

Greenbelt Development Plan

Greenbelt Development

An area of 93485 sq. m (9.34 Ha) (33 %) of the total site area (283377 sq. m)/28.32 Ha is earmarked for green belt development. As it is an existing facility and about 3.43 Ha of land is covered under greenbelt and remaining 5.91 Ha of land to developed under greenbelt cover. But it is not alike a typical industrial greenbelt of 1500 to 2000 trees per Ha. There are big gaps. A typical industrial greenbelt of 5 to 10 m width on all sides cannot be developed unless the existing trees are removed and the entire area is denuded. It is not advisable to uproot the existing trees and hence it is planned to reinforce and strengthen the existing greenbelt by pruning the branches of the trees to the desired level so that it becomes possible to grow new saplings close to the trees. It is proposed to have 2 to 5 rows of trees on all sides with a spacing of 2m x 3m (1500 / Ha).

Action plan for greenbelt development in 33% of area

Environmental protection has been considered as an important domain for industrial and other developmental activities in India. Ministry of Environment & Forests (MoEF) has taken several policy initiatives and promoted integration of environmental concerns in developmental projects. One such initiative is the notification on Environmental Impact Assessment (EIA) of developmental projects issued in 1994 and further revised notification in year 2006 under the provisions of Environment (Protection) Act, 1986 EIA Guidance Manual for building, construction, townships, and area development projects proactively talks about the importance of greenbelts in such projects.

Greenbelt in India refers to a buffer zone created beyond which industrial activity may not be carried on. This concept has developed through a long line of cases and today, greenbelts are present not only for the purpose of protecting sensitive areas to maintain ecological balance but are also be found in urban areas so as to act as a sink for the harmful gases released by vehicles and industries operating in the city area. In this regard, comprehensive Guidelines for Developing Greenbelts have been compiled by the Central Pollution Control Board [Refer Probes/75/1999-2000].

As per the stipulations of MoEF, greenbelt is to be provided all along the boundary by planting tall, evergreen trees and the total green area including landscaping area will be 1/3rd (about 33%) of the plant area. This will include Lay down area which will be later on converted into Green area. Depending on the size, activity and environmental impacts of the industry; extent of land available, agro- climatic conditions, at least 5 m wide greenbelt of two rows of tall and evergreen plants shall be grown at the rate of 600 per Ac (1500 per Ha). About 3.4 Ha (about 12.07%) of the total land is going to be used for road network. The estimated road length is about 5 km. At a distance of about 10m from tree to tree, about 100 avenue trees can be grown per km on each side. Thus, a total of 1000 Avenue Trees can be grown along the 5 km

long road network theoretically or mathematically. However, it is possible to use not more than 80% of the total as there will be road junctions, pipelines, electrical lines, entrances and exits etc. Thus, it is feasible to grow about 800 avenue trees at a distance of 10 m from plant to plant in one row on either of the roads. Profusely branching trees with canopy, such as *Delonix regia*, Peepal, Banyan, Kadamb, Neem, *Conocarpus lancefolius* etc will be grown as avenue trees.

As stated earlier, it envisaged to develop greenbelt of 5 to 10m width on all sides of the industry in an area of 5.91 Ha out of 9.34 Ha. At present around 5000 plants are existing in the facility. Saplings grown in polythene bags will be planted at distance of 2 m x 3 m @ 1500 / Ha). Work on greenbelt shall be undertaken along with the proposed construction.

The total amount of 50 lakhs has been allotted for overall greenbelt development in and around the project site (along the roads, open places & peripheral greenbelt etc) at the rate of Rs.6,00,000 per Ha and the amount will be spent in five years after construction, erection and fabrication of the TSDF at the rate of Rs.30,00,000 during the first year and Rs.20,00,000 during the second year. A total of 14,000 trees will be grown in the 9.34 Ha in 2 to 10 rows of 3mx2m all along the boundary besides one row of avenue plantations on either side of the internal roads at a distance of 10m from plant to plant. Saplings grown in poly bags are transplanted in pits of 30 Cm depth. Treated effluent water and rain water harvested shall be used for plantations.