ENVIRONMENTAL INITIATIVES AT TKM

Chapter 7

Rainwater Harvesting Pond

Fig 6.6: Rain Water Harvesting Pond

TKM has adopted rainwater harvesting at its newly constructed parts centre in a bid to conserve the rain water and to protect the environment by reducing the exploitation of ground water resources. A rainwater harvesting pond of capacity 200 cum has been developed which will used a source for utilizing the water for gardening purposes. In addition to all this the aesthetic look of the industry is also enhanced.

Weather Monitoring Station

The weather monitoring has been established in the TKM premises for grasping the data's of Ambient Temperature, Humidity, Wind Velocity, Wind Direction, Rainfall in the area. Grasping of the above mentioned data helps in understanding the behavior of the exhaust gas at different times of the day.

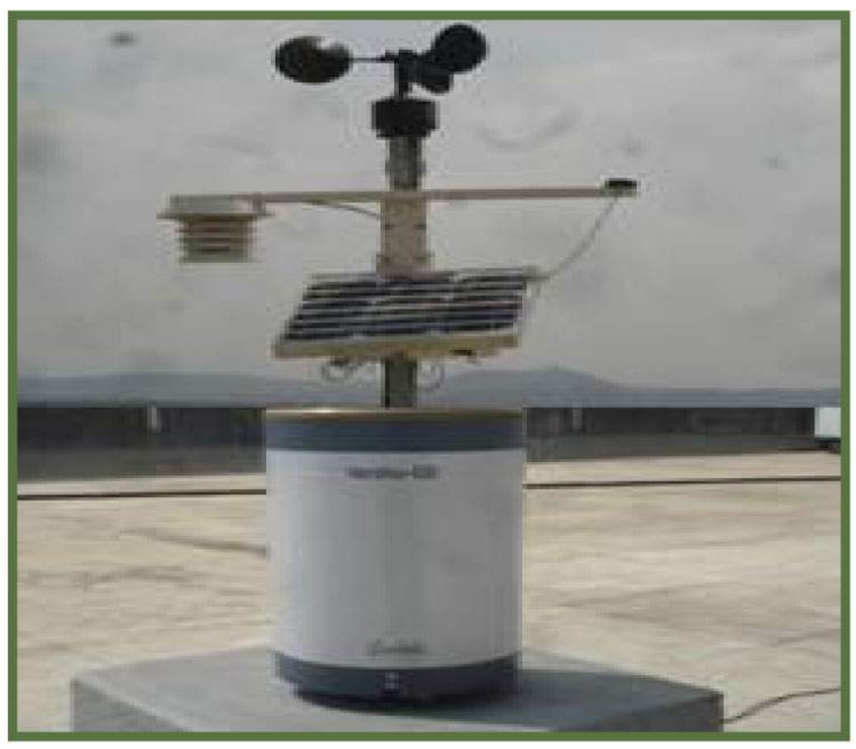

Fig 6.7: Weather Monitoring Station

It gives us in depth detail on the dispersion of pollutant around the premises of the industry so that incase of any abnormality the emergency response at most affected area in the downstream side can be initiated. The rainfall data obtained will serve us as a tool during the establishment of rain water harvesting system during the execution of future project stages. The highlight of this system is that the weather data can be grasped from any where in the world at any point of time through the website.

ENVIRONMENTAL INITIATIVES AT TKM

De WaTS : Decentralised Wastewater Treatment System

Continual increase in energy requirements for various industrial activities is causing a huge impact on the environment as well as leading to the depletion of energy resources. Energy efficient De WaTS system has been adopted to treat the wastewater being generated at the National Parts Center at TKM.

Fig 6.8 : Eco Friendly DeWaTS System

The De WaTS system is a eco friendly process where the wastewater flows by gravity thereby reducing the pumping costs of the wastewater to minimum. It is a completely closed system therefore eliminating any odor related problems to the surroundings. The root zone filter which comprises of flowering plants for polishing the treated water adds to the aesthetic look of the area.

Elimination of Substances of Concern (SOC)

European Union (EU) insists the European car manufacturers to take back their End of Life vehicles back to their premises for recycling. The End of Life vehicles are too valuable to be dumped onto to the earth. However, the recycling rates that has to be met for disposing the vehicles would be too high at that point of time.

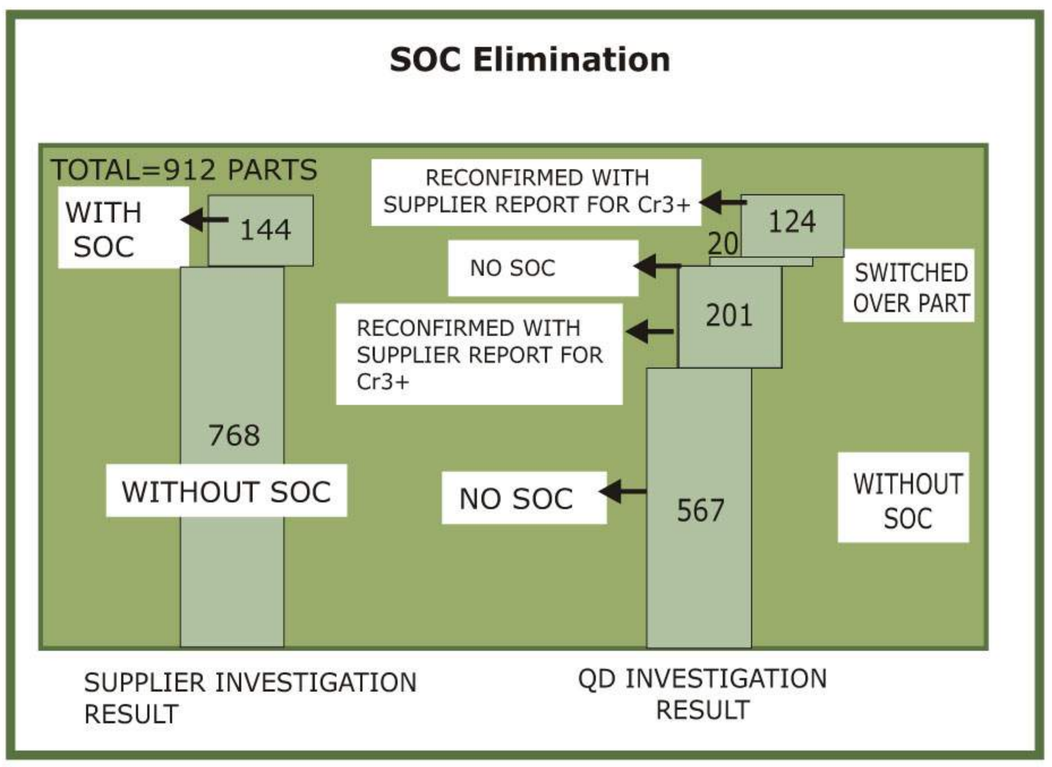

Fig 6.9: SOC Elimination

ENVIRONMENTAL INITIATIVES AT TKM

Fig 6.10 : Analysis for SOC

TKM has adopted the concept of eliminating the substances of concern (Lead, Mercury, Cadmium & Hexavalent chromium) from the Innova car that is being manufactured in the plant. Out of the 912 IMV parts identified, 144 were declared as containing SOC by the supplier. These parts were changed to SOC free parts. For Ex: Hexavalent Chrome Plating to Trivalent Chrome Plating. Quality audit was done to ensure that no SOC parts are supplied to TKM from critical suppliers end. A well equipped in house laboratory has been established to confirm SOC compliance for all 912 parts. Regular part audit is being done for critical parts on a yearly basis to ensure sustenance of the activity. For new projects, parts are checked for SOC before mass production stage.