

## DLW committed towards a clean environment



**Y. P. Singh  
General Manager**

Diesel Locomotive Works (DLW) made a modest beginning, when the first diesel-electric locomotive manufactured by it was dedicated to the nation by Late Shri Lal Bahadur Shastri on 03<sup>rd</sup> January, 1964. DLW has now taken its rightful place amongst the leading locomotive manufacturers of the world. With a capability to design locomotives for multiple gauges used by various international railway systems, DLW has its footprint across Asia and Africa. Locomotives manufactured by DLW are running in Bangladesh, Sri Lanka, Myanmar, Tanzania, Sudan, Senegal, Mali, Malaysia, Vietnam, Angola and Mozambique. DLW is also supplying locomotives to various steel plants, power plants and port trusts in India.

Since the year 2016-17, DLW has embarked on a journey to manufacture Electric Locomotives and has not looked back ever since. In a bid to reduce the carbon footprint and to provide green traction, no more Diesel Locomotives are being manufactured in DLW for Indian Railways. During the year 2019-20, 272 Electric Locomotives were successfully manufactured and dedicated to the nation. Till March, 2020, DLW has manufactured 444 Electric Locomotives. For the first time in world history, six Diesel Locomotives have been converted into Electric Locomotives with increased traction power and have been dedicated to the nation. The first such converted loco was inaugurated by the Hon'ble Prime Minister Shri Narendra Modi on 19<sup>th</sup> February, 2019.



**Hon'ble PM Shri Narendra Modi  
Flagging-off the First Electric Loco converted  
from Diesel Loco at DLW**

DLW, located in the heritage town of Varanasi, is the leading industrial unit in this area and has always been conscious of its larger role with regard to its community stakeholders especially towards the holy River Ganga. Always being a leader in environmental protection, DLW took the lead way back in late 1980s and installed two treatment plants viz. Sewage Treatment Plant (STP) for treatment of discharged human waste and Industrial Effluent Treatment Plant (IETP) for treating contaminated & mixed Petroleum oil and Lubricants (POL).

These plants, besides ensuring that river Ganga remains clean, also contribute significantly to the recycling of resources. At STP approx. 3 million liters of water is being recycled every day. The treated water is released for agricultural and gardening purposes. DLW takes pride in the fact that no sewage, whether treated or untreated, is discharged into the River Ganga. The digested bio-manure as sludge is dried and used as fertilizer for horticultural purposes. The parameters of STP and IETP are monitored online to ensure that these remain within the laid down standards of Central Pollution Control Board.



**Sewage Treatment Plant**



**Industrial Effluent Treatment Plant**

In order to provide focus to its efforts towards maintaining various parameters of water, air, hazardous waste, exhaust emission etc. within limits at par with laid down standards, DLW went in for ISO:14001 certification for Environment Management System in 2001. With this certification DLW has a well defined and documented policy for preservation of its environment of its workshop and colony.

DLW was one of the first few units of Indian Railways which were awarded the status of Green Co Silver rating by CII-Godrej Green Business Centre (CII-Godrej GBC) for its initiatives towards protecting the Environment.

In its endeavor towards sustainable environment, one water recycling plant (WRP) with capacity of 0.25 million liters per day has been commissioned near Surya Sarovar for reclaiming water for reuse application.



**Solar equipments at DLW premises**

Stepping towards energy conservation and to tap the benefits of non-conventional energy resources, DLW has taken a giant leap towards installation of grid connected solar power plants. At present, DLW has installed capacity of 2 MWp of grid connected solar power at various locations. In 2019-20, DLW has fitted 1187 energy efficient LED fittings in Quarters & Service buildings.

DLW boasts of being the first production unit where SCADA system in general services has been commissioned for monitoring of energy consumption and optimizing energy usage. It may be mentioned that DLW has obtained ISO:50001 certificate for better energy conservation.

The employees at DLW are also encouraged to adopt energy efficient lights at their homes. DLW was the first institution on Indian Railways which took lead in distributing energy efficient LED lamps amongst DLW staff. More than 50,000 energy efficient 7 watt LED lamps have so far been distributed amongst more than 4200 employees. Following DLW's example, other units of Indian Railways have also started adopting the same. Another

example of DLW's initiative towards reduction in energy consumption is the use of Motorized Gate Valve with Pump Automation. These system improvements have not only saved precious water that got wasted due to overflow but also reduced pumping requirement by 2 hours.

Through various measures, DLW has been able to reduce the water consumptions over the years and presently, the average water consumption in DLW is about 12 million liters per day. Recognizing water as precious resource, treated water from STP is used for irrigation of lawns, sports ground, green patches and filling of water bodies. DLW is also committed towards water harvesting by construction of more than 425 soak pits and 47 deep recharge wells to recharge ground water.



### **Recharge Well & soak pits**

Under the Swachchh Bharat Mission, vigorous cleanliness drives are carried out in workshop, colony, offices and hospitals at DLW. All the officers, employees and their family members including the members of Civil Defence, Bharat Scouts & Guides and St. John's Ambulance Brigade actively take part in these drives to keep the premises neat and clean.

DLW township area boasts of having more than 150000 small & big trees. This translates into DLW having around 40% green area. Thousands of trees are planted yearly all over the campus. In the year 2019-20, more than 2000 trees were planted at DLW. This concerted effort of "Team DLW" for "Clean DLW, Green DLW", has resulted in an environment which is not only green & clean all around but also the pollution levels of water, air, exhaust-emissions and hazardous wastes are well within the limits. The green campus of DLW speaks volumes about the concern and commitment of the habitants of this colony for the environment conservation at DLW. One can perceptibly feel a temperature drop of 3-4 degree Celsius, on entering DLW campus, as compared to outside area. It is the understanding and appreciation of its environment which continuously encourages DLW towards a greener and cleaner and sustainable future.



### **Green and Clean DLW premises**