The Unit in an area of 4081 Sq.m. Greenbelt is recommended as one of the major components of Environment Management Plan. The proposed greenbelt area is about 1348 Sq.m (33.01 %). As per MoEF&CC guidelines total no. of trees for greenbelt of 1348 Sq.m would be about 107 nos.

These species can be also available near the forest department nurseries. The Major tree species proposed for plantation in the plant area are tabulated in below:-

TABLE -10.1(a) LIST OF PLANTS FOR GREEN BELT

Sl. No.	Common Name	Biological Name	Its Significance for pollution control
1	Neem	Azadirachta indica	Noise barrier, Pollution sink, Economic & Medicinal Value, Medicinal, Evergreen & Timber
2	Ashok	Polyalthia longifolia	Ornamental & Evergreen
3	Sheesham	Dalbergia sissoo	Economic Value, Pollution Sink
4	Bargad	Ficus bengalensis	Noise barrier, Pollution sink, Shade, Supports other species, Religious values, Foliage & Canopy
5	Pipal	Ficus religiosa	Noise barrier, Pollution sink, Shade, Supports other species, Religious values , Medicinal and deciduous in winter
6	Arjun	Terminalia arjuna	Noise barrier, Pollution sink
7	Amaltas	Cassia fistula	Landscaping, Flowering plant, Pollution sink , Amaltas
8	Gulmohar	Delonix regia	Ornamental & Evergreen

Proper attention and management is required to maintain the survival rate of the planted species. The following guidelines are suggested & will be followed by the proponent for future operations of greenbelt development & maintenance.

Guidelines for Greenbelt Development

- Design and development of greenbelt will be in adherence to industry-specific requirements and prevalent climatic conditions.
- Unit will ensure healthy & dense greenbelt throughout the project life.
- Unit will follow CPCB guidelines for development & maintenance of greenbelt area.
- Unit will ensure regular irrigation & fertilization of greenbelt area as required timely.
- Unit will ensure re-plantation in greenbelt area depending upon the survival rate of planted vegetation to maintain greenbelt.
- Unit will plant trees with density of about 1500 trees per hectare or developing the greenbelt area.
- Indigenous species with fast growth are only selected or form the base of selection as Greenbelt can come in view as fast as possible.
- The tress will be planted in three-tier pattern to ensure that the entire area covered and ensure effective pollution abatement. For this, management will ensure that plantation

of trees will include mixture of lower, higher and middle canopy structure, which will be mixed appropriately / proportionately / uniformly.

Among the various native plant species evaluated during the research studies, Azadiracta indica and Polyalthia longifolia are identified as keystone species which comes under excellent category.

Small herbs, grass varieties, climbers, ornamental and flowering plants can also be raised as per the availability in the plant area.

Care will be taken to plant trees along the roadside, boundary wall as well as plant premises. It will enable proper balance of atmosphere both outside the unit by absorbing noise and gaseous pollutants of the roadside movement of vehicles and also absorption of noise and emissions within the premises of the plant.

TABLE -10.1(b) LIST OF PLANTS FOR GREEN BELT

S.No	Botanical Name	Common Name	As per CPCB Manual	Site	No.	Space in m	Each	Area (m2)	Tolerance level for pollution
1	Azadirachta indica	Neem	A44	Plant area	10	5x5	25	250	Tolerant
2	Dalbergia sissoo	Sheesham	D2	Plant area	10	5x5	25	250	Tolerant
3	Delonix regia	Gulmohar	D3	Plant area	10	3x3	9	90	Sensitive
4	Ficus bengalensis	Bargad	F1	Plant area	10	5x5	25	250	Tolerant
5	Terminalia arjuna	Arjun	T6	Plant area	10	3x3	9	90	Tolerant
6	Polyalthia longifolia	Ashok	P9	Plant area	19	2x2	4	76	Sensitive
7	Cassia fistula	Amaltas	C7	Plant area	18	3x3	9	162	Tolerant
8	Ficus religiosa	Pipal	F7	Plant area	20	3x3	9	180	Tolerant
					107			**1348**	

2nd Column in the above table shows that List of plant species suggested by CPCB manual.

*Guidelines for the development of Greenbelts. Published by Envis Centre, CPCB, (Programme objective series: PROBES / 75 / 1999-2000, 210 pp.

- Tall trees towards boundary wall proposed
- Medium sized trees next row to tall trees
- Small trees next row
- Near entrance gate & Open area provided for plantation

Unit will follow the following three-year comprehensive programme

- Unit will follow the following three -year comprehensive greenbelt development program after that the company will keep following the prevailing practices of greenbelt management.
- Unit will regularly assess survival rate of planted trees & shrub and if required necessary re-plantation will be done to ensure healthy & dense greenbelt area in proposed premises.
- For re-plantation, if required, Industry will acquire saplings from local private/government nursery.
- Unit will do fertilization as required for healthy & dense greenbelt development.

TABLE -10.1(c) Greenbelt Development -:Year Wise Plantation Program

S. No.	Year of Plantation	Proposed Plantation	Area Covered SQM	Budget	
				Capital Cost (Rs In Lacs)	Recurring Cost per annum (Rs In Lacs)
1	Ist Year	36	450	5.0	1.0
2	IInd Year	36	450	-	0.50
3	IIIrd Year	35	448	-	0.50
	Total	**107**	**1348**	**5.0**	**2.0**