The Pegasus Project Hazardous Air Pollutants Emissions And Health Risk Analysis for 4 GE LM600 Turbines

Natural Gas High Heat Value (HHV) =	1,050.0	Btu/scf
Annual Turbine Capacity (HHV) @ 66 °F & 100% Load* =	450.0	MMBtu/Hr
Max Turbine Heat Input (HHV) @ 24 °F & 100% Load** =	467.5	MMBtu/Hr
Annual Fuel Rate = 0.429 MMscf/hour	Max Fuel Rate =	0.445 MMscf/hr

Maximum Impacts from 1 gram per second ISCT3 Air Dispersion Modeling & Location of Impacts				
Averaging Time	Max Impact	Unit	UTM Coordinates	
1-hour Maximum Impact =	12.618	$(\mu g/m^3)/(g/s)$	438,012	3,763,778
Annual Maximum Impact =	0.6715136	$(\mu g/m^3)/(g/s)$	439,612	3,761,078

Hazardous Air Pollutants Emission Factors & Plant Sources Emission Rates				Risk Assessment Health Values					Hazard Indices & Cancer Risk			Hazard Indices & Cancer Risks Adjusted for Multipathway		
HAP	CATEF Emission Factor*** (lbs/MMcf)	4 Turbines Max. Emissions (g/s)	4 Turbines Avg. Annual Emissions (g/s)	Acute RELs $(\mu g/m^3)$	Chronic RELs $(\mu g/m^3)$	Chronic MPAF	Cancer Potency $(\mu g/m^3)^{-1}$	MICR MPAF	Acute Hazard Index	Chronic Hazard Index	Inhalation Cancer Risks Per Million	Acute Hazard Index	Chronic Hazard Index	Max Individual Cancer Risks Per Million
Acetaldedyde	6.86E-02	1.54E-02	1.48E-02		9.0E+00	1.0	2.7E-06	1.0		1.1E-03	2.7E-02		1.1E-03	2.7E-02
Acrolein	2.73E-02	6.12E-03	5.90E-03	1.9E-01	2.0E-02	1.0			4.1E-01	2.0E-01		4.1E-01	2.0E-01	
Ammonia (1)	7.14E+00	1.60E+00	1.54E+00	3.2E+03	2.0E+02	1.0			6.3E-03	5.2E-03		6.3E-03	5.2E-03	
Benzene	1.36E-02	3.05E-03	2.94E-03	1.3E+03	6.0E+01	1.0	2.9E-05	1.0	3.0E-05	3.3E-05	5.7E-02	3.0E-05	3.3E-05	5.7E-02
Benzo(a)anthracene	2.26E-05	5.07E-06	4.89E-06				1.1E-04	12.7			3.6E-04			4.6E-03
Benzo(a)pyrene	1.39E-05	3.12E-06	3.01E-06				1.1E-03	12.7			2.2E-03			2.8E-02
Benzo(b)fluoranthene	1.13E-05	2.53E-06	2.44E-06				1.1E-04	12.7			1.8E-04			2.3E-03
Benzo(k)fluoranthene	1.10E-05	2.47E-06	2.38E-06				1.1E-04	12.7			1.8E-04			2.2E-03
1,3-Butadiene	1.27E-04	2.85E-05	2.75E-05				1.7E-04	1.0			3.1E-03			3.1E-03
Chrysene	2.52E-05	5.65E-06	5.45E-06				1.1E-05	12.7			4.0E-05			5.1E-04
Dibenz(a,h)anthracene	2.35E-05	5.27E-06	5.08E-06				1.2E-03	12.7			4.1E-03			5.2E-02
Formaldehyde	1.10E-01	2.47E-02	2.38E-02	9.4E+01	3.0E+00	1.0	6.0E-06	1.0	3.3E-03	5.3E-03	9.6E-02	3.3E-03	5.3E-03	9.6E-02
Indeno(1,2,3-cd)pyrene	2.35E-05	5.27E-06	5.08E-06				1.1E-04	12.7			3.8E-04			4.8E-03
Naphthalene	1.66E-03	3.72E-04	3.59E-04		9.0E+00	1.0				2.7E-05			2.7E-05	
Propylene Oxide	4.78E-02	1.07E-02	1.03E-02	3.1E+03	3.0E+01	1.0	3.7E-06	1.0	4.4E-05	2.3E-04	2.6E-02	4.4E-05	2.3E-04	2.6E-02
Toluene	7.10E-02	1.59E-02	1.54E-02	3.7E+04	3.0E+02	1.0			5.4E-06	3.4E-05		5.4E-06	3.4E-05	
Xylene (Total)	2.61E-02	5.85E-03	5.64E-03	2.2E+04	7.0E+02	1.0			3.4E-06	5.4E-06		3.4E-06	5.4E-06	
		1.68E+00	1.62E+00						4.16E-01	2.10E-01	2.16E-01	0.41634	0.21013	0.30337

* With inlet air chiller on

**Heat Input for the short term case is for 24 degrees, 100% load, inlet air chiller off, and water injection off.

*** Mean California Air Toxic Emission Factors (CATEF), Version 1.2 are used.

(1) Ammonia Emissions are based on 5 ppmdv maximum ammonia slip @ 15% Oxygen