# ASSESSMENT OF ENVIRONMENTAL ISSUES IN VISAKHAPATNAM PORT AUTHORITY

MINISTRY OF PORTS, SHIPPING AND WATERWAYS

PUBLIC ACCOUNTS COMMITTEE (2023-24)

**NINETY EIGHTH** 

# SEVENTEENTH LOK SABHA



LOK SABHA SECRETARIAT NEW DELHI

# NINETY SECOND REPORT

PUBLIC ACCOUNTS COMMITTEE (2023-24)

(SEVENTEENTH LOK SABHA)

# ASSESSMENT OF ENVIRONMENTAL ISSUES IN VISAKHAPATNAM PORT AUTHORITY

MINISTRY OF PORTS, SHIPPING AND WATERWAYS



Presented to Lok Sabha on:

Laid in Rajya Sabha on:

LOK SABHA SECRETARIAT NEW DELHI

February, 2024 / Magha, 1945 (Saka)

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# **COMPOSITION OF THE PUBLIC ACCOUNTS COMMITTEE (2023-24)**

# Shri Adhir Ranjan Chowdhury

# Chairperson

### **MEMBERS**

# LOK SABHA

- 2. Shri Thalikkottai Rajuthevar Baalu
- 3. Shri Subhash Chandra Baheria
- 4. Shri Bhartruhari Mahtab
- 5. Shri Jagdambika Pal
- 6. Shri Vishnu Dayal Ram
- 7. Shri Pratap Chandra Sarangi
- 8. Shri Rahul Ramesh Shewale
- 9. Shri Gowdar Mallikarjunappa Siddeshwara
- 10. Shri Brijendra Singh
- 11. Shri Rajiv Ranjan Singh alias Lalan Singh
- 12. Dr. Satya Pal Singh
- 13. Shri Jayant Sinha
- 14. Shri Balashowry Vallabbhaneni
- 15. Shri Ram Kripal Yadav

### **RAJYA SABHA**

- 16. Shri Shaktisinh Gohil
- 17. Dr. K. Laxman
- 18. Shri Derek O' Brien\*
- 19. Shri Tiruchi Siva
- 20. Dr. M. Thambidurai
- 21. Shri Ghanshyam Tiwari
- 22. Dr. Sudhanshu Trivedi

### **SECRETARIAT**

1. Dr.Sanjeev Sharma

Joint Secretary

2. Smt.Bharti Sanjeev Tuteja

- Director

3. Shri Girdhari Lal

Deputy Secretary

<sup>\*</sup> Elected w.e.f. 19.08.2023 consequent upon retirement of Shri Sukhendu Sekhar Ray, MP on 18.08.2023.

#### INTRODUCTION

I, the Chairperson, Public Accounts Committee (2023-24), having been authorised by the Committee, do present this Ninety- eighth Report (Seventeenth Lok Sabha) on 'Assessment of Environmental Issues in Visakhapatnam Port Authority' based on Para No. 7.2 of C&AG Report 01 of 2023 relating to the Ministry of Ports, Shipping and Waterways.

- 2. The C&AG Report No. 15 of 2022 was laid on the Table of the House on 27.03.2023.
- 3. The Public Accounts Committee (2023-2024), selected the aforesaid subject for detailed examination and took oral evidence of the representatives of the Ministry of Communications (Department of Posts) on the subject matter on 31<sup>st</sup> October, 2023.
- 4. The Public Accounts Committee (2023-2024) considered and adopted the Draft Report on the aforementioned subject at their Sitting held on 05.02.2024. The Minutes of the Sittings are appended to the Report.
- 5. For facility of reference and convenience, the Observations and Recommendations of the Committee have been printed in thick type and form Part- II of the Report.
- 6. The Committee would like to express their thanks to the representatives of the Ministry of Ports, Shipping and Waterways for tendering evidence before them and furnishing the requisite information in connection with the examination of the subject.
- 7. The Committee also place on record their appreciation of the assistance rendered to them in the matter by the Committee Secretariat and the Office of the Comptroller and Auditor General of India.

NEW DELHI: 05<sup>th</sup> Februrary, 2024 16 Magha 1945 (*Saka*) ADHIR RANJAN CHOWDHURY Chairperson, Public Accounts Committee

# **REPORT**

#### PART-I

#### I. Introductory

This Report of the Committee is based on Para 7.2 of C&AG Report No.1 of 2023 on the subject, "Assessment of Environmental Issues in Visakhapatnam Port Authority" pertaining to the Ministry of Ports, Shipping and Waterways.

II. Assessment of Environmental Issues in Visakhapatnam Port Authority (VPA)

# A. Insufficient Environment Management Policy

- 2. Audit noted that a well laid down Environment Management Policy is a prerequisite for any organization to plan and execute its environment related operations.
  However, it was observed that VPA had not formulated any comprehensive policy for
  environment management, conservation of natural resources and occupational health.
  Management replied (May 2022) that the current Policy was prepared in accordance
  with ISO certification norms and stated that the audit observation with regard to
  absence of comprehensive environment management policy was noted and suitable
  action will be taken in this regard.
- 3. The Committee wanted to know about the measures that VPA intends to implement in order to create a more extensive Environmental Management Policy that extends beyond ISO requirements aligning with the International best practices. In this regard, the Ministry in their written reply stated as under:

"The assignment of formulating a comprehensive environment management policy and environment audit has already been awarded to M/s. National Productivity Council (NPC), under Ministry of Commerce and Industry, GOI, vide order dated 03.11.2023 and to submit a report within six months. The policy will be formulated by considering the "Harit Sagar" guidelines — 2023 issued by MoPSW as baseline."

4. When enquired on the role this policy will play in guiding and coordinating various environmental initiatives and schemes, the Ministry in their written reply stated as under:

"The policy will aim to enable the port achieve the environmental objective of designing infrastructure in such a way to minimize the environmental impacts during maintenance/operations adherence to the environmental regulations, prevent pollution, reduce waste, recover and recycle the wastes by formulating comprehensive environmental management programmes and meeting the environmental performance indicators as formulated under Harit Sagar-2023"

5. When the Committee desired to know how this policy will function in providing guidance and harmonizing diverse environmental projects and programs, the Ministry in their written reply stated as under:

"This policy will help the port in formulating and developing resilient infrastructure for safe efficient and sustainable port by promoting use of renewable energy, reducing air emissions, optimizing water usage, improving solid waste management and reducing carbon emissions. The draft policy will be discussed in the Environmental Monitoring Committee (EMC) meeting where in local residents and local NGO's are the members of EMC."

6. When asked further whether the forthcoming policy will include an analysis of VPA's strengths and weaknesses, as well as a roadmap for addressing environmental challenges and opportunities, the Ministry in their written reply stated as under:

"The policy provides guidance to the port as a tool for drawing out comprehensive plan of action covering all the activities of the port for achieving targeted out comes by adopting best practices and by employing best available carbon neutral and environmental friendly technologies."

7. To a question on the specific measures or schemes being considered to abate pollution, conserve natural resources, and promote occupational health at the port, the Ministry in their written reply stated as under:

"The following measures are being implemented:

- i) Green cover- Plantation was done upto 2022 financial year is 5,65,000 plants in and around the port area.
- ii) Renewable energy- 10MW Solar Power Plant was setup in the port.
- iii) Waste Management- VPA constructed 10MLDSTP and the treated waste water is used for dust suppression in the port.
- iv) Environmental Management:- Environmental Cell with qualified staff working under the supervision of Superintendent Engineer.- Environmental Task Force Team with 20 members working in 24x7 round the clock to monitor environmental issues.
- Continuous Ambient Air Quality Monitoring Stations are arranged to monitor the AAQ during port operations.- Periodical monitoring of Marine Water, Marine Sediments, Marine Ecology, Ground/ Leachate waters, STP water by authorized agencies.- Fog Canons, MDSS with PLC Based
- Water Sprinkling on roads
- Mechanical Road Sweeping Machines are used to clean the port roads.
- Manually clean the spillage of cargo on roads.- Regularly clean the internal drains.
- Truck Tyre Washing facilities.

- At regular intervals clean the floating material in public sewers, which is entering into the sea.
- City sewage water is treating in 10MLD Capacity of STP and the treated water being used for dust suppression in the port area.
- High Raised walls and Dust Barriers along city interface.
- Covered Belt Conveyor System with water sprinkling at junctions.
- Covering of Stock Piles with Tarpaulins.
- Only Pollution Certified vehicles are allowed into the port to transport the cargo.
- Ensuring all cargo transporting vehicles are covered with tarpaulins.
- Construction of Covered Storage Sheds for dusty cargo storage.

# B. Non-compliance of plantation by lessees

- 8. As per the Audit observation, Clause 31 of the Long Term Lease Agreements entered into with various parties by VPA stipulates that the lessees should develop greenery in 10 per cent of the area allotted to them as an anti-pollution measure failing which double the cost of plantation for 10 per cent of the area of land including the maintenance cost will be recovered from the lessees without any notice. However, it was observed that though 23 lessees, who had taken lease of 1127.55 acres since 1993, had not adhered to the condition, VPA has not taken any punitive action against them indicating failure in supervisory mechanism. While confirming the audit observation, Management replied (May 2022) that efforts are being made to impress upon the lessees to complete the plantation as per contractual obligation and also stated that certain land parcels were not conducive for plantation and hence, a meeting was planned with the lessees to solve the issue.
- 9. When asked to provide an update on the current status of greenery development within the areas allotted to lessees as per Clause 31 of the Long Term Lease Agreements, the Ministry in their written reply stated as under:

"The plantation programme in the stipulated percentage of the leased areas have been taken up by the Lessees in terms of the lease agreement condition in this regard. The saplings growth in the leased areas are at different stages and lessees are being monitored by this office for effective up-keeping of the greenery as per stipulation."

10. When asked whether any punitive action has been taken against lessees who have not adhered to the greenery development condition as stipulated in the Agreements, the Ministry in their written reply stated as under:

'Notices have been issued to the Lessees who have not taken up the full pledged plantation of saplings as per stipulation and the number of such shortfall of plants identified are also indicated in the notices to complete the required number of plantation as per the lease agreement condition and thus they are

further notified the financial implication calculated to the shortfall in number of the plants for which they are liable to pay if they do not comply."

11. As regards the mechanisms and processes that have been put in place to supervise and monitor lessees' compliance with the greenery development condition, the Ministry in their written reply stated as under:

"A SOP is put in place and periodical inspections of leased premises are being carried out and wherever the shortfall in plantation / greenery as per stipulation, notices are being issued to complete the required number of sapling plantation by the Lessee concerned. Notices in this regard have been issued to 16 Lessees currently and they are being monitored for to comply with the above."

12. When asked to explain the amount of penalty that was supposed to be levied on non-compliant lessees, as of 31 March 2021, based on the Agreements, the Ministry in their written reply stated as under:

"VPA constantly pursues with the Lessees to complete the plantation of required number of saplings / greenery as per stipulated condition of lease agreement. The shortfall of sapling plantation as identified in the periodical inspections and the financial implication calculated for such short fall shall also notified asserting, if they don't comply, VPA shall take up the same and the cost as calculated shall be realized from them towards compensatory plantation and the total amount worked out for the same upto 31st March-2021 and notified was Rs.1.30crores."

13. As regards levy of penalty against defaulters, the representative of the Ministry of Ports, Shipping and Waterways while deposing before the Committee on 31<sup>st</sup> October, 2023 stated as under:

"As per the latest report, we are fully complying with it. 80 acres have already been planted and for the rest of 31 acres of land, we are issuing penalty to all the defaulting lessees. I will be complying with it by December end. By December end, penalty will be levied against all such defaulters and I am collecting the penalty amount and deposit it in the exchequer."

14. When enquired about the concrete actions or strategies that may be under implementation to guarantee that lessees fulfill their contractual commitments for planting, the Ministry in their written reply stated as under:

"VPA management has been conducting scheduled joint meetings with the stakeholders / Lessees and apprising them of fulfilling the environmental requirements and control measures to avert pollution menace in Port lands and to take up the required number of sapling plantation as stipulated in the lease agreement condition / up-keeping of the greenery. VPA has also been issuing

notices as and when the shortfall in plantation / greenery development are identified to complete the plantation of required number of saplings duly giving the details of financial implication calculated against such shortfall of plantation, which will be realized from the Lessee concerned towards compensatory plantation if they don't comply with and VPA shall take up the same at their cost. As VPA is pressurizing the Lessee to comply with the above, they are progressively taking up the plantation greenery development as required in the area leased them."

# C. Hosting of Environmental Clearances on website

- 15. It was noted by the Audit that as per Para 10 (i)(a) of the MoEF & CC Notification dated 14 September 2006 on Environmental Impact Assessment, it shall be mandatory for the project proponent to make public the Environmental Clearance granted for their project along with the environmental conditions and safeguards and the same shall also be displayed in the project proponent's website permanently. However, VPA has not hosted the Environmental Clearances obtained on its website. Management stated (May 2022) that necessary action will be initiated to comply with the legal requirements.
- 16. When asked for an update on the current status of compliance with Para 10 (i)(a) of the MoEF&CC Notification dated 14 September 2006 regarding the hosting of Environmental Clearances on the VPA website, the Ministry in their written reply stated as under:
  - "VPA uploaded Environmental Clearances, Environmental Statement (Form-V), Environmental Clearance Stipulated Conditions Compliance Reports. It is updated half yearly after submission of compliance status to the concerned authorities."
- 17. When asked how VPA plans to ensure that the hosting of Environmental Clearances is carried out and maintained as a permanent feature on the website, the Ministry in their written reply stated as under:
  - "A separate space will be created in the VPA website wherein the environmental / sustainable related issues will be hosted and will be ensured that, the same is updated time to time."

# D. Deficiencies in Harbour Water Quality Management

18. Audit found that as per Environment (Protection) Rules, 1986, maintenance of water quality is a pre-requirement for Harbours. Harbour Water Samples were tested on 10 occasions during the period from April 2018 to March 2021 by consultants from Andhra University and it was observed from Analysis Reports that actual values for Lead, Dissolved Oxygen and Total Suspended Solids were beyond the permissible limits on all the occasions. As per the set Water Quality Standards for Harbour Water

stipulated in Environment (Protection) Rules, 1986 issued by MoEF&CC, Lead should be less than 0.10 milligrams per liter in Harbour Water. However, it was observed that presence of lead in Harbour Water was in excess of the prescribed standard at various sampling points and ranged between 0.20 and 0.49 milligrams per litre during the period from April 2018 to March 2021. Management replied (May 2022) that the primary reason for excess of pollutants in the Harbour Water is due to entering of drainage water from Visakhapatnam city drains into Harbour Water. This matter has been taken up with the District Collector time and again and action from their end is awaited. The reply needs to be viewed in light of the fact that the efforts of VPA have not yielded any visible results in containing harbour water pollution as seen from tests results mentioned in the para above.

19. When asked to provide a comprehensive evaluation of the origins of lead pollution, diminished dissolved oxygen levels, and the presence of total suspended solids exceeding permissible limits in Harbor Water, the Ministry in their written reply stated as under:

"Major drains originating from the upper reaches of the city are discharging the drainage water into the Harbor Waters. These reaches of drains in port area are being maintained regularly by VPA to ensure free flow of water and to keep the harbour water clean.VPA has constructed 10MLD capacity STP to treat the waste water and the treated water is used for dust suppression. However, part of the waste water from city drains is discharged into harbour water of VPA without treatment.VPA regularly removing the floating material in city drains joining the harbour waters and disposing at the dumping ground identified by GVMC. Decrease in Dissolved Oxygen and presence of suspended solids are observed at the vicinity of the sewage out fall from the public sewer along with silt discharging into the harbour water. Exceeding of suspended solids are due to surface water flow during rains along with the floating material is entering into the sea water. There is considerable fresh water influx into the harbour from 'Megadrigedda' during monsoon and is also a source of industrial effluents into the harbour. Navy and Hindustan shipyard also carrying out their activities in the western arm / north western arm of port. The fishing activity is banned in harbour water as per the International Security Complainant port, hence no fishing is done inside the harbour waters. Harbour Water Quality Monitoring is conducted by Andhra University for every three months.

20. When enquired whether VPA has carried out any study to link the connection between these fluctuations and local activities or external factors, the Ministry in their written reply stated as under:

"VPA carried out Ground Water/ Leachate (Surface water) from the stackyards Monitoring at different locations for observing the effects due to port operations and noted that, the fluctuations are noted in the vicinity of discharge points of wastes from city drains into the harbour water .GVMC was requested to treat

waste water and de-silt the drain at upstream side before entering into harbour water."

21. Asked, beyond addressing the issue with the District Collector, what measures VPA has undertaken to mitigate or eliminate the entry of drainage water from Visakhapatnam city drains into the Harbour Water, the Ministry in their written reply stated as under:

"The City Sewage water is treated at the existing 10 MLDSTP duly constructing a groyne at the downstream side before entering in to the Northern Channel to avoid entry of sewage water in to Harbour waters. However, VPA coordinates with Greater Visakhapatnam Municipal Corporation (GVMC) to sort out the issue and action has been initiated by them for removal of floating material in mechanical mode as well as Underground sewage system. However, VPA ensuring all preventive measure to avoid contamination of harbour water quality by arranging bar screens to control the floating material. Regularly removing of floating material and silt from the drains and the analysis reports are also showing the results are within the permissible limits.VPA collecting Solid municipal waste and disposed through Scientifically (Incinerated at around 900°C) Generated Power from solid waste by Jindal Urban Waste Management (Visakhapatnam) Itd."

22. When asked to elaborate on the procedures and systems used for ongoing evaluation of water quality in Harbor Water, including compliance with established water quality standards, the Ministry in their written reply stated as under:

"VPA carried out harbour water quality monitoring by Andhra University at a frequency of every quarter of the calendar year for Two Tides i.e. Low Tide and High Tide. The sampling and analysis is done according to standard operating procedure (CPCB; 2001, APHA; 2005) and the reports are submitted to Ministry and Pollution Control Board along Half yearly compliance reports. VPA carried out STP water testing at each stage by approved agency on daily basis."

23. When enquired about the ongoing environmental conservation initiatives or programs in place to protect and enhance the ecological health of the harbor and surrounding waters, the Ministry in their written reply stated as under:

"VPA has 10MLDSTP for treatment of waste water and the treated water stored at Delta Pond. Removal of Silt and floating material from drains is done regularly. VPA carried out marine ecology study by Andhra University for the improvement action plan on marine ecosystem. In the EMC meeting all stakeholders are aware about environmental best practices and implemented."

24. When asked whether VPA has a comprehensive long-term strategy to address water pollution in the harbor, the Ministry in their written reply stated as under:

'VPA is conducting study of ground water / leachates from stack yards by Andhra University. As per Harit Sagar, VPA proposed to implement online continuous monitoring system for marine water at two locations for which VPA engaged NPC to submit the suitable locations and action plan."

25. When the Committee asked about the steps being taken to engage the public, including local residents and industries, in efforts to prevent pollution and protect the harbour's environment, the Ministry in their written reply stated as under:

"VPA has setup Environmental Monitoring Committee with 18 members consisting of experts in Environment Management systems, members form Non-Governmental organizations (NGO's), representatives from nearby schools/residents, Indian Navy, GVMC, APPCB, PPP Operators, Industries and Trades etc. and the committee inspects the VPA premises and meeting of the committee will be held every two months and monitor the environment activities of port. In that meeting all stakeholders will be given awareness on environment and pollution effects due to their operational activities and suggest plan to mitigate the pollution."

# E. Deviations in Consumption of Water and Discharge of Effluents

Audit scrutiny revealed that VPA obtained Consent for Operations from APPCB in May 2017 which was valid up to 31 December 2021. The Consent for Operations prescribed limits for water consumption, discharge of effluents, disposal of hazardous waste, etc. On a review of application filed by VPA in December 2021for renewal of Consent for Operations and various periodical returns filed by VPA, various deviations were observed. It was observed that VPA requested to grant permission for consumption of 6.0 million litres of fresh water per day which was equivalent to 15.84 lakh gallons per day. However, APPCB, restricted the freshwater consumption to 4.00 lakh gallons per day. APPCB also directed VPA to take steps to reduce water consumption to the extent possible. Audit observed that the average consumption of fresh water was nearly double the permitted quantity and stood at 8.044 lakh gallons, 8.156 lakh gallons and 7.962 lakh gallons per day during the years 2018, 2019 and 2020 respectively. In its reply, APPCB acknowledged the increase in water consumption and attributed the same to sprinkling of water to arrest emission of dust from various cargo. Further, APPCB differed with the assessment of VPA that 85 per cent of water used will be discharged as effluents and said that there will be loss of some quantity of water due to evaporation. However, no details of loss due to such purported evaporation was quantified by APPCB. It was further observed that though APPCB had instructed (2 March 2020) VPA to obtain amendment to its Consent for Operations with respect to exceedance of limits in the areas of water consumption and discharge of effluents, no action was initiated by VPA in this regard until the expiry of the Consent for Operations by December 2021.

27. When asked to provide more details on the reasons behind the significant increase in water consumption during the years 2018, 2019, and 2020 compared to the limits prescribed by APPCB in the Consent for Operations issued in May 2017, the Ministry in their written reply stated as under:

"On those years the dust suppression carried out by Trucks in all areas and due to developmental activities and for green belt development &landscaping in and around the port area. The water consumption is increased, due to the above."

28. About the actions or initiatives undertaken to ensure compliance with regulations related to effluent discharge, the Ministry in their written reply stated as under:

"The following measures are taken:

- i) To minimize/reduce the water used for plantation/landscaping and use the treated waste water from 10MLDSTP.
- ii) To take up water auditing and to initiate action to avoid unnecessary use of fresh water.
- iii) All drains carrying the discharges are connected to the 10MLDSTP.
- 29. When asked what steps VPA has taken to explore opportunities for the reuse of treated effluent water, as mandated under the Environment (Protection) Rules, 1986, the Ministry in their written reply stated as under:

"In addition to 10MLDSTP the VPA installed one more 20KLDSTP at AOB for waste water treatment. The treated water being used for green belt development and reduce the fresh water consumption.VPA will re-evaluate the water consumption and implement additional measures to conserve water by reducing fresh water use for plantation/landscaping/ sprinkling water."

30. When the Committee sought elaboration on the revisions made in the Consent for Operations issued in April 2022, the Ministry in their written reply stated as under:

"Earlier CFO, 2017 the VPA having fresh water consumption quantity is 4Lakhs Gallons. At present CFO, 2022 VPA revised the quantity of fresh water is 8Lakhs Gallons. The water discharging quantity is revised in 2022 CFO as 18,875KLDwherein 2017 CFO VPA having water discharging quantity is 10,019.04KLD. VPA installed one more STP at AOB with the capacity of 20KLD and the treated water being used for green belt development.

31. When asked why VPA did not initiate action to obtain an amendment to its Consent for Operations, as instructed by APPCB in March 2020, until the Consent's expiry in December 2021, the Ministry in their written reply stated as under:

"VPA is applied CFO renewal and obtained CFO on 13.04.2022 and it is valid upto 31.12.2026."

32. When enquired whether VPA has any proposals to explore alternative methods for increasing reuse of waste water such as for gardening, flushing toilets, sprinkling on roads/coal yards to suppress dust, etc. so as to reduce the consumption of fresh water the Ministry in their written reply stated as under:

"As per Harit Sagar, VPA commissioned and operated 20KLDSTP at AOB to increase the reuse of waste from AOB domestic water. VPA engaged National Productivity Council for Environmental Audit, how to reduce the water consumption and explore alternatives measure to re-use / re-cycled or reduce the water consumption. Presence of constituents in excess of tolerance limits in the treated effluents discharged - In compliance with the conditions stipulated in Consent for Operations issued by APPCB, VPA had installed (4 October 2019) a Sewage Treatment Plant at Port Hospital (viz., Golden Jubilee Hospital). The main purpose of installation of Sewage Treatment Plant was to reduce toxic effects of various effluents like pH, Total Suspended Solids, etc. However, it was observed from the Analysis Reports of effluents discharged from Sewage Treatment Plant located at Golden Jubilee Hospital that the Alkalinity levels and presence of Total Suspended Solids were in excess of the prescribed limits on three occasions out of seven during the period from October 2019 to December 2021. Management stated (May 2022) that the pH value is not of serious concern unless it is abnormally high and with time, the Potential Hydrogen values will be stabilised. Since the wastewater was discharged from different hospital units. removal of dissolved solids cannot be ensured. Hence, on some occasions, the Total Suspended Solids results may be shown in excess of the prescribed limits .APPCB replied (April 2022) that the Harbour Water is getting contaminated with domestic sewage entering into the waters without any treatment which is being dealt with by Greater Visakhapatnam Municipal Corporation and that the matter has been taken up with Commissioner, Greater Visakhapatnam Municipal Corporation."

33. When asked whether VPA has consistently complied with the conditions stipulated in the Consent for Operations issued by the Andhra Pradesh Pollution Control Board (APPCB) in July 2017, the Ministry in their written reply stated as under:

"VPA complying stipulated conditions of CFO issued by APPCB and submitted the compliance report on half yearly basis."

34. When asked why APPCB did not take any action against VPA for non-compliance with the prescribed norms as per the Consent for Operations and non-adherence to its instructions until they were revised in April 2022, the Ministry in their written reply stated as under:

"APPCB took stringent actions against any environmental issues to VPA by issuing notices and directions. APPCB imposed penalty of Rs. 1.97 Crores in the year 2020 for non-compliance of directions by trade and the penalty was collected from the defaulters."

35. Asked whether VPA has consulted Greater Visakhapatnam Municipal Corporation about the steps to be taken to address the issue of domestic sewage contaminating Harbour Water, the Ministry in their written reply stated as under:

"VPA is continuously pursuing with GVMC for taking necessary action to improve Harbour water quality by controlling of city drains entering into harbor water. Recently on 26.10.2023 a request letter sent to commissioner, GVMC with a copy to i) Collector & District Magistrate and ii) E.E., R.O., APPCB, VSP in addition to the letter sent on 27.04.2023 for remedial action."

#### Air Pollution

# F. Emission of PM10 in excess of the prescribed annual averages

- 36. Audit observed that as per National Ambient Air Quality Standards issued by MoEF&CC vide Gazette Notification dated 18 November 2009, the annual averages of PM10 levels were to be maintained at 60 micro grams per cubic meter. Three Ambient Air Quality Monitoring Stations were located in VPA premises. Data from these stations revealed that the annual averages of PM10 were in excess of the levels stipulated by MoEF&CC. While confirming the audit observation, Management replied (May 2022) that though VPA was able to meet daily emission norms, they were unable to meet annual averages. It was also stated that they were initiating various steps such as installation of Mechanized Dust Suppression Systems, Fog Cannon Machines on all berths and construction of covered sheds. It was further stated that besides VPA, so many other factors such as vehicle pollution and dust emanating from the city roads were also contributing to dust pollution.
- 37. When asked to specify the reasons behind VPA's inability to achieve the annual average PM10 levels while complying with the daily emission standards established by MoEF&CC, the Ministry in their written reply stated as under:

"VPA is not only reason for contributing the excess values of PM10 in the City, as the other factors are also contributing the pollution load. During Covid-19Lockdown period the PM10 values are well within the standards when VPA alone is continued its operations besides all other sources of pollution due to lockdown. As per the NEERI's report (January 2013) on Air pollution & Source Apportionment Study for the Assessment of Impact of Visakhapatnam Port Operations on Ambient Air Quality, the report reveals that, VPA alone is not the contributing factor for the dust pollution, there are other factors like vehicular

emission & dust emitting from city roads are also contributing.VPA implementing of MDSS, Truck Mounted and Trolley mounted Fog Canons Machines, Truck tyres washing facility, Mechanical Sweeping machines, Covering of cargo with tarpaulins, Constructing Covered Storage shed, Covered conveyor belt etc. for mitigation of dust."

38. When enquired how VPA assesses the impact of factors such as vehicle pollution and dust emanating from city roads on dust pollution within the VPA premises, the Ministry in their written reply stated as under:

"VPA ensures to allow the cargo transporting vehicles with valid pollution certificate only. Same will be instructed to stakeholders to comply. Two of the PPP operators are installed Water Sprinkling System at their stock yards. Fog Canons are deployed at the time of cargo handling."

# G. Inadequate covering of dusty cargo with tarpaulins

- 39. The APPCB, being the Regulatory Authority for monitoring environmental aspects in the State of Andhra Pradesh, issued directions to VPA from time to time for mitigating pollution. The directions given by APPCB on 28 December 2015 to mitigate the air pollution in VPA, inter-alia, included that "VPA shall cover all the stack yards of dusty cargoes (coal and other cargoes, etc.) with tarpaulins immediately and no coal stack yard shall exist without covering with tarpaulins."
- 40. Audit noted that the Periodical Inspection Reports of the Internal Environment Task Force Team constituted to assess the coverage of cargoes with tarpaulins at various locations of VPA and Public Private Partnership Operators covered 2,630stacks during the period from January 2019 to June 2021. These inspections revealed that in 15 per cent of the stacks, there was no tarpaulin coverage at all. Average surface coverage of remaining stacks with tarpaulins was only about 60 percent of dusty cargo stacks. Consequent upon the failure in covering of stacks with tarpaulins by stock holders, VPA issued notices to all defaulting stockholders and collected a penalty of ₹8.16 crore during the period May 2018 to January 202090 .Thus, in compliance of the directions given by the APPCB on 28 December 2015,VPA was able to cover nearly half of the surface area of the stacks with tarpaulins. It did not ensure full compliance with the measures as directed by APPCB to mitigate air pollution generated through storage of dusty cargoes at its stack yards.
- 41. When the Committee desired to know why VPA did not comply with the directions issued by the APPCB on 28December 2015 to cover all stack yards of dusty cargo with tarpaulin immediately and ensure that no coal stack yard existed without such covering, the Ministry in their written reply stated as under:

"It is to state that this office under takes all the steps required ensuring that the dusty cargo stacks stacked in and around the dock area premises are covered

with Tarpaulin coverage and the concerned stevedore responsible for the stack in of the cargo stacks are pressurized to cover their respective stacks on 100% basis. However, at times when there is delivery of consignment either by road means or by rail mode, the stevedore/ handling agent is forced to open the coverage of the cargo stacks partially (or) fully depending upon the quantum of cargo available at the stackyard and the quantity of cargo to be delivered, at times delivery of consignment is effected at multiple cargo stack locations and by both means of transport i.e. by road and by rail but to remove the Tarpaulin coverage of the cargo stacks. In addition to the above, at times the handling agent stacks cargo discharged from the vessel, which consumes certain period the time and under such a situation, the handling agent is not in a position to immediately cover the stacks until and unless piling up off the total quantity of cargo is completed. Hence, this office is strictly complying with the directions issued by APPCB on 20<sup>th</sup> December, 2015 for coverage of all stack yards of dusty cargoes with Tarpaulin cover from the date of receipt of such orders to till date.

42. When asked to provide an assessment of the effectiveness of the measures taken by VPA to mitigate air pollution through tarpaulin coverage, especially in light of the findings that only about 60 percent of dusty cargo stacks were covered, the Ministry in their written reply stated as under:

"The assessment of the effectiveness of the measures taken by VPA to mitigate air pollution through tarpaulin coverage is evident from the fact that the Ambient Air Quality (AAQ) has improved significantly due to ensuring of 100%Tarpaulin coverage on top of the cargo stacks and also due to mitigation of air pollution caused by fine dust through sprinkling of water on top of the cargo stacks which is carried out through Mechanical Dust Suppression System (MDSS) and also through deployment of road moving water tankers at regular interval. This office is strictly with the above mentioned strategies for arresting air pollution caused by fine dust. However, if any variation is noticed by this office on part of the concerned handling agents responsible for stacking of cargo stacks, this office levies penalty as per the provisions mentioned in SOR/VPA currently in force. Further, it is also to state that the implementation of afore mentioned strategies, this office is of the view that there is a significant decline in the upsurge of air pollution and improvement of Ambient Air Quality (AAQ)."

43. When asked to elaborate on the penalties collected by VPA from defaulting stockholders between May 2018 and January 2020, the Ministry in their written reply stated as under:

"During the period between May, 2018 up to January, 2020 this office has realized an amount of Rs. 8,11,31,040/- (copy enclosed) towards penalty for non-coverage of cargo stacks with tarpaulin coverage. In spite of the amount of penalty realized by the office from the defaulting stakeholders, this office has

been strictly adhering to policies and guidelines issued by APPCB towards effective management and control of air pollution and retention of high index of Ambient Air Quality (AAQ). Over a period of time it has been observed that compliance of such guidelines issued towards mitigation of dust pollution on part of the stakeholders has been responsible for achieving better parameters of Ambient Air Quality (AAQ)."

44. When the Committee wanted to know about the steps being taken to improve the average surface coverage of tarpaulins on dusty cargo stacks and to eliminate instances of no coverage, the Ministry in their written reply stated as under:

"In order to ensure to complete coverage of cargo stacks with Tarpaulin cover this office has initiated several initiatives such as supply of Tarpaulin covers to the concerned stakeholders so as to utilize the same for coverage of their respective cargo stacks. In order to ensure the same this office carries out frequent inspections at regular intervals and also on daily basis. During the course of inspection, if and non-compliance is noticed on part of the concerned handling agents towards non-coverage of Tarpaulins, this office levies penalty as per the provisions mentioned in SOR/VPA currently in force.

In addition to the above, this office also interacts with the stakeholders duly emphasizing on the significance and necessity of coverage of cargo stacks with Tarpaulin cover. This office also issues various Trade circulars duly stressing upon cargo stack coverage with Tarpaulin cover. The Environment task force team is continuously monitoring in 24x7 basis in all port areas ensuring the compliance to dust mitigation control measures such as MDSS utilization, regular wetting of roads, Spraying of water on stacks through water tankers where dusty cargo is being stored, water sprinkling through fog cannon machines at all berths during unloading of cargos etc. and it is being complied. T.M Department also giving trade circulars and notices which is related to environmental issues like coverage of cargo stacks with Tarpaulins. If any APPCB / MoEF directions are intimated by T.M. Department to the stack holders to comply.

45. In this regard, the representative of the Ministry of Ports, Shipping and Waterways while deposing before the Committee on 31<sup>st</sup> October, 2023 further stated as under:

"Now, the port is fully gear up to take care of all the environmental and other related issues. Recently, four number of covered sheds where the issue of coal and all can be stored, we are constructing four number of covered shed where we will keep the cargo in a closed ambiance."

46. When asked whether VPA has any plans to study the best international practices followed by efficiently managed foreign port authorities to mitigate air pollution caused by dusty cargo within VPA premises, the Ministry in their written reply stated as under:

"VPA is working on the subject issue so as to explore the feasibility of implementing the same at VPA for mitigating air pollution as is being carried out in other international ports."

47. When sought to know what methods and strategies are employed by VPA to engage with stakeholders and pertinent parties, emphasizing the significance of using tarpaulin coverage and adhering to environmental guidelines, the Ministry in their written reply stated as under:

"This office interacts with the stakeholders on regular basis duly emphasizing on the significance and necessity of coverage of cargo stacks with Tarpaulin cover. This office also issues various Trade circulars duly stressing upon cargo stack coverage with Tarpaulin cover from time to time. Supply of Tarpaulin covers to the concerned stakeholders so as to utilize the same for coverage of their respective cargo stacks. Further, this office also makes it mandatory on part of the concerned stakeholders to deploy road moving water tanker for sprinkling of water on top of the cargo stacks by them at various locations in the jurisdiction of VPA. In addition to the above, maximum permissible height of the cargo stacks permitted by this office to the stakeholders has been pegged at 6mts height."

# H. Non-Compliance with the Directions issued by APPCB

Audit also noted that a Non-Governmental Organization (NGO) filed an application (2015) before the National Green Tribunal on purported violation of environmental standards by VPA with a request to pass appropriate orders for not operating any coal cargo by VPA due to emission of dust from such cargo. In response to the application, VPA stated (September 2015) that VPA was installing Mechanical Dust Suppression Systems to arrest the emission of dust from such cargo in addition to other measures such as washing of truck tyres, raising of compound wall, non-storing of dusty cargo near the human habitations, etc. It was also stated that they have initiated a Comprehensive Environment Management Plan with Short Term (during 2015-16), Medium Term (during 2015-17) and Long Term Measures (during 2015-18). As per Environment Management Plan promised by VPA, it had to implement Long Term Measures by December 2018 Consequently, the National Green Tribunal rejected the plea of the applicant NGO for not operating any coal cargo by VPA and directed (8 March 2017) VPA to implement the already initiated Environment Management Plan. VPA was further directed to submit Quarterly Progress Reports to National Green Tribunal for further action. APPCB, being the statutory authority for maintaining pollution standards in the State, had been reviewing the status of implementation of the directions and Consent for Operations conditions and had issued periodical directions from time to time for compliance by VPA. Subsequently, in the course of an appeal filed (2019) by the NGO, the National Green Tribunal observed that VPA had not complied with the commitments given to it and directed (3 January 2020) APPCB to take necessary action against VPA on the basis of the observations made by them in the last report and submit further action taken and status report in this regard within a period of two months.

49. To a query why VPA failed to fully comply with the environmental directions issued by the National Green Tribunal, which led to the imposition of environmental compensation of ₹1.97 crore, the Ministry in their written reply stated as under:

"VPA has complied with all the short / medium / long term directions issued by APPCB except providing Mechanical Dust Suppression System at certain areas such as L-17, R-2, R-5, A &B, Opp. TM Office, which was completed subsequently. The delay is caused due to re-organization of stack yards in view of PPP operator for EQ-1A berth stopped the work and was terminated."

50. When enquired how the Internal Task Force Team was monitoring the stack yards, and why issues with non-compliance persisted, such as exceeding stack heights and lack of Mechanical Dust Suppression Systems, the Ministry in their written reply stated as under:

"The Environment task force team is continuously monitoring in 24x7 basis in all port areas ensuring the compliance to dust mitigation control measures such as MDSS utilization, regular wetting of roads, Spraying of water on stacks through water tankers where dusty cargo is being stored, water sprinkling through fog cannon machines at all berths during un loading of cargos etc. and it is being complied."

51. On enquiring about the impact if any, on the finances of VPA on account of VPA's settlement of the ₹1.97 crore environmental compensation to APPCB, the Ministry in their written reply stated as under:

"The amount was Rs. 1.97 Crores paid by VPA towards environmental compensation to APPCB was met from the environment cess being collected from the stack holders per ton of cargo handled by them. Therefore, no impact of finance of VPA."

52. As regards the steps taken to ensure long-term compliance with environmental directions and prevent future violations, the Ministry in their written reply stated as under:

"The Re-organization of coal stack yards is completed and the stack yards are provided with environmental safe guards such as MDSS, Tarpaulin coverage and 3no. of Covered storage sheds at R-11 area and R-2 & R-5 Areas are constructed."

53. About the measures that VPA is putting in place to prevent future violations of environmental standards and directions from regulatory authorities, the Ministry in their written reply stated as under:

"VPA has setup Environmental Monitoring Committee with 18 members consisting of experts in Environment Management systems, members form Non-Governmental organizations (NGO's), representatives from nearby schools/residents, Indian Navy, GVMC, APPCB, PPP Operators, Industries and Trades etc. and the committee inspects the VPA premises and meeting of the committee will be held every two months and monitor the environment activities of port. In that meeting all stakeholders are having awareness on environment issues and MoEF&APPCB Directions. If any violation of directions, they will be penalized."

# I. Lapses in E-waste Management

- 54. The MoEF&CC vide Notification dated 23 March 2016 notified the E-waste (Management) Rules. 2015 which stipulate that the e-waste generated is to be disposed in the manner that is prescribed under E-waste Management Rules issued in the years 2011 and 2016. Rule 12 of E-waste Management Rules, 2011 read with Rule 15 of Ewaste Management Rules, 2016 state that "every producer, collection center, dismantler, or recyclers may store the e-waste for a period not exceeding one hundred and eighty days". Further, Consent for Operations issued to VPA in May2017 prescribed that the disposal of e-waste generated at VPA shall be limited to 0.5tonnes per annum and the same had to be disposed to the authorized re-processors/re-cyclers. In this regard, Audit observed that VPA disposed (November and December 2018) 13.66 metric tonnes of e-waste through e-auction participated by authorized agents. Subsequently, another quantity of 9.60 metric tonnes was disposed of in January 2021. These quantities were said to have accumulated over a period of 20 years. Further, 500 kilograms of electrical lamps were lying in stock as on 31 March 2021. The reasons for delay in disposal of e-waste were not available in the records produced to Audit. While accepting the audit observations, Management replied (May 2022) that action will be initiated to adhere to the prescribed timelines and Environment Management Plan will be amended accordingly. The fact remains that e-waste was accumulated over the years and was not timely disposed of despite the norms being in vogue since 2011.
- 55. Asked about the reasons for the accumulation of e-waste over a period of 20 years at VPA, despite the E-waste Management Rules being in place since 2011 and the Consent for Operations specifying disposal limits, the Ministry in their written reply stated as under:

"VPA embarked implementation of Information Technology (ERP) for the first time during 2012. It takes some time to create awareness among all for proper collection segregation and disposal of e-waste. Now SOP is put in place."

56. To a query as to how VPA ensured compliance with Rule 12 of E-waste Management Rules, 2011 and Rule 15 of E-waste Management Rules, 2016, which allow storage of e-waste for a maximum of 180 days, the Ministry in their written reply stated as under:

"SOP is put in place and e-waste is being disposed/ handled as per the SOP."

57. On being asked what specific actions will be initiated by VPA to adhere to the prescribed timelines for e-waste disposal in the future, the Ministry in their written reply stated as under:

"Internal control mechanism was put in place for ensuring timelines for e-waste disposal."

58. When the Committee wanted to know how VPA will ensure that e-waste management practices are closely monitored and reviewed to prevent similar accumulations in the future, the Ministry in their written reply stated as under:

"E-waste management was incorporated in ISO management review agenda and being reviewed at management level. Awareness was created among the employees/ IT maintenance personnel about the e-waste handling / storage."

#### PART-II

# **OBSERVATIONS/ RECOMMENDATIONS OF THE COMMITTEE**

# INTRODUCTORY

Consequent to the sifting of all the material and information – mainly from the written information and depositions made before the Committee, they have come to certain observations and recommendations which are contained in the succeeding paragraphs of this part of the Report.

# 1. <u>Insufficient Environment Management Policy</u>

The Committee note from Audit observation that VPA had not formulated any comprehensive policy for environment management, conservation of natural resources and occupational health and followed ISO certification norms only to plan and execute its environment related operations. The Committee learn that to abate pollution, conserve natural resources, and promote occupational health at the Port, the measures implemented by VPA inter alia included: (i) undertaking Plantation which stood at 5,65,000 plants in and around the port area up to financial year 2022;(ii) setting up10MW Solar Power Plant in the port: (iii) constructing10MLD STP and using the treated waste water for dust suppression in the port;(iv) monitoring environmental issues through Environmental Cell with qualified staff working under the supervision of Superintendent Engineer having Environmental Task Force Team with 20 members working 24x7 round the clock; (v) arranging Continuous Ambient Air Quality Monitoring Stations to monitor the AAQ during port operations; (vi) Periodical monitoring of Marine Water, Marine Sediments, Marine Ecology, Ground/ Leachate waters, STP water by authorized agencies; (vii) Fog Canons, MDSS with PLC Based - Water Sprinkling on roads; (viii) Mechanical Road Sweeping Machines for cleaning the port roads;(ix) Manually cleaning the spillage of cargo on roads; (x) Regularly cleaning the internal drains; (xi) Truck Tyre Washing facilities; (xii) cleaning the floating material at regular intervals in public sewers, which enters into the sea; (xiii) treating City sewage water in 10MLD Capacity of STP and the treating water being used for dust suppression in the port area; (xiv) setting up High Raised walls and Dust Barriers along city interface; (xv) Covering Belt Conveyor System with water sprinkling at junctions; (xvi) Covering of Stock Piles with Tarpaulin; (xvii) Allowing only Pollution Certified vehicles into the port to transport the cargo; (xviii) Ensuring that all cargo transporting vehicles are covered with tarpaulins and (xix) Constructing Covered Storage Sheds for dusty cargo storage.

In the light of the information furnished by the Ministry, the Committee observe that to abate pollution, conserve natural resources, and promote

occupational health at the port, the VPA has been implementing various measures so as to be in compliance with ISO certification norms. The Committee in this regard, are of the firm opinion that a more extensive Environmental Management Policy aligning with the International best practices should also be formulated expeditiously for environment management, conservation of natural resources and occupational health. The Committee further note from the submission made by the Ministry that the assignment of formulating a comprehensive environment management policy and environment audit has already been awarded to M/s. National Productivity Council (NPC), under Ministry of Commerce and Industry, GOI, vide order dated 03.11.2023 and tasked to submit the report within six months. According to the Ministry, the policy will be formulated by considering the "Harit Sagar" guidelines – 2023 issued by MoPSW as baseline and after discussion in the Environmental Monitoring Committee (EMC) meeting wherein local residents and local NGOs are the members of EMC. While appreciating the initiatives undertaken by the Ministry towards formulation of a comprehensive environment management policy, the Committee recommend that earnest efforts should be made for its finalization within the stipulated timeframe under intimation to the Committee. Further, while drafting/finalizing the policy, the Committee desire that an analysis of VPA's strengths and weaknesses, as well as a roadmap for meeting the environmental performance indicators as formulated under Harit Sagar and Sustainable Development Goals should mandatorily be undertaken. The Committee hope that the future comprehensive Environment Management Policy will be seamlessly integrated with the Master Plan of the port as well.

### 2. Non-compliance of plantation by lessees

The Committee also note that Clause 31 of the Long Term Lease Agreements entered into with various parties by VPA stipulates that the lessees should develop greenery in 10 per cent of the area allotted to them as an antipollution measure failing which double the cost of plantation for 10 per cent of the area of land including the maintenance cost will be recovered from them without any notice. The Committee have, however, learnt that although 23 lessees, who had taken lease of 1127.55 acres since 1993, had not adhered to the condition, VPA has not taken any punitive action against them, which is indicative of failure in supervisory mechanism. While confirming the audit observation, Management have replied (May 2022) that efforts are being made to impress upon the lessees to complete the plantation as per contractual obligation and also stated that certain land parcels were not conducive for plantation and hence, a meeting was planned with the lessees to solve the issue.

In this regard, the Committee were apprised by Ministry that the plantation programme in the stipulated percentage of the leased areas has been taken up by the Lessees in terms of the lease agreement condition. The saplings growth in the leased areas is at different stages and lessees are being monitored by VPA

for effective up-keeping of the greenery as per stipulation. Regarding punitive action, the Ministry stated that notices have been issued to the Lessees who have not taken up the full-fledged plantation of saplings as per stipulation and the extent of shortfall of plants identified are also indicated in the notices to complete the requirement as per the lease agreement condition and were further notified the financial implications calculated on the basis of shortfall in number of the plants for which they are liable to pay in the event of non-compliance. Notices in this regard have been issued to 16 Lessees currently and they are being monitored to comply with the said stipulations. As regards the amount of penalty levied on non-compliant lessees, based on the Agreements, the Ministry stated that the shortfall of sapling plantation as identified in the periodical inspections and the financial implication calculated for such shortfall shall also be notified and intimated that if they don't comply, VPA shall take due cognizance and the cost as calculated shall be realized from them towards compensatory plantation and the total amount worked out for the same upto 31st March-2021 and notified was Rs.1.30 crores. As per Clause 31 of the Long-Term Lease Agreements entered into with various parties by VPA, the lessees should develop greenery in 10 per cent of the area allotted to them as an anti-pollution measure failing which double the cost of plantation for 10 per cent of the area of land including the maintenance cost will be recovered from the lessees without any notice. The Committee hence wonder why VPA has been issuing notices to non-compliant lessees in the first place asking them to complete the required amount of plantation as per the lease agreement condition and financial implication of noncompliance as they are liable to pay the penalty for not adhering to the stipulations. The Committee also fail to fathom why punitive action against Lessees who have not taken up full-fledged plantation of saplings was not taken and recovery made as per stipulation. The Committee while taking serious note of lapse in monitoring mechanism leading to non-observance of the Clause 31 of the Long-Term Lease Agreements entered into with various parties by VPA and subsequent inaction for recovery of the dues under the stipulations, desire that an enquiry should be instituted to ascertain the reasons for such failures and responsibility fixed against the erring officials. The Committee would also like to be apprised of the mechanism being followed for identifying the non-compliant lessees for issuing the notices on account of shortfall of sapling plantation and calculating the financial implication ,as out of 23 lessees, VPA has issued notices to only 16 Lessees so far.

# 3. Hosting of Environmental Clearances on website

The Committee note from Audit observation that as per Para 10 (i)(a) of the MoEF&CC Notification dated 14 September 2006 on Environmental Impact Assessment, it shall be mandatory for the project proponent to make public the Environmental Clearance granted for their project along with the environmental conditions and safeguards and the same shall also be displayed in the project proponent's website permanently. However, the Committee are constrained to

note that VPA has not hosted the Environmental Clearances obtained on its website. Detailing compliance status, the Ministry stated that VPA uploaded Environmental Clearances, Environmental Statement (Form-V), Environmental Clearance Stipulated Conditions Compliance Reports and the same is updated half yearly after submission of compliance status to the concerned authorities. To ensure that the hosting of Environmental Clearances is carried out and maintained as a permanent feature on the website, the Ministry stated that a separate space will be created in the VPA website wherein the environmental / sustainable related issues will be hosted and ensure that the same is updated from time to time. The Committee express displeasure over the lackadaisical approach of the VPA in meeting the legal requirement mandating project proponent to make public the Environmental Clearance granted for their projects along with the environmental conditions and safeguards as separate space is yet to be created in the VPA website for the purpose. For hosting as a permanent feature on the website, the Committee desire that the necessary action for adhering to the MoEF&CC's stipulation of hosting of Environmental Clearances on website permanently should be taken without any further delay. The Committee also desire that a mechanism should also be devised to update the website on real time basis after submission of compliance status to the concerned authorities.

# 4. <u>Deficiencies in Harbour Water Quality Management</u>

The Committee note that as per Environment (Protection) Rules, 1986, maintenance of water quality is a pre-requirement for Harbours. Audit scrutiny revealed that Harbour Water Samples were tested on 10 occasions during the period from April 2018 to March 2021 by consultants from Andhra University and it was observed from Analysis Reports that actual values for Lead, Dissolved Oxygen and Total Suspended Solids were beyond the permissible limits on all the occasions. As per the set Water Quality Standards for Harbour Water stipulated in Environment (Protection) Rules, 1986 issued by MoEF&CC, Lead should be less than 0.10 milligrams per liter in Harbour Water. However, it was observed that presence of lead in Harbour Water was in excess of the prescribed standard at various sampling points and ranged between 0.20 and 0.49 milligrams per litre during the period from April 2018 to March 2021.

In this regard, the Ministry stated that major drains originating from the upper reaches of the city are discharging the drainage water into the Harbor Waters. Decrease in Dissolved Oxygen and presence of suspended solids are observed at the vicinity of the sewage outfall from the public sewer along with silt discharging into the harbour water. Excessive presence of suspended solids is due to surface water flow during rains along with the floating material which is entering into the sea water. There is considerable fresh water influx into the harbour from 'Megadrigedda' during monsoon and is also a source of flow of industrial effluents into the harbour. Navy and Hindustan Shipyard Limited are also carrying out their activities in the western arm / north western arm of port.

About the measures undertaken to mitigate or eliminate the entry of drainage water from Visakhapatnam city drains into the Harbour Water, the Ministry stated that the City Sewage water is treated at the existing 10 MLD STP duly constructing a groyne at the downstream side before entering in to the Northern Channel to avoid entry of sewage water in to Harbour waters. However, VPA coordinates with Greater Visakhapatnam Municipal Corporation (GVMC) to sort out the issue and action has been initiated by them for removal of floating material in mechanical mode as well as Underground sewage system. However, VPA is ensuring all preventive measure to avoid contamination of harbour water quality by arranging bar screens to control the floating material. Regularly removing floating material and silt from the drains and the analysis reports are also showing the results are within the permissible limits.VPA is collecting Solid municipal waste and disposing it through Scientifically (Incinerated at around 900°C) Generated Power from solid waste by Jindal Urban Waste Management (Visakhapatnam) Itd. Besides, VPA carried out harbour water quality monitoring by Andhra University at a frequency of every quarter of the calendar year for Two Tides i.e. Low Tide and High Tide. The sampling and analysis is done according to standard operating procedure (CPCB; 2001, APHA; 2005) and the reports are submitted to Ministry and Pollution Control Board along with Half yearly compliance reports. VPA carried out STP water testing at each stage by approved agency on daily basis.

In view of the analysis brought out in the preceding paragraphs, reports showing that the results are within the permissible limits, the Committee express satisfaction with the measures being taken by VPA to maintain harbor water quality as per Environment (Protection) Rules, 1986. The Committee hope that besides coordinating with Greater Visakhapatnam Municipal Corporation (GVMC) to work out a permanent solution for removal of floating material in mechanical mode as well as Underground sewage system, VPA will ensure constant monitoring by the consultants of Andhra University and take timely corrective action so that actual values for Lead, Dissolved Oxygen and Total Suspended Solids do not go beyond the permissible limits.

5. The Committee note from the submissions made by the Ministry that to protect and enhance the ecological health of the harbor and surrounding waters, besides having a study of ground water / leachates from stack yards, VPA carried out marine ecology study by Andhra University for improvement in the action plan on marine ecosystem. Further, as per Harit Sagar, VPA proposed to implement online, continuous monitoring system for marine water at two locations for which VPA engaged National Productivity Council (NPC) to submit the suitable locations and action plan. The Committee would like to be apprised of the overview of the improvement action plan on marine ecosystem suggested by Andhra University as well as the status of implementation of online continuous monitoring system for marine water as proposed under the Harit Sagar Guidelines.

6. As for steps being taken to engage the public, including local residents and industries, in efforts to prevent pollution and protect the harbour's environment, the Committee were informed that VPA has setup Environmental Monitoring Committee with 18 members consisting of experts in Environment Management members from Non-Governmental **Organizations** representatives from nearby schools/ residents, Indian Navy, GVMC, APPCB, PPP Operators, Industries and Trades etc. Further, meeting of the committee will be held every two months to monitor the environment activities of port. In that meeting, all stakeholders will be sensitized on environment and pollution effects due to their operational activities and suggest plan to mitigate the pollution. The Committee recommend that Environmental Monitoring Committee invariably hold its meeting as per schedule and take pollution mitigating measures giving due consideration to the operational requirements of the stakeholders to protect the harbour's environment.

# 7. Deviations in Consumption of Water and Discharge of Effluents

The Committee note that VPA obtained Consent for Operations from APPCB in May 2017 which was valid up to 31 December 2021. The Consent for Operations prescribed limits for water consumption, discharge of effluents, disposal of hazardous waste, etc. Audit noticed that on a review of application filed by VPA in December 2021 for renewal of Consent for Operations and various periodical returns filed by VPA, various deviations were observed. It was also observed that VPA requested for granting permission for consumption of 6.0 million litres of fresh water per day which was equivalent to 15.84 lakh gallons per day. However, APPCB restricted the freshwater consumption to 4.00 lakh gallons per day. APPCB also directed VPA to take steps to reduce water consumption to the extent possible. Audit found that the average consumption of fresh water was nearly double the permitted quantity and stood at 8.044 lakh gallons, 8.156 lakh gallons and 7.962 lakh gallons per day during the years 2018, 2019 and 2020 respectively. Explaining reasons behind the significant increase in water consumption, the Ministry stated that in these years, for suppression of dust resulting from movement of Trucks in all areas, and due to developmental activities and for green belt development & landscaping in and around the port area, the water consumption was increased. As regards steps being taken to adhere to water consumption limits as stipulated in the Consent for Operations from APPCB, the Ministry stated that in addition to 10MLD STP the VPA installed one more 20KLD STP at AOB for waste water treatment. The treated water is being used for green belt development and reducing the fresh water consumption. PA will re-evaluate the water consumption and implement additional measures to conserve water by reducing fresh water use for plantation/landscaping/ sprinkling water. Keeping in view the fact that as against VPA's request for consumption of 6.0 million litres (15.84 lakh gallons) of fresh water per day, APPCB restricted the freshwater consumption to 4.00 lakh gallons

per day, the Committee would like to be apprised of the outcome of the initiatives taken by VPA to reduce freshwater consumption and meeting its average consumption requirements of fresh water being nearly double the permitted quantity.

The Committee note from Audit observation that though APPCB had instructed (2 March 2020) VPA to obtain amendment to its Consent for Operations with regard to exceeding limits in the areas of water consumption and discharge of effluents, no action was initiated by VPA in this regard until the expiry of the Consent for Operations by December 2021. On this issue, the Ministry stated that VPA had applied for CFO renewal and obtained CFO on 13.04.2022 which is valid upto 31.12.2026. Further, as per earlier CFO, 2017, the VPA having fresh water consumption quantity was 4 Lakhs Gallons. At present, as per CFO, 2022 of VPA, the revised quantity of fresh water is 8 Lakhs Gallons. The water discharging quantity is revised in 2022 CFO as 18,875KLD wherein 2017 CFO VPA having water discharging quantity is 10,019.04KLD. VPA installed one more STP at AOB with the capacity of 20KLD and the treated water is being used for green belt development. Taking note of the fact that the VPA applied for CFO renewal and obtained CFO on 13.04.2022 despite having been instructed by APPCB on 2 March 2020 itself and expiry of its Consent for Operations by December 2021, the Committee would like to be apprised of the reasons for not taking advance action for obtaining the CFO timely from January, 2022 onwards and undue delay of more than four months in this regard. The Committee would also like to have the details of penalty, if any, levied by APPCB while considering the VPA's CFO renewal application.

In light of the fact that as per present CFO, 2022 VPA revised the quantity of fresh water to 8 Lakhs Gallons and the water discharging quantity revised as 18,875KLD wherein 2017 CFO VPA having water discharging quantity was 10,019.04KLD, the Committee desire that VPA should reassess the effectiveness of the water conservation initiatives being undertaken by it.

9. The Committee note that in compliance with the conditions stipulated in Consent for Operations issued by APPCB, VPA had installed (4 October 2019) a Sewage Treatment Plant at Port Hospital (viz., Golden Jubilee Hospital). The main purpose of installation of Sewage Treatment Plant was to reduce toxic effects of various effluents like pH, Total Suspended Solids, etc. However, it was observed from the Analysis Reports of effluents discharged from Sewage Treatment Plant located at Golden Jubilee Hospital that the Alkalinity levels and presence of Total Suspended Solids were in excess of the prescribed limits on three occasions out of seven during the period from October 2019 to December 2021. Management stated (May 2022) that the pH value is not of serious concern unless it is abnormally high and with time, the Potential Hydrogen values will be stabilised. Since the wastewater was discharged from different hospital units, removal of dissolved solids cannot be ensured. Hence, on some occasions, the Total

Suspended Solids results may be shown in excess of the prescribed limits. In this regard, reply of APPCB (April 2022) was that the Harbour Water is getting contaminated with domestic sewage entering into the waters without any treatment which is being dealt with by Greater Visakhapatnam Municipal Corporation and that the matter has been taken up with Commissioner, Greater Visakhapatnam Municipal Corporation, Regarding action against VPA for noncompliance with the prescribed norms as per the Consent for Operations, the Ministry stated that APPCB took stringent actions against any environmental issues to VPA by issuing notices and directions. APPCB imposed penalty of Rs. 1.97 Crores in the year 2020 for non-compliance of directions by trade and the penalty was collected from the defaulters. While expressing their displeasure over the casual approach adopted by the Management in April 2022 stating that the pH value is not of serious concern unless it is abnormally high and with time. the Potential Hydrogen values will be stabilized despite the fact APPCB imposed penalty of Rs. 1.97 Crores in the year 2020 for non-compliance of directions by trade, the Committee recommend that besides taking necessary action to reduce toxic effects of various effluents like pH, Total Suspended Solids, etc., VPA should vigorously pursue with GVMC the matter of undertaking earnest efforts to improve Harbour water quality by controlling of city drains entering harbor water. The Committee would like to be apprised of the concrete steps taken in this regard.

# **Air Pollution**

# 10. Emission of PM10 in excess of the prescribed annual averages

The Committee note from Audit observation that as per National Ambient Air Quality Standards issued by MoEF&CC vide Gazette Notification dated 18 November 2009, the annual averages of PM10 levels were to be maintained at 60 micro grams per cubic meter. Three Ambient Air Quality Monitoring Stations were located in VPA premises. Data from these stations revealed that the annual averages of PM10 were in excess of the levels stipulated by MoEF&CC. While confirming the audit observation, Management replied (May 2022) that though VPA was able to meet daily emission norms, they were unable to meet annual averages. The Ministry further stated that VPA is not the only cause for contributing to the excess values of PM10 in the City, and there were other factors also contributing the pollution load. During Covid-19 Lockdown period the PM10 values were well within the standards when VPA alone continued its operations besides all other sources of pollution due to lockdown. As per the National Environmental Engineering Research Institute (NEERI's) report (January 2013) on Air pollution & Source Apportionment Study for the Assessment of Impact of Visakhapatnam Port Operations on Ambient Air Quality, it is revealed that, VPA alone is not the contributing factor for the dust pollution, there are other contributing factors like vehicular emission & dust emitting from city roads.VPA is implementing MDSS, Truck Mounted and Trolley mounted Fog

Canons Machines, Truck tyres washing facility, Mechanical Sweeping machines, covering of cargo with tarpaulins, Constructing Covered Storage shed, Covered conveyor belt etc. for mitigation of dust. The Committee while acknowledging the year 2013 findings of the NEERI's report citing other contributing factors like vehicular emission & dust emitting from city roads for the dust pollution are of the view that fresh Assessment of Impact of Visakhapatnam Port Operations on Ambient Air Quality should be conducted to plan and execute its environment related operations and also to strategize initiatives to maintain the annual averages of PM10 levels at 60 micro grams per cubic meter. The Committee, therefore, desire that VPA should have an Assessment of Impact of Visakhapatnam Port Operations on Ambient Air Quality conducted by an independent agency and carry out Environment Management initiatives in tune with the findings thereof to ascertain the impact of vehicular emission & dust emitting from city roads for the dust pollution with a view to ensuring that PM10 values are well within the standards.

#### 11. Inadequate covering of dusty cargo with tarpaulin

The Committee note that the APPCB, being the Regulatory Authority for monitoring environmental aspects in the State of Andhra Pradesh, issued directions to VPA from time to time for mitigating pollution. The directions given by APPCB on 28 December 2015 to mitigate the air pollution in VPA, inter-alia, included that VPA shall cover all the stack yards of dusty cargo (coal and other cargo, etc.) with tarpaulin immediately and no coal stack yard shall exist without the covering. Audit noted that the Periodical Inspection Reports of the Internal Environment Task Force Team constituted to assess the coverage of cargo with tarpaulin at various locations of VPA and Public Private Partnership Operators covered 2,630 stacks during the period from January 2019 to June 2021. These inspections revealed that in 15 per cent of the stacks, there was no tarpaulin coverage at all. Average surface coverage of remaining stacks with tarpaulin was only about 60 per cent of dusty cargo stacks. Acting upon the failure in covering of stacks with tarpaulin, VPA issued notices to all defaulting stackholders and collected a penalty of ₹ 8.16 crore during the period May 2018 to January 2020. Thus, in compliance of the directions given by the APPCB on 28 December 2015, VPA was able to cover nearly half the surface area of the stacks with tarpaulins. Audit observed that it did not ensure full compliance with the measures as directed by APPCB to mitigate air pollution generated through storage of dusty cargo at its stack yards. Explaining reasons for the lack of tarpaulin coverage in 15 percent of the stacks, the Ministry stated that the office undertakes all the steps required for ensuring that the dusty cargo stacks stacked in and around the dock area premises are covered with Tarpaulin and the concerned stevedore responsible for the stack in the cargo stacks are pressurized to cover their respective stacks on 100% basis. However, at times when there is delivery of consignment either by road means or by rail mode, the stevedore/ handling agent is forced to open the coverage of the cargo stacks

partially (or) fully depending upon the quantum of cargo available at the stack vard and the quantity of cargo to be delivered. At times delivery of consignment is effected at multiple cargo stack locations and by both means of transport i.e. by road and by rail but to remove the Tarpaulin coverage of the cargo stacks. In addition to the above, at times the handling agent stacks cargo discharged from the vessel, which consumes certain time period and under such a situation, the handling agent is not in a position to immediately cover the stacks until and unless piling up off the total quantity of cargo is completed. Hence, this office is strictly complying with the directions issued by APPCB on 20th December, 2015 for coverage of all stack yards of dusty cargoes with Tarpaulin cover from the date of receipt of such orders to till date. The Ministry further stated that the assessment of the effectiveness of the measures taken by VPA to mitigate air pollution through tarpaulin coverage is evident from the fact that the Ambient Air Quality (AAQ) has improved significantly due to ensuring of 100% Tarpaulin coverage on top of the cargo stacks and also due to mitigation of air pollution caused by fine dust through sprinkling of water on top of the cargo stacks which is carried out through Mechanical Dust Suppression System (MDSS) and also through deployment of road moving water tankers at regular interval. Further, in order to ensure to complete coverage of cargo stacks with Tarpaulin cover, this office has initiated several initiatives such as supply of Tarpaulin covers to the concerned stakeholders so as to utilize the same for coverage of their respective cargo stacks. In order to ensure the same, this office carries out frequent inspections at regular intervals and also on daily basis. During the course of inspection, if any non-compliance is noticed on part of the concerned handling agents towards non- coverage of Tarpaulins, this office levies penalty as per the provisions mentioned in SOR/VPA currently in force. In addition to the above, this office also interacts with the stackholders duly emphasizing on the significance and necessity of coverage of cargo stacks with Tarpaulin cover. This office also issues various Trade circulars duly stressing upon cargo stack coverage with Tarpaulin cover. The Environment task force team is continuously monitoring in 24x7 basis in all port areas ensuring the compliance to dust mitigation control measures such as MDSS utilization, regular wetting of roads, spraying of water on stacks through water tankers where dusty cargo is being stored, water sprinkling through fog cannon machines at all berths during unloading of cargos etc. and it is being complied. T.M Department is also giving trade circulars and notices which is related to environmental issues like coverage of cargo stacks with Tarpaulins. The Ministry stated that VPA is also exploring the feasibility of implementing the best international practices for mitigating air pollution as is being carried out in other international ports.

The Committee, while noting that VPA has been undertaking various initiatives to mitigate air pollution caused by dusty cargo within VPA premises, desire that the Ministry should also devise a plan to study the best international practices, especially that of the developed countries being followed by efficiently managed foreign port authorities and implement them at VPA to effectively deal

with the air pollution in and around the Ports. The Committee would like to be apprised of the concrete steps taken in the matter.

# 12. Non-Compliance with the Directions issued by APPCB

The Committee note from Audit observation that a Non-Governmental Organization (NGO) filed an application (2015) before the National Green Tribunal on purported violation of environmental standards by VPA with a request to pass appropriate orders restraining coal cargo operations by VPA due to emission of dust from such cargo. In response to the application, VPA stated (September 2015) that the Authority was installing Mechanical Dust Suppression Systems to arrest the emission of dust from such cargo in addition to other measures such as washing of truck tyres, raising of compound wall, non-storing of dusty cargo near the human habitations, etc. Further, a Comprehensive Environment Management Plan has been initiated with Short Term (during 2015-16), Medium Term (during 2015-17) and Long Term Measures (during 2015-18). Audit pointed out that as per Environment Management Plan promised by VPA, it had to implement Long Term Measures by December 2018. The National Green Tribunal rejected the plea of the applicant NGO and directed (8 March 2017) VPA to implement the already initiated Environment Management Plan. VPA was further directed to submit Quarterly Progress Reports to National Green Tribunal for further action. APPCB, being the statutory authority for maintaining pollution standards in the State, had been reviewing the status of implementation of the directions and Consent for Operations conditions and had issued directions from time to time for compliance by VPA. Subsequently, in the course of an appeal filed (2019) by the NGO, the National Green Tribunal observed that VPA had not complied with the commitments given to it and directed (3 January 2020) APPCB to take necessary action against VPA on the basis of the observations made by them in the last report and submit further action taken and status report in this regard within a period of two months. Audit observed that non- compliance with the environmental directions issued by the National Green Tribunal, led to the imposition of environmental compensation charge of ₹1.97 crore. According to the Ministry, VPA has complied with all the short / medium / long term directions issued by APPCB except providing Mechanical Dust Suppression System at certain areas such as L-17, R-2, R-5, A &B, Opp. TM Office, which was completed subsequently. The delay has been caused due to re-organization of stack yards in view of PPP operator for EQ-1A berth who had stopped the work and the Management was terminated. Further, there is no impact on the finance of VPA as the amount of Rs. 1.97 Crores paid by VPA towards environmental compensation to APPCB was met from the environment cess being collected from the stack holders on the basis of tonnage of cargo handled by them.

The Committee note that VPA is still plagued with persistent issues of noncompliance, such as exceeding stack heights and lack of Mechanical Dust Suppression Systems. In this regard, the Ministry stated that the Environment

task force team is continuously monitoring in 24x7 basis in all port areas ensuring compliance to dust mitigation control measures such as MDSS utilization, regular wetting of roads, spraying water on stacks through water tankers where dusty cargo is being stored, water sprinkling through fog cannon machines at all berths while un loading cargo etc. and these are being complied with. While expressing surprise over the casual reply of the Ministry that there is no impact on the finance of VPA, the Committee wish to point out that delayed implementation of the measures as directed by the APPCB and the National Green Tribunal led to the imposition of environmental compensation charge of ₹1.97 crore which was met from the environment cess being collected from the stack holders on the basis of the size of cargo handled by them, and thereby, in effect VPA lost ₹1.97 crore which could have otherwise been utilized for providing environmental safe guards and for maintaining pollution standards in the State. The Committee, therefore, desire that to ensure long-term compliance with environmental directions and prevent future violations, existing Environmental Monitoring mechanism should be strengthened. Further, the Committee desire that a senior officer of VPA be designated to serve as an Environment Compliance Officer responsible for overseeing compliance issues.

# 13. <u>Lapses in E-waste Management</u>

The Committee note that the MoEF&CC vide Notification dated 23 March 2016 notified the E-waste (Management) Rules, 2015 which stipulate that the ewaste generated is to be disposed in the manner that is prescribed under E-waste Management Rules issued in the years 2011 and 2016. Rule 12 of E-waste Management Rules, 2011 read with Rule 15 of E-waste Management Rules, 2016 state that "every producer, collection center, dismantler, or recyclers may store the e-waste for a period not exceeding one hundred and eighty days". Further, Consent for Operations issued to VPA in May 2017 prescribed that the disposal of e-waste generated at VPA shall be limited to 0.5 tonnes per annum and the same had to be disposed to the authorized re-processors/re-cyclers. In this regard, Audit observed that VPA disposed (November and December 2018) 13.66 metric tonnes of e-waste through e-auction in which authorized agents participated. Subsequently, another quantity of 9.60 metric tonnes was disposed of in January 2021. These quantities were said to have accumulated over a period of 20 years. Further, 500 kilograms of electrical lamps were lying in stock as on 31 March 2021. While accepting the audit observations, Management replied (May 2022) that action will be initiated to adhere to the prescribed timelines and Environment Management Plan will be amended accordingly. The fact remains that e-waste was accumulated over the years and was not disposed of timely despite the norms being in vogue since 2011. Explaining the reasons for the accumulation of e-waste over a period of 20 years at VPA, despite the E-waste Management Rules being in place since 2011 and the Consent for Operations specifying disposal limits, the Ministry stated that VPA embarked on implementation of Information

Technology (ERP) for the first time during 2012. It takes some time to create awareness among all for proper collection segregation and disposal of e-waste. The Ministry added that now SOPs are put in place and e-waste is being disposed/ handled as per the SOPs. To ensure compliance with Rule 12 of E-waste Management Rules, 2011 and Rule 15 of E-waste Management Rules, 2016, which allow storage of e-waste for a maximum of 180 days, the Ministry stated that Internal control mechanism was put in place for ensuring timelines for e-waste disposal. Further, regarding the plan to enhance the oversight and enforcement of e-waste disposal regulations within VPA premises, the Ministry stated that E-waste management was incorporated in ISO management review agenda and is being reviewed at management level. Awareness was created among the employees/ IT maintenance personnel about the e-waste handling / storage.

While expressing surprise over the undue delay in bringing out the SOPs for e- waste disposal as the norms were in vogue since 2011, the Committee desire that the Ministry should put in place the Standard Operating Procedure for E-waste management as soon as possible and also evolve a monitoring mechanism by creating IT infrastructure and Internal control mechanism to ensure strict compliance of the e-waste disposal regulations within VPA premises and ensuring timelines for the purpose. Further, in light of the fact that E-waste management was incorporated in ISO management review agenda, the Committee would also like to be apprised of the follow up action taken at the management level and the amendments proposed to the Environment Management Plan to prevent future accumulations and ensure timely disposal. For proper collection, segregation and disposal of e-waste, the Committee also desire that awareness program among VPA staff and stakeholders should be given due impetus and thereby e- waste accumulation avoided.

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NEW DELHI: 05<sup>th</sup> Februrary, 2024 16 Magha 1945 (*Saka*) ADHIR RANJAN CHOWDHURY Chairperson, Public Accounts Committee