

# Air Pollution from Proposed PA Ethanol Plants

Pollutant	Health Problems caused or made worse (not a complete list!)	Permitted Emissions (tons/year)			Frequency of Testing	
		Sunnyside	BioNoI	Northeast Ethanol	Sunnyside	BioNoI
<b>Nitrogen Oxides (NOx)</b>	Worsens asthma; decreases lung function; respiratory disease; helps form ozone, which contributes to asthma, heart attacks, low birth weight and premature births	171.0	72.0	73.4	for main stack; Once every 2 years for rest of facility	Once within 180 days of startup
<b>Carbon Monoxide (CO)</b>	Injuries to heart, brain and other organ and tissues	330.7	25.5	91.8	Continuous	
<b>Sulfur Dioxides (SOx)</b>	Lung irritation; worsens asthma; destabilizes heart, low birth rate; sudden	435.9	1.5	10.4	Continuous	Never
<b>Particulate Matter (PM)</b>	Increased asthma attacks; increased deaths in elderly; heart disease; stroke; low birth weight; premature births; airway obstruction; sudden infant death syndrome	130.1	63.7	75.8	Once/year for main stack; every 2 years for rest of facility	Once within 180 days of startup
<b>Fine Particulate Matter (PM10)</b>				45.0		
<b>Ammonia</b>	Breathing problems; suspected neurotoxin and reproductive toxin	14.2	no limit		Once/year	Never
<b>Sulfuric Acid (H2SO4)</b>	Reduced lung function	21.8	no limit		Once/year	Never
<b>Volatile Organic Compounds (VOCs)</b>	Suspected to cause cancer and to be toxic to reproductive system	37.6	33.9	31.6	main stack; every 2 years for rest of plant	Once within 180 days of startup
<b>Hazardous Air Pollutants (HAPs):</b>	See below:	2.2	5.2	<b>11.5</b>	Once/year	Never
The toxins below are all considered HAPs. Chemical storage tanks on site will release VOCs and volatile HAPs, but these emissions will not be monitored.						
<b>Arsenic</b>	Cancers; may damage fetus; damage to nerve, stomach, intestines		<b>No specific limits</b>		Once/year	<b>No testing required</b>
<b>Beryllium</b>	Lung scarring, breathing difficulties, heart strain, and skin irritation, cancer (lung &	37.34 lbs/year		Once/year		
<b>Cadmium</b>	Cancer (kidney); reproductive problems; kidney & liver damage			Once/year		
<b>Chromium VI</b>	problems			Once/year		
<b>Lead</b>	Reproductive problems; Memory & behaviour problems, Nerve damage, kidney	123.6 lbs/year		Once/year		
<b>Mercury</b>	Nerve toxin; brain damage, mental retardation; birth defects; blood pressure;	2.1 lbs/year		Once/year		
<b>Nickel</b>	Possible cancer (lung); Asthma			Once/year		
<b>Other toxic metals</b>	Other metals (Antimony, Cobalt, Manganese, Selenium) cause heart, lung problems, brain damage			Once/year		
<b>Hydrofluoric Acid (HF)</b>	Kidney and nervous system damage; damage to bones; learning disabilities	3.1		Once/year		
<b>Hydrochloric Acid (HCl)</b>	Lung irritation, worsens asthma	9.9		Once/year		
<b>Polycyclic Aromatic Hydrocarbons (PAHs)</b>	Cancer, birth defects, immune system problems	no limits		Never		
<b>Dioxins / Furans</b>	Cancer; reproductive problems; birth defects; learning disabilities	no limits		Never		
<b>TOTALS</b>		<b>1,156</b>		<b>202</b>	<b>340</b>	

**Why would Northeast Ethanol have hazardous air emissions so much higher than two other PA ethanol plants that are each twice as large -- and even dirtier than the one burning waste coal (Sunnyside) instead of natural gas??**