Open spaces, where tree plantation may not be possible, will be covered with shrubs and grass to prevent erosion of top soil. Adequate attention has been paid to plantation of trees, their maintenance and protection based on the geology, soil condition and topography of the site area. Plantation program has been scheduled in the proposed premises, along the boundary & in the designated green spaces. The project has proposed to establish 14% (87,184.92 $m^2$) greenbelt of the total area. A wide range of plant species will be planted in and around the premises to help capture the fugitive emissions and noise levels. The green belt shall be covered with plants of fast growing type with thick canopy cover, perennial green nature, native origin and a large leaf area index. The geographical, environmental, morphological, anatomical & physiological aspects of plants species have been found influencing the dust capture by plant species, therefore following criteria should be adopted for selection of plant species for green belt development in urban areas:

a. The species should be adapted to site.

b. The leaf litter should decompose quickly thus adding organic matter to the soil tree like *Delonix regia* (Gulmohar), *Azadirachta indica* (Neem) etc. are suitable for the purpose.

e. Multi-purpose tree plant species have a special significance in fulfilling the objectives of environment as well as needs of the people. The combination of species to address the local needs is more beneficial.

f. The tree products have acceptable characteristics to suit local customs and traditions. Flowering herbs and shrub species like Cape jasmine, Crown daisy, Lily, Sunflower etc. meet the purpose.

**Design of Green Belt:** All around the site, a green belt of 3m width will be developed as bio-fence. Fast growing, evergreen or semi-evergreen tree saplings or cuttings will be planted to develop a thick greenbelt. Saplings are readily available from the local nurseries and the plants are well adapted to the local agro-climate. Shrubs and trees will be planted in encircling grows around the project site. The short trees (<10m height) will be planted in the first rows of the green-belt. The tall trees (>10m height) will be planted in the outer row (away residential patches).

**Some of guidelines to be considered are:**

a. Planting of trees in each row will be in staggered orientation.

b. In the front row, shrubs will be grown.

c. Since the trunks of the tall trees are generally devoid of foliage, it will be useful to have shrubs in front of the trees so as to give coverage to this portion.

| **Recommended Species for Greenbelt Development** | | |
|---|---|---|
| **Sl. No.** | **Scientific Name** | **Common Name** |
| **Trees** | | |
| 1 | *Terminalia arjuna* | Arjun |
| 2 | *Annona squamosa* | Amrood |
| 3 | *Mangifera indica* | Aam |
| 4 | *Thevetia peruviana* | Peeli kaner |
| 5 | *Ipomea carnea* | Morning glory |
| 6 | *Hibiscus rosa sinensis* | Gurhal |

| Recommended Species for Greenbelt Development | | |
|---|---|---|
| 7 | *Bougainvillea glavra* | Bougainvillea |
| 8 | *Syzygium cumini* | Jamun |
| 9 | *Citrus limon* | Nimboo |
| 10 | *Dalbergia sissoo* | Shisham |
| 11 | *Delonix regia* | Gulmohar |
| 12 | *Moringa oliefera* | Sahajan |
| 13 | *Aegle marmelos* | Bael |
| 14 | *Pithecellobium dulce* | Jungle jalebi |
| 15 | *Cassia fistula* | Amaltas |
| 16 | *Butea monosperma* | Palash |
| 17 | *Azadirachta indica* | Neem |
| 18 | *Polyalthia longifolia* | Ashoka |
| 19 | *Ficus benghalensis* | Bad |
| **Shrubs** | | |
| 1 | *Croton oblongifolius* | Croton |
| 2 | *Tabernaemontana divaricata* | Chandni |
| 3 | *Withania somnifera* | Ashwagandh |
| 4 | *Helianthus annuus* | Sunflower |
| 5 | *Gardenia jasminoides* | Cape jasmine |
| 6 | *Lillium sp.* | Lily |
| **Herbs** | | |
| 1 | *Tagetes minuta* | Genda |
| 2 | *Chrysanthamum sp.* | Crown daisy |
| 3 | *Rosa indica* | Rose |