Forest Conservation Act, 1980 and wild life(protection) Act,1972 etc. shall be obtained, as applicable by project proponents from the respective competent authorities.	Obtained
12	The project proponent shall advertise in at least two local Newspapers widely circulated in the region, one of which shall be in the vernacular language informing that the project has been accorded Environmental Clearance and copies of clearance letters are available with the state Pollution Control Board and may also be seen on the website of the ministry MOEF at http://www.envfor.nic.in	Paper advertisement was given in Udayavani, Manipal and Deccan Herald, Mangalore dated 29.09.2011 .
13	Environmental clearances is subject to final order of the Hon'ble Supreme Court of India in the matter of Goa Foundation vs. Union of India	Complied


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	in Writ Petition (Civil) No.460 of 2004 as may be applicable to this project.	
14	Status of Compliance to the various stipulated environmental conditions and environmental safe guards will be uploaded by the project proponent in its website.	Uploaded .www. newmangalore-port.com
15	A copy of the clearance letter shall be sent by the proponent to concerned Panchayat, Zilla Parishad/Municipal Corporation, Urban Local Body and the Local NGO, if any, from whom suggestions / representations, if any , were received while Processing the Proposal . The clearance letter shall also be put on the website of the company by the Proponent.	At the time of construction issued
16	The proponent shall upload the status of compliance of the stipulated EC conditions, including results of monitored data on their website and shall upload the same periodically. It shall simultaneously be sent to the Regional office of MoE&CC, the respective Zonal Office of CPCB and the SPCB.	Uploaded in.www. newmangalore-port.com andcomplied
17	The project proponent shall also submit six monthly reports on the status of compliance of the stipulated EC conditions including results of monitored data(both in hard copies as well as by e-mail) to the respective Regional Office of MEF&CC , the respective Zonal Office of CPCB and the SPCB.	Complied Statement of Monitoring report of Air, water, Noise, STP and Stack emission from October2022-March2023
18	The environmental statement for each financial year ending 31 st March in Form-V as is mandated to be submitted by the project proponent to the concerned State Pollution Control Board as prescribed under the Environment (Protection) Rules, 1986, as amended subsequently, shall also be put on the website of the company along with status of compliance of EC conditions and shall also be sent to the respective Regional Offices of MOEF&CC by e-mail.	Submitted to KSPCB on 30/09/2022. Soft copy uploaded in the Port web site and sent mail to respective officers


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**Revised stipulated environmental clearances report as per the Letter
No. F.No.11-2/2010-IA.III (Pt.)Dated:-14th December 2016**

Sl.No.	Specific Conditions:	Remarks
1	Construction activity shall be carried out strictly according to the provisions of CRZ Notification, 2011. No construction work other than those permitted in Coastal Regulation Zone Notification shall be carried out in Coastal Regulation Zone area.	Complied
2	All the recommendations and conditions specified by Karnataka Coastal Zone Management Authority (KCZMA) vide letter no. FEE 580 CRZ 2015 dated 07.01.2016 shall be complied with.	Complied.
3	As proposed, a fully mechanised coal unloading system shall be provided for Berth 18. Air pollution control measures to be provided are water sprinklers; closed conveyor, bag filter and mechanised cargo handling.	Complied.
4	Automatic / online monitoring system (24 x 7) monitoring devices for air pollution as well as water pollution in respect of flow measurement and relevant pollutants in the treatment system shall be installed. The data should be made available to the respective SPCB and in the Company's website.	Regular Air & Water quality sample testing shall be conducted till the Installation of Online monitoring system 24X7 and all efforts are made to install it in time frame of 06months. Flow measurement is installed for relevant Water pollution pollutants in the treatment system.
5	All the recommendations mentioned in the rapid risk assessment report, disaster management plan and safety guidelines shall be implemented.	Implemented
6	All other conditions will remain unchanged.	Noted


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FIRE FIGHTING SYSTEM DETAILS AT OIL BERTHS AT NMPA					
Descrip tion	OISD Requirement	Berth 10	Berth 11	Berth 12	Berth 13
Fire water design require ment	600 m3/ hrs for water/ foam monitors (2 tower monitors X 5000 lpm)	Tower monitors (2 nos. x 5000 LPM) provided. 900 m3/hr pump is provided which is adequate and meets the OISD 156 requirement	Tower monitors (2 nos. X 6000 LPM) provided. 900 m3/hr pump is provided which is adequate and meets the OISD 156 requirement	Tower monitors (2 nos. X 6000 LPM) provided. 900 m3/hr pump is provided which is adequate and meets the OISD 156 requirement	Tower monitors (4 nos. X 6000 LPM) provided. 820 m3/hr pump is provided which is adequate and meets the OISD 156 requirement
	600 m3/ hrs for hydrant & water curtains (2 Jumbo nozzles X 5000 lpm)	8 x 1.5" (690 LPM each) and 9 x 1" (362 LPM each) 8778 LPM in all 900 m3/hr pump is provided which is adequate but the nozzle output is lesser by 1222 lpm as per the OISD 156 requirement	18 x 1" (362 LPM each) 6516 LPM in all. 900 m3/hr pump is provided which is adequate but the nozzle output is lesser by 3484 lpm as per the OISD 156 requirement	16 x 1" (362 LPM each) 5792 LPM in all 900 m3/hr pump is provided which is adequate but the nozzle output is lesser by 4208 lpm as per the OISD 156 requirement	64 X 1 " (362 LPM) 820 m3/hr pump is provided which is adequate as per the OISD 156 requirement
Jockey pump capacity		25 Cum m3/ hr	54 cu.m/hr	54 cu.m/hr	54 cu.m/hr
Foam System	2 X 5000 lpm Tower foam monitor + 2 X 2400 lpm base foam monitor Foam calculation = 14800 X .03X 60 = 26640 litre	Tower monitors (2 nos. x 5000 LPM) Ground monitor (1 No.x5000 LPM) As per calculation requirement is (15000 X .03 X 60) =27000 litre Available = 15 cu.m tank which is lesser by 12 cu.m as per OISD 156	Tower monitors (2 nos. X 6000 LPM) Ground monitor (1 No.x 3000 LPM) As per calculation requirement is (15000 X .03 X 60) =27000 litre Available = 30 cu.m tank which meets OISD 156 requirement	Tower monitors (2 nos. X 6000 LPM) Ground monitor (1 No.x 3000 LPM). As per calculation requirement is (15000 X .06 X 60) =54000 litre(since 6% foam is available) Available = 2 X 30 cu.m tank which meets OISD 156 requirement	Tower monitors (4 nos. X 6000 LPM) Ground monitor (2 No.x 3000 LPM) As per calculation requirement is (18000 X .03 X 60) =32400 litre. Available = 35 cu.m tank which meets OISD 156 requirement
Foam Pump Capacity		54 Cu.m /hr @ 18 kg/cm2 X 2 nos pumps available Adequate	27 Cu.m /hr @ 17 kg/cm2 X 2 nos pumps available Adequate	54 Cu.m /hr @ 17 kg/cm2 X 2 nos pumps available Adequate	28 Cu.m /hr @ 17 kg/cm2 X 2 nos pumps available Adequate

Extinguishers	6x10 kg. DCP extinguisher	1 X 5 kg, 2 X 10 kg, 2 X 20 Kg	2 X 10 Kg, 2 X 20 Kg	4 X 10 kg, 2 X 20	12 X 10 Kg, 4 X 5 Kg
	4x75 wheeled DCP	4 X 25 kg, 2 X 50 Kg	4 X 25 Kg, 2 X 50 kg	4X 25 Kg, 5 X 75 kg	4 X 75 Kg
Jockey pumps / Booster Pumps		2	2	2	2
International shore connection	minimum 1 per berth	1 No.	1 No.	1 No.	1 No
Hydrant	Single headed		3	3	9
	Double headed	16	16	12	16
Fixed water spray system	To be provided for all jetties handling more than 20,000 DWT		2 No.	2 No.	2 no.
Gas Detectors	as per requirement	4	4	4	4
Flame Detectors	as per requirement		10	10	10

Green Belt at NMPA

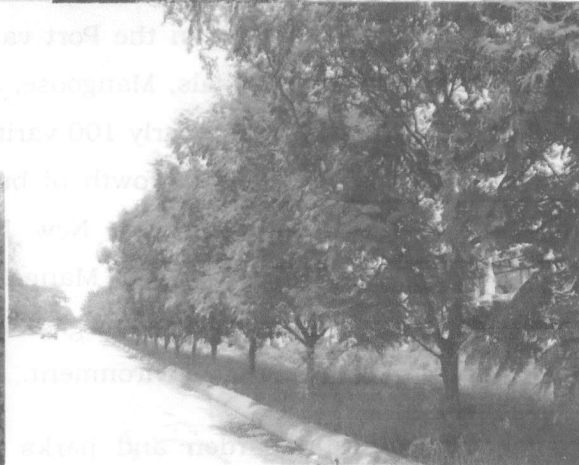
Port in its Endeavour to develop Green Belt has already provided a green cover of more than 33% with 95% survival of plants. Even though the Port is categorized as a service oriented organization, it has complied with the stipulations of an industry. The initiative for the greenery in the estate, include the operational and non operational area within the Port limits to control pollution mitigate emission of dust , air and water contamination. The Port, in its Endeavour has planted more than 2lakhs saplings of both endemic and non-endemic species .

The Ports a generally associated with cargo. It is unbelievable that New Mangalore Port Authority apart from its thriving business is also a natural heaven for the bird population. The species existing in the Port varies from Peacocks to Plovers and Pythons to Flower Peckers, Jackals, Mongoose, Jungle Fowls etc. At present, the bird population has increased to nearly 100 varieties. The relentless efforts taken by the Management has ushered the growth of butterflies also. Butterflies are the indicators of best ecological system. New Mangalore Port Authority houses immovable butterflies. At present, New Mangalore Port Authority is the only Port in the country that maintain the best ecological balance in the midst of its business activity without compromising its Environment.

The presence of beautiful garden and parks indicate the maturity of civilized society. They are not only provide soothness to the eyes , but act as bio-diversity engines. New Mangalore Port Authority has more than 10 beautiful parks, three inside the colony area and rest inside the wharf. Each park is distinct in supporting the environment with endemic species and exotic sapplings. These parks are under 24/7 strict supervision and they are well maintained. All the parks exhibit different hue during the spring time to invoke the colours of rainbow. Recently Green Tech foundation awared NMPA for Environmental Protection.

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Green Belt at NMPA



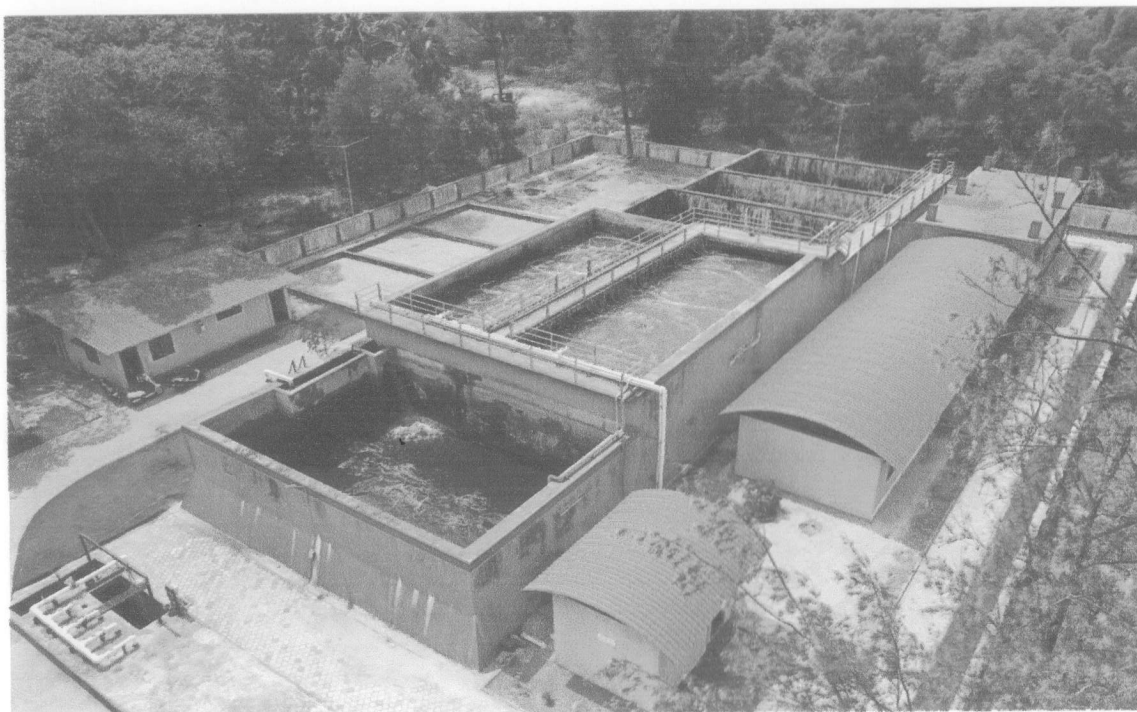
1.2 MLD Sewage Treatment Plant at NMPA

New Mangalore Port Authority has commissioned 1.2 MLD Sewage Treatment Plant with SBR Technology, it consumes 329 KW power/day for treating 0.75 MLD water/day.

The domestic sewage emanated from the NMPA township containing floating matter and solids both inorganic and organic matter will be treated in the STP and reused for irrigating the Green Belt after ensuring its suitability. Periodic inspection and maintenance is carried out by Engineers and monitored by the Environment Cell of the Port.

NMPA has achieved the Zero Discharge as NMPA is re using the entire quantity of treated water for **green belts** created inside the Port in order to reduce the burden on water resources. Besides, it is also used for sprinkling inside the wharf to suppress the dust emanating out of cargo handling.

There is a scientific monitoring system in place in the Port. The monitoring process is carried out through established NABL and MOEF&CC certified laboratory regularly and taken both preventive and corrective actions which results in very low BOD and Zero Turbidity. The Port has been fully complying with the statutory requirements.



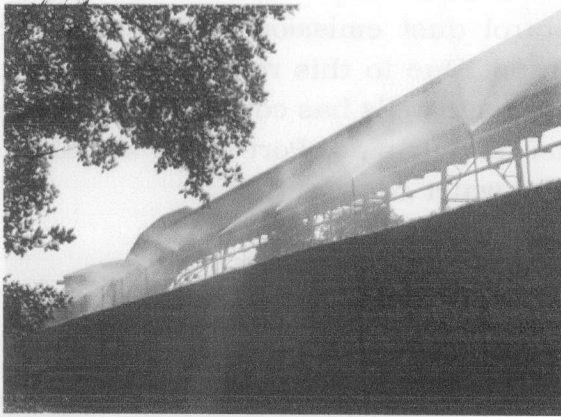
Rain Water Harvesting:- The prudence exhibited in utilizing this **scarce resource** depends upon **determination, vision and mission** of the management. New Mangalore Port is perhaps **the only Port** that is blessed with this resource due to its topography. After Kerala on the West Coast, Mangalore is the second location on Indian map to catch the early rain. Mangalore receives roughly, around 4000 mm rain in Mansoon period which is perhaps the highest rain fall next to Chirapunji. However, most of the water runs into Arabian Sea, since the land mass in the Port is significantly less and hilly terrain with laterite soil. Despite these adverse conditions, New Mangalore Port has envisaged **comprehensive plan** to harvest the rain water. In this direction, 3 large **Rainwater Harvesting Ponds and Ground water Recharge ponds** have been created inside the Port area, in the catchment areas covering 64,217 Sq.Mtrs. with a capacity of 1,10,340 CUM of water. This water is constantly used for **“development of green belt”**, sprinkling to control dust emission and also drinking source for the animals, flora and fauna. Due to this rain water harvesting ponds, the water levels in the nearby village wells has constantly recharging. Port is not depend on MCC for water supply since Port is self sustain with its own Raintwater harvested ponds for water consumption.



Rain Water Harvesting Near Thimppaiah Well

Mechanized Sprinkling System: Sprinkling system inside the Port was the brain child of **Inhouse Engineers**. All most all the concrete roads inside the Port have been installed with mechanised sprinklers on either side of the road. It operates every 30 minutes. This system ensures **minimizing dust pollution** in cargo operational areas. The water used for this system is partly out of treated sewage water and partly from rain harvesting. This system is Complementary to the "Tank sprinkling" system. The sprinkling system is also provided in Railway Marshalling Yard to prevent / arrest the dust suppressed during the loading and unloading time.

Sprinkling system



Yard Sprinkler System:-Sprinklers are installed in the coal yards which can rotate 180 degrees and cover the entire coal stacks. This completely settles the dust generated from the coal stacks during operations. The automation mechanism gives aid to effective usage of water. The Sprinklers will Switch Off and Switch On for the predetermined time cycle automatically throughout the process thus minimizing water usage. The water will be recycled & reused for the same purpose after sediment separation.

Solar Energy: NMPA has installed Solar power plant at an expenditure of 33.75 Crores during the year 2016-17. NMPA is generating 5.2 MW with its own ground mounted & roof top solar grid contributing towards Carbon reduction. NMPA has become 100% solar powered Port. Using Solar power, NMPA has reduced the carbon foot print reduction of about 30,437 Tonnes every year.



Solar Power Plant at NMPA

Annexure -IV

Environmental Monitoring System: There is a scientific monitoring system in place in the Port. The monitoring process is carried out through NABL accredited established laboratories having resources and spare capacity. NMPA monitors air and water qualities through third party authorised from KSPCB, MOEF&CC, regularly and taken both preventive and corrective actions. This Environmental Management System improves the environmental conditions in general and public health of its employees in particular. The treated water out of Sewage Treatment Plant is used for the green belts created inside the Port in order to reduce the burden on water resources. Besides, it is also used for sprinkling inside the wharf to suppress the dust emanating out of cargo handling. The Port is an ISO 14001:2015 certified since 2011 and it demands various Compliances to protect the Environment. The Port has successfully complied the standards

CONTINUOUS AMBIENT AIR QUALITY MONITORING SYSTEM

- a. New Mangalore Port Authority Shortly Installing the CAAQMS.
- b. The Karnataka State Pollution Control Board team visited to Port verified the tender and location for the installation
- c. As per the Wind Rose diagram of year 2021 , Location was identified by the pollution control board team
- d. As per the suggestions obtained by the KSPCB team, Old tender was discharged and again new estimation prepared for tender is under process.
- e. All tender documents are shared to Regional Pollution Control Board for information.