

**VPA COMMITTED TO TAKE UP THE RELENTLESS MARCH TOWARDS UPKEEPING
OF ENVIRONMENT**

Environmental Dimensions of Sustainability Concerns:

**COMPLIANCE TO ENVIRONMENT RELATED LEGAL, REGULATORY AND ETHICAL
REQUIREMENTS:**

1. Filing of returns in the compliance (annual/half yearly) to the conditions put forth by MoEF & CC/APPCCB/CPCB at the intervals specified in the consent order. Maintaining records in environmental cell and put up the same to EMC meetings/ HOD meetings.
2. Maintenance of QMS, EMS & OHSAS records and files and put forth during internal or external auditing.
3. Liaisoning with the monitoring agencies engaged in Environment monitoring works.
4. Submission of the required data for presenting at the time of attending the court trials. Filing of remarks and reasons with reference to court cases being filed against pollution caused as and when required.
5. Collection and submission of information after proper scrutiny to the person who requests the information under RTI Act rule.
6. Filing of online application with MoEF & CC for environmental clearances for new projects and expansion projects,

ENERGY:

From the Environment point of View VPT has identified the following scheme of action which is broadly as under;

Energy Conservation:

The objectives of energy management are resource conservation, climate protection and cost savings. Recognizing the importance of the energy management. Government of India notified "The Energy Conservation Act, 2001". VPT is one of the designated consumers identified as energy intensive industry and other establishments. VPT had earlier conducted energy audit by Andhra Pradesh Productivity Council in the year 2008. The Electrical Department has taken certain measures for energy conservation and Potential Areas for Savings

Demand Correction: It can be seen that demand recorded for all facilities other than residential facilities, is less than 80% of contract demand. It is preferable to reduce the contract demand so that demand charges can be reduced. In case if any additional demand is envisaged, it shall be explored to maintain the maximum demand by staggering of loads to the extent possible.

It was understood that VPT has already taken steps to reduce demand at

132KV S/S ,but yet to be implemented.

Pumps Control for Tankers Filling: The STP treated water is used for dust suppression. The tankers are filled through a pumping system connected to discharge outlets. Around eight discharge outlets are provided for simultaneous filling. It was noticed that the pump was running at full capacity, even if one tanker is getting filled. Other discharge outlets could not be throttled / closed, since the pumps are getting overheated. Even when there are no tankers for some time, the pumps are not switched off due to priming requirements. Now a day's self priming pumps are available. There is potential to save energy around 300 units per day which amounts to saving of Rs 54,000.00 per month.

Lighting Controls in Corridors / Offices: It was observed that many lights were on during daytime in many office rooms and also in corridors. It shall be ensured that all corridors lights are connected through a time switch so that they will be on only whenever light fails, and office rooms shall have good maintainable windows with glazing so that day lighting can be exploited. The cost towards time switch may not be more than Rs 20,000/- which can be paid back in around six months.

Solar PV System: Hospital building with all blocks can accommodate around 80KWp solar system. The system can be without a battery bank since most of the energy can be used during daytime itself. However, a detailed study needs to be done for actual implementation of system.

Natural resource conservation:

With an objective of reducing the pressure on fresh water resources a 10 MLD sewage treatment plant is under operation treating the sewage collected from Yerrigedda and Gangulagedda canals and the same is being used for the purpose of dust suppression.

Promoting renewable energy resource utilization: Utilization of renewable energy sources thereby reducing the pressure on conventional grid electricity by using the solar power for lighting purpose.

Visakhapatnam port is the pioneer in implementing Solar power under Green initiatives and initiated 10MW solar power plant at a cost of about Rs.60 crores and is in operation also 100 Kw solar power is being used for hospital purposes.



Solar energy is being utilized for the purpose of lighting in some of the port areas on trial basis at a cost of Rs. 5,09,940/-

Solar powered water heating system is also being used in different canteens and port guesthouse by investing an amount of Rs. 9,02,412/-

Already 100 Kw solar power is being used for hospital purposes.



Solar Panel installed at GJH

Green technology revolution against green house gases evolution: Possible reduction in fossil fuel consumption by proposing for the deployment of electrical rail engines in place of diesel engines thereby contributing for the development of clean fuel technology.

Green belt development as a barrier against pollution: Active participation in globally prioritized green belt development programme as per the Parliamentary standing committee recommendations.

Conservation and Resource optimization: Strictly adhering to the transportation of cargo by High capacity trucks henceforth reducing the No. of trips and considerable improvement in the cargo handling time and energy consumption.

Wastewater reclamation: A 10 MLD STP is under operation for collecting and treating the city sewage before entering into the harbour water thereby maintaining the harbor water quality. The treated water is reclaimed for effective dust suppression hence conserving the fresh water resources.

A proposal for Bioremediation of STP pond water for achieving the desired water quality for safe reclamation for the purpose of sprinkling. without intervention of hard chemicals usage as a green initiative besides it also avoids expensive periodical desiltation of Pond.

Solid waste management: A bio compost plant construction, operation and maintenance proposal is under process involving the collection of waste from Port Employee quarters by introducing dual dust bin for the segregation of waste and thereby converting it into organic bio compost through an external agency.

Rain Water Harvesting Pits: VPT has proposed to identify the suitable government educational / other buildings in Visakhapatnam city for planning rain water recharge and to develop as model rain water recharge facility. Site specific rain water recharge proposals with indicative cost will be prepared for considering the execution by the Port under CSR activities.

Fly Ash bricks utilization in VPT Construction Works:

- a) Construction of High-rise wall from Sea horse Jn to H7 Jn in port area at a cost of Rs.5,93 Crores.
- b) Providing Compound Wall (i) Along the road leading from Sea Horse junction of M/s AP Transco (ii) West side of Administrative office building (AOB) and providing 7 nos of gates in Port area in view of security measures at a cost of Rs.12.91 Lakhs.
- c) Providing compound wall from North east corner of D.C office to level crossing No.3 near H-8 drive house including raising of existing compound wall with chain link mesh.
- d) Providing sentry posts at various locations and providing gates at identified locations in vies of security measures at a cost of Rs 17.86 Lakhs.

The above strategies are in line with the National environment policy Act 2006 and other initiatives like low carbon mobility plan (LCMP) and other initiatives taken against greenhouse gases production.

INITIATIVES TO MITIGATE ENVIRONMENTAL IMPACTS:

Environment Initiatives and Best Practices adopted to protect environment

1) MECHANIZATION OF BULK CARGO HANDLING AT VISAKHAPATNAM PORT

In conventional coal handling, dust generation is mainly due to multiple handling such as unloading the coal from ship using grabs and placed on the berth, from berth loading in to dumpers, dumpers transport the coal to stackyards, stacking of coal at stack yards, from stack yard loading in to railway wagons etc.

2) 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) “Advisory support in the field of Environment of VPT” entrusted to Administrative Staff College of India, Hyderabad
- (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 final report was submitted.
- (a) 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 is in force.
- (b) The Continuous **ambient air quality monitoring at three locations** of the surrounding areas of the Visakhapatnam Port has been entrusted to the **M/s Environment SA India Pvt Ltd.**
- (c) The 10 MLD **STP water quality monitoring of VPT** entrusted to the M/s **SV Enviro Labs & Consultants** and same is in progress.