

# The Issue

Air toxics from dirty diesel, industry sources and other emissions are a major health crisis. Exposure has been linked to heart, lung and brain disorders, especially among the elderly, our youth, people with allergies, asthma sufferers and pregnant women.

In Lents, major sources of emissions are:

- Interstate 205 and State Highway 213/82nd Avenue which carry tens of thousands of commuters daily.
- Heavy construction equipment involved in projects throughout the city.
- Commercial trucks and industrial vehicles with dirty diesel engines.
- Industrial and manufacturing centers such as metal casters and glassworks.

Despite the recent passage of HB2007 which regulates heavy diesel engines in the Portland Metropolitan Area, much work remains to be done. Emissions from industry, medium-duty trucks and construction vehicles remain unaddressed for both urban and rural residents.

This guide was designed to provide our neighbors with several key strategies to mitigate the impacts of environmental toxics on their family and in their homes and effectively respond to air quality emergencies when they arise.

# About Us

Green Lents is a non-profit that began as a community group in 2009 and is dedicated to providing leadership, educational and volunteer opportunities in and around the Lents neighborhood to support vibrant and sustainable communities.

For more information visit:  
[greenlents.org](http://greenlents.org)

*Green Lents*

# Clean Air Solutions

Strategies to  
Protect Yourself  
and Your Family  
from the Impacts of  
Environmental  
Air Toxics



In 1993, the National Aeronautics and Space Administration was working to solve the issue of air pollution in sealed space habitats. In their study, they identified the natural air purifying qualities of common houseplants which can be easily acquired at your local nursery.

## Bamboo Palm

(Chamaedorea seifrizii)

Place near air flow, keep soil moist and mist to prevent spider mites.  
Non-toxic, pet and child safe  
Eliminates formaldehyde, benzene, xylene, carbon monoxide, chloroform

## Areca Palm

(Chrysalidocarpus lutescens)

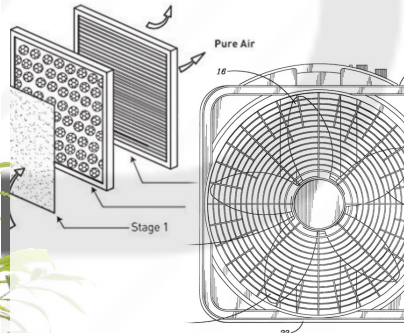
Care: Regular watering in summer. Non-toxic, pet and child safe  
Eliminates benzene, formaldehyde, carbon monoxide, trichloroethylene, xylene and more.

## Spider Plant

(Chlorophytum comosum)

Care: Water twice a week. Non-toxic, pet and child safe  
Eliminates formaldehyde and xylene

Residential air purification systems are effective at filtering out toxic air particulates but can be costly to buy and maintain. Fortunately with a little ingenuity you can achieve the same results at a fraction of the cost. Simply follow the instructions below.

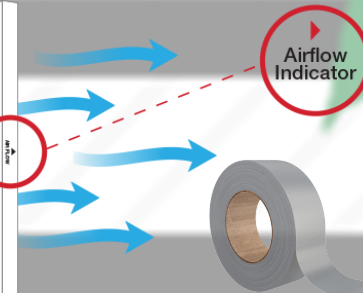


### STEP ONE

Acquire a high-efficiency particulate air (HEPA) filter and an electric fan of similar size. Both are widely available through online retailers or home improvement stores.

### STEP TWO

Using duct tape or plastic clips, affix the air filter to the grill of the fan. Avoid obstructing the intake. Take care to align the arrow on the filter with the direction of the fan's airflow.



### STEP THREE

Activate your newly assembled air purifier in a room with all the doors and windows closed. Within an hour it should eliminate 80% of all air particulates, creating an air quality safe zone inside your house to protect you and your family.



In the event of heavy wildfire smoke or other air quality emergencies; or for people with asthma, breathing problems or heart disease, consider the use of respirator masks when outdoors.



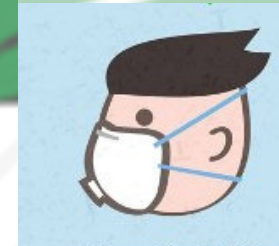
Respirator masks with a rating of N95 or N100 are more affordable and easier to use than other specialized breathing apparatuses while being effective at protecting you from toxic air.

Surgical masks and bandannas are not sufficient to protect yourself from toxic particulates.



A clean seal is critical to the effectiveness of the respirator.

Excessive facial hair and improper sizing or wear can interfere with a tidy seal. Children will require special-sized masks in order to fit.



If for any reason you cannot achieve a proper seal do not use the respirator. Check with your doctor before continuing to use a respirator mask if you find it makes breathing difficult.



# 60 HR

Under typical conditions, a mask is effective for sixty hours of use.