## Lesson 7: Got Dirty Air? – Sources of Air Pollution (Major Man-Made Air Pollutants)

POLLUTANT	DESCRIPTION	SOURCES	SIGNS / EFFECTS
Carbon monoxide (CO)	Colorless, odorless gas	<ul> <li>Vehicles burning gasoline</li> <li>Indoor sources, including: kerosene, wood burning, natural gas, coal, or wood- burning stoves and heaters</li> </ul>	<ul> <li>Headaches, reduced mental alertness, death</li> <li>Heart damage</li> </ul>
Lead (Pb)	Metallic element	<ul><li>Vehicles burning leaded gasoline</li><li>Metal refineries</li></ul>	<ul><li>Brain and kidney damage</li><li>Contaminated crops and livestock</li></ul>
Nitrogen oxides (NO <sub>X</sub> )	Gaseous compounds made up of nitrogen and oxygen	<ul> <li>Vehicles</li> <li>Power plants burning fossil fuels</li> <li>Coal-burning stoves</li> </ul>	<ul> <li>Lung damage</li> <li>React in atmosphere to form acid rain</li> <li>Deteriorate buildings and statues</li> <li>Damage forests</li> <li>Form ozone &amp; other pollutants (smog)</li> </ul>
Ozone (O <sub>3</sub> )	Gaseous pollutant	<ul> <li>Vehicle exhaust and certain other fumes</li> <li>Formed from other air pollutants in the presence of sunlight</li> </ul>	<ul> <li>Lung damage</li> <li>Eye irritation</li> <li>Respiratory tract problems</li> <li>Damages vegetation</li> <li>Smog</li> </ul>
Particulate matter	Very small particles of soot, dust, or other matter, including tiny droplets of liquids	<ul><li>Diesel engines</li><li>Power plants</li><li>Industries</li><li>Windblown dust</li><li>Wood stoves</li></ul>	<ul> <li>Lung damage eye irritation</li> <li>Damages crops</li> <li>Reduces visibility</li> <li>Discolors buildings and statues</li> </ul>
Sulphur dioxide (SO2)	Gaseous compound made up of sulphur and oxygen	<ul> <li>Coal-burning power plants and industries</li> <li>Coal-burning stoves</li> <li>Refineries</li> </ul>	<ul> <li>Eye irritation</li> <li>Lung damage</li> <li>Kills aquatic life</li> <li>Reacts in atmosphere to form acid rain</li> <li>Damages forests</li> <li>Deteriorates buildings and statues</li> </ul>

(Source: US Environmental Protection Agency, <a href="https://www.epa.gov/environmental-topics/air-topics">https://www.epa.gov/environmental-topics/air-topics</a>)



