



VISAKHAPATNAM PORT AUTHORITY
CIVIL ENGINEERING DEPARTMENT

ISO 9001:2020
ISO 14001:2020
OHSAS 45001:2020

No. IENG/EE (EC)/Form-VAPPCB /11E/Pt.I
Date: 30.09.2022

To
The Environmental Engineer,
Regional Office,
A.P. Pollution Control Board,
Besides RTA office,
Madhavadhara VUDA layout,
VISAKHAPATNAM - 530 018

Sir,

Sub: Submission of Environmental Statement in FORM-V-Reg

The Environmental statement in FORM -V for the financial year ending 31.03.2022 as per Rule No.14 of E (P) Act, 1986 is herewith enclosed please.

Encl: As above

Yours faithfully,

For 
CHIEF ENGINEER
मुख्य अभियंता
CHIEF ENGINEER
विशाखपट्टणम पोर्ट ट्रस्ट
Visakhapatnam Port Trust

FORM V
(See Rule 14)

ENVIRONMENTAL STATEMENT FOR THE FINANCIAL YEAR ENDING THE
31st MARCH 2022

PART – A

- (i) Name and address of the owner : Sri K. Rama Mohan Rao , IAS
Chairman
Occupier of the industry : Visakhapatnam Port Authority
Operation or process. : Visakhapatnam – 530 035.
- (ii) Industry category : Service sector
Primary: - (STC Code)
Secondary: - (SIC Code)
- (iii) Production capacity : Cargo Handled 2021-2022)
69.03 Million Metric Tonnes
- (iv) Year of establishment : 1933
- (v) Date of the last environmental
Statement submitted : 30-09-2021

PART – B

WATER AND RAW MATERIAL CONSUMPTION

- (i) Water consumption m³/d
Process : *Not Applicable*
Cooling : *Not Applicable*
Domestic : **3160.99 m³/Annum**

Name of the products	Process water consumption per Unit of product output	
	During the previous financial year	During the current financial year
	(1)	(2)
(1)		
(2)	<i>Not applicable</i>	<i>Not applicable</i>
(3)		

(ii) Raw Material Consumption: - **Not Applicable**

* Name of raw Material	Name of Products	Consumption of raw material per unit of output	
		During the previous financial year	During the current financial year
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➤ Industry may use codes if disclosing details of raw material would violate contractual obligations, otherwise all industries have to name the raw materials used

PART – C

<u>POLLUTION DISCHARGED TO ENVIRONMENT / UNIT OF OUT PUT</u> (Parameter as specified in the consent issued) Pollutants	Quantity of pollutants discharged (Mass/day)	Concentrations of pollutants in discharges (Mass/volume)	Percentage of variation from prescribed standards with reasons
(a) Water	}	}	<i>Not Applicable</i>
1) pH			
2) Total suspended solids (TSS at 103-105°C)			
3) Oil and Grease			
4) Chemical oxygen demand (COD)			
5) Biochemical oxygen demand (BOD)	}	}	
(b) Air	}	}	<i>Details furnished at Annexure - I</i>
1) SPM			
2) RSPM			
3) SO ₂			
4) NO _x	}	}	

PART – D

Hazardous Wastes

(As specified under Hazardous wastes / Management and Handling Rules, 1989)

Hazardous Wastes	Total Quantity (Kg.)	
	During the previous financial year	During the current financial year
(a) From process	<i>Does not apply since VPA is not having any processing activities</i>	
(b) From pollution control facilities		

PART – E

Solid Wastes

		Total Quantity (Tonnes.)	
		During the previous financial year	During the current financial year
(a)	From process	<i>Nil</i>	<i>Nil</i>
(b)	From pollution control facility	<i>Nil</i>	<i>Nil</i>
(c)	1. Quantity recycled or re-utilized within the unit	<i>Nil</i>	<i>Nil</i>
	2. Solid	<i>1850</i>	<i>1940</i>
	3. Disposed	<i>1850</i>	<i>1940</i>

Biomedical Wastes	Total Quantity (Kg.)per Annum
	During the current financial year
(a) From process	<i>Does not apply since VPA is not having any processing activities</i>
(b) From Golden Jubilee Hospital	<i>252.00 Kg/Annum</i>

PART – F

Please specify the characterizations (in terms of composition and quantum) of hazardous as well as solid wastes and indicate disposal practice adopted for both these categories of wastes

- *Details on Disposal of Hazardous wastes & Hazardous chemicals are shown in Annexure – II, and Solid wastes are shown in Annexure - III*

PART – G

Impact of the pollution abatement measures taken on conservation of natural resources and on the cost of productions.

- VPA is not having any processing activities hence it is not applicable. However, VPA has developed Rain Harvesting Pits, Contour Trenches etc. at different areas like S.G.Puram Housing Colony, CISF Complex, Sports Complex, Harbour Park and Maharani peta,
- VPA is conserving natural resources i.e. using the treated water from STP for dust suppression purpose in place of fresh water. The details of the treated water quality enclosed as **Annexure- IV**

PART – H

Additional measures / investment proposal for environmental protection including abatement of pollution, prevention of pollution.

- *Details furnished at **Annexure – V***

PART – I

Any other particulars for improving the quality of the environment

- *Details furnished at **Annexure – VI***

**VISAKHAPATNAM PORT AUTHORITY
CIVIL ENGINEERING DEPARTMENT**

**CONTINUOUS AMBIENT AIR QUALITY MONITORING STATIONS
MONTHLY AVERAGE VALUES FROM APRIL-2021 – MARCH-2022**

Month	R&D Yard				GVMC Stadium				GCB			
	PM 10	PM 2.5	SO2	NOX	PM 10	PM 2.5	SO2	NOX	PM 10	PM 2.5	SO2	NOX
APRIL(2021)	79.38	34.98	7.77	9.19	76.14	33.14	5.33	9.82	79.38	34.98	7.77	9.19
MAY(2021)	80.06	35.36	7.83	7.85	70.64	28.68	5.38	8.55	80.06	35.36	7.83	7.85
JUNE(2021)	70.59	32.48	7.91	9.06	66.11	29.05	5.65	8.05	70.59	32.48	7.91	9.06
JULY(2021)	59.48	22.85	7.73	7.97	51.06	20.64	5.99	5.25	59.48	22.85	7.73	7.97
AUG(2021)	62.13	26.66	7.05	7.98	62.70	23.82	4.34	11.14	62.13	26.66	7.05	7.98
SEPT(2021)	49.32	21.50	7.40	8.72	57.69	21.73	5.45	9.40	49.32	21.50	7.40	8.72
OCT(2021)	67.95	31.20	6.62	9.17	57.71	24.69	5.70	9.30	67.95	31.20	6.62	9.17
NOV(2021)	54.74	21.57	8.76	12.12	53.46	22.77	6.40	10.38	54.74	21.57	8.76	12.12
DEC(2021)	55.22	21.73	7.04	9.69	54.10	24.95	5.64	13.01	55.22	21.73	7.04	9.69
JAN(2022)	58.06	27.17	4.80	8.68	69.77	28.79	5.34	8.51	62.99	30.45	6.92	9.11
FEB(2022)	59.58	27.29	5.51	7.44	51.87	23.97	5.66	9.73	58.22	25.57	6.72	9.41
MAR(2022)	62.22	26.88	4.67	8.47	56.89	24.06	5.30	10.41	56.48	24.51	5.89	9.01

NOTE: CAAQM Stations were installed at VPA in the month of November 2016 and are under operation

As per the norms the Maximum limit of PM2.5 and PM10 are as follows:

24 Hrs Average STANDARDS	PM 2.5	PM 10
	60 ug/m³	100 ug/m³

Water consumption details for the year 20219-2022		
Year	Domestic Water consumption (Lakh gallons)	
	GVMC	VPA (infiltration galleries and open wells)
2019-20	1198.64	1707.78
2020-21	1342.30	1931.61
2021-22	1296.00	1864.99
Total Consumption	3836.94	5504.38
Say:	3837.00	5504.40

GVMC

Total Annual consumption for 3 years = 3837.00 LG

Average consumption per annum = 1279.00LG

Average water consumption per day = 3.50 **LG/day**

VPA

Total Annual consumption for 3 years = 5504.00 LG

Average consumption per annum =1834.66 LG

Average water consumption per day = **5.02 LG**

Total domestic water consumption GVMC and VPA (i.e. 3.50(+) 5.02) = 8.52 LG/Day or say **8.50 LG/Day**

Remarks: The source of water consumption at GVMC is gradually reduced from 2019 to 2022 due to increase in the VPA own sources.

The standard norm for domestic water usage in India is **135 litres per capita per day** (LPCD), prescribed by the Central Public Health and Environmental Engineering Organisation.

Total domestic effluents accounts for 85 % of total (8.50 LG) Water consumption=7.22 LG/day=3277.88 KL/day as per Central Public Health and Environmental Engineering Organisation.

VISAKHAPATNAM PORT AUTHORITY
MATERIALS MANAGEMENT DEPARTMENT

DETAILS OF HAZARDOUS WASTES AND HAZARDOUS CHEMICALS DURING THE
PERIOD OF ONE YEAR i.e. 01-04-2021 TO 31-03-2022

HAZARDOUS WASTES:

S.No	Description of the Hazard Waste	Approx. Qty
a)	Drained/Waste Oil	28.5 KL
b)	Scrapped /Used lead acid batteries	82 Nos
c)	Empty oil barrels	138 Nos

Method of Disposal:

1. Drained/Waste Oil barrels are stacked on the concrete platform.
2. Scrapped/ Used lead acid batteries (duly removing the acid) are stacked on the wooden pallets inside the godown.
3. Empty Oil Barrels are stacked horizontally in the open stock yard.
4. The above are being disposed to the parties who are possessing authorisation /consent from MOEF/related State Pollution Control Board through E-Auction by MSTC.

**VISAKHAPATNAM PORT AUTHORITY
MEDICAL DEPARTMENT**

DETAILS OF SOLID WASTE DISPOSAL

A) Garbage Collection from Various Residential Colonies

Following are the Residential Colonies

1. Salagramapuram Housing Colony
2. Maharanipeta Officers Housing Colony
3. Harbour Park Officer Housing Colony

Garbage from the roads, footpaths and the drains is collected and put into various dust bins located at various places in the residential colonies by sanitary staff and disposed through contract vehicles from the areas as follows:

- | | |
|---|--------------|
| a) Salagramapuram Housing Colony | Daily |
| b) Maharanipeta Officers Housing Colony | Twice a week |
| c) Harbour Park Officers Housing Colony | Twice a week |

This garbage is taken and dumped at Kapuluppada dumping yard, which is earmarked for dumping by the Municipal Corporation.

B) Garbage Collection from various worksite areas and frequency of collection is as follows:

	AREA	FREQUENCY
i.	Dock Area	Twice a week
ii.	OHC	Once in a week
iii.	MC Complex	Once in a week
iv.	Dry Dock	Once in a week
v.	ORS	Once in a week
vi.	North Cabin	Once in a week
vii.	R&D Yard	Once in a week

One Port vehicle is earmarked for this purpose.

VISAKHAPATNAM PORT AUTHORITY
CIVIL ENGINEERING DEPARTMENT

**ANALYSIS REPORT OF SEWAGE TREATMENT PLANT SAMPLES FROM April 2021 –
March 2022**

S.No	STANDARD	PH	Total suspended solids (TSS)	Chemical Oxygen Demand (COD)	Biological Oxygen Demand (BOD)	Oil & Grease
		5.5-9.0	200	250	100	10
	April 2021– March 2022 (Average value)	6.6	125	80	25	<1.0

NOTE: All values are expressed in ppm except pH.

VISAKHAPATNAM PORT AUTHORITY
CIVIL ENGINEERING DEPARTMENT

List of ENVIRONMENT WORKS TAKEN UP FOR THE LAST 5 YEARS UP TO MARCH-2022

Investment proposal for environmental protection including abatement of pollution, prevention of pollution.		
S.No	Name of the scheme	SANCTIONED COST (Rs. in Lakhs)
1	a) Providing dust barrier system from existing high rise wall at AKP level crossing to OHC compound wall under NHAI bridge	30.00
2	b) Providing Dust barrier along the existing compound wall from North west (NW Gate) gate to Coastal cargo berth(Green Channel berth) in WOB.	50.00
3	c) Providing Dust Barrier cum view cutter from GCB RFID gate towards GCB Pump house	20.00
4	d) Ground preparation with lova garden rock and usage of NTPC pond ash for filling at VPT low lying area of 12acrs. on West of Mindi siding near toll gate in western sector area	639.00
5	e) Ground preparation with lova garden rock and usage of NTPC pond ash for filling at VPT low lying area of Ac 20 cts on North of CFL near PCR junction in western sector area	947.00
6	f) Providing drainage facilities to the road on west of ESSAR road	55.00
7	g) Formation of two lane road including construction of drain and compound wall from CWC-1 junction to DRDO approaches at northern boundary of VPT areas, NH yard, west of OHC along coast Guard road and NMDC area, North of Tina godown area and North west corner of west ore berth in VPT	166.00
8	Improvement to Water supply system, drains and culverts	142.00
9	Construction of surface drain from 'Y' junction to 11vents culverts along road kerb on west side of petrol bunk and truck parking area	2.00
10	Construction of Pump house for 90 H.P in SS nagar	35.00
11	Face lift works and beautification works for Pump houses at operational areas	20.00
12	Providing RCC drain along Railway tracks form old Ambedkar statue junction to Gangula gedda near AKP level crossing via in motion weighbridge and Box culvert at old Ambedkar statue junction in port area"	32.00
13	Providing 200mm dia DI water supply pipeline from OH tank of Lova garden pump house to join at existing pipeline at oil wharf jn	100.00
14	Installation of 10 MW Solar Energy Project in VPT	206.00
15	Providing LED street lighting at SG puram Housing colonies including segregation of street lighting and power supply etc.,	75.00
16	Providing of shore power supply to vessels at East Quay Berth	151.00
17	EMS (Energy Management System)	51.00
18	Providing CC block pavement on the dismantled corridor of Del-4 line at East of the existing road from north east of OHC gate to WQ-5 junction in port area.	277.68

19	Providing 200 mm dia DI water supply pipe line from OH tank of Lovagarden pump house to join at existing pipe line at oil wharf junction (2 nd call)	176.56
20	Installation of Mechanical Dust Suppression system (MDSS) at dusty cargo area viz.,R-2 to R-5 areas, NH yard, west of OHC along coast Guard road and NMDC area, North of Tina Godown area North west corner of west ore berth in Visakhapatnam port.	951.48
21	Re-grading of existing BT surface with cc blocks paving from KR & sons west junction to dumper cabin	149.10
22	Widening of Road from NW gate to road turning point near AVR tanks in WOB area.	44.94
23	Construction of RCC drain from L-15 junction to connecting existing culvert at chakaligedda duly providing precast units under railway track at dumper cabin.	292.83
24	Providing CC block pavement road from newly developed KRMR siding to NMDC drive house junction in port area.	190.92
25	Providing approach road from sravan CFS junction to Alufluoride company in western sector.	39.64
26	Providing drainage facilities to the road on west of ESSAR Road.	45.02
27	Providing road connection from the end of Fly over Level grade separator approach at gangula gedda to H- junction near watch tower with cc block pavement in port area.	241.26
28	Regrading of existing BT surface with CC blocks paving from KR & Sons west junction to dumper cabin	149.10
29	Providing 200 mm dia DI water supply pipe line from OH tank of Lovagarden pump house to join at existing pipe line at oil wharf junction (2 nd call)	176.56
	Total cost	5456.09

S.No	Current Environmental pollution mitigation measures	Amount in lakhs/Annum
1	Continuous Ambient Air quality Monitoring by Environnement S.A. India Pvt .Ltd	17.8
2	Monitoring of harbour water quality by AUDC	4.00
	Sampling and analysis of Marine Sediments at Visakhapatnam Port	0.46
3	Operation and Maintenance of MDSS at cargo stacking areas	36.00
4	Operation and maintenance of 10 MLD S.T.P	79.00
	Sampling ,Analysis & testing of raw sewage treated water of 10 MLD STP of VPT	3.12
5	Operation and Maintenance of 25 KLD at Golden Jubilee Hospital, Vishakhapatnam Port Trust	3.38
6	Green belt development in the identified areas of VPT	21.25
7	Manual Roads sweeping in identified VPT areas.	66.00
8	Sprinkling of water on roads	605.00
9	Beach Nourishment	600.00
10	Maintenance if other works being developed through 51% taxes to be paid to GVMC	600.00
	Total	2036.01

**VISAKHAPATNAM PORT AUTHORITY
CIVIL ENGINEERING DEPARTMENT**

Environment Initiatives and Best Practices adopted to protect environment

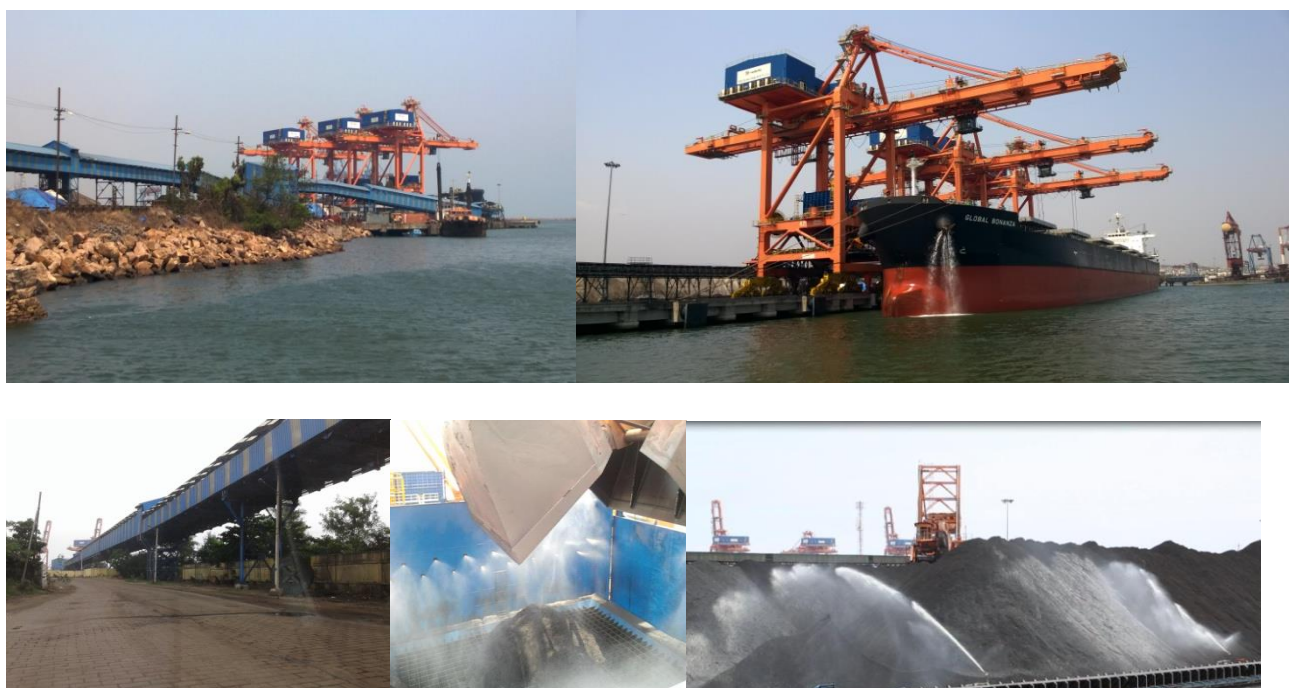
1) MECHANIZATION OF BULK CARGO HANDLING AT VISAKHAPATNAM PORT

As observed so far when bulk cargo handling Ports Like Visakhapatnam Port are considered, dust generation is mainly due to multiple handling when done manually such as unloading the coal from ship using grabs and placed on the berth, from berth loading in to dumpers, dumpers transport the coal to stackyards, stacking of coal at stack yards, from stack yard loading in to railway wagons etc.

Therefore, Visakhapatnam port under continual improvement had taken up the mechanization of cargo handling as the major solution, where in bulk cargo / coal unloaded from ship falls in a hopper, from hopper passed on to closed conveyor, conveyor to stack yard, from stack yard to silo with bucket wheel reclaimer / conveyor arrangement, loading in to railway wagons from silo etc. and transportation to the destination. In the said process, transport to stack yards through dumpers by road is avoided and in addition other environmental measures viz. sprinkling and dry fogging at unloading points, transfer houses in conveyor system are also in place and there by dust generation is minimized to the considerable extent. .

Thus in order to address the dust generation problem, VPA has initiated mechanization of coal handling through BOT/PPP operators. Under this, port is having mechanized coal-handling systems at three terminals operated by M/s Vizag seaports Ltd., M/s Vedanta and M/s Adani at an investment of about Rs. 205 Crores, Rs. 650 crores and Rs. 330 crores respectively. During 2018-19 about 16.6 Million Tonnes (MT) of coal was handled at port and out of that 11.5 MT was handled at above three terminals through mechanized handling.

Visakhapatnam port has so far has invested about Rs. 2000 crores towards mechanization of cargo handling through PPP.





Status of Modernization of facilities for handling dusty / dry cargo

Sl. No.	Project Name	Cost in Crores	Completion Date	Present status
1	Mechanization of coal handling facilities at general cargo berth (GCB) in outer harbour on PPP basis. M/s VGCBPL.	650.00	Commissioned on 08.04.2013	Under operation
2	Development of EQ1 berth for handling Steam coal with fully mechanized means in the inner harbour on PPP mode. M/s Adani.	323.18	Commissioned since September 2014	Termination notice issued to M/s SEW. The project has been taken up by VPT.
3	Development of EQ1A berth for handling Steam coal and Thermal coal with fully mechanized means in the inner harbour on PPP mode. M/s SEW	313.39		Termination notice issued to M/s SEW. The project has been taken up by VPT.
4	Mechanisation of iron ore handling facilities in the Inner Harbour and up-gradation of iron ore handling facilities at OHC . M/s ESSAR	845.41	October 2017	Phase –I is completed.
5	Development of WQ-6 Berth in Inner Harbour for handling dry bulk cargo on DBFOT basis	114.50	Commissioned since April 2015	The project is taken up by VPT.

2) Existing Environment Management System at VPA

- AAQ is being monitored continuously at three locations by Environment SA, India Pvt Ltd.
- Separate Environmental Cell headed by Superintending Engineer with dedicated staff and one Environment Monitoring Officer.
- VPT has constituted internal Env .task force team headed by Environment Monitoring Officer to monitor the implementation of EMS at VPA & PPP terminals.
- Environment Monitoring Committee (APPCB, Senior Citizens, Air Quality Experts, NGOs, Port users, Officials of GVMC, Representatives of Navy, SAIL and schools) meets once in 2 months.
- Consent of APPCB obtained under Air and Water Acts.
- Annual auditing by external agencies (IRQS) for ISO14001 is a continuous process.

MONITORING OF AMBIENT AIR QUALITY AND WATER QUALITY

S.No	Name of Work	Description of work/sampling areas	Monitoring method/Parameters
1	Continuous online Ambient Air quality monitoring (CAAQM)	Monitoring of ambient air quality in Residential and Port operational areas as mentioned below is being carried out by M/s Environnement SA, India Pvt Ltd 1. GCB 2. R& D Yard 3. GVMC Indira Piry darshini stadium	Reference method Parameters: PM2.5, PM10, SO2 &NOx
2	Monitoring of Harbour water quality	Harbour water samples collected during low tide and high tide for assessing the Harbour water quality by AUDC/AU on quarterly basis at 9 locations in inner & outer harbour.	Parameters: PH, Color, Odor, TSS, DO, BOD, Oil& Grease, Sulphide, Ammonical Nitrogen, Free Ammonical Nitrogen, Total Kjeldahl Nitrogen, Cyanide, Fluoride, heavy metals and faecal Coliform
3	Monitoring of STP water samples	Collection and Analysis of STP water samples by M/s SV ENVIRO Labs & Consultants	pH, TSS,COD,BOD, Nitrate nitrogen, Nitrite Nitrogen, Total Phosphate,Ammonical Nitrogen,Sulphide,Fluoride,Oil&grease,Residual Chlorine
4	Sampling and analysis of Marine Sediments at Visakhapatnam Port	Bed samples and water samples are being collected and analysed by M/s SV ENVIRO Labs & Consultants for parameters concerned i.e physico-chemical parameters Sampling points: Northern Arm Western arm Outer harbour	DO, Turbidity, Phosphate, Sulphate, Ammonia and heavy metals.

3) THE POLLUTION MITIGATION MEASURES IN PLACE:

- A. The very first step in controlling and managing the dust generated by Coal handling is the **Mechanical Dust Suppression System (MDSS)**, which was commissioned in 2002 with capital cost of **Rs.7.89 Crores**. This system sprinkles water over the Coal stacks at the stack yards so that the Coal stacks are wet and the dust does not rise into the air.
- B. To reduce the spread of dust on to areas beyond the Port, a **dust barrier** was constructed **at the R11 area** in the North at a height of 7.5 meters for a length of 500m. at a cost of **Rs.1.50 Crores**. Another dust barrier of height **11.5 metres for a length of 1000m** was constructed on the Eastern and Northern side of the **East Yard** at a cost of **Rs.2.50 Crores**.
- C. 90% of the coal is being evacuated by rail avoiding road movement and thereby to minimize dust emissions. However, **the roads in the Visakhapatnam Port are being wetted by water tankers round the clock** to prevent emission of dust during movement of vehicles. A total of average 275 trips i.e. about 4.0 MLD of treated water is sprinkled per day through tankers and about 3.0 MLD is sprinkled through MDSS.
- D. Covering of trucks, railway wagons and stacks **with tarpaulins**.
- E. The **reorganization of the stack yards** so that the dust generating stacks such as Coal is being shifted to the inner side of the Harbour and non-dusty cargos at the periphery.

4) THE MEASURES TAKEN BY THE PORT TO MONITOR AND IMPROVE ENVIRONMENTAL MANAGEMENT SYSTEMS:

- (a) As a proactive measure and to achieve continual improvement, Visakhapatnam Port has engaged the services of the Administrative Staff College of India, Hyderabad for the preparation of "**Environmental Management and Monitoring Plan**" (EMMP). The said report was submitted in January 2015 and the Port is implementing the same.
- (b) Port has engaged the services of Administrative Staff College of India, Hyderabad for "Advisory support in the Environmental area of VPT" .
- (c) The Port has engaged the services of the Jawaharlal Technological University, Kakinada to come up with an "**Assessment of Effectiveness of existing air pollution management plan of Public Private Partnership partners** and other areas of Visakhapatnam Port" and they have submitted the report during December 2018.
- (d) The Visakhapatnam Port has engaged the services of the National Environment Engineering Research Institute (hereinafter referred to as NEERI) for the preparation of "**Disaster Management Plan**". The said plan was submitted in July 2014 and the same in force for implementation.

GREEN INITIATIVES IN PLACE AT VISAKHAPATNAM PORT

A) GREEN BELT DEVELOPMENT TO MANAGE AIR QUALITY:

- Most of the Greenery was damaged due to Hudhud cyclone on 12.10.2014. To compensate the lost greenery, about 50,000 plants were planted in port areas during
- 2014-15 and 2015-16. 50,000 Nos (30,000 by VPA and 20,000 by HPCL) of plantation in port areas during 2016-17 was completed.
- For the year 2017-18 plantation about 20,000 Nos. around stack yards was also completed. During 2018-19 and 2019-20, 2 lakh Shelter Belt plantation was completed through AP Forest department at a cost of Rs.2.30 crores
- 70,000 nos. out of 1.02 lakh plantation is completed during year 2020-21 at an estimated cost of 3 .87 Crores.
- 25,000 nos of Avenue plantation completed up to September 2022 balance 5,000 nos of plantation will be completed by March 2023.



B) SOLAR POWER:

Visakhapatnam port is the pioneer in implementing Solar power under Green initiatives and initiated 10MW solar power plants at a cost of about Rs.60 crores .Already 100 Kw roof top solar power is being used for hospital purposes. In addition 770 KW roof top solar power is being generated.



CSR ACTIVITIES TO IMPROVE QUALITY OF LIFE OF CITIZEN'S AROUND THE VISAKHAPATNAM PORT:

Under CSR activities port is running a general health check-up clinic in association with Red Cross Society of India where in about 300 out patients are being treated on daily basis. As per the reports, it is noticed that there are no abnormal respiratory issues with the residents / patients residing in the vicinity of port.

Sl. No.	Activity	Amount (In Rs. Lakhs)
1	Medical equipment for Govt. Hospital (KGH)	76.00
2	Digital education system for Bharatheeya Vidya Bhavan	14.00
3	Medical equipment for Indian Red Cross Society	50.00
4	Material for BC Welfare students hostel	20.00
5	Equipment for AU Engg. College for Women	17.00
6	Medical Camps	76.00
7	Adoption of Queen Mary School for Medical camps	14.00
8	Bio toilets in Schools (for girls students)	80.00
9	Skill development for I Town unemployed Youth	50.00
10	For development of AVN College	20.60
11	Solar system for old age orphanage	5.00
12	Green Vision	10.00

13	Medical equipment of Mohsin Eye bank	10.00
14	Park in Central Revenue quarters	15.00
15	For development of Port Schools	6.00
16	The Port has contributed lacs for providing of food distribution vehicle at King George Hospital VSP	10.28
	Total	473.88