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

POLLUTANT	DESCRIPTION	SOURCES	\$IGN\$/ EFFECT\$
Carbon monoxide (CO)	 colorless, odorless gas 	 vehicles burning gasoline indoor sources, including kerosene, wood-burning, natural gas, coal, or wood-burning stoves and heaters 	 headaches, reduced mental alertness, death heart damage
Lead (Pb)	• metallic element	 vehicles burning leaded gasoline metal refineries 	 brain and kidney damage contaminated crops and livestock
Nitrogen oxides (NO _x)	 gaseous compounds made up of nitrogen and oxygen 	 vehicles power plants burning fossil fuels coal-burning stoves 	 lung damage react in atmosphere to form acid rain deteriorate buildings and statues damage forests form ozone & other pollutants (smog)
Ozone (O ₃)	• gaseous pollutant	 vehicle exhaust and certain other fumes formed from other air pollutants in the presence of sunlight 	 lung damage eye irritation respiratory tract problems damages vegeta- tion smog
Particulate matter	 very small particles of soot, dust, or other matter, including tiny droplets of liquids 	 diesel engines power plants industries windblown dust wood stoves 	 lung damage eye irritation damages crops reduces visibility discolors buildings and statues
Sulphur dioxide (SO ₂)	 gaseous compound made up of sulphur and oxygen 	 coal-burning power plants and industries coal-burning stoves refineries 	 eye irritation lung damage kills aquatic life reacts in atmosphere to form acid rain damages forests deteriorates buildings and statues

(Source: US Environmental Protection Agency, Project A.I.R.E. http://www.epa.gov/region01/students/teacher/airqual.html)