

The following list represents the results of my review of published research and literature. I'm sharing it with the intention of encouraging others to consider using these species when planting near **roadways, rail corridors, industrial sites**, and in **urban and suburban areas**. Note that these species are only suitable for soils with mild to moderate levels of petroleum contamination, and that not all of the species listed here are ideal for home gardens and landscaping projects where a clean, manicured aesthetic is desired. Please cross-reference the species contained on this list with Lissa's List of Well Behaved Natives before planting them in a location where a "well behaved" plant species is more desirable.

NATIVE TREE SPECIES FOR REMOVAL OF PARTICULATE MATTER

Conifers collect ultrafine particles (PM2.5) more effectively than deciduous species.

When selecting deciduous trees, species with waxy leaf coatings, leaf hairs, and greater leaf area index will collect more particulate matter than species without these features.

Common Name	Scientific Name	Sunlight Requirements	Soil Moisture Requirements
Green Ash	<i>Fraxinus pennsylvanica</i>	Full sun	Medium
Eastern red cedar	<i>Juniperus virginiana</i>	Full sun	Dry to medium
Common Ninebark	<i>Physocarpus opulifolius</i>	Full sun to part shade	Dry to medium
Shortleaf Pine	<i>Pinus echinata</i>	Full sun	Dry to medium
Northern Red Oak	<i>Quercus rubra</i>	Full sun	Dry to medium

NATIVES TREE SPECIES FOR NITROGEN DIOXIDE (NO₂)

Consider planting these species in industrial areas where NO_x emissions are high.

Common Name	Scientific Name	Sunlight Requirements	Soil Moisture Requirements	Comments
Black Locust	<i>Robinia pseudoacacia</i>	Full sun	Dry to medium	Has high assimilation of NO ₂ while simultaneously having a high resistance to damage from NO ₂ .

NATIVE TREE SPECIES THAT EMIT LESS VOLATILE ORGANIC COMPOUNDS (VOCs)

Common Name	Scientific Name	Sunlight Requirements	Soil Moisture Requirements
Downy Serviceberry	<i>Amelanchier arborea</i>	Full sun to part shade	Medium
Eastern Red Cedar	<i>Juniperus virginiana</i>	Full sun	Dry to medium
Basswood	<i>Tilia americana</i>	Full sun to part shade	Medium
Winged Elm	<i>Ulmus alata</i>	Full sun	Medium
American Elm	<i>Ulmus americana</i>	Full sun	Medium
Slippery Elm	<i>Ulmus rubra</i>	Full sun	Medium