



पञ्चाङ्ग - १८८८

भारत सरकार  
GOVERNMENT OF INDIA

पर्यावरण, वन एवं जलवायु परिवर्तन मंत्रालय  
MINISTRY OF ENVIRONMENT, FORESTS & CLIMATE CHANGE  
Regional Office (South Eastern Zone),

1<sup>st</sup> & 2<sup>nd</sup> floor, HEPC Building, No.34, Cathedral Garden Road, Nungambakkam,  
Chennai - 600034



Dated: 24-03-2016

To,  
The Chief Engineer  
Visakhapatnam Port Trust  
Visakhapatnam  
Andhra Pradesh

**Subject:** Certified copy of the Compliance Report for Port Projects

**Reference:** J-16011/1191-IA, III Dated 09.10.1991

Sir,

Please find enclosed herewith a certified copy of the compliance report for your further necessary action.

Yours faithfully,

(Dr. C. Kaliyaperumal)  
Director (S)

Encl: as above

## **Visakhapatnam Port Trust (VPT)**

### **Subject:**

1. Construction of Existing old Jetty WJ-2 & WJ-3 at the inner harbor in to a regular berth of VPT
2. Construction of Multipurpose berth in the inner harbor at Visakhapatnam port
3. Construction of LPG Handling Jetty in the outer harbour by Visakhapatnam Port Trust Construction of Multipurpose berth in the outer harbour at Visakhapatnam port
4. EC for construction of 4 multipurpose berths in the extended arm of internal harbour at VPT.
5. EC for up gradation of Iron Ore handling facilities at outer harbour of Visakhapatnam Port by Visakhapatnam Port Trust
6. Environmental and CRZ clearance for construction of 3 berths WQ-6, WQ-8 and EQ-10 in the Northern Arm of Inner harbour of Visakhapatnam Port Trust, Andhra Pradesh by M/s. Visakhapatnam port Trust-Reg
7. Environmental and CRZ clearance for construction of 3 berths WQ-6, WQ-8 and EQ-10 in the Northern Arm of inner harbour of Visakhapatnam Port Trust, Andhra Pradesh by M/s. Visakhapatnam port Trust-Reg.
8. Environmental and CRZ clearance for the Project
  - (I) Development of East quay-1A (EQ-1A) berth on south side of EQ-1
  - (II) Development of East quay -1 (EQ-1) by replacing existing EQ-1 berth and part of EQ-2 berth at Visakhapatnam Port. by M/s Visakhapatnam Port Trust-Reg.

### **Ref:**

1. J-16011/1/488 IA-II dated 12th July 1988
2. F.No. J-16011/11/91-IA III MoEF & CC (I .A. Division) dated 9th September, 1991
3. F.No. J-16011/15, 16/92-IA III MoEF & CC (I .A. Division) dated 2nd February, 1993.
4. NO.PD/26017/1/96/CRZ-VPT DATED 19TH May, 1998

5. No.10-11/2006-IA-III dated 29th November, 2006
6. No.11-7/2009-IA-III dated 31st August 2009.
7. No.10-9/2009-IA.III dated 1st September 2009.
8. No.11-33/2010-IA-III dated 6th June 2011

M/s.Visakhapatnam Port Trust (VPT) authorities have obtained the above mentioned environmental clearances (as per records) from the MoEF. Out of this most of the projects were allotted to various private agencies to execute and operate the projects and compliance of the EC conditions are also implemented by the private operators for their operation which are allotted to them.

- Now they are planning for expansion of existing container terminal in the outer harbour (633 crores)
- Planning to upgrade and create new facility for handling iron ore on DBFOT basis (OHC and WQ-1), (845 crores)
- Development of West Quay North (WQ-7 and WQ-8) berth with mechanized handling facilities for handling bulk cargoes on DBFOT basis (400 crores).

VPT have obtained EC for container terminal in 1993 and for this EC, the compliance report is enclosed (Annexure-1).

For the ore handling complex EC was issued in 2006 and so far the project has not been taken up and EC also got expired.

WQ-7 Construction work was started in the year 2003 and during construction the structures got collapsed in 2004 and because of this the construction work was not continued. WQ-8 work has not been commenced yet. For their expansion activities they have requested a certified copy of the compliance report and for that the undersigned visited the port projects on 15-17<sup>th</sup> March, 2016 along with the project authorities and also had discussion with APPCB official as well as the Chairman of the port trust.

Since the project authority is planning to go for an expansion in three terminals and requested certified copy of the compliance report, only for those three ECs compliance report are made and appended herewith (Annexure-1).

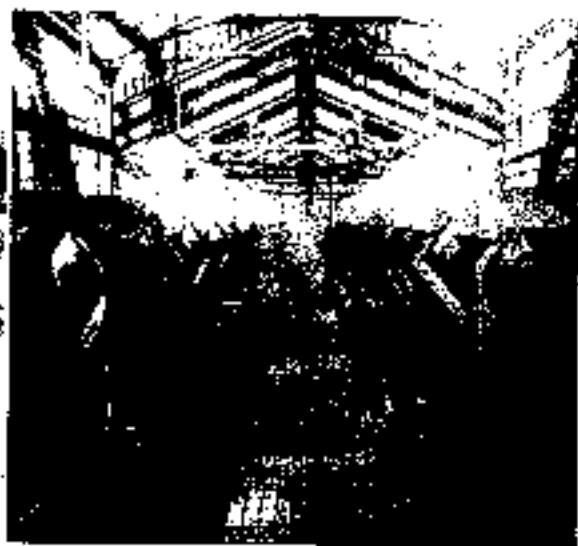
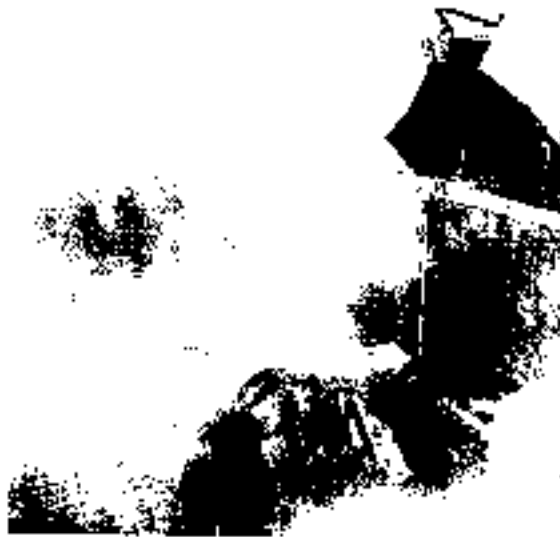
The main source of pollution in and around port area is due to unloading coal from ship to berth and from berth to dumpers and also from dumpers to coal stockyard and then from coal stockyard to railway wagon in a conventional way. Similarly, handling bulk cargo of iron ore and gypsum also creates fugitive dusts.

In general coal handling as well as iron ore handling activities creates lot of atmospheric pollution. There were complaints against this fugitive dust pollution problem due to mainly coal handling and for this, the APPCB had issued direction to VPT and for that the VPT authorities have prepared an immediate measures, short term measures and medium term measures to control the dust pollution.

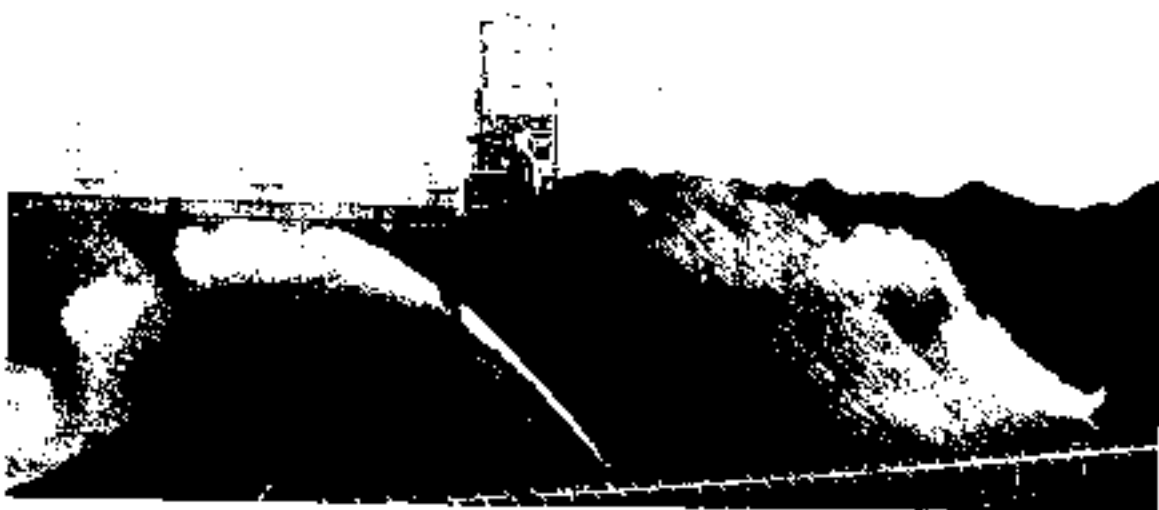
The VPT authorities have as well as private operators have mainly concentrated on fugitive dust control activities and also they have implemented the below mentioned dust pollution control measures mainly due to coal handling in port areas

- To control the dust, bulk cargos, coal are unloaded from ships to hopper, and from hopper the material is carried away through closed conveyer and then to stack yard. From here to silo through bucket conveyer/reclaimer and then to railway wagon.





- They are by carrying out water spraying on and around coal stackyards, and also most of the coal stacks are covered by tarpaulin.





- About 90% of the coal is transported by rail to reduce the dust and covered with tarpaulin
- M/s Vedanta have constructed tall compound wall having 7.5 m height and over above this 4 m height net to a length of 1.2 Km around the eastern side of the port area (around coal yard). They have taken up green belt development also. Similarly on the northern side of the port also they have constructed tall compound wall having 7.5 m height to a length of 1.2 Km



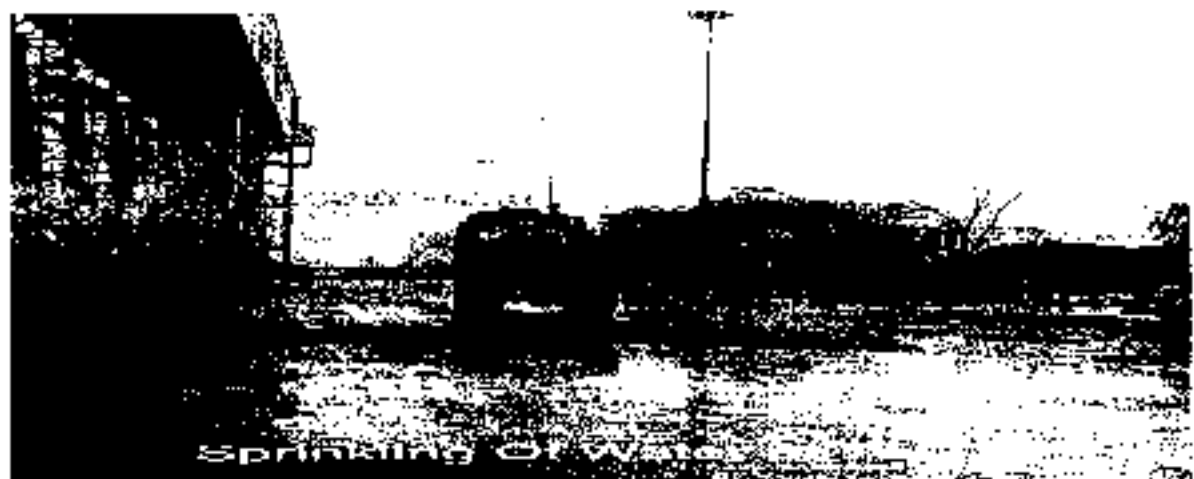
- The other private operators also have constructed 7.5 m height compound wall having length of 1 Km and on top of this 4 m netting has been constructed/made. They have also developed 10 m width green belt in between the compound wall and the coal stack yard in addition to the

continuous water sprinkling and tarpaulin coverage to control the fugitive dust.

- They have purchased two numbers of truck mounted fog canons to control/suppress the dust while loading and unloading



- The port area as well as the internal roads and other roads are regularly wetted by using water tankers round the clock to control the dust.



- The dusts on roads are regularly cleaned manually and also desilting is carried out.



- The lire washing/cleaning ramp is under construction and this work would be completed by this month end as informed
- They are planning to reorganize the dust generating stacks mainly coal stacks to the inner harbor to avoid the dust.
- They have developed green belt in an area of 650 acers. During last year they have planted about 46000 plants and about 90% of the plants are surviving. Three years contract has been given to the contractor who has done the green belt development works.
- The sewage is treated and for this they have constructed 10 MLD of sewage treatment plant and the treated sewage is used for dust separation
- Ambient air qualities (AAQ) at 3 locations are being monitored by Andhra University, Visakhapatnam and at another 3 locations are monitored by APPCB regularly as per CPCB norms. PM 2.5 is monitored from 2013 onwards as informed. Now at 3 locations installation of continuous ambient air quality monitoring equipments works are under progress.



- In addition to the dust suppression and AAQ monitoring noise levels are also monitored by them at various places in and around the port area on quarterly basis.

The VPT authorities informed that about 90% of the immediate measures have been implemented. It was observed during the visit that the measures mentioned above are working satisfactorily. In addition to these VPT authorities have prepared the future plan for environmental management activities mainly to control the dust levels in and around the port areas. A copy of the future action plan provided by the port authorities is here with enclosed as annexure II.

This has the approval of Additional PCCF (Central) vide diary No395 dated 24.3.2016



Dr. C. Kalyan Kumar

Director(S)

## Annexure-I

### Certified Copy of Compliance Report

**Sub:** Construction of LPG Handling Jetty in the outer harbour by Visakhapatnam Port Trust Construction of Multipurpose berth in the outer harbour at Visakhapatnam port

**Ref:** F.No. J-16011/15, 16/92-IA III MoEF & CC (I .A. Division) dated 2nd February, 1993.

**Present Status of the Project:** The project work has been completed, commissioned and it is under operation

**Date of Monitoring:** 15-17<sup>th</sup> March 2016.

Sl.no	Conditions	Compliance
2 (i)	Dredging operations should be undertaken in consultation with Expert Institute such as Central Water and Power Research Station (CWPRS), Pune, or any other institute to ensure that dredging operations do not cause any adverse impact on surface and ground water and marine productivity in the vicinity.	Refer below. As gathered that dredging operations were carried out by CWPRS, Pune. The Project Authorities (PA) informed that during dredging the surface water quality studies including marine water quality in the sea water were carried out. Now the water quality in the inner and outer harbor water is monitored at 9 locations regularly by Andhra University. However no reports were produced during the visit.
(ii)	During dredging, construction and maintenance stages, the water quality parameters at the bottom level should be inspected and periodic reports be maintained. Tests should be carried out to measure water quality parameters, viz, turbidity, dissolved oxygen, ammonical nitrogen and other nutrients which must be maintained within the prescribed standards.	Refer below During dredging, construction and maintenance stages, the water quality parameters at the bottom level was monitored and periodic reports was maintained at that time. As stated above tests are carried out to measure water quality parameters, viz, turbidity, dissolved oxygen ammonical nitrogen and other nutrients by external agency and the levels are within the prescribed standards. However no reports were produced during the visit
(iii)	Screening of pollutants in the harbor waters should be taken up by the project authorities and periodical monitoring reports on water quality parameters must be forwarded to this ministry at six monthly intervals.	Refer below. Though the PA informed that screening of pollutants in the harbor waters are monitored no reports were produced during the visit.

(iv)	In addition to the Disaster Management Plan prepared, the project authorities should consider the worst case scenario with respect to specific cases like oil/chemical spills, fire/explosion, terrorist attack, flood, etc, spelling out definite adequate measures to be taken to prevent and contain such disasters. A report on this must be forwarded to this ministry within six months from the date of issue of environmental clearance.	Partly Complied On-site and Off-site Emergency Plans are in place. The PA informed that In addition to the Disaster Management Plan(DMP) prepared, the worst case scenario with respect to specific cases like oil/chemical spills, fire/explosion, terrorist attack, flood, etc spelling out definite adequate measures to be taken to prevent and contain such disasters were also considered. No information was provided about the submission of this report within six months to the Ministry.
(v)	To prevent discharge of sewage, bilge, wastes and other liquid wastes into the marine environment, adequate system for collection, treatment and disposal of liquid wastes including shoreline interceptor for receiving liquid wastes from all shoreline installations and special hose connection for ships to allow for discharge of sewage must be provided.	Partly Complied. To prevent discharge of sewage, bilge, wastes and other liquid wastes into the marine environment, adequate system for collection, treatment and disposal of liquid wastes including shoreline interceptor for receiving liquid wastes from all shoreline installations and special hose connection for ships to allow for discharge of sewage is provided. Ships are provided with in house treatment plants, untreated sewage is not discharged in to the sea without treatment from the ships. The PA has established 10 MLD sewage treatment plant by spending Rs.5 Crore to treat the sewage. The treated un sewage and treated sewage is monitored by Andhra University on quarterly basis used for dust suppression. Frequency of monitoring of sewage is inadequate.
(vi)	Appropriate protection, clothing and necessary equipment should be provided to the personnel engaged handling of phosphoric acid, liquid ammonia and other toxic chemicals.	Refer below. The PA informed that handling of phosphoric acid, liquid ammonia and other toxic chemicals are not done now in these berths and hence it is not applicable now. They assured that as and when these are handled, the required personal protective equipment (PPE) would be provided to the personals working
(vii)	Green Belt Development Programme as proposed must be carried out. In addition	Being Complied. The PA have developed green belt in an area of 650 ac within the port area. Last year they

	<p>suitable species of trees must also be planted alongside the existing roads in the port area, open vacant spaces and along the shoreline.</p>	<p>have planted 46,000 plants. The plantation works and the survival are good.</p>
(viii)	<p>Adequate noise control measures such as providing muffler to muffle the sound from engines, motors, etc. earplugs to workers working in the noisy environment to contain the noise within prescribed standards must be adopted.</p>	<p>Partly Complied. The PA have provided PPE to the workers working in the noisy environment and are using. Noise levels are monitored by them at various locations during day and night time. No reports were made available during the visit.</p>
(ix)	<p>The quality of treated effluents, solid wastes, emissions and noise levels, etc., must conform to the standards laid down by the competent authorities, including Central/State Pollution Control Board and under the Environment (Protection) Act, 1986, whichever is more stringent.</p>	<p>Partly Complied. The untreated and treated sewage are monitored by Andhra University. Solid wastes are collected and disposed to the Municipal solid wastes. There is no process emission. Noise levels are monitored by them at various locations during day and night time. No reports were made available during the visit.</p>
3.	<p>In Visakhapatnam Port Trust, sufficient in-house capability (Environment cell) should be created to monitor and implement the programme related to pollution control and environmental conservation.</p>	<p>Complied The PA have established a Separate Environmental Cell with qualified persons. The environmental parameters monitoring is being carried out through external agency.</p>
4.	<p>Adequate financial provision must be made for implementation of the above stipulations.</p>	<p>Partly Complied. No information was provided about the financial allocation made. However they informed that an amount of Rs 1 Crore is being spent every year for this purpose.</p>
5.	<p>In case of any deviation/alterations in the project, proposal from those submitted to this Ministry for clearance these stipulations may be modified and/or new ones imposed for ensuring environmental protection.</p>	<p>Agreed to Comply</p>
6.	<p>These stipulations will be enforced among others under</p>	<p>Agreed to Comply.</p>

the Water (Prevention & Control of Pollution) Act, 1974. The Air (Prevention & Control of pollution) Act , 1981. and the Environment (Protection) Act, 1986
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This has the approval of Additional PCCF (Central) vide diary No395 dated 24.3.2016

  
Dr.C.Kaliyaperumal  
Director (S)

**FUTURE PLANS FOR THE ENVIRONMENTAL MITIGATIVE MEASURES:**

**A) SHORT TERM PLANS (DURING 2015-17):**

- (a) Under continual improvement program, another **dust barrier of 7.50m height and 1.70KM long i.e. from the Sea Horse Junction to Convent Junction** at the city interface is under construction at a cost of **Rs.9.75 Crores**. Work order was already released and the work is under progress and expected to be completed by **May 2016**
- (b) Sweeping of roads within the Port by **mechanical sweeping machine** at a cost of Rs 2.81 Crores. **Tenders have been floated.**
- (c) **Up-gradation and strengthening of BT and CC Blocks** for Operational Roads including drains and Berms (**East Zone**) at a cost of **Rs.16.31 Crores**. **Tenders have been floated.**
- (d) **Strengthening and up-gradation of BT and CC Blocks** for roads including drains and berms (**Convent Junction to PCR Junction**) at a cost of **Rs.18.32 Crores**. **Tenders have been floated**
- (e) **Refurbishment of STP** to handle 10MLD with proper quality output as per APPCB norms at an estimated cost of about **Rs. 1.50 crores**. At estimate stage and targeted to be completed by end of June 2016

**B) LONG TERM PLANS (DURING 2015-18):**

- (a) **Re-organization of stack yards duly providing Environmental safeguards** viz Service road, raised kerb wall around stacks sprinkling system Plantation around stacks etc
- (b) Dismantling and re-construction of West Quay berths i.e from part of **WQ-2 to WQ-5** for handling 14.50m draft vessels with fully **mechanized handling facilities** for handling bulk cargoes
- (c) Dismantling and re-construction of **part of EQ5 and EQ-6** berths for handling 14.50m draft vessels with fully **mechanized handling facilities** for handling bulk cargoes. Mechanization of cargo handling at EQ6 berth
- (d) Development of multipurpose terminal by replacement of existing **EQ2 to EQ5** berths to cater to 14.50m draft vessels with fully **mechanized**

**handling facilities** for handling bulk cargoes in inner harbour of Visakhapatnam Port.

- (e) Development of West Quay North (**WQ-7 & WQ-8**) berth with **mechanized handling facilities** for handling bulk cargoes.

**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 monitoring the implementation of identified EMPs under EMMP.
- (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". The said report is expected to be submitted by December 2015.
- (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 has been in force.
- (e) The **ambient air quality monitoring at three locations** of the surrounding areas of the Visakhapatnam Port has been entrusted to the **Andhra University**.
- (f) The **STP water quality and Ambient Air Quality monitoring** at three locations of the area around the Visakhapatnam Port is entrusted to the **APPCB** and same is in progress.

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