Phelps Dodge - Morenci
Stack Parameters

Stack ID	Description	Height (ft)	Diameter (ft)	Temp. (F)	Exit Vel. (ft/s)	Height (m)	Diameter (m)	Temp. (K)	Exit Vel. (m/s)	F_{stk}
51	Unit #1 Turbine	80.0	5.8	100	650	24.4	1.8	311	198	3.72E+06
52	Unit #2 Boiler	80.0	5.8	100	650	24.4	1.8	311	198	3.72E+06
53	Unit #3 Turbine	80.0	5.8	100	650	24.4	1.8	311	198	3.72E+06
62	Small Ind. Steam Generator #1	33.0	2.0	295	38.2	10.1	0.61	419	11.6	1.43E+04
74	Small Ind. Steam Generator #2	33.0	2.0	295	38.2	10.1	0.61	419	11.6	1.43E+04
75	Small Ind. Steam Generator #3	33.0	2.0	295	38.2	10.1	0.61	419	11.6	1.43E+04

Phelps Dodge - Morenci
Screen Modeling Results[ab]

Stack ID	Pollutant	Emission Rate[c] (lb/hr)	Emission Rate (g/s)	1- Hour Generic Modeling Results {(μg/m³)/(g/s)}	Maximum Predicted 1-Hour Concentration (μg/m³)	Maximum Predicted Annual Concentration (μg/m³)	Distance to Maximum Concentration (m)	Generic Cavity Results {(μg/m³)/(g/s)}	Maximum Cavity Concentration (μg/m³)
62	Benzene	2.29E-01	2.88E-02	198	5.70E+00	4.56E-01	25	0.00E+00	0.00E+00
	Facility - Benzene Maximum Combined Results				**5.70E+00**	**4.56E-01**	**25**	**-**	**0.00E+00**
62	Manganese Compounds	4.22E-02	5.32E-03	198	1.05E+00	8.42E-02	25	0.00E+00	0.00E+00
	Facility - Manganese Compounds Maximum Combined Results				**1.05E+00**	**8.42E-02**	**25**	**-**	**0.00E+00**
62	Mercury Compounds	1.37E-03	1.73E-04	198	3.41E-02	2.73E-03	25	0.00E+00	0.00E+00
	Facility - Mercury Compounds Maximum Combined Results				**3.41E-02**	**2.73E-03**	**25**	**-**	**0.00E+00**
62	Nickel Compounds	1.60E-03	2.01E-04	198	3.98E-02	3.18E-03	25	0.00E+00	0.00E+00
	Facility - Nickel Maximum Combined Results				**3.98E-02**	**3.18E-03**	**25**	**-**	**0.00E+00**
62	Polycyclic Organic Matter (POM)	2.59E-03	3.27E-04	198	6.46E-02	5.16E-03	25	0.00E+00	0.00E+00
	Facility - POM Maximum Combined Results				**6.46E-02**	**5.16E-03**	**25**	**-**	**0.00E+00**
62	Toluene	3.88E-01	4.89E-02	198	9.67E+00	7.74E-01	25	0.00E+00	0.00E+00
	Facility - Toluene Maximum Combined Results				**9.67E+00**	**7.74E-01**	**25**	**-**	**0.00E+00**
62	Xylene (mixed isomers)	8.11E-01	1.02E-01	198	2.02E+01	1.62E+00	25	0.00E+00	0.00E+00
	Facility - Xylene Maximum Combined Results				**2.02E+01**	**1.62E+00**	**25**	**-**	**0.00E+00**

[a] Results are with building dimensions (Stack ht./1.5 -0.1 m) x 110 m x 280 m). Building length and width estimated from USGS 7.5 minute quadrangle, Clifton, dated 1989.

[b] No specific source emissions provided by ADEQ, therefore facility-wide emissions modeled from only Stack ID #62 (minimum Fstk).

[c] Based upon TRI reported facility-wide Benzene emissions (2,003 lb/yr)/(8,760 hr/yr), Manganese Compound emissions (370 lb/yr)/(8,760 hr/yr), Mercury Compound emissions (12 lb/yr/8,760 hr/yr), Nickel Compound emissions (14 lb/yr)/(8,760 hr/yr), POM emissions (22.7 lb/yr)/(8,760 hr/yr), Toluene emissions (3,401 lb/yr)/(8,760 hr/yr), and Xylene emissions (7,101 lb/yr)/(8,760 hr/yr).

Phelps Dodge - Morenci AAC Analysis

Pollutant	AAC 1-Hour (μg/m³)	AAC Annual (μg/m³)	Percentage of 1-Hour AAC	Percentage of Annual AAC
Benzene	1.28E+06	2.43E-01	4.46E-06	188
Manganese Compounds	2.50E+03	5.21E-02	0.042	162
Mercury Compounds	1.03E+03	3.13E-01	3.33E-03	0.87
Nickel Compounds	5.00E+03	7.90E-03	7.96E-04	40.3
Polycyclic Organic Matter (POM)	5.00E+03	2.02E-03	1.29E-03	256
Toluene	1.92E+06	4.17E+02	5.03E-04	0.19
Xylene (mixed isomers)	1.74E+06	1.04E+02	1.16E-03	1.6

1 American Woodmark Corp.
2 Mastercraft Cabinets Inc.

American Woodmark Corp.
Stack Parameters

Stack ID	Description	Height (ft)	Diameter (ft)	Temp. (F)	Exit Vel. (ft/s)	Height (m)	Diameter (m)	Temp. (K)	Exit Vel. (m/s)
EXH1	Vertical Oven Cool Zone 1.28C	44.0	2.3	105	22.1	13.4	0.71	314	6.7
EXH2	Vertical Oven Cool Zone 1.31C	44.0	2.3	105	22.1	13.4	0.71	314	6.7
EXH3	Vertical Oven Cool Zone 1.36C	44.0	2.3	105	22.1	13.4	0.71	314	6.7
EXH4	Vertical Oven Cool Zone 1.41C	44.0	2.3	105	22.1	13.4	0.71	314	6.7
EXH7	Spray Booth 3.10	44.0	3.0	85.0	29.0	13.4	0.91	302	8.8
EXH8	Oven 3.11	44.0	2.0	120	13.9	13.4	0.61	322	4.2
EXH9	Spray Booth 3.12	44.0	2.0	85.0	46.2	13.4	0.61	302	14.1
EXH10	Oven 3.13	44.0	1.5	120	24.7	13.4	0.46	322	7.5
EXH12	Oven 4.15C	44.0	2.5	105	21.6	13.4	0.76	314	6.6
EXH13	Pump Room	44.0	2.1	68.0	19.2	13.4	0.65	293	5.9
RTO1	Thermal Oxidizer	44.0	5.8	300	37.4	13.4	1.8	422	11.4

American Woodmark Corp.
Screen Modeling Results[ab]

Stack ID	Pollutant	Emission Rate[c] lb/hr)	Emission Rate (g/s)	1- Hour Generic Modeling Results {(μg/m^3)/(g/s)}	Maximum Predicted 1-Hour Concentration (μg/m^3)	Maximum Predicted Annual Concentration (μg/m^3)	Distance to Maximum Concentration (m)	Generic Cavity Results {(μg/m^3)/(g/s)}	Maximum Cavity Concentration (μg/m^3)
EXH1	Methanol	6.00E-01	7.56E-02	336	2.54E+01	2.03E+00	59	0.00E+00	0.00E+00
EXH7	Methanol	5.37E-01	6.77E-02	327	2.21E+01	1.77E+00	80	0.00E+00	0.00E+00
EXH8	Methanol	5.37E-01	6.77E-02	484	3.28E+01	2.62E+00	27	0.00E+00	0.00E+00
EXH9	Methanol	5.37E-01	6.77E-02	337	2.28E+01	1.83E+00	89	0.00E+00	0.00E+00
EXH10	Methanol	5.37E-01	6.77E-02	445	3.01E+01	2.41E+00	89	0.00E+00	0.00E+00
EXH12	Methanol	6.05E-02	7.62E-03	324	2.47E+00	1.97E-01	59	0.00E+00	0.00E+00
EXH13	Methanol	1.65E-02	2.08E-03	1,061	2.21E+00	1.76E-01	89	0.00E+00	0.00E+00
RTO1	Methanol	2.09E+00	2.63E-01	152	4.00E+01	3.20E+00	27	0.00E+00	0.00E+00
Facility - Methanol Maximum Combined Results					**1.78E+02**	**1.42E+01**	**27**	**-**	**0.00E+00**
EXH1	Methyl Ethyl Ketone (MEK)	1.32E+00	1.66E-01	336	5.58E+01	4.46E+00	59	0.00E+00	0.00E+00
EXH12	Methyl Ethyl Ketone (MEK)	1.49E-01	1.88E-02	324	6.08E+00	4.86E-01	59	0.00E+00	0.00E+00
EXH13	Methyl Ethyl Ketone (MEK)	3.23E-02	4.07E-03	1,061	4.32E+00	3.45E-01	89	0.00E+00	0.00E+00
RTO1	Methyl Ethyl Ketone (MEK)	4.68E+00	5.90E-01	152	8.96E+01	7.17E+00	27	0.00E+00	0.00E+00
Facility - MEK Maximum Combined Results					**1.56E+02**	**1.25E+01**	**27**	**-**	**0.00E+00**
EXH1	Toluene	2.47E+00	3.11E-01	336	1.05E+02	8.37E+00	59	0.00E+00	0.00E+00
EXH7	Toluene	9.25E-02	1.17E-02	327	3.81E+00	3.05E-01	80	0.00E+00	0.00E+00
EXH8	Toluene	9.25E-02	1.17E-02	484	5.64E+00	4.52E-01	27	0.00E+00	0.00E+00
EXH9	Toluene	9.25E-02	1.17E-02	337	3.93E+00	3.14E-01	89	0.00E+00	0.00E+00
EXH10	Toluene	9.25E-02	1.17E-02	445	5.18E+00	4.15E-01	89	0.00E+00	0.00E+00
EXH12	Toluene	1.55E-01	1.95E-02	324	6.32E+00	5.06E-01	59	0.00E+00	0.00E+00
EXH13	Toluene	3.68E-02	4.64E-03	1,061	4.92E+00	3.94E-01	89	0.00E+00	0.00E+00
RTO1	Toluene	5.29E+00	6.67E-01	152	1.01E+02	8.10E+00	27	0.00E+00	0.00E+00
Facility - Toluene Maximum Combined Results					**2.36E+02**	**1.89E+01**	**27**	**-**	**0.00E+00**
EXH1	Xylene (mixed isomers)	1.30E+00	1.64E-01	336	5.51E+01	4.41E+00	59	0.00E+00	0.00E+00
EXH7	Xylene (mixed isomers)	5.94E-01	7.48E-02	327	2.45E+01	1.96E+00	80	0.00E+00	0.00E+00
EXH8	Xylene (mixed isomers)	5.94E-01	7.48E-02	484	3.62E+01	2.90E+00	27	0.00E+00	0.00E+00
EXH9	Xylene (mixed isomers)	5.94E-01	7.48E-02	337	2.52E+01	2.02E+00	89	0.00E+00	0.00E+00
EXH10	Xylene (mixed isomers)	5.94E-01	7.48E-02	445	3.33E+01	2.66E+00	89	0.00E+00	0.00E+00
EXH12	Xylene (mixed isomers)	6.57E-03	8.28E-04	324	2.68E-01	2.14E-02	59	0.00E+00	0.00E+00
EXH13	Xylene (mixed isomers)	2.86E-02	3.60E-03	1,061	3.82E+00	3.06E-01	89	0.00E+00	0.00E+00
RTO1	Xylene (mixed isomers)	3.81E+00	4.80E-01	152	7.29E+01	5.83E+00	27	0.00E+00	0.00E+00
Facility - Xylene Maximum Combined Results					**2.51E+02**	**2.01E+01**	**27**	**-**	**0.00E+00**

[a] Results are with building dimensions (Stack ht./1.5 -0.1 m) x 40 m x 40 m). Assumed generic building length and width.
[b] Stack IDs EXH1-EXH4 are identical, therefore total emissions from these four stacks were modeled from just EXH1.
[c] ADEQ supplied PTE emission rate (lb/hr).

American Woodmark Corp. AAC Analysis

Pollutant	AAC 1-Hour (μg/m^3)	AAC Annual (μg/m^3)	Percentage of 1-Hour AAC	Percentage of Annual AAC
Methanol	9.43E+05	4.17E+03	0.019	0.34
Methyl Ethyl Ketone (MEK)	5.02E+06	5.21E+03	3.11E-03	0.24
Toluene	1.92E+06	4.17E+02	0.012	4.5
Xylene (mixed isomers)	1.74E+06	1.04E+02	0.014	19.3

Mastercraft Cabinets Inc.
Stack Parameters[a]

Stack ID	Description	Height (ft)	Diameter (ft)	Temp. (F)	Exit Vel. (ft/s)	Height (m)	Diameter (m)	Temp. (K)	Exit Vel. (m/s)	F_{stk}
5	#1 Stain Spray Machine	24.0	1.2	110	64.2	7.3	0.36	316	19.6	4.52E+03
14	#2 Stain Spray Machine	22.0	1.2	110	64.2	6.7	0.36	316	19.6	4.14E+03
24	Sealer Spray Machine	22.0	1.2	110	64.2	6.7	0.36	316	19.6	4.14E+03
31	Topcoat Spray Machine	24.0	1.2	110	64.2	7.3	0.36	316	19.6	4.52E+03
40	Finishing Kitchen Cabinet Spray B	22.0	1.2	110	64.2	6.7	0.36	316	19.6	4.14E+03

[a] Maricopa County unable to supply specific sources of HAP emissions. Stacks emitting VOCs chosen for modeling.

Mastercraft Cabinets Inc.
Screen Modeling Results[ab]

Stack ID	Pollutant	Emission Rate[c] (lb/hr)	Emission Rate (g/s)	1- Hour Generic Modeling Results {(μg/m³)/(g/s)}	Maximum Predicted 1-Hour Concentration (μg/m³)	Maximum Predicted Annual Concentration (μg/m³)	Distance to Maximum Concentration (m)	Generic Cavity Results {(μg/m³)/(g/s)}	Maximum Cavity Concentration (μg/m³)
14	Methyl Ethyl Ketone (MEK)	5.60E+00	7.05E-01	21,780	1.54E+04	1.23E+03	25	0.00E+00	0.00E+00
	Facility - MEK Maximum Combined Results				**1.54E+04**	**1.23E+03**	**25**	**-**	**0.00E+00**
14	Toluene	9.09E+00	1.14E+00	21,780	2.49E+04	1.99E+03	25	0.00E+00	0.00E+00
	Facility - Toluene Maximum Combined Results				**2.49E+04**	**1.99E+03**	**25**	**-**	**0.00E+00**
14	Xylene (mixed isomers)	9.23E+00	1.16E+00	21,780	2.53E+04	2.03E+03	25	0.00E+00	0.00E+00
	Facility - Xylene Maximum Combined Results				**2.53E+04**	**2.03E+03**	**25**	**-**	**0.00E+00**

[a] Results are with building dimensions (Stack ht./1.5 -0.1 m) x 73 m x 114 m). Building length and width estimated from aerial photo.
[b] Maricopa County designated all stacks as downward unobstructed, therefore all stacks would be modeled with 0.001 m/s exit velocity.
Facility-wide emissions assumed to be emitted from only Stack ID 14 (minimum Fstk). Stack IDs 14, 24, 40 all have same stack characteristics, Stack ID 14 chosen for modeling.
[c] Based upon TRI reported facility-wide MEK emissions (11,190 lb/yr)/(2,000 hr/yr), Toluene emissions (18,174 lb/yr)/(2,000 hr/yr), and Xylene emissions (18,452 lb/yr)/(2,000 hr/yr).

Mastercraft Cabinets Inc. AAC Analysis

Pollutant	AAC 1-Hour (μg/m³)	AAC Annual (μg/m³)	Percentage of 1-Hour AAC	Percentage of Annual AAC
Methyl Ethyl Ketone (MEK)	5.02E+06	5.21E+03	0.31	23.6
Toluene	1.92E+06	4.17E+02	1.3	478
Xylene (mixed isomers)	1.74E+06	1.04E+02	1.5	1,948

1 Cavco Industries Inc. Litchfield

Cavco Industries Inc. Litchfield
Stack Parameters[a]

Stack ID	Description	Release Height (ft)	Sigma Y (ft)	Sigma Z (ft)	Release Height (m)	Sigma Y (m)	Sigma Z (m)
1	Generic Volume Source	12.0	23.4	11.2	3.7	7.1	3.4

[a] No stack parameters supplied by Maricopa County, assumed generic volume source based upon 2-story (24 ft high, 100-ft long) building.

Cavco Industries Inc. Litchfield
Screen Modeling Results

Stack ID	Pollutant	Emission Rate[a] (lb/hr)	Emission Rate (g/s)	1- Hour Generic Modeling Results {(μg/m^3)/(g/s)}	Maximum Predicted 1-Hour Concentration (μg/m^3)	Maximum Predicted Annual Concentration (μg/m^3)	Distance to Maximum Concentration (m)	Generic Cavity Results {(μg/m^3)/(g/s)}	Maximum Cavity Concentration (μg/m^3)
1	Ethylene Glycol	8.33E+00	1.05E+00	6,588	6.91E+03	5.53E+02	25	NA	NA
	Facility - Ethylene Glycol Maximum Combined Results				**6.91E+03**	**5.53E+02**	**25**	**NA**	**NA**

[a] Based upon TRI reported facility-wide Ethylene Glycol emissions (16,658 lb/yr)/(2,000 hr/yr).

Cavco Industries Inc. Litchfield AAC Analysis

Pollutant	AAC 1-Hour (μg/m^3)	AAC Annual (μg/m^3)	Percentage of 1-Hour AAC	Percentage of Annual AAC
Ethylene Glycol	5.00E+04	4.17E+02	13.8	133

Abitibi Consolidated - Snowflake Pulp Mill
Stack Parameters

Stack ID	Description	Height (ft)	Diameter (ft)	Temp. (F)	Exit Vel. (ft/s)	Height (m)	Diameter (m)	Temp. (K)	Exit Vel. (m/s)
1	Power Boiler 1	120	7.5	400	45.0	36.6	2.3	477	13.7
2	Power Boiler 2	214	12.0	225	60.2	65.2	3.7	380	18.3
3	Power Boiler 3	115	6.0	350	62.6	35.1	1.8	450	19.1

Abitibi Consolidated - Snowflake Pulp Mill
Screen Modeling Results[a]

Stack ID	Pollutant	Emission Rate[b] (lb/hr)	Emission Rate (g/s)	1- Hour Generic Modeling Results {(μg/m^3)/(g/s)}	Maximum Predicted 1-Hour Concentration (μg/m^3)	Maximum Predicted Annual Concentration (μg/m^3)	Distance to Maximum Concentration (m)	Generic Cavity Results {(μg/m^3)/(g/s)}	Maximum Cavity Concentration (μg/m^3)
2	2 Chloroacetophenone	2.94E-04	3.70E-05	3.2	1.20E-04	9.63E-06	400	0.00E+00	0.00E+00
	Facility - 2 Chloroacetophenone Maximum Combined Results				**1.20E-04**	**9.63E-06**	**400**	**-**	**0.00E+00**
2	2, 4-Dinitrotoluene	1.18E-05	1.49E-06	3.2	4.83E-06	3.86E-07	400	0.00E+00	0.00E+00
	Facility - 2, 4-Dinitrotoluene Maximum Combined Results				**4.83E-06**	**3.86E-07**	**400**	**-**	**0.00E+00**
2	Acrolein	1.22E-02	1.54E-03	3.2	4.99E-03	4.00E-04	400	0.00E+00	0.00E+00
	Facility - Acrolein Maximum Combined Results				**4.99E-03**	**4.00E-04**	**400**	**-**	**0.00E+00**
2	Benzyl Chloride	2.94E-02	3.70E-03	3.2	1.20E-02	9.63E-04	400	0.00E+00	0.00E+00
	Facility - Benzyl Chloride Maximum Combined Results				**1.20E-02**	**9.63E-04**	**400**	**-**	**0.00E+00**
2	BIS (2-Ethylhexyl) Phthalate	3.07E-02	3.87E-03	3.2	1.26E-02	1.01E-03	400	0.00E+00	0.00E+00
	Facility - BIS (2-Ethylhexyl) Phthalate Maximum Combined Results				**1.26E-02**	**1.01E-03**	**400**	**-**	**0.00E+00**
2	Chlorobenzene	9.24E-04	1.16E-04	3.2	3.78E-04	3.03E-05	400	0.00E+00	0.00E+00
	Facility - Chlorobenzene Maximum Combined Results				**3.78E-04**	**3.03E-05**	**400**	**-**	**0.00E+00**
1	Chromium Compounds	6.72E-04	8.47E-05	11.7	9.86E-04	7.89E-05	73	0.00E+00	0.00E+00
2	Chromium Compounds	5.88E-02	7.41E-03	3.2	2.41E-02	1.93E-03	400	0.00E+00	0.00E+00
3	Chromium Compounds	1.40E-03	1.76E-04	10.7	1.88E-03	1.51E-04	70	0.00E+00	0.00E+00
	Facility - Chromium Compounds Maximum Combined Results				**2.69E-02**	**2.16E-03**	**70**	**-**	**0.00E+00**
2	Ethyl Benzene	3.95E-03	4.98E-04	3.2	1.62E-03	1.29E-04	400	0.00E+00	0.00E+00
3	Ethyl Benzene	2.00E-04	2.52E-05	10.7	2.69E-04	2.15E-05	70	0.00E+00	0.00E+00
	Facility - Ethyl Benzene Maximum Combined Results				**1.89E-03**	**1.51E-04**	**70**	**-**	**0.00E+00**
2	Ethylene Dibromide	1.68E-03	2.12E-04	3.2	6.88E-04	5.50E-05	400	0.00E+00	0.00E+00
	Facility - Ethylene Dibromide Maximum Combined Results				**6.88E-04**	**5.50E-05**	**400**	**-**	**0.00E+00**
2	Ethylene Dichloride	5.04E-05	6.35E-06	3.2	2.06E-05	1.65E-06	400	0.00E+00	0.00E+00
	Facility - Ethylene Dichloride Maximum Combined Results				**2.06E-05**	**1.65E-06**	**400**	**-**	**0.00E+00**
1	Formaldehyde	3.60E-02	4.54E-03	11.7	5.28E-02	4.23E-03	73	0.00E+00	0.00E+00
2	Formaldehyde	1.01E-02	1.27E-03	3.2	4.13E-03	3.31E-04	400	0.00E+00	0.00E+00
3	Formaldehyde	9.90E-02	1.25E-02	10.7	1.33E-01	1.07E-02	70	0.00E+00	0.00E+00
	Facility - Formaldehyde Maximum Combined Results				**1.90E-01**	**1.52E-02**	**70**	**-**	**0.00E+00**
1	Hexane	8.64E-01	1.09E-01	11.7	1.27E+00	1.01E-01	73	0.00E+00	0.00E+00
2	Hexane	2.81E-03	3.54E-04	3.2	1.15E-03	9.20E-05	400	0.00E+00	0.00E+00
	Facility - Hexane Maximum Combined Results				**1.27E+00**	**1.02E-01**	**73**	**-**	**0.00E+00**
2	Hydrochloric Acid	5.04E+01	6.35E+00	3.2	2.06E+01	1.65E+00	400	0.00E+00	0.00E+00
	Facility - Hydrochloric Acid Maximum Combined Results				**2.06E+01**	**1.65E+00**	**400**	**-**	**0.00E+00**
2	Hydrogen Flouride (Hydroflouric Acid)	6.30E+00	7.94E-01	3.2	2.58E+00	2.06E-01	400	0.00E+00	0.00E+00
	Facility - Hydrogen Flouride Maximum Combined Results				**2.58E+00**	**2.06E-01**	**400**	**-**	**0.00E+00**
1	Manganese Compounds	1.82E-04	2.29E-05	11.7	2.67E-04	2.14E-05	73	0.00E+00	0.00E+00
2	Manganese Compounds	2.06E-02	2.60E-03	3.2	8.43E-03	6.75E-04	400	0.00E+00	0.00E+00
3	Manganese Compounds	2.80E-03	3.53E-04	10.7	3.77E-03	3.01E-04	70	0.00E+00	0.00E+00
	Facility - Manganese Compounds Maximum Combined Results				**1.25E-02**	**9.97E-04**	**70**	**-**	**0.00E+00**
1	Mercury Compounds	1.25E-04	1.58E-05	11.7	1.83E-04	1.47E-05	73	0.00E+00	0.00E+00
2	Mercury Compounds	3.49E-03	4.40E-04	3.2	1.43E-03	1.14E-04	400	0.00E+00	0.00E+00
3	Mercury Compounds	1.40E-03	1.76E-04	10.7	1.88E-03	1.51E-04	70	0.00E+00	0.00E+00
	Facility - Mercury Compounds Maximum Combined Results				**3.50E-03**	**2.80E-04**	**70**	**-**	**0.00E+00**
2	Methyl Tert-Butyl Ether	1.47E-03	1.85E-04	3.2	6.02E-04	4.81E-05	400	0.00E+00	0.00E+00
	Facility - Methyl Tert-Butyl Ether Maximum Combined Results				**6.02E-04**	**4.81E-05**	**400**	**-**	**0.00E+00**
2	Phenol	6.72E-04	8.47E-05	3.2	2.75E-04	2.20E-05	400	0.00E+00	0.00E+00
	Facility - Phenol Maximum Combined Results				**2.75E-04**	**2.20E-05**	**400**	**-**	**0.00E+00**
2	Propionaldehyde	1.60E-02	2.02E-03	3.2	6.55E-03	5.24E-04	400	0.00E+00	0.00E+00
	Facility - Propionaldehyde Maximum Combined Results				**6.55E-03**	**5.24E-04**	**400**	**-**	**0.00E+00**
1	Toluene	1.63E-03	2.05E-04	11.7	2.39E-03	1.91E-04	73	0.00E+00	0.00E+00
2	Toluene	1.01E-02	1.27E-03	3.2	4.13E-03	3.31E-04	400	0.00E+00	0.00E+00
3	Toluene	1.86E-02	2.34E-03	10.7	2.50E-02	2.00E-03	70	0.00E+00	0.00E+00
	Facility - Toluene Maximum Combined Results				**3.16E-02**	**2.52E-03**	**70**	**-**	**0.00E+00**
2	Vinyl Acetate	3.19E-04	4.02E-05	3.2	1.31E-04	1.04E-05	400	0.00E+00	0.00E+00
	Facility - Vinyl Acetate Maximum Combined Results				**1.31E-04**	**1.04E-05**	**400**	**-**	**0.00E+00**
2	Xylene (mixed isomers)	1.55E-03	1.95E-04	3.2	6.35E-04	5.08E-05	400	0.00E+00	0.00E+00
3	Xylene (mixed isomers)	3.00E-04	3.78E-05	10.7	4.04E-04	3.23E-05	70	0.00E+00	0.00E+00
	Facility - Xylene Maximum Combined Results				**1.04E-03**	**8.31E-05**	**70**	**-**	**0.00E+00**

[a] Results are with building dimensions (Stack ht./1.5 -0.1 m) x 100 m x 200 m). Building length and width estimated from topograph.
[b] ADEQ supplied PTE emission rates (lb/hr).

Abitibi Consolidated - Snowflake Pulp Mill AAC Analysis

Pollutant	AAC 1-Hour (μg/m^3)	AAC Annual (μg/m^3)	Percentage of 1-Hour AAC	Percentage of Annual AAC
2 Chloroacetophenone	NA	3.13E-02	NA	0.031
2, 4-Dinitrotoluene	5.00E+03	2.13E-02	9.66E-08	1.81E-03
Acrolein	2.30E+02	2.09E-02	2.17E-03	1.9
Benzyl Chloride	2.60E+04	3.96E-02	4.63E-05	2.4
BIS (2-Ethylhexyl) Phthalate	1.25E+04	4.80E-01	1.01E-04	0.21
Chlorobenzene	1.00E+06	1.04E+03	3.78E-08	2.91E-06
Chromium Compounds	1.00E+02	1.58E-04	0.027	1,364
Ethyl Benzene	2.50E+05	1.04E+03	7.54E-07	1.45E-05
Ethylene Dibromide	1.00E+05	3.16E-03	6.88E-07	1.7
Ethylene Dichloride	4.05E+05	7.29E-02	5.09E-09	2.26E-03
Formaldehyde	1.70E+04	1.46E-01	1.12E-03	10.4
Hexane	1.16E+07	2.21E+03	1.09E-05	4.60E-03
Hydrochloric Acid	1.60E+04	2.09E+01	0.13	7.9
Hydrogen Flouride (Hydroflouric Acid)	1.00E+04	1.46E+01	0.026	1.4
Manganese Compounds	2.50E+03	5.21E-02	4.99E-04	1.9
Mercury Compounds	1.03E+03	3.13E-01	3.41E-04	0.089
Methyl Tert-Butyl Ether	1.44E+06	7.40E+00	4.17E-08	6.51E-04
Phenol	5.80E+04	2.09E+02	4.74E-07	1.05E-05
Propionaldehyde	4.03E+05	8.62E-01	1.63E-06	0.061
Toluene	1.92E+06	4.17E+02	1.64E-06	6.05E-04
Vinyl Acetate	3.87E+05	2.09E+02	3.37E-08	5.00E-06
Xylene (mixed isomers)	1.74E+06	1.04E+02	5.98E-08	7.99E-05

Munters Corporation

Stack Parameters[a]

Stack ID	Description	Height (ft)	Diameter (ft)	Temp. (F)	Exit Vel. (ft/s)	Height (m)	Diameter (m)	Temp. (K)	Exit Vel. (m/s)
1	Scrubber Stack	35.0	2.0	93.0	46.2	10.7	0.61	307	14.1

[a] Maricopa County supplied data for only one stack (Stack ID 1). Assumed all facility-wide emissions from Stack ID 1.

Munters Corporation

Screen Modeling Results[a]

Stack ID	Pollutant	Emission Rate[b] (lb/hr)	Emission Rate (g/s)	1- Hour Generic Modeling Results {(μg/m^3)/(g/s)}	Maximum Predicted 1-Hour Concentration (μg/m^3)	Maximum Predicted Annual Concentration (μg/m^3)	Distance to Maximum Concentration (m)	Generic Cavity Results {(μg/m^3)/(g/s)}	Maximum Cavity Concentration (μg/m^3)
1	Formaldehyde	1.66E+00	2.09E-01	374	7.83E+01	6.27E+00	71	0.00E+00	0.00E+00
Facility - Formaldehyde Maximum Combined Results					**7.83E+01**	**6.27E+00**	**71**	**-**	**0.00E+00**
1	Phenol	2.96E-01	3.72E-02	374	1.39E+01	1.11E+00	71	0.00E+00	0.00E+00
Facility - Phenol Maximum Combined Results					**1.39E+01**	**1.11E+00**	**71**	**-**	**0.00E+00**

[a] Results are with building dimensions (Stack ht./1.5 -0.1 m) x 40 m x 40 m). Assumed generic building length and width.

[b] Based upon TRI reported facility-wide Formaldehyde emissions (10,363 lb/yr)/(6,240 hr/yr) and Phenol emissions (1,844 lb/yr)/(6,240 hr/yr).

Munters Corporation AAC Analysis

Pollutant	AAC 1-Hour (μg/m^3)	AAC Annual (μg/m^3)	Percentage of 1-Hour AAC	Percentage of Annual AAC
Formaldehyde	1.70E+04	1.46E-01	0.46	4,292
Phenol	5.80E+04	2.09E+02	0.024	0.53

1 IVC Indl. Coatings Inc.

IVC Indl. Coatings Inc.
Stack Parameters

Stack ID	Description	Height (ft)	Diameter (ft)	Temp. (F)	Exit Vel. (ft/s)	Height (m)	Diameter (m)	Temp. (K)	Exit Vel. (m/s)
1	5 Shar Mixer Stack	10	1.3	67.7	8.0	3.0	0.41	293	2.4
2	5 Shar Mixers and 1 Grinding Mill	15	1.0	67.7	42.5	4.6	0.30	293	13.0
3	5 Shar Mixers and 1 Grinding Mill	15	1.0	67.7	42.5	4.6	0.30	293	13.0

IVC Indl. Coatings Inc.
Screen Modeling Results[ab]

Stack ID	Pollutant	Emission Rate[c] (lb/hr)	Emission Rate (g/s)	1- Hour Generic Modeling Results {(μg/m^3)/(g/s)}	Maximum Predicted 1-Hour Concentration (μg/m^3)	Maximum Predicted Annual Concentration (μg/m^3)	Distance to Maximum Concentration (m)	Generic Cavity Results {(μg/m^3)/(g/s)}	Maximum Cavity Concentration[d] (μg/m^3)
1	Glycol Ethers	3.04E-01	3.84E-02	48,520	1.86E+03	1.49E+02	25	9.49E+03	3.64E+02
2	Glycol Ethers	3.04E-01	3.84E-02	2,167	8.31E+01	6.65E+00	48	0.00E+00	0.00E+00
3	Glycol Ethers	3.04E-01	3.84E-02	2,167	8.31E+01	6.65E+00	48	0.00E+00	0.00E+00
Facility - Glycol Ethers Maximum Combined Results					**2.03E+03**	**1.62E+02**	**25**	**-**	**3.64E+02**
1	Methyl Ethyl Ketone (MEK)	2.58E-01	3.25E-02	48,520	1.58E+03	1.26E+02	25	9.49E+03	3.08E+02
Facility - MEK Maximum Combined Results					**1.58E+03**	**1.26E+02**	**25**	**-**	**3.08E+02**

[a] Results are with building dimensions (3.66 m x 18 m x 28 m). Assumed minimum building height of 12 ft. Building length and width estimated from aerial photo.

[b] TRI reported MEK emissions of 2,258 lb/yr. Pinal County stated that IVC Indl. Coatings does not emit MEK.

[c] MEK emission rate based upon (2,258 lb/yr)/(8,760 hr/yr). MEK emissions assumed emitted from only Stack ID 1 (minimum F_{stk}).

Glycol Ethers emission rate based upon Pinal County supplied facility-wide emissions of 2,667 lb/yr, equally distributed among stacks.

[d] Cavity length 14 m.

IVC Indl. Coatings Inc. AAC Analysis

Pollutant	AAC 1-Hour (μg/m^3)	AAC Annual (μg/m^3)	Percentage of 1-Hour AAC	Percentage of Annual AAC
Glycol Ethers	2.50E+05	3.14E+00	0.81	5,165
Methyl Ethyl Ketone (MEK)	5.02E+06	5.21E+03	0.031	2.4

1 Equilon Phoenix Transmix Facility

Equilon Phoenix Transmix Facility
Stack Parameters[a]

Stack ID	Description	Release Height (ft)	Sigma Y (ft)	Sigma Z (ft)	Release Height (m)	Sigma Y (m)	Sigma Z (m)
1	Generic Volume Source	12.0	23.4	11.2	3.7	7.1	3.4

[a] ADEQ stated that emissions from this facility are fugitive, therefore the facility was modeled as a volume source.

Equilon Phoenix Transmix Facility
Screen Modeling Results

Stack ID	Pollutant	Emission Rate[a] (lb/hr)	Emission Rate (g/s)	1- Hour Generic Modeling Results {(μg/m^3)/(g/s)}	Maximum Predicted 1-Hour Concentration (μg/m^3)	Maximum Predicted Annual Concentration (μg/m^3)	Distance to Maximum Concentration (m)	Generic Cavity Results {(μg/m^3)/(g/s)}	Maximum Cavity Concentration (μg/m^3)
1	Benzene	5.71E-02	7.19E-03	6,588	4.74E+01	3.79E+00	25	NA	NA
	Facility - Benzene Maximum Combined Results				**4.74E+01**	**3.79E+00**	**25**	**NA**	**NA**
1	Ethyl Benzene	2.91E-02	3.67E-03	6,588	2.42E+01	1.93E+00	25	NA	NA
	Facility - Ethyl Benzene Maximum Combined Results				**2.42E+01**	**1.93E+00**	**25**	**NA**	**NA**
1	Hexane	5.71E-02	7.19E-03	6,588	4.74E+01	3.79E+00	25	NA	NA
	Facility - Hexane Maximum Combined Results				**4.74E+01**	**3.79E+00**	**25**	**NA**	**NA**
1	Methyl Tert-Butyl Ether	3.22E-01	4.05E-02	6,588	2.67E+02	2.14E+01	25	NA	NA
	Facility - Methyl Tert-Butyl Ether Maximum Combined Results				**2.67E+02**	**2.14E+01**	**25**	**NA**	**NA**
1	Toluene	5.71E-02	7.19E-03	6,588	4.74E+01	3.79E+00	25	NA	NA
	Facility - Toluene Maximum Combined Results				**4.74E+01**	**3.79E+00**	**25**	**NA**	**NA**
1	Xylene (mixed isomers)	5.71E-02	7.19E-03	6,588	4.74E+01	3.79E+00	25	NA	NA
	Facility - Xylene Maximum Combined Results				**4.74E+01**	**3.79E+00**	**25**	**NA**	**NA**

[a] Based upon TRI reported facility-wide Benzene emissions (500 lb/yr)/(8,760 hr/yr), Ethyl Benzene emissions (255 lb/yr)/(8,760 hr/yr), Hexane emissions (500 lb/yr)/(8,760 hr/yr), Methyl Tert-Butyl Ether emissions (2,817 lb/yr)/(8,760 hr/yr), Toluene emissions (500 lb/yr)/(8,760 hr/yr) and Xylene (500 lb/yr)/(8,760 hr/yr).

Equilon Phoenix Transmix Facility AAC Analysis

Pollutant	AAC 1-Hour (μg/m^3)	AAC Annual (μg/m^3)	Percentage of 1-Hour AAC	Percentage of Annual AAC
Benzene	1.28E+06	2.43E-01	3.71E-03	1,560
Ethyl Benzene	2.50E+05	1.04E+03	9.67E-03	0.19
Hexane	1.16E+07	2.21E+03	4.07E-04	0.17
Methyl Tert-Butyl Ether	1.44E+06	7.40E+00	1.85E-02	289
Toluene	1.92E+06	4.17E+02	2.46E-03	0.91
Xylene (mixed isomers)	1.74E+06	1.04E+02	2.73E-03	3.6

1 Goodrich-Aircraft Interior Products

Goodrich-Aircraft Interior Products
Stack Parameters[a]

Stack ID	Description	Release Height (ft)	Sigma Y (ft)	Sigma Z (ft)	Release Height (m)	Sigma Y (m)	Sigma Z (m)
1	Generic Volume Source	12.0	23.4	11.2	3.7	7.1	3.4

[a] Unable to determine stack parameters from Maricopa County supplied information, assumed generic volume source based upon 2-story (24 ft high, 100-ft long) building.

Goodrich-Aircraft Interior Products
Screen Modeling Results

Stack ID	Pollutant	Emission Rate[a] (lb/hr)	Emission Rate (g/s)	1- Hour Generic Modeling Results {(μg/m^3)/(g/s)}	Maximum Predicted 1-Hour Concentration (μg/m^3)	Maximum Predicted Annual Concentration (μg/m^3)	Distance to Maximum Concentration (m)	Generic Cavity Results {(μg/m^3)/(g/s)}	Maximum Cavity Concentration (μg/m^3)
1	Hexane	4.40E+00	5.54E-01	6,588	3.65E+03	2.92E+02	25	NA	NA
	Facility - Hexane Maximum Combined Results				**3.65E+03**	**2.92E+02**	**25**	**NA**	**NA**
1	Methyl Ethyl Ketone (MEK)	1.28E+01	1.61E+00	6,588	1.06E+04	8.49E+02	25	NA	NA
	Facility - MEK Maximum Combined Results				**1.06E+04**	**8.49E+02**	**25**	**NA**	**NA**
1	Toluene	1.52E+01	1.91E+00	6,588	1.26E+04	1.01E+03	25	NA	NA
	Facility - Toluene Maximum Combined Results				**1.26E+04**	**1.01E+03**	**25**	**NA**	**NA**

[a] Based upon TRI reported facility-wide Hexane emissions (9,144 lb/yr)/(2,080 hr/yr), MEK emissions (26,604 lb/yr)/(2,080 hr/yr), and Toluene emissions (31,578 lb/yr)/(2,080 hr/yr).

Goodrich-Aircraft Interior Products AAC Analysis

Pollutant	AAC 1-Hour (μg/m^3)	AAC Annual (μg/m^3)	Percentage of 1-Hour AAC	Percentage of Annual AAC
Hexane	1.16E+07	2.21E+03	3.13E-02	13.2
Methyl Ethyl Ketone (MEK)	5.02E+06	5.21E+03	0.212	16.3
Toluene	1.92E+06	4.17E+02	0.66	242

1 Rogers Corp. ACMD-Roosevelt
2 Southwest Fiberglass LLC

Rogers Corporation ACMD-Roosevelt
Stack Parameters

Stack ID	Description	Height (ft)	Diameter (ft)	Temp. (F)	Exit Vel. (ft/s)	Height (m)	Diameter (m)	Temp. (K)	Exit Vel. (m/s)	F_{stk}
1	Thermal Oxidizer Stack	40.0	3.7	300	41.0	12.2	1.12	422	12.5	6.31E+04
2	Boiler Stack	35.0	3.0	800	23.6	10.7	0.91	700	7.2	3.52E+04

Rogers Corporation ACMD-Roosevelt
Screen Modeling Results[ab]

Stack ID	Pollutant	Emission Rate[c] (lb/hr)	Emission Rate (g/s)	1- Hour Generic Modeling Results {(μg/m^3)/(g/s)}	Maximum Predicted 1-Hour Concentration (μg/m^3)	Maximum Predicted Annual Concentration (μg/m^3)	Distance to Maximum Concentration (m)	Generic Cavity Results {(μg/m^3)/(g/s)}	Maximum Cavity Concentration (μg/m^3)
2	Ethyl Benzene	3.11E-01	3.92E-02	211	8.28E+00	6.63E-01	25	0.00E+00	0.00E+00
	Facility - Ethyl Benzene Maximum Combined Results				**8.28E+00**	**6.63E-01**	**25**	**-**	**0.00E+00**
2	Xylene (mixed isomers)	1.23E+00	1.55E-01	211	3.27E+01	2.62E+00	25	0.00E+00	0.00E+00
	Facility - Xylene Maximum Combined Results				**3.27E+01**	**2.62E+00**	**25**	**-**	**0.00E+00**

[a] Results are with building dimensions (Stack ht./1.5 -0.1 m) x 40 m x 40 m). Assumed generic building length and width.
[b] Facility-wide Ethyl Benzene and Xylene emissions modeled from Stack ID 2 (minimum F_{stk}).
[c] Based upon TRI reported facility-wide Ethyl Benzene emissions (2,612 lb/yr)/(8,400 hr/yr), and Xylene emissions (10,317 lb/yr)/(8,400 hr/yr).

Rogers Corporation ACMD-Roosevelt AAC Analysis

Pollutant	AAC 1-Hour (μg/m^3)	AAC Annual (μg/m^3)	Percentage of 1-Hour AAC	Percentage of Annual AAC
Ethyl Benzene	2.50E+05	1.04E+03	3.31E-03	0.064
Xylene (mixed isomers)	1.74E+06	1.04E+02	1.88E-03	2.5

Southwest Fiberglass LLC
Stack Parameters[a]

Stack ID	Description	Release Height (ft)	Sigma Y (ft)	Sigma Z (ft)	Release Height (m)	Sigma Y (m)	Sigma Z (m)
1	Generic Volume Source	12.0	23.4	11.2	3.7	7.1	3.4

[a] No stack parameters were available, assumed generic volume source based upon 2-story (24 ft high, 100-ft long) building.

Southwest Fiberglass LLC
Screen Modeling Results

Stack ID	Pollutant	Emission Rate[a] (lb/hr)	Emission Rate (g/s)	1- Hour Generic Modeling Results {(μg/m^3)/(g/s)}	Maximum Predicted 1-Hour Concentration (μg/m^3)	Maximum Predicted Annual Concentration (μg/m^3)	Distance to Maximum Concentration (m)	Generic Cavity Results {(μg/m^3)/(g/s)}	Maximum Cavity Concentration (μg/m^3)
1	Styrene	2.85E+00	3.59E-01	6,588	2.37E+03	1.89E+02	25	NA	NA
Facility - Styrene Maximum Combined Results					**2.37E+03**	**1.89E+02**	**25**	**NA**	**NA**

[a] Based upon Pima County supplied facility-wide emissions (24,974 lb/yr)/(8,760 hr/yr).

Southwest Fiberglass LLC AAC Analysis

Pollutant	AAC 1-Hour (μg/m^3)	AAC Annual (μg/m^3)	Percentage of 1-Hour AAC	Percentage of Annual AAC
Styrene	5.54E+05	1.04E+03	0.43	18.2

1 Flex Foam Division (was Western Bonded Products Inc. Flex Foam)

Flex Foam Division (was Western Bonded Products Inc. Flex Foam)
Stack Parameters[a]

Stack ID	Description	Release Height (ft)	Sigma Y (ft)	Sigma Z (ft)	Release Height (m)	Sigma Y (m)	Sigma Z (m)
1	Generic Volume Source	12.0	23.4	11.2	3.7	7.1	3.4

[a] No stack parameters supplied by Maricopa County, assumed generic volume source based upon 2-story (24 ft high, 100-ft long) building.

Flex Foam Division (was Western Bonded Products Inc. Flex Foam)
Screen Modeling Results

Stack ID	Pollutant	Emission Rate[a] (lb/hr)	Emission Rate (g/s)	1- Hour Generic Modeling Results {(μg/m^3)/(g/s)}	Maximum Predicted 1-Hour Concentration (μg/m^3)	Maximum Predicted Annual Concentration (μg/m^3)	Distance to Maximum Concentration (m)	Generic Cavity Results {(μg/m^3)/(g/s)}	Maximum Cavity Concentration (μg/m^3)
1	Dichloromethane (Methyl Chloride)	9.57E+00	1.21E+00	6,588	7.94E+03	6.36E+02	25	NA	NA
	Facility - Dichloromethane Maximum Combined Results				**7.94E+03**	**6.36E+02**	**25**	**NA**	**NA**

[a] Based upon TRI reported facility-wide Dichloromethane emissions (19,447 lb/yr)/(2,032 hr/yr).

Flex Foam Division (was Western Bonded Products Inc. Flex Foam) AAC Analysis

Pollutant	AAC 1-Hour (μg/m^3)	AAC Annual (μg/m^3)	Percentage of 1-Hour AAC	Percentage of Annual AAC
Dichloromethane (Methyl Chloride)	3.47E+05	4.03E+00	2.3	15,770

1 Distinctive Marble Inc.
2 Ultra Installations Inc

Distinctive Marble Inc.
Stack Parameters[a]

Stack ID	Description	Release Height (ft)	Sigma Y (ft)	Sigma Z (ft)	Release Height (m)	Sigma Y (m)	Sigma Z (m)
1	Generic Volume Source	12.0	23.4	11.2	3.7	7.1	3.4

[a] No stack parameters were available, assumed generic volume source based upon 2-story (24 ft high, 100-ft long) building.

Distinctive Marble Inc.
Screen Modeling Results

Stack ID	Pollutant	Emission Rate[a] (lb/hr)	Emission Rate (g/s)	1- Hour Generic Modeling Results {(μg/m^3)/(g/s)}	Maximum Predicted 1-Hour Concentration (μg/m^3)	Maximum Predicted Annual Concentration (μg/m^3)	Distance to Maximum Concentration (m)	Generic Cavity Results {(μg/m^3)/(g/s)}	Maximum Cavity Concentration (μg/m^3)
1	Styrene	2.05E+00	2.59E-01	6,588	1.71E+03	1.36E+02	25	NA	NA
				Facility - Styrene Maximum Combined Results	**1.71E+03**	**1.36E+02**	**25**	**NA**	**NA**

[a] Based upon Pima County supplied facility-wide emissions (18,000 lb/yr)/(8,760 hr/yr).

Distinctive Marble Inc. AAC Analysis

Pollutant	AAC 1-Hour (μg/m^3)	AAC Annual (μg/m^3)	Percentage of 1-Hour AAC	Percentage of Annual AAC
Styrene	5.54E+05	1.04E+03	0.31	13.1

Ultra Installations Inc.
Stack Parameters[a]

Stack ID	Description	Release Height (ft)	Sigma Y (ft)	Sigma Z (ft)	Release Height (m)	Sigma Y (m)	Sigma Z (m)
1	Generic Volume Source	12.0	23.4	11.2	3.7	7.1	3.4

[a] No stack parameters supplied by Maricopa County, assumed generic volume source based upon 2-story (24 ft high, 100-ft long) building.

Ultra Installations Inc.
Screen Modeling Results

Stack ID	Pollutant	Emission Rate[a] (lb/hr)	Emission Rate (g/s)	1- Hour Generic Modeling Results {(μg/m^3)/(g/s)}	Maximum Predicted 1-Hour Concentration (μg/m^3)	Maximum Predicted Annual Concentration (μg/m^3)	Distance to Maximum Concentration (m)	Generic Cavity Results {(μg/m^3)/(g/s)}	Maximum Cavity Concentration (μg/m^3)
1	Styrene	7.68E+00	9.68E-01	6,588	6.38E+03	5.10E+02	25	NA	NA
			Facility - Styrene Maximum Combined Results		**6.38E+03**	**5.10E+02**	**25**	**NA**	**NA**

[a] Based upon TRI reported facility-wide emissions (19,971 lb/yr)/(2,600 hr/yr).

Ultra Installations Inc. AAC Analysis

Pollutant	AAC 1-Hour (μg/m^3)	AAC Annual (μg/m^3)	Percentage of 1-Hour AAC	Percentage of Annual AAC
Styrene	5.54E+05	1.04E+03	1.2	49.0

1 ANR Mfg. Ltd.
2 Hartson-Kennedy Cabinet Top Co. Inc.
3 MAAX Spas Arizona Inc.

ANR Mfg. Ltd.
Stack Parameters[a]

Stack ID	Description	Release Height (ft)	Sigma Y (ft)	Sigma Z (ft)	Release Height (m)	Sigma Y (m)	Sigma Z (m)
1	Generic Volume Source	12.0	23.4	11.2	3.7	7.1	3.4

[a] No stack parameters were provided by Maricopa County, assumed generic volume source based upon 2-story (24 ft high, 100-ft long) building.

ANR Mfg. Ltd.
Screen Modeling Results

Stack ID	Pollutant	Emission Rate[a] (lb/hr)	Emission Rate (g/s)	1- Hour Generic Modeling Results {(μg/m^3)/(g/s)}	Maximum Predicted 1-Hour Concentration (μg/m^3)	Maximum Predicted Annual Concentration (μg/m^3)	Distance to Maximum Concentration (m)	Generic Cavity Results {(μg/m^3)/(g/s)}	Maximum Cavity Concentration (μg/m^3)
1	Styrene	3.03E+00	3.82E-01	6,588	2.51E+03	2.01E+02	25	NA	NA
	Facility - Styrene Maximum Combined Results				**2.51E+03**	**2.01E+02**	**25**	**NA**	**NA**

[a] Based upon TRI reported Styrene facility emissions of (6,300 lb/yr)/(2,080 hr/yr).

ANR Mfg. Ltd. AAC Analysis

Pollutant	AAC 1-Hour (μg/m^3)	AAC Annual (μg/m^3)	Percentage of 1-Hour AAC	Percentage of Annual AAC
Styrene	5.54E+05	1.04E+03	0.45	19.3

Hartson-Kennedy Cabinet Top Co. Inc.
Stack Parameters[a]

Stack ID	Description	Release Height (ft)	Sigma Y (ft)	Sigma Z (ft)	Release Height (m)	Sigma Y (m)	Sigma Z (m)
1	Generic Volume Source	12.0	23.4	11.2	3.7	7.1	3.4

[a] No stack parameters were provided by Maricopa County, assumed generic volume source based upon 2-story (24 ft high, 100-ft long) building.

Hartson-Kennedy Cabinet Top Co. Inc.
Screen Modeling Results

Stack ID	Pollutant	Emission Rate[c] (lb/hr)	Emission Rate (g/s)	1- Hour Generic Modeling Results {(μg/m^3)/(g/s)}	Maximum Predicted 1-Hour Concentration (μg/m^3)	Maximum Predicted Annual Concentration (μg/m^3)	Distance to Maximum Concentration (m)	Generic Cavity Results {(μg/m^3)/(g/s)}	Maximum Cavity Concentration (μg/m^3)
1	Methyl Methacrylate	1.79E+00	2.25E-01	6,588	1.48E+03	1.19E+02	25	0.00E+00	0.00E+00
	Facility - Methyl Methacrylate Maximum Combined Results				**1.48E+03**	**1.19E+02**	**25**	**-**	**0.00E+00**
1	Styrene	1.39E+00	1.75E-01	6,588	1.15E+03	9.20E+01	25	0.00E+00	0.00E+00
	Facility - Styrene Maximum Combined Results				**1.15E+03**	**9.20E+01**	**25**	**-**	**0.00E+00**

[a] Based upon TRI reported facility-wide Methyl Methacrylate (8,371 lb/yr)/(4,680 hr/yr), and Styrene emissions (6,487 lb/yr)/(4,680 hr/yr).

Hartson-Kennedy Cabinet Top Co. Inc. AAC Analysis

Pollutant	AAC 1-Hour (μg/m^3)	AAC Annual (μg/m^3)	Percentage of 1-Hour AAC	Percentage of Annual AAC
Methyl Methacrylate	3.11E+05	7.30E+02	0.48	16.3
Styrene	5.54E+05	1.04E+03	0.21	8.9

MAAX Spas Arizona Inc.
Stack Parameters

Stack ID	Description	Height (ft)	Diameter (ft)	Temp. (F)	Exit Vel. (ft/s)	Height (m)	Diameter (m)	Temp. (K)	Exit Vel. (m/s)	F_{stk}
1	Resin Lamination Vent	35	2.1	75.0	41.4	10.7	0.64	297	12.6	1.29E+04
2	Resin Lamination Vent	30	2.1	75.0	41.4	9.1	0.64	297	12.6	1.10E+04
3	Resin Lamination Vent	35	2.1	75.0	41.4	10.7	0.64	297	12.6	1.29E+04
4	Polyfoam Application Vent	33	4.0	75.0	27.2	10.1	1.22	297	8.3	2.89E+04
6	Tooling Room Vent	20	3.5	75.0	35.4	6.1	1.07	297	10.8	1.62E+00

MAAX Spas Arizona Inc.
Screen Modeling Results[ab]

Stack ID	Pollutant	Emission Rate[c] (lb/hr)	Emission Rate (g/s)	1- Hour Generic Modeling Results {(μg/m^3)/(g/s)}	Maximum Predicted 1-Hour Concentration (μg/m^3)	Maximum Predicted Annual Concentration (μg/m^3)	Distance to Maximum Concentration (m)	Generic Cavity Results {(μg/m^3)/(g/s)}	Maximum Cavity Concentration[d] (μg/m^3)
6	Styrene	3.71E+01	4.68E+00	50,730	2.37E+05	1.90E+04	25	2.28E+03	1.06E+04
	Facility - Styrene Maximum Combined Results				**2.37E+05**	**1.90E+04**	**25**	**-**	**1.06E+04**

[a] Results are with building dimensions (Stack ht./1.5 -0.1 m) x 74 m x 89 m). Building length and width estimated from aerial photo.

[b] Maricopa County designated Stack ID 6 as vertical obstructed, therefore Stack ID 6 was modeled with 0.001 m/s exit velocity.

[c] Maricopa County unable to supply specific sources of Styrene emissions. Facility-wide TRI reported Styrene emissions (74,211 lb/yr/2,000 hr/yr) modeled from only Stack ID 6 (minimum F_{stk}).

[d] Cavity length 23 m.

MAAX Spas Arizona Inc. AAC Analysis

Pollutant	AAC 1-Hour (μg/m^3)	AAC Annual (μg/m^3)	Percentage of 1-Hour AAC	Percentage of Annual AAC
Styrene	5.54E+05	1.04E+03	42.8	1,824

1 American Fiberglass
2 Arizona Environmental Container Corp.
3 Baja Products Ltd.
4 Earl's Fiberglass
5 Inter-Fab Inc.
6 Tucson Outstanding Products
7 Wallnox Enterprises dba Desert Sun Fiberglass

American Fiberglass
Stack Parameters[a]

Stack ID	Description	Release Height (ft)	Sigma Y (ft)	Sigma Z (ft)	Release Height (m)	Sigma Y (m)	Sigma Z (m)
1	Generic Volume Source	12.0	23.4	11.2	3.7	7.1	3.4

[a] No stack parameters were provided by Maricopa County, assumed generic volume source based upon 2-story (24 ft high, 100-ft long) building.

American Fiberglass
Screen Modeling Results

Stack ID	Pollutant	Emission Rate[a] (lb/hr)	Emission Rate (g/s)	1- Hour Generic Modeling Results {(μg/m^3)/(g/s)}	Maximum Predicted 1-Hour Concentration (μg/m^3)	Maximum Predicted Annual Concentration (μg/m^3)	Distance to Maximum Concentration (m)	Generic Cavity Results {(μg/m^3)/(g/s)}	Maximum Cavity Concentration (μg/m^3)
1	Styrene	3.22E+00	4.05E-01	6,588	2.67E+03	2.14E+02	25	NA	NA
			Facility - Styrene Maximum Combined Results		**2.67E+03**	**2.14E+02**	**25**	**NA**	**NA**

[a] Based upon TRI reported Styrene facility emissions of (6,693 lb/yr)/(2,080 hr/yr).

American Fiberglass AAC Analysis

Pollutant	AAC 1-Hour (μg/m^3)	AAC Annual (μg/m^3)	Percentage of 1-Hour AAC	Percentage of Annual AAC
Styrene	5.54E+05	1.04E+03	0.48	20.5

Arizona Environmental Container Corp.
Stack Parameters

Stack ID's	Description	Height (ft)	Diameter (ft)	Temp. (F)	Exit Vel. (ft/s)	Height (m)	Diameter (m)	Temp. (K)	Exit Vel. (m/s)
1-8	Eight Identical Fiberglass Layup Bay Exhau	30	4.0	80.0	27	9.1	1.22	300	8.2

Arizona Environmental Container Corp.
Screen Modeling Results[a]

Stack ID's	Pollutant	Emission Rate[b] (lb/hr)	Emission Rate (g/s)	1- Hour Generic Modeling Results {(μg/m^3)/(g/s)}	Maximum Predicted 1-Hour Concentration (μg/m^3)	Maximum Predicted Annual Concentration (μg/m^3)	Distance to Maximum Concentration (m)	Generic Cavity Results {(μg/m^3)/(g/s)}	Maximum Cavity Concentration (μg/m^3)
1-8	Styrene	4.00E+01	5.03E+00	464	2.34E+03	1.87E+02	25	0.00E+00	0.00E+00
				Facility - Styrene Maximum Combined Results	**2.34E+03**	**1.87E+02**	**25**	**-**	**0.00E+00**

[a] Results are with generic building dimensions (Stack ht./1.5 -0.1 m) x 31 m x 61 m). Building length and width supplied by Pinal County.
[b] Based upon Pinal County supplied facility-wide emissions (350,000 lbs/yr)/(8,760 hr/yr).

Arizona Environmental Container Corp. AAC Analysis

Pollutant	AAC 1-Hour (μg/m^3)	AAC Annual (μg/m^3)	Percentage of 1-Hour AAC	Percentage of Annual AAC
Styrene	5.54E+05	1.04E+03	0.42	18.0

Baja Products Ltd.
Stack Parameters

Stack ID	Description	Height (ft)	Diameter (ft)	Temp. (F)	Exit Vel. (ft/s)	Height (m)	Diameter (m)	Temp. (K)	Exit Vel. (m/s)	F_{stk}
Bldg 3	Diving Stand/Spraybooth	19	2.5	67.7	54.97	5.8	0.76	293	16.8	1.30E+04
Bldg 4	Hot Tub/Spraybooth	20	2.5	67.7	54.97	6.1	0.76	293	16.8	1.36E+04
Bldg 5	Hot Tub/Spraybooth	23	1.5	67.7	44.06	7.0	0.46	293	13.4	4.52E+03
Bldg 7	Wood Cabinet/Spraybooth	18	2.5	67.7	54.97	5.5	0.76	293	16.8	1.23E+04

Baja Products Ltd.
Screen Modeling Results[a]

Stack ID	Pollutant	Emission Rate[b] (lb/hr)	Emission Rate (g/s)	1- Hour Generic Modeling Results {(µg/m^3)/(g/s)}	Maximum Predicted 1-Hour Concentration (µg/m^3)	Maximum Predicted Annual Concentration (µg/m^3)	Distance to Maximum Concentration (m)	Generic Cavity Results {(µg/m^3)/(g/s)}	Maximum Cavity Concentration (µg/m^3)
Bldg 5	Styrene	1.83E+00	2.30E-01	712	1.64E+02	1.31E+01	46	0.00E+00	0.00E+00
Facility - Styrene Maximum Combined Results					**1.64E+02**	**1.31E+01**	**46**	**-**	**0.00E+00**

[a] Results are with building dimensions (Stack ht./1.5 -0.1 m) x 12 m x 20 m). Building length and width estimated from aerial photo.
[b] Facility styrene emissions assumed to be emitted by only Bldg 5 stack (minimum F_{stk}). Styrene emissions based upon Pima County supplied facility-wide emissions (16,000 lb/yr)/(8,760 hr/yr).

Baja Products Ltd. AAC Analysis

Pollutant	AAC 1-Hour (µg/m^3)	AAC Annual (µg/m^3)	Percentage of 1-Hour AAC	Percentage of Annual AAC
Styrene	5.54E+05	1.04E+03	0.030	1.3

Earl's Fiberglass
Stack ID

Stack ID	Description	Release Height (ft)	Sigma Y (ft)	Sigma Z (ft)	Release Height (m)	Sigma Y (m)	Sigma Z (m)
1	Generic Volume Source	12.0	23.4	11.2	3.7	7.1	3.4

[a] No stack parameters were provided by Maricopa County, assumed generic volume source based upon 2-story (24 ft high, 100-ft long) building.

Earl's Fiberglass
Screen Modeling Results

Stack ID	Pollutant	Emission Rate[a] (lb/hr)	Emission Rate (g/s)	1- Hour Generic Modeling Results {(μg/m^3)/(g/s)}	Maximum Predicted 1-Hour Concentration (μg/m^3)	Maximum Predicted Annual Concentration (μg/m^3)	Distance to Maximum Concentration (m)	Generic Cavity Results {(μg/m^3)/(g/s)}	Maximum Cavity Concentration (μg/m^3)
1	Styrene	6.00E+00	7.57E-01	6,588	4.98E+03	3.99E+02	25	0.00E+00	0.00E+00
			Facility - Styrene Maximum Combined Results		**4.98E+03**	**3.99E+02**	**25**	**-**	**0.00E+00**

[a] Based upon TRI reported facility-wide Styrene emissions (12,970 lb/yr)/(2,160 hr/yr).

Earl's Fiberglass AAC Analysis

Pollutant	AAC 1-Hour (μg/m^3)	AAC Annual (μg/m^3)	Percentage of 1-Hour AAC	Percentage of Annual AAC
Styrene	5.54E+05	1.04E+03	0.90	38.3

Inter-Fab Inc.
Stack Parameters

Stack ID	Description	Height (ft)	Diameter (ft)	Temp. (F)	Exit Vel. (ft/s)	Height (m)	Diameter (m)	Temp. (K)	Exit Vel. (m/s)
30502	Artificial Rock Spray Area					0.0	0.00	255	0.0

Inter-Fab Inc.
Screen Modeling Results[a]

Stack ID	Pollutant	Emission Rate (lb/hr)	Emission Rate (g/s)	1- Hour Generic Modeling Results {(µg/m^3)/(g/s)}	Maximum Predicted 1-Hour Concentration (µg/m^3)	Maximum Predicted Annual Concentration (µg/m^3)	Distance to Maximum Concentration (m)	Generic Cavity Results {(µg/m^3)/(g/s)}	Maximum Cavity Concentration (µg/m^3)
	Styrene		0.00E+00		0.00E+00	0.00E+00		0.00E+00	0.00E+00
	Facility - Styrene Maximum Combined Results				**0.00E+00**	**0.00E+00**	**-**	**-**	**0.00E+00**

[a] Results are with building dimensions (Stack ht./1.5 -0.1 m) x m x m). Building length and width estimated from aerial photo.

Inter-Fab Inc. AAC Analysis

Pollutant	AAC 1-Hour (µg/m^3)	AAC Annual (µg/m^3)	Percentage of 1-Hour AAC	Percentage of Annual AAC
Styrene	5.54E+05	1.04E+03	0	0

Tucson Outstanding Products
Stack Parameters[a]

Stack ID	Description	Release Height (ft)	Sigma Y (ft)	Sigma Z (ft)	Release Height (m)	Sigma Y (m)	Sigma Z (m)
1	Generic Volume Source	12.0	23.4	11.2	3.7	7.1	3.4

[a] No stack parameters were available, assumed generic volume source based upon 2-story (24 ft high, 100-ft long) building.

Tucson Outstanding Products
Screen Modeling Results

Stack ID	Pollutant	Emission Rate[a] (lb/hr)	Emission Rate (g/s)	1- Hour Generic Modeling Results {(μg/m^3)/(g/s)}	Maximum Predicted 1-Hour Concentration (μg/m^3)	Maximum Predicted Annual Concentration (μg/m^3)	Distance to Maximum Concentration (m)	Generic Cavity Results {(μg/m^3)/(g/s)}	Maximum Cavity Concentration (μg/m^3)
1	Styrene	6.03E-01	7.60E-02	6,588	5.01E+02	4.00E+01	25	NA	NA
				Facility - Styrene Maximum Combined Results	**5.01E+02**	**4.00E+01**	**25**	**NA**	**NA**

[a] Based upon TRI reported Styrene facility emissions of (5,283 lb/yr)/(8,760 hr/yr).

Tucson Outstanding Products AAC Analysis

Pollutant	AAC 1-Hour (μg/m^3)	AAC Annual (μg/m^3)	Percentage of 1-Hour AAC	Percentage of Annual AAC
Styrene	5.54E+05	1.04E+03	0.090	3.9

Wallnox Enterprises dba Desert Sun Fiberglass
Stack Parameters

Stack ID	Description	Height (ft)	Diameter (ft)	Temp. (F)	Exit Vel. (ft/s)	Height (m)	Diameter (m)	Temp. (K)	Exit Vel. (m/s)	F_{stk}
1	Gel Coat Booth	15.0	3.0	80.0	269	4.6	0.91	300	82.0	7.37E+04
2	Mechanical Spray (Chop)	15.0	3.0	80.0	269	4.6	0.91	300	82.0	7.37E+04
3	4 Identical Plenum Stacks	19.0	4.0	80.0	553	5.8	1.2	300	169	3.41E+05

Wallnox Enterprises dba Desert Sun Fiberglass
Screen Modeling Results[ab]

Stack ID	Pollutant	Emission Rate[c] (lb/hr)	Emission Rate (g/s)	1- Hour Generic Modeling Results {(μg/m^3)/(g/s)}	Maximum Predicted 1-Hour Concentration (μg/m^3)	Maximum Predicted Annual Concentration (μg/m^3)	Distance to Maximum Concentration (m)	Generic Cavity Results {(μg/m^3)/(g/s)}	Maximum Cavity Concentration[d] (μg/m^3)
1	Styrene	3.56E+01	4.48E+00	29,880	1.34E+05	1.07E+04	25	4.55E+03	2.04E+04
Facility - Styrene Maximum Combined Results					**1.34E+05**	**1.07E+04**	**25**	**-**	**2.04E+04**

[a] Results are with building dimensions (3.66 m x 40 m x 40 m). Assumed minimum building height of 12 ft. Assumed generic building length and width.

[b] Maricopa County designated all three stacks as vertical obstructed, therefore all three stacks would be modeled with 0.001 m/s exit velocity. Unable to determine specific source of Styrene emissions from Maricopa County supplied data. Facility-wide Styrene emissions modeled from Stack ID 1 (minimum F_{stk}).

[c] Based upon TRI reported facility-wide Styrene emissions (73,964 lb/yr)/(2,080 hr/yr).

[d] Cavity length 19 m.

Wallnox Enterprises dba Desert Sun Fiberglass AAC Analysis

Pollutant	AAC 1-Hour (μg/m^3)	AAC Annual (μg/m^3)	Percentage of 1-Hour AAC	Percentage of Annual AAC
Styrene	5.54E+05	1.04E+03	24.2	1,030

Arizona Portland Cement
Stack Parameters[a]

Stack ID	Description	Height (ft)	Diameter (ft)	Temp. (F)	Exit Vel. (ft/s)	Height (m)	Diameter (m)	Temp. (K)	Exit Vel. (m/s)	F_{stk}
1	H5-GB	75.0	10.0	475	53.2	22.9	3.0	519	16.2	1.40E+06
2	H5-5-GB	75.0	10.0	425	52.7	22.9	3.0	491	16.1	1.32E+06

[a] As reported in the 2002 AZEI.

Arizona Portland Cement
Screen Modeling Results[ab]

Stack ID	Pollutant	Emission Rate[c] (lb/hr)	Emission Rate (g/s)	1- Hour Generic Modeling Results {(μg/m³)/(g/s)}	Maximum Predicted 1-Hour Concentration (μg/m³)	Maximum Predicted Annual Concentration (μg/m³)	Distance to Maximum Concentration (m)	Generic Cavity Results {(μg/m³)/(g/s)}	Maximum Cavity Concentration (μg/m³)
H5-5-GB	Acetaldehyde	3.47E-02	4.38E-03	31.7	1.39E-01	1.11E-02	46	0.00E+00	0.00E+00
	Facility - Acetaldehyde Maximum Combined Results				**1.39E-01**	**1.11E-02**	**46**	**-**	**0.00E+00**
H5-5-GB	Benzene	1.47E-01	1.85E-02	31.7	5.86E-01	4.69E-02	46	0.00E+00	0.00E+00
	Facility - Benzene Maximum Combined Results				**5.86E-01**	**4.69E-02**	**46**	**-**	**0.00E+00**
H5-5-GB	ChloroBenzene	2.60E-06	3.28E-07	31.7	1.04E-05	8.33E-07	46	0.00E+00	0.00E+00
	Facility - ChloroBenzene Maximum Combined Results				**1.04E-05**	**8.33E-07**	**46**	**-**	**0.00E+00**
H5-5-GB	Cumene	1.30E-06	1.63E-07	31.7	5.19E-06	4.15E-07	46	0.00E+00	0.00E+00
	Facility - Cumene Maximum Combined Results				**5.19E-06**	**4.15E-07**	**46**	**-**	**0.00E+00**
H5-5-GB	Dibenzofurans	9.77E-07	1.23E-07	31.7	3.91E-06	3.13E-07	46	0.00E+00	0.00E+00
	Facility - Dibenzofurans Maximum Combined Results				**3.91E-06**	**3.13E-07**	**46**	**-**	**0.00E+00**
H5-5-GB	Dichloromethane (Methyl Chloride)	8.56E-03	1.08E-03	31.7	3.42E-02	2.74E-03	46	0.00E+00	0.00E+00
	Facility - Dichloromethane (Methyl Chloride) Maximum Combined Results				**3.42E-02**	**2.74E-03**	**46**	**-**	**0.00E+00**
H5-5-GB	Ethyl Benzene	2.85E-05	3.60E-06	31.7	1.14E-04	9.13E-06	46	0.00E+00	0.00E+00
	Facility - Ethyl Benzene Maximum Combined Results				**1.14E-04**	**9.13E-06**	**46**	**-**	**0.00E+00**
H5-5-GB	Formaldehyde	1.61E+00	2.03E-01	31.7	6.45E+00	5.16E-01	46	0.00E+00	0.00E+00
	Facility - Formaldehyde Maximum Combined Results				**6.45E+00**	**5.16E-01**	**46**	**-**	**0.00E+00**
H5-5-GB	Hexane	3.45E-03	4.35E-04	31.7	1.38E-02	1.10E-03	46	0.00E+00	0.00E+00
	Facility - Hexane Maximum Combined Results				**1.38E-02**	**1.10E-03**	**46**	**-**	**0.00E+00**
H5-5-GB	Hydrochloric Acid	3.78E+00	4.76E-01	31.7	1.51E+01	1.21E+00	46	0.00E+00	0.00E+00
	Facility - Hydrochloric Acid Maximum Combined Results				**1.51E+01**	**1.21E+00**	**46**	**-**	**0.00E+00**
H5-5-GB	Hydrogen Flouride (Hydroflouric Acid)	4.81E-02	6.06E-03	31.7	1.92E-01	1.54E-02	46	0.00E+00	0.00E+00
	Facility - Hydrogen Flouride (Hydroflouric Acid) Maximum Combined Results				**1.92E-01**	**1.54E-02**	**46**	**-**	**0.00E+00**
H5-5-GB	Mercury Compounds	1.34E-04	1.69E-05	31.7	5.36E-04	4.29E-05	46	0.00E+00	0.00E+00
	Facility - Mercury Compounds Maximum Combined Results				**5.36E-04**	**4.29E-05**	**46**	**-**	**0.00E+00**
H5-5-GB	Naphthalene	2.12E-02	2.67E-03	31.7	8.47E-02	6.78E-03	46	0.00E+00	0.00E+00
	Facility - Naphthalene Maximum Combined Results				**8.47E-02**	**6.78E-03**	**46**	**-**	**0.00E+00**
H5-5-GB	Phenol	5.03E-03	6.33E-04	31.7	2.01E-02	1.61E-03	46	0.00E+00	0.00E+00
	Facility - Phenol Maximum Combined Results				**2.01E-02**	**1.61E-03**	**46**	**-**	**0.00E+00**
H5-5-GB	Polychlorinated Biphenyls	1.81E-04	2.28E-05	31.7	7.23E-04	5.79E-05	46	0.00E+00	0.00E+00
	Facility - Polychlorinated Biphenyls Maximum Combined Results				**7.23E-04**	**5.79E-05**	**46**	**-**	**0.00E+00**
H5-5-GB	Polycyclic Organic Matter (POM)	6.32E-08	7.97E-09	31.7	2.53E-07	2.02E-08	46	0.00E+00	0.00E+00
	Facility - POM Maximum Combined Results				**2.53E-07**	**2.02E-08**	**46**	**-**	**0.00E+00**
H5-5-GB	Toluene	4.06E-02	5.12E-03	31.7	1.62E-01	1.30E-02	46	0.00E+00	0.00E+00
	Facility - Toluene Maximum Combined Results				**1.62E-01**	**1.30E-02**	**46**	**-**	**0.00E+00**
H5-5-GB	Vinylidene Chloride (1,2-Dichloroethylene	5.16E-03	6.50E-04	31.7	2.06E-02	1.65E-03	46	0.00E+00	0.00E+00
	Facility - Vinylidene Chloride (1,2-Dichloroethylene) Maximum Combined Results				**2.06E-02**	**1.65E-03**	**46**	**-**	**0.00E+00**
H5-5-GB	Xylene, o-	4.02E-05	5.06E-06	31.7	1.61E-04	1.29E-05	46	0.00E+00	0.00E+00
	Facility - o-Xylene Maximum Combined Results				**1.61E-04**	**1.29E-05**	**46**	**-**	**0.00E+00**

[a] Results are with building dimensions (Stack ht./1.5 -0.1 m) x 40 m x 40 m). Assumed generic building length and width.

[b] Facility-wide emissions modeled from Stack ID H5-5-GB (minimum E_{stk}).

[C] Based upon 2002 AZEI reported facility-wide Acetaldehyde emissions (304 lb/yr)/(8,760 hr/yr), Benzene emissions (1,285 lb/yr)/(8,760 hr/yr), Chlorobenzene emissions (0.023 lb/yr)/(8,760 hr/yr), Cumene emissions (0.011 lb/yr)/(8,760 hr/yr), Dibenzofurans (8.6E-03 lb/yr)/(8,760 hr/yr), Dichloromethane emissions (75 lb/yr)/(8,760 hr/yr), Ethyl Benzene emissions (0.25 lb/yr)/(8,760 hr/yr), Formaldehyde emissions (14,121 lb/yr)/(8,760 hr/yr), Hexane emissions (30.3 lb/yr)/(8,760 hr/yr), Hydrochloric Acid emissions (33,100 lb/yr)/(8,760 hr/yr), Hydrogen Flouride emissions (421 lb/yr)/(8,760 hr/yr), Mercury Compound emissions (1.2 lb/yr)/(8,760 hr/yr), Naphthalene emissions (186 lb/yr)/(8,760 hr/yr), Phenol emissions (44 lb/yr)/(8,760 hr/yr), Polychlorinated Biphenyls emissions (1.6 lb/yr)/(8,760 hr/yr), POM emissions (5.54E-04 lb/yr)/(8,760 hr/yr), Toluene emissions (356 lb/yr)/(8,760 hr/yr), Vinylidene Chloride emissions (45 lb/yr)/(8,760 hr/yr), and o-Xylene emissions (0.35 lb/yr)/(8,760 hr/yr).

Arizona Portland Cement AAC Analysis

Pollutant	AAC 1-Hour (μg/m³)	AAC Annual (μg/m³)	Percentage of 1-Hour AAC	Percentage of Annual AAC
Acetaldehyde	3.06E+05	8.62E-01	4.54E-05	1.3
Benzene	1.28E+06	2.43E-01	4.60E-05	19.3
ChloroBenzene	1.00E+06	1.04E+03	1.04E-09	8.01E-08
Cumene	9.35E+05	4.17E+02	5.55E-10	9.95E-08
Dibenzofurans	2.50E+04	7.30E+00	1.56E-08	4.28E-06
Dichloromethane (Methyl Chloride)	3.47E+05	4.03E+00	9.87E-06	0.068
Ethyl Benzene	2.50E+05	1.04E+03	4.57E-08	8.78E-07
Formaldehyde	1.70E+04	1.46E-01	3.79E-02	353
Hexane	1.16E+07	2.21E+03	1.19E-07	5.00E-05
Hydrochloric Acid	1.60E+04	2.09E+01	0.094	5.8
Hydrogen Flouride (Hydroflouric Acid)	1.00E+04	1.46E+01	1.92E-03	0.11
Mercury Compounds	1.03E+03	3.13E-01	5.23E-05	0.014
Naphthalene	7.50E+04	5.58E-02	1.13E-04	12.1
Phenol	5.80E+04	2.09E+02	3.47E-05	7.70E-04
Polychlorinated Biphenyls	2.50E+03	1.90E-02	2.89E-05	0.30
Polycyclic Organic Matter (POM)	5.00E+03	2.02E-03	5.06E-09	1.00E-03
Toluene	1.92E+06	4.17E+02	8.45E-06	3.12E-03
Vinylidene Chloride (1,1-Dichloroethylene	3.80E+04	2.09E+02	5.43E-05	7.90E-04
Xylene, o-	1.74E+06	1.04E+02	9.26E-09	1.24E-05

1 Phoenix Brickyard

Phoenix Brickyard
Stack Parameters[a]

Stack ID	Description	Height (ft)	Diameter (ft)	Temp. (F)	Exit Vel. (ft/s)	Height (m)	Diameter (m)	Temp. (K)	Exit Vel. (m/s)
North	NA	31.5	3.9	379	34.3	9.6	1.2	466	10.4
South	NA	31.5	3.9	593	52.3	9.6	1.2	585	15.9

[a] Stack parameters from 2004 ADEQ Hydrogen Flouride ISC modeling files for the North and South stacks.

Phoenix Brickyard
Screen Modeling Results[ab]

Stack ID	Pollutant	Emission Rate[c] (lb/hr)	Emission Rate (g/s)	1- Hour Generic Modeling Results {(μg/m^3)/(g/s)}	Maximum Predicted 1-Hour Concentration (μg/m^3)	Maximum Predicted Annual Concentration (μg/m^3)	Distance to Maximum Concentration (m)	Generic Cavity Results {(μg/m^3)/(g/s)}	Maximum Cavity Concentration (μg/m^3)
North	Hydrogen Flouride	4.46E+00	5.62E-01	154	8.63E+01	6.90E+00	33	0.00E+00	0.00E+00
South	Hydrogen Flouride	7.51E+00	9.46E-01	101	9.52E+01	7.62E+00	48	0.00E+00	0.00E+00
Facility - Hydrogen Flouride Maximum Combined Results					**1.81E+02**	**1.45E+01**	**33**	**-**	**0.00E+00**

[a] Results are with building dimensions (ht. = 4.68 m x 21.9 m x 76.84 m). Building dimensions from downwash dimensions in ADEQ ISC modeling file.
[b] Maricopa County did not supply additional specific HAP pollutant emissions, therefore only Hydrogen Flouride was modeled.
[c] Maximum lb/hr emission rates in the 2004 ADEQ Hydrogen Flouride ISC modeling files.

Phoenix Brickyard AAC Analysis

Pollutant	AAC 1-Hour (μg/m^3)	AAC Annual (μg/m^3)	Percentage of 1-Hour AAC	Percentage of Annual AAC
Hydrogen Flouride	1.00E+04	1.46E+01	1.8	99.4

1 Mesa Fully Formed Inc.
2 Mountain Marble Mfg. Inc.

Mesa Fully Formed Inc.
Stack Parameters

Stack ID	Description	Height (ft)	Diameter (ft)	Temp. (F)	Exit Vel. (ft/s)	Height (m)	Diameter (m)	Temp. (K)	Exit Vel. (m/s)	F_{stk}
1	Gelcoat Spray Booth	29	2.8	81.0	39.7	8.8	0.86	300	12.1	1.88E+04
2	Casting Machine Exhaust	28	3.0	81.0	35.4	8.5	0.91	300	10.8	1.81E+04
4	Adhesive Spray Tunnel Exhaust	27	2.8	81.0	31.7	8.2	0.86	300	9.7	1.39E+04

Mesa Fully Formed Inc.
Screen Modeling Results[ab]

Stack ID	Pollutant	Emission Rate[c] (lb/hr)	Emission Rate (g/s)	1- Hour Generic Modeling Results {(µg/m^3)/(g/s)}	Maximum Predicted 1-Hour Concentration (µg/m^3)	Maximum Predicted Annual Concentration (µg/m^3)	Distance to Maximum Concentration (m)	Generic Cavity Results {(µg/m^3)/(g/s)}	Maximum Cavity Concentration (µg/m^3)
4	Styrene	1.31E+01	1.65E+00	24,370	4.01E+04	3.21E+03	25	0.00E+00	0.00E+00
	Facility - Styrene Maximum Combined Results				**4.01E+04**	**3.21E+03**	**25**	**-**	**0.00E+00**

[a] Results are with building dimensions (Stack ht./1.5 -0.1 m) x 20 m x 90 m). Building length and width estimated from aerial photo.
[b] Maricopa County designated stacks as vertical obstructed, therefore Stack ID 4 was modeled with 0.001 m/s exit velocity.
[c] Maricopa County unable to supply specific sources of Styrene emissions. Facility-wide TRI reported Styrene emissions (40,757 lb/yr/3,120 hr/yr) modeled from only Stack ID 4 (minimum F_{stk}).

Mesa Fully Formed Inc. AAC Analysis

Pollutant	AAC 1-Hour (µg/m^3)	AAC Annual (µg/m^3)	Percentage of 1-Hour ACC	Percentage of Annual ACC
Styrene	5.54E+05	1.04E+03	7.2	309

Mountain Marble Mfg. Inc.
Stack Parameters

Stack ID	Description	Height (ft)	Diameter (ft)	Temp. (F)	Exit Vel. (ft/s)	Height (m)	Diameter (m)	Temp. (K)	Exit Vel. (m/s)
EF1	Not Supplied by ADEQ	22	3.0	67.7	31.6	6.7	0.91	293	9.6
EF2	Not Supplied by ADEQ	22	1.7	67.7	65.9	6.7	0.51	293	20.1

Mountain Marble Mfg. Inc.
Screen Modeling Results[a]

Stack ID	Pollutant	Emission Rate[b] (lb/hr)	Emission Rate (g/s)	1- Hour Generic Modeling Results {(μg/m^3)/(g/s)}	Maximum Predicted 1-Hour Concentration (μg/m^3)	Maximum Predicted Annual Concentration (μg/m^3)	Distance to Maximum Concentration (m)	Generic Cavity Results {(μg/m^3)/(g/s)}	Maximum Cavity Concentration (μg/m^3)
EF1	Styrene	3.90E+00	4.91E-01	626	3.07E+02	2.46E+01	25	0.00E+00	0.00E+00
EF2	Styrene	1.11E+00	1.40E-01	263	3.68E+01	2.94E+00	30	0.00E+00	0.00E+00
Facility - Styrene Maximum Combined Results					**3.44E+02**	**2.75E+01**	**25**	**-**	**0.00E+00**

[a] Results are with building dimensions (Stack ht./1.5 -0.1 m) x 22 m x 65 m). Building length and width estimated from aerial photo.
[b] Based upon ADEQ supplied individual stack (EF1 and EF2) potential Styrene lb/hr emission rate. No styrene emissions from stack ID EF3.

Mountain Marble Mfg. Inc. AAC Analysis

Pollutant	AAC 1-Hour (μg/m^3)	AAC Annual (μg/m^3)	Percentage of 1-Hour AAC	Percentage of Annual AAC
Styrene	5.54E+05	1.04E+03	0.062	2.6

1 Guardian Fiberglass Inc.
2 Owens Corning Eloy Plant

Guardian Fiberglass Inc.
Stack Parameters

Stack ID	Description	Height (ft)	Diameter (ft)	Temp. (F)	Exit Vel. (ft/s)	Height (m)	Diameter (m)	Temp. (K)	Exit Vel. (m/s)	F_{stk}
EP1	Forming/Conditioning	135	6.8	120	36.4	41.1	2.1	322	11.1	5.00E+05
EP3	Curing/Cooling	100	4.2	229	79.7	30.5	1.27	383	24.3	3.58E+05

Guardian Fiberglass Inc.
Screen Modeling Results[ab]

Stack ID	Pollutant	Emission Rate[c] (lb/hr)	Emission Rate (g/s)	1- Hour Generic Modeling Results {(µg/m^3)/(g/s)}	Maximum Predicted 1-Hour Concentration (µg/m^3)	Maximum Predicted Annual Concentration (µg/m^3)	Distance to Maximum Concentration (m)	Generic Cavity Results {(µg/m^3)/(g/s)}	Maximum Cavity Concentration (µg/m^3)
EP3	Chromium Compounds (Chromium VI)	2.85E-03	3.60E-04	14.4	5.17E-03	4.14E-04	213	0.00E+00	0.00E+00
Facility - Chromium Maximum Combined Results					**5.17E-03**	**4.14E-04**	**213**	**-**	**0.00E+00**
EP1	Formaldehyde	1.01E+00	1.27E-01	16.7	2.12E+00	1.70E-01	213	0.00E+00	0.00E+00
EP3	Formaldehyde	1.30E-01	1.64E-02	14.4	2.36E-01	1.89E-02	213	0.00E+00	0.00E+00
Facility - Formaldehyde Maximum Combined Results					**2.35E+00**	**1.88E-01**	**213**	**-**	**0.00E+00**

[a] Screen files (Dated 11/24/03) supplied by ADEQ were used. Emission rates were changed to the PTE supplied by ADEQ on 07/05/05.
[b] TRI reported Chromium Compound emissions of 25 lb/yr. ADEQ did not calculate Chromium emissions.
[c] Chromium emission rate based upon (25 lb/yr)/(8,760 hr/yr). Chromium emissions assumed emitted from only Stack ID EP3 (minimum F_{stk}).
Based upon ADEQ supplied individual stack potential formaldehyde lb/hr emission rate.

Guardian Fiberglass Inc. AAC Analysis

Pollutant	AAC 1-Hour (µg/m^3)	AAC Annual (µg/m^3)	Percentage of 1-Hour AAC	Percentage of Annual AAC
Chromium Compounds (Chromium VI)	1.00E+02	1.58E-04	5.17E-03	262
Formaldehyde	1.70E+04	1.46E-01	0.014	129

Owens Corning Eloy Plant
Stack Parameters

Stack ID	Description	Height (ft)	Diameter (ft)	Temp. (F)	Exit Vel. (ft/s)	Height (m)	Diameter (m)	Temp. (K)	Exit Vel. (m/s)	F_{stk}
1	Main Forming Stack	65	4.5	100	37.4	19.8	1.4	311	11.4	1.02E+05
5	Oven Exhaust Stack (West & East)	50	1.4	210	65	15.2	0.43	372	19.8	1.61E+04
6	Cooling Section Filter Box	6	2	100	25	1.8	0.61	311	7.6	1.26E+03

Owens Corning Eloy Plant
Screen Modeling Results[ab]

Stack ID	Pollutant	Emission Rate[c] (lb/hr)	Emission Rate (g/s)	1- Hour Generic Modeling Results {(μg/m^3)/(g/s)}	Maximum Predicted 1-Hour Concentration (μg/m^3)	Maximum Predicted Annual Concentration (μg/m^3)	Distance to Maximum Concentration (m)	Generic Cavity Results {(μg/m^3)/(g/s)}	Maximum Cavity Concentration[d] (μg/m^3)
6	Chromium Compounds (Chromium VI)	8.64E-03	1.09E-03	21,250	2.31E+01	1.85E+00	25	3.12E+03	3.39E+00
Facility - Chromium Maximum Combined Results					**2.31E+01**	**1.85E+00**	**25**	**-**	**3.39E+00**
1	Formaldehyde	5.03E-01	6.34E-02	93.8	5.95E+00	4.76E-01	101	0.00E+00	0.00E+00
5	Formaldehyde	3.62E-01	4.56E-02	158	7.21E+00	5.77E-01	82	0.00E+00	0.00E+00
6	Formaldehyde	2.29E-01	2.89E-02	21,250	6.14E+02	4.91E+01	25	3.12E+03	9.01E+01
Facility - Formaldehyde Maximum Combined Results					**6.28E+02**	**5.02E+01**	**25**	**-**	**9.01E+01**

[a] Results for Stack IDs 1 and 5 are with building dimensions (Stack ht./1.5 -0.1 m) x 25 m x 152 m). Building length and width supplied by Pinal County. Stack ID 6 assumed minimum building height of 12 ft.

[b] TRI reported Chromium Compound emissions of 75.7 lb/yr. Pinal County stated that Owens does not emit Chromium.

[c] Chromium emission rate based upon (75.7 lb/yr)/(8,760 hr/yr). Chromium emissions assumed emitted from only Stack ID 6 (minimum F_{stk}).

Based upon Pinal County supplied individual stack potential formaldehyde lb/hr emissions rate.

[d] Cavity length 16 m.

Owens Corning Eloy Plant AAC Analysis

Pollutant	AAC 1-Hour (μg/m^3)	AAC Annual (μg/m^3)	Percentage of 1-Hour AAC	Percentage of Annual AAC
Chromium Compounds (Chromium VI)	1.00E+02	1.58E-04	23.1	1,171,532
Formaldehyde	1.70E+04	1.46E-01	3.7	34,384

1 Nucor Steel Kingman (North Star Steel)

Nucor Steel Kingman (North Star Steel)
Stack Parameters

Stack ID	Description	Height (ft)	Diameter (ft)	Temp. (F)	Exit Vel. (ft/s)	Height (m)	Diameter (m)	Temp. (K)	Exit Vel. (m/s)
1	Reheat Furnace	100	6.0	199	17.7	30.5	1.8	366	5.4
2	Electric Arc Shaft Furnace	86	5.2	165	9.5	26.2	1.6	347	2.9

Nucor Steel Kingman (North Star Steel)
Screen Modeling Results[a]

Stack ID	Pollutant	Emission Rate[b] (lb/hr)	Emission Rate (g/s)	1- Hour Generic Modeling Results {(μg/m^3)/(g/s)}	Maximum Predicted 1-Hour Concentration (μg/m^3)	Maximum Predicted Annual Concentration (μg/m^3)	Distance to Maximum Concentration (m)	Generic Cavity Results {(μg/m^3)/(g/s)}	Maximum Cavity Concentration (μg/m^3)
1	Manganese Compounds	2.40E-01	3.02E-02	50.1	1.52E+00	1.21E-01	61	0.00E+00	0.00E+00
2	Manganese Compounds	5.54E-01	6.98E-02	120	8.36E+00	6.69E-01	61	0.00E+00	0.00E+00
Facility - Manganese Compounds Maximum Combined Results					**9.88E+00**	**7.90E-01**	**61**	**-**	**0.00E+00**
1	Nickel Compounds	1.32E+00	1.66E-01	50.1	8.34E+00	6.67E-01	53	0.00E+00	0.00E+00
2	Nickel Compounds	8.95E-03	1.13E-03	120	1.35E-01	1.08E-02	53	0.00E+00	0.00E+00
Facility - Nickel Compounds Maximum Combined Results					**8.47E+00**	**6.78E-01**	**53**	**-**	**0.00E+00**

[a] Results are with building dimensions (Stack ht./1.5 -0.1 m) x 85 m x 145 m). Building length and width estimated from aerial photo.

[b] Based upon ADEQ supplied individual stack potential Manganese and Nickel Compounds lb/hr emission rate.

Nucor Steel Kingman (North Star Steel) AAC Analysis

Pollutant	AAC 1-Hour (μg/m^3)	AAC Annual (μg/m^3)	Percentage of 1-Hour AAC	Percentage of Annual AAC
Manganese Compounds	2.50E+03	5.21E-02	0.40	1,517
Nickel Compounds	5.00E+03	7.90E-03	0.17	8,578

Phelps Dodge - Miami Smelter and Mine
Stack Parameters[a]

Stack ID	Description	Height (ft)	Diameter (ft)	Temp. (F)	Exit Vel. (ft/s)	Height (m)	Diameter (m)	Temp. (K)	Exit Vel. (m/s)	F_{stk}
1	Boiler 1 (oil)	55.0	3.0	250	37.0	16.8	0.91	394	11.3	4.89E+04
2	Boiler 2 (oil)	55.0	3.0	250	37.0	16.8	0.91	394	11.3	4.89E+04
3	Acid Plant Tail Gas Stack	200	6.0	122	79.0	61.0	1.8	323	24.1	1.24E+06
4	Vent Fume Stack	160	10.0	75.0	56.8	48.8	3.0	297	17.3	1.83E+06

[a] Stack parameters for Stack IDs 3 and 4 are from 2002 modeling files supplied by ADEQ. Stack parameters for Stack IDs 1 and 2 are from PTE calculations supplied by ADEQ.

Phelps Dodge - Miami Smelter and Mine
Screen Modeling Results[ab]

Stack ID	Pollutant	Emission Rate[c] (lb/hr)	Emission Rate (g/s)	1- Hour Generic Modeling Results {(μg/m³)/(g/s)}	Maximum Predicted 1-Hour Concentration (μg/m³)	Maximum Predicted Annual Concentration (μg/m³)	Distance to Maximum Concentration (m)	Generic Cavity Results {(μg/m³)/(g/s)}	Maximum Cavity Concentration (μg/m³)
4	Antimony Compound	6.89E-01	8.68E-02	24.0	2.08E+00	1.67E-01		0.00E+00	0.00E+00
	Facility - Antimony Compound Maximum Combined Results				**2.08E+00**	**1.67E-01**	**0**	**-**	**0.00E+00**
1	Arsenic Compounds	2.80E-04	3.53E-05	73.1	2.58E-03	2.06E-04	34	0.00E+00	0.00E+00
2	Arsenic Compounds	2.80E-04	3.53E-05	73.1	2.58E-03	2.06E-04	34	0.00E+00	0.00E+00
3	Arsenic Compounds	5.84E-02	7.36E-03	12.3	9.01E-02	7.21E-03	406	0.00E+00	0.00E+00
4	Arsenic Compounds	1.90E+00	2.39E-01	24.0	5.75E+00	4.60E-01	325	0.00E+00	0.00E+00
	Facility - Arsenic Compounds Maximum Combined Results				**5.84E+00**	**4.67E-01**	**34**	**-**	**0.00E+00**
1	Cadmium Compounds	7.40E-04	9.32E-05	73.1	6.82E-03	5.45E-04	34	0.00E+00	0.00E+00
2	Cadmium Compounds	7.40E-04	9.32E-05	73.1	6.82E-03	5.45E-04	34	0.00E+00	0.00E+00
3	Cadmium Compounds	2.34E-03	2.95E-04	12.3	3.61E-03	2.89E-04	406	0.00E+00	0.00E+00
4	Cadmium Compounds	1.78E+00	2.24E-01	24.0	5.38E+00	4.31E-01	325	0.00E+00	0.00E+00
	Facility - Cadmium Compounds Maximum Combined Results				**5.40E+00**	**4.32E-01**	**34**	**-**	**0.00E+00**
1	Chromium Compounds	4.56E-03	5.75E-04	73.1	4.20E-02	3.36E-03	34	0.00E+00	0.00E+00
2	Chromium Compounds	4.56E-03	5.75E-04	73.1	4.20E-02	3.36E-03	34	0.00E+00	0.00E+00
4	Chromium Compounds	4.67E-03	5.88E-04	24.0	1.41E-02	1.13E-03	325	0.00E+00	0.00E+00
	Facility - Chromium Compounds Maximum Combined Results				**9.81E-02**	**7.85E-03**	**34**	**-**	**0.00E+00**
1	Cobalt Compounds	2.91E-02	3.67E-03	73.1	2.68E-01	2.15E-02		0.00E+00	0.00E+00
	Facility - Cobalt Compounds Maximum Combined Results				**2.68E-01**	**2.15E-02**	**0**	**-**	**0.00E+00**
1	Manganese Compounds	9.50E-04	1.20E-04	73.1	8.75E-03	7.00E-04	34	0.00E+00	0.00E+00
2	Manganese Compounds	9.50E-04	1.20E-04	73.1	8.75E-03	7.00E-04	34	0.00E+00	0.00E+00
4	Manganese Compounds	2.34E-03	2.95E-04	24.0	7.08E-03	5.66E-04	325	0.00E+00	0.00E+00
	Facility - Manganese Compounds Maximum Combined Results				**2.46E-02**	**1.97E-03**	**34**	**-**	**0.00E+00**
1	Mercury Compounds	2.00E-04	2.52E-05	73.1	1.84E-03	1.47E-04	34	0.00E+00	0.00E+00
2	Mercury Compounds	2.00E-04	2.52E-05	73.1	1.84E-03	1.47E-04	34	0.00E+00	0.00E+00
3	Mercury Compounds	2.34E-03	2.95E-04	12.3	3.61E-03	2.89E-04	406	0.00E+00	0.00E+00
4	Mercury Compounds	2.34E-03	2.95E-04	24.0	7.08E-03	5.66E-04	325	0.00E+00	0.00E+00
	Facility - Mercury Compounds Maximum Combined Results				**1.44E-02**	**1.15E-03**	**34**	**-**	**0.00E+00**
1	Nickel Compounds	1.22E-03	1.54E-04	73.1	1.12E-02	8.99E-04	34	0.00E+00	0.00E+00
2	Nickel Compounds	1.22E-03	1.54E-04	73.1	1.12E-02	8.99E-04	34	0.00E+00	0.00E+00
3	Nickel Compounds	4.67E-03	5.88E-04	12.3	7.21E-03	5.77E-04	406	0.00E+00	0.00E+00
4	Nickel Compounds	3.27E-02	4.12E-03	24.0	9.89E-02	7.91E-03	325	0.00E+00	0.00E+00
	Facility - Nickel Compounds Maximum Combined Results				**1.29E-01**	**1.03E-02**	**34**	**-**	**0.00E+00**
4	Selenium Compounds	5.51E-01	6.94E-02	24.0	1.67E+00	1.33E-01	325	0.00E+00	0.00E+00
	Facility - Selenium Compounds Maximum Combined Results				**1.67E+00**	**1.33E-01**	**325**	**-**	**0.00E+00**

[a] Results are with building dimensions (Stack ht./1.5 -0.1 m) x 80 m x 140 m). Building length and width estimated from aerial photo.
[b] No specific Cobalt emission sources supplied by ADEQ, therefore facility-wide Cobalt emissions modeled from Stack ID 1 (minimum F_{stk}).
[c] Based upon TRI reported facility-wide Cobalt emissions (255 lb/yr)/(8,760 hr/yr), all other pollutants are ADEQ supplied PTE emission rates (lb/hr).

Phelps Dodge - Miami Smelter and Mine AAC Analysis

Pollutant	AAC 1-Hour (μg/m³)	AAC Annual (μg/m³)	Percentage of 1-Hour AAC	Percentage of Annual AAC
Antimony Compound	1.25E+04	1.46E+00	NA	11.4
Arsenic Compounds	2.50E+03	4.41E-04	0.23	105,957
Cadmium Compounds	2.50E+02	1.05E-03	2.2	41,143
Chromium Compounds	1.00E+02	1.58E-04	0.10	4,969
Cobalt Compounds	1.00E+04	6.86E-04	2.68E-03	3,127
Manganese Compounds	2.50E+03	5.21E-02	9.83E-04	3.8
Mercury Compounds	1.03E+03	3.13E-01	1.40E-03	0.37
Nickel Compounds	5.00E+03	7.90E-03	2.57E-03	130
Selenium Compounds	5.00E+02	1.83E+01	0.33	0.73

1 Rexam Beverage Can Co. Phoenix Facility

Rexam Beverage Can Co. Phoenix Facility
Stack Parameters[a]

Stack ID	Description	Height (ft)	Diameter (ft)	Temp. (F)	Exit Vel. (ft/s)	Height (m)	Diameter (m)	Temp. (K)	Exit Vel. (m/s)	F_{stk}
1	Line 1 Printer/Printer Oven	47	1.3	385	41.8	14.3	0.41	469	12.7	1.10E+04
5	Line 3 Printer/Printer Oven	43	2.0	385	18.6	13.1	0.61	469	5.7	1.02E+04

[a] Maricopa County listed Stack ID 1 as the only Glycol Ethers emitting stack. Stack ID 5 is minimum F_{stk} stack.

Rexam Beverage Can Co. Phoenix Facility
Screen Modeling Results[ab]

Stack ID	Pollutant	Emission Rate[c] (lb/hr)	Emission Rate (g/s)	1- Hour Generic Modeling Results {(µg/m^3)/(g/s)}	Maximum Predicted 1-Hour Concentration (µg/m^3)	Maximum Predicted Annual Concentration (µg/m^3)	Distance to Maximum Concentration (m)	Generic Cavity Results {(µg/m^3)/(g/s)}	Maximum Cavity Concentration (µg/m^3)
1	Glycol Ethers	1.20E+01	1.52E+00	166	2.52E+02	2.01E+01	85	0.00E+00	0.00E+00
	Facility - Glycol Ethers Maximum Combined Results				**2.52E+02**	**2.01E+01**	**85**	**-**	**0.00E+00**
5	Hydrogen Flouride (Hydroflouric Acid)	2.17E-03	2.73E-04	195	5.32E-02	4.26E-03	66	0.00E+00	0.00E+00
	Facility - Hydrogen Flouride Maximum Combined Results				**5.32E-02**	**4.26E-03**	**66**	**-**	**0.00E+00**

[a] Results are with building dimensions (Stack ht./1.5 -0.1 m) x 60 m x 150 m). Building length and width estimated from aerial photo.
[b] Facility-wide Glycol Ethers emissions assumed to be emitted from only Stack ID 1. Facility-wide Hydrogen Flouride emissions assumed to be emitted from only Stack ID 5 (minimum F_{stk}).
[c] Based upon TRI reported facility-wide Glycol Ethers emissions (105,406 lb/yr)/(8,760 hr/yr), and Hydrogen Flouride emissions (19 lb/yr)/(8,760 hr/yr).

Rexam Beverage Can Co. Phoenix Facility AAC Analysis

Pollutant	AAC 1-Hour (µg/m^3)	AAC Annual (µg/m^3)	Percentage of 1-Hour AAC	Percentage of Annual AAC
Glycol Ethers	2.50E+05	3.14E+00	0.10	641
Hydrogen Flouride (Hydroflouric Acid)	1.00E+04	1.46E+01	5.32E-04	0.029

1 Air System Components LP

Air System Components LP
Stack Parameters

Stack ID	Description	Height (ft)	Diameter (ft)	Temp.[a] (F)	Exit Vel.[a] (ft/s)	Height (m)	Diameter (m)	Temp. (K)	Exit Vel. (m/s)
1	Paint Tank	35	2.7	67.7	0.033	10.7	0.81	293	0.010

[a] Pima County did not supply temperature and exit velocity of vent, assumed ambient temperature and 0.001 m/s exit velocity from vent.

Air System Components LP
Screen Modeling Results[ab]

Stack ID	Pollutant	Emission Rate[c] (lb/hr)	Emission Rate (g/s)	1- Hour Generic Modeling Results {(μg/m^3)/(g/s)}	Maximum Predicted 1-Hour Concentration (μg/m^3)	Maximum Predicted Annual Concentration (μg/m^3)	Distance to Maximum Concentration (m)	Generic Cavity Results {(μg/m^3)/(g/s)}	Maximum Cavity Concentration (μg/m^3)
1	Chromium Compounds	5.71E-04	7.19E-05	14,730	1.06E+00	8.47E-02	25	0.00E+00	0.00E+00
	Facility - Chromium Compounds Maximum Combined Results				**1.06E+00**	**8.47E-02**	**25**	**-**	**0.00E+00**
1	Glycol Ethers	4.41E+00	5.55E-01	14,730	8.18E+03	6.54E+02	25	0.00E+00	0.00E+00
	Facility - Glycol Ethers Maximum Combined Results				**8.18E+03**	**6.54E+02**	**25**	**-**	**0.00E+00**

[a] Results are with building dimensions (Stack ht./1.5 -0.1 m) x 109 m x 209 m). Building length and width estimated from aerial photo.
[b] TRI reported Chromium Compounds emissions of 5 lb/yr. Pima County did not include Chromium emissions.
[c] Chromium Compounds emission rate based upon (5 lb/yr)/(8,760 hr/yr). Based upon Pima County supplied facility-wide Glycol Ethers emissions (38,600 lb/yr)/(8,760 hr/yr).

Air System Components LP AAC Analysis

Pollutant	AAC 1-Hour (μg/m^3)	AAC Annual (μg/m^3)	Percentage of 1-Hour AAC	Percentage of Annual AAC
Chromium Compounds (Chromium VI)	1.00E+02	1.58E-04	1.1	53,638
Glycol Ethers	2.50E+05	3.14E+00	3.3	20,836

1 Triumph Corporation

Triumph Corporation
Stack Parameters[a]

Stack ID	Description	Release Height (ft)	Sigma Y (ft)	Sigma Z (ft)	Release Height (m)	Sigma Y (m)	Sigma Z (m)
1	Generic Volume Source	12.0	23.4	11.2	3.7	7.1	3.4

[a] No stack parameters supplied by Maricopa County, assumed generic volume source based upon 2-story (24 ft high, 100-ft long) building.

Triumph Corporation
Screen Modeling Results

Stack ID	Pollutant	Emission Rate[a] (lb/hr)	Emission Rate (g/s)	1- Hour Generic Modeling Results {(μg/m^3)/(g/s)}	Maximum Predicted 1-Hour Concentration (μg/m^3)	Maximum Predicted Annual Concentration (μg/m^3)	Distance to Maximum Concentration (m)	Generic Cavity Results {(μg/m^3)/(g/s)}	Maximum Cavity Concentration (μg/m^3)
1	Trichloroethylene	2.67E+00	3.36E-01	6,588	2.22E+03	1.77E+02	25	NA	NA
	Facility - Trichloroethylene Maximum Combined Results				**2.22E+03**	**1.77E+02**	**25**	**NA**	**NA**

[a] Based upon TRI reported facility-wide Trichloroethylene emissions (8,398 lb/yr)/(3,146 hr/yr).

Triumph Corporation AAC Analysis

Pollutant	AAC 1-Hour (μg/m^3)	AAC Annual (μg/m^3)	Percentage of 1-Hour AAC	Percentage of Annual AAC
Trichloroethylene	1.45E+06	1.68E-02	0.153	1,055,169

1 Semiray Inspection Services (was Kachina Technical Services)

Semiray Inspection Services (was Kachina Technical Services)
Stack Parameters

Stack ID	Description	Height (ft)	Diameter (ft)	Temp. (F)	Exit Vel. (ft/s)	Height (m)	Diameter (m)	Temp. (K)	Exit Vel. (m/s)
2	Degreaser	25	0.83	185	3.1	7.6	0.25	358	0.94
3	Surface Coating	22	2.8	85.0	0.40	6.7	0.86	302	0.12
9	Chemline/UHV Line	25	3.0	81.0	47.2	7.6	0.91	300	14.4
10	Paint Strip	25	0.83	85.0	4.6	7.6	0.25	302	1.4

Semiray Inspection Services (was Kachina Technical Services)
Screen Modeling Results[ab]

Stack ID	Pollutant	Emission Rate[c] (lb/hr)	Emission Rate (g/s)	1- Hour Generic Modeling Results {(μg/m^3)/(g/s)}	Maximum Predicted 1-Hour Concentration (μg/m^3)	Maximum Predicted Annual Concentration (μg/m^3)	Distance to Maximum Concentration (m)	Generic Cavity Results {(μg/m^3)/(g/s)}	Maximum Cavity Concentration[d] (μg/m^3)
9	Chromic Acid	1.20E-03	1.51E-04	322	4.88E-02	3.91E-03	25	0.00E+00	0.00E+00
	Facility - Chromic Acid Maximum Combined Results				**4.88E-02**	**3.91E-03**	**25**	**-**	**0.00E+00**
10	Dichloromethane (Methylene Chloride)	1.32E-01	1.67E-02	16,050	2.67E+02	2.14E+01	25	0.00E+00	0.00E+00
	Facility - Dichloromethane Maximum Combined Results				**2.67E+02**	**2.14E+01**	**25**	**-**	**0.00E+00**
9	Hydrochloric Acid	1.44E-03	1.82E-04	322	5.86E-02	4.69E-03	25	0.00E+00	0.00E+00
	Facility - Hydrochloric Acid Maximum Combined Results				**5.86E-02**	**4.69E-03**	**25**	**-**	**0.00E+00**
9	Hydrogen Flouride (Hydroflouric Acid)	2.16E-03	2.73E-04	322	8.79E-02	7.03E-03	25	0.00E+00	0.00E+00
	Facility - Hydrogen Flouride Maximum Combined Results				**8.79E-02**	**7.03E-03**	**25**	**-**	**0.00E+00**
3	Methyl Ethyl Ketone (MEK)	1.02E+00	1.29E-01	35,450	4.57E+03	3.66E+02	25	3.91E+03	5.05E+02
	Facility - MEK Maximum Combined Results				**4.57E+03**	**3.66E+02**	**25**	**-**	**5.05E+02**
2	Tetrachloroethylene (perchloroethylene)	4.72E+00	5.94E-01	14,800	8.80E+03	7.04E+02	25	0.00E+00	0.00E+00
	Facility - Tetrachloroethylene Maximum Combined Results				**8.80E+03**	**7.04E+02**	**25**	**-**	**0.00E+00**
2	Trichloroethylene	9.06E-01	1.14E-01	14,800	1.69E+03	1.35E+02	25	0.00E+00	0.00E+00
	Facility - Trichloroethylene Maximum Combined Results				**1.69E+03**	**1.35E+02**	**25**	**-**	**0.00E+00**

[a] Results are with building dimensions (Stack ht./1.5 -0.1 m) x 39 m x 39 m). Building length and width estimated from aerial photo.

[b] Maricopa County has designated Stack IDs 2, 3, and 10 as vertical obstructed, therefore they were modeled with 0.001 m/s exit velocity.

[c] Based upon Maricopa County reported Chromic Acid 2002 annual emissions (5 lb/yr)/(4,160 hr/yr), Dichloromethane 2002 annual emissions (550 lb/yr)/(4,160 hr/yr), Hydrochloric Acid 2002 annual emissions (6 lb/yr)/(4,160 hr/yr), Hydrogen Flouride 2002 annual emissions (9 lb/yr)/(4,160 hr/yr), MEK 2002 annual emissions (2,129 lb/yr)/(2,080 hr/yr), and Trichloroethylene 2002 annual emissions (3,770 lb/yr)/(4,160 hr/yr). TRI reported emissions of Tetrachloroethylene were greater than the Maricopa County reported 2002 annual emissions, therefore TRI reported emissions were modeled. Based upon TRI reported emissions of Tetrachloroethylene (19,620 lb/yr)/(4,160 hr/yr).

[d] Cavity length 21 m.

Semiray Inspection Services (was Kachina Technical Services) AAC Analysis

Pollutant	AAC 1-Hour (μg/m^3)	AAC Annual (μg/m^3)	Percentage of 1-Hour AAC	Percentage of Annual AAC
Chromic Acid	1.00E+02	1.58E-04	0.049	2,472
Dichloromethane (Methylene Chloride)	3.47E+05	4.03E+00	0.077	531
Hydrochloric Acid	1.60E+04	2.09E+01	3.66E-04	0.022
Hydrogen Flouride (Hydroflouric Acid)	1.00E+04	1.46E+01	8.79E-04	0.048
Methyl Ethyl Ketone (MEK)	5.02E+06	5.21E+03	0.091	7.0
Tetrachloroethylene (perchloroethylene)	8.14E+05	3.20E-01	1.1	219,876
Trichloroethylene	1.45E+06	1.68E-02	0.12	804,750

1 Super Radiator Coils

Super Radiator Coils
Stack Parameters[a]

Stack ID	Description	Release Height (ft)	Sigma Y (ft)	Sigma Z (ft)	Release Height (m)	Sigma Y (m)	Sigma Z (m)
1	Generic Volume Source	12.0	23.4	11.2	3.7	7.1	3.4

[a] No stack parameters supplied by Maricopa County, assumed generic volume source based upon 2-story (24 ft high, 100-ft long) building.

Super Radiator Coils
Screen Modeling Results

Stack ID	Pollutant	Emission Rate[a] (lb/hr)	Emission Rate (g/s)	1- Hour Generic Modeling Results {(μg/m^3)/(g/s)}	Maximum Predicted 1-Hour Concentration (μg/m^3)	Maximum Predicted Annual Concentration (μg/m^3)	Distance to Maximum Concentration (m)	Generic Cavity Results {(μg/m^3)/(g/s)}	Maximum Cavity Concentration (μg/m^3)
1	Tetrachloroethylene (Perchloroethylene)	4.88E+00	6.15E-01	6,588	4.05E+03	3.24E+02	25	NA	NA
	Facility - Trichloroethylene Maximum Combined Results				**4.05E+03**	**3.24E+02**	**25**	**NA**	**NA**

[a] Based upon TRI reported facility-wide Tetrachloroethylene emissions (27,825 lb/yr)/(5,700 hr/yr).

Super Radiator Coils AAC Analysis

Pollutant	AAC 1-Hour (μg/m^3)	AAC Annual (μg/m^3)	Percentage of 1-Hour AAC	Percentage of Annual AAC
Tetrachloroethylene (Perchloroethylene)	8.14E+05	3.20E-01	0.50	101,304

1 Litton Electro-Optical Systems

Litton Electro-Optical Systems
Stack Parameters[a]

Stack ID	Description	Release Height (ft)	Sigma Y (ft)	Sigma Z (ft)	Release Height (m)	Sigma Y (m)	Sigma Z (m)
1	Generic Volume Source	12.0	23.4	11.2	3.7	7.1	3.4

[a] No stack parameters supplied by Maricopa County, assumed generic volume source based upon 2-story (24 ft high, 100-ft long) building.

Litton Electro-Optical Systems
Screen Modeling Results

Stack ID	Pollutant	Emission Rate[a] (lb/hr)	Emission Rate (g/s)	1- Hour Generic Modeling Results {(μg/m^3)/(g/s)}	Maximum Predicted 1-Hour Concentration (μg/m^3)	Maximum Predicted Annual Concentration (μg/m^3)	Distance to Maximum Concentration (m)	Generic Cavity Results {(μg/m^3)/(g/s)}	Maximum Cavity Concentration (μg/m^3)
1	Methanol	4.50E+00	5.67E-01	6,588	3.73E+03	2.99E+02	25	NA	NA
				Facility - Methanol Maximum Combined Results	**3.73E+03**	**2.99E+02**	**25**	**NA**	**NA**

[a] Based upon TRI reported facility-wide Methanol emissions (8,993 lb/yr)/(2,000 hr/yr).

Litton Electro-Optical Systems AAC Analysis

Pollutant	AAC 1-Hour (μg/m^3)	AAC Annual (μg/m^3)	Percentage of 1-Hour AAC	Percentage of Annual AAC
Methanol	9.43E+05	4.17E+03	0.396	7.2

1 Neltec Inc.
2 Sanmina-SCI Corp. Phoenix Div.

Neltec Inc.
Stack Parameters[a]

Stack ID	Description	Release Height (ft)	Sigma Y (ft)	Sigma Z (ft)	Release Height (m)	Sigma Y (m)	Sigma Z (m)
1	Generic Volume Source	12.0	23.4	11.2	3.7	7.1	3.4

[a] No stack parameters supplied by Maricopa County, assumed generic volume source based upon 2-story (24 ft high, 100-ft long) building.

Neltec Inc.
Screen Modeling Results

Stack ID	Pollutant	Emission Rate[a] (lb/hr)	Emission Rate (g/s)	1- Hour Generic Modeling Results {(μg/m^3)/(g/s)}	Maximum Predicted 1-Hour Concentration (μg/m^3)	Maximum Predicted Annual Concentration (μg/m^3)	Distance to Maximum Concentration (m)	Generic Cavity Results {(μg/m^3)/(g/s)}	Maximum Cavity Concentration (μg/m^3)
1	Dimethyl Formamide	7.85E-02	9.89E-03	6,588	6.52E+01	5.21E+00	25	NA	NA
Facility - Dimethyl Formamide Maximum Combined Results					**6.52E+01**	**5.21E+00**	**25**	**NA**	**NA**
1	Methyl Ethyl Ketone (MEK)	4.31E-01	5.43E-02	6,588	3.58E+02	2.86E+01	25	NA	NA
Facility - MEK Maximum Combined Results					**3.58E+02**	**2.86E+01**	**25**	**NA**	**NA**

[a] Based upon TRI reported facility-wide Dimethyl Formamide emissions (534 lb/yr)/(6,800 hr/yr) and MEK emissions (2,689 lb/yr)/(6,240 hr/yr).

Neltec Inc. AAC Analysis

Pollutant	AAC 1-Hour (μg/m^3)	AAC Annual (μg/m^3)	Percentage of 1-Hour AAC	Percentage of Annual AAC
Dimethyl Formamide	1.64E+05	3.13E+01	0.040	16.7
Methyl Ethyl Ketone (MEK)	5.02E+06	5.21E+03	7.13E-03	0.55

Sanmina-SCI Corp. Phoenix Div.
Stack Parameters[a]

Stack ID	Description	Height (ft)	Diameter (ft)	Temp. (F)	Exit Vel. (ft/s)	Height (m)	Diameter (m)	Temp. (K)	Exit Vel. (m/s)
707	G-DES	45.0	2.0	76	22.9	13.7	0.61	297	7.0

[a] Based upon information supplied by Maricopa County it was assumed that Stack ID 707 is the only source of Hydrochloric Acid emissions.

Stack Parameters[a]

Stack ID	Description	Release Height (ft)	Sigma Y (ft)	Sigma Z (ft)	Release Height (m)	Sigma Y (m)	Sigma Z (m)
1	Generic Volume Source	12.0	23.4	11.2	3.7	7.1	3.4

[a] Based upon information supplied by Maricopa County it was not possible to accurately determine which stacks have Formaldehyde emissions. It was assumed that a generic volume source would be a better representation of Formaldehyde emissions from the facility than using a single stack with the minimum F_{stk}. Facility-wide Formaldehyde emissions were modeled from a generic volume source based upon 2-story (24 ft high, 100-ft long) building.

Sanmina-SCI Corp. Phoenix Div.
Screen Modeling Results[a]

Stack ID	Pollutant	Emission Rate[b] (lb/hr)	Emission Rate (g/s)	1- Hour Generic Modeling Results {(μg/m^3)/(g/s)}	Maximum Predicted 1-Hour Concentration (μg/m^3)	Maximum Predicted Annual Concentration (μg/m^3)	Distance to Maximum Concentration (m)	Generic Cavity Results {(μg/m^3)/(g/s)}	Maximum Cavity Concentration (μg/m^3)
1	Formaldehyde	8.73E-02	1.10E-02	6,588	7.25E+01	5.80E+00	25	NA	NA
	Facility - Formaldehyde Worst Case Results				**7.25E+01**	**5.80E+00**	**25**	**NA**	**NA**
707	Hydrochloric Acid	8.71E-01	1.10E-01	583	6.39E+01	5.12E+00	78	0.00E+00	0.00E+00
	Facility - Hydrochloric Acid Worst Case Results				**6.39E+01**	**5.12E+00**	**78**	**0.00E+00**	**0.00E+00**

[a] Results are with building dimensions ((Stack ht./1.5 -0.1 m) x 40 m x 110 m). Building length and width estimated from aerial photo.
[b] Based upon TRI reported facility-wide Formaldehyde emissions (654 lb/yr)/(7,488 hr/yr) and Maricopa County reported 2002 annual Hydrochloric Acid emissions (6,523 lb/yr)/(7,488 hr/yr).

Sanmina-SCI Corp. Phoenix Div. AAC Analysis

Pollutant	AAC 1-Hour (μg/m^3)	AAC Annual (μg/m^3)	Percentage of 1-Hour AAC	Percentage of Annual AAC
Formaldehyde	1.70E+04	1.46E-01	0.43	3,973
Hydrochloric Acid	1.60E+04	2.09E+01	0.40	24.5

1 Intel Corporation
2 Microchip Tech. Inc.
3 Motorola-Mesa
4 Freescale Semiconductor Inc (was Motorola-Chandler)

Intel Corporation
Stack Parameters[a]

Stack ID	Description	Height (ft)	Diameter (ft)	Temp. (F)	Exit Vel. (ft/s)	Height (m)	Diameter (m)	Temp. (K)	Exit Vel. (m/s)
11	FAB12 Wet Fume Scrubber #SC-F-1 to 10 Linked	102	5.0	62.0	21.2	31.1	1.5	290	6.5
31	FAB12 HPM Fume Scrubber #SC-HPM-1&2 Linked	102	2.2	68.0	90.4	31.1	0.66	293	27.6
41	FAB12 CUB Scrubber #SC-CUB-1	44.0	2.3	68.0	39.0	13.4	0.71	293	11.9
111	FAB22 Wet Fume Scrubber #SC-133-1-100 to 3 Linked	70.0	3.0	75.0	75.0	21.3	0.91	297	22.9
131	FAB22 Bridge Scrubber #SC-133-1-400 to 3 Linked	76.0	3.5	75.0	37.6	23.2	1.1	297	11.5

[a] Based on information supplied by Maricopa County it was assumed that Hydrogen Flouride emissions from Stack IDs 11, 31, 41, 111, and 131.
Based upon information supplied by Maricopa County it was assumed that Ethylene Glycol emissions from only Stack ID 11.
Based upon information supplied by Maricopa County it does not appear that Stack IDs 21 and 121 emit TRI reported pollutants, they have not been included here.

Stack Parameters[a]

Stack ID	Description	Release Height (ft)	Sigma Y (ft)	Sigma Z (ft)	Release Height (m)	Sigma Y (m)	Sigma Z (m)
6	Generic Volume Source	12.0	23.4	11.2	3.7	7.1	3.4

[a] Based upon information supplied by Maricopa County it was assumed that Methanol emissions are fugitive. Therefore, facility-wide Methanol emissions were modeled from a generic volume source based upon 2-story (24 ft high, 100-ft long) building.

Intel Corporation
Screen Modeling Results[a]

Stack ID	Pollutant	Emission Rate[b] (lb/hr)	Emission Rate (g/s)	1- Hour Generic Modeling Results {(μg/m^3)/(g/s)}	Maximum Predicted 1-Hour Concentration (μg/m^3)	Maximum Predicted Annual Concentration (μg/m^3)	Distance to Maximum Concentration (m)	Generic Cavity Results {(μg/m^3)/(g/s)}	Maximum Cavity Concentration (μg/m^3)
11	Ethylene Glycol	6.85E-03	8.63E-04	195	1.69E-01	1.35E-02	207	0.00E+00	0.00E+00
	Facility - Ethylene Glycol Maximum Combined Results				**1.69E-01**	**1.35E-02**	**207**	**0.00E+00**	**0.00E+00**
41	Hydrogen Flouride	1.49E-01	1.88E-02	343	6.44E+00	5.16E-01	89	0.00E+00	0.00E+00
	Facility - Hydrogen Flouride Maximum Combined Results				**6.44E+00**	**5.16E-01**	**89**	**0.00E+00**	**0.00E+00**
6	Methanol	2.79E-01	3.52E-02	6,588	2.32E+02	1.85E+01	25	0.00E+00	0.00E+00
	Facility - Methanol Combined Maximum Results				**2.32E+02**	**1.85E+01**	**25**	**0.00E+00**	**0.00E+00**

[a] Hydrogen Flouride emissions modeled from Stack ID 41 (minimum F_{stk}). Results for Stack IDs 11 and 41 used building dimensions ((Stack ht./1.5 -0.1 m) x 120 m x 200 m).
Building length and width estimated from aerial photo.
[b] Based upon TRI reported facility-wide Ethylene Glycol emissions (60 lb/yr)/(8,760 hr/yr), Hydrogen Flouride emissions (1,305 lb/yr)/(8,760 hr/yr), and Methanol emissions (2,445 lb/yr)/(8,760 hr/yr).

Intel Corporation AAC Analysis

Pollutant	AAC 1-Hour (μg/m^3)	AAC Annual (μg/m^3)	Percentage of 1-Hour AAC	Percentage of Annual AAC
Ethylene Glycol	5.00E+04	4.17E+02	3.37E-04	3.23E-03
Hydrogen Flouride	1.00E+04	1.46E+01	0.064	3.5
Methanol	9.43E+05	4.17E+03	0.025	0.44

Microchip Tech. Inc.
Stack Parameters[a]

Stack ID	Description	Height (ft)	Diameter (ft)	Temp. (F)	Exit Vel. (ft/s)	Height (m)	Diameter (m)	Temp. (K)	Exit Vel. (m/s)	F_{stk}
8	Beverly Pacific C-B49 Fume Scrubber	52.0	4.4	78.0	43.8	15.8	1.3	299	13.4	9.00E+04
9	Beverly Pacific C-B49 Fume Scrubber	52.0	4.4	78.0	43.8	15.8	1.35	299	13.4	9.00E+04
10	Beverly Pacific C-B49 Fume Scrubber	49.0	4.4	78.0	39.3	14.9	1.35	299	12.0	7.61E+04
31	Harrington Ind Plastics Inc ECH-33-5 NB	43.0	1.8	78.0	15.0	13.1	0.53	299	4.6	4.00E+03
32	Harrington Ind Plastics Inc ECH-33-5 NB	28.0	1.2	78.0	30.2	8.5	0.36	299	9.2	2.34E+03

[a] Based on information supplied by Maricopa County it was assumed that Hydrogen Flouride emissions from Stack IDs 8, 9, 10, 31, and 32

Microchip Tech. Inc.
Screen Modeling Results[ab]

Stack ID	Pollutant	Emission Rate[c] (lb/hr)	Emission Rate (g/s)	1- Hour Generic Modeling Results {(μg/m^3)/(g/s)}	Maximum Predicted 1-Hour Concentration (μg/m^3)	Maximum Predicted Annual Concentration (μg/m^3)	Distance to Maximum Concentration (m)	Generic Cavity Results {(μg/m^3)/(g/s)}	Maximum Cavity Concentration (μg/m^3)
32	Hydrogen Flouride (Hydroflouric Acid)	2.32E-01	2.92E-02	1,340	3.91E+01	3.13E+00	56	0.00E+00	0.00E+00
	Facility - Hydrogen Flouride Maximum Combined Results				**3.91E+01**	**3.13E+00**	**56**	**-**	**0.00E+00**

[a] Results are with building dimensions ((Stack ht./1.5 -0.1 m) x 40 m x 40 m). Assumed generic building length and width.
[b] Maricopa County unable to supply specific emissions from sources, therefore assumed Hydrogen Flouride facility-wide emissions only from Stack ID 32 (minimum F_{stk}).
[c] Based upon TRI reported Hydrogen Flouride emissions (2,029 lb/yr)/(8,760 hr/yr).

Microchip Tech. Inc. ACC Analysis

Pollutant	AAC 1-Hour (μg/m^3)	AAC Annual (μg/m^3)	Percentage of 1-Hour AAC	Percentage of Annual AAC
Hydrogen Flouride (Hydroflouric Acid)	1.00E+04	1.46E+01	0.39	21.4

Motorola-Mesa
Stack Parameters[a]

Stack ID	Description	Height (ft)	Diameter (ft)	Temp. (F)	Exit Vel. (ft/s)	Height (m)	Diameter (m)	Temp. (K)	Exit Vel. (m/s)	F_{stk}
1	Carbon Adsorber (VARA 1)	36	2.5	77.0	54.3	11.0	0.76	298	16.6	2.47E+04
11	Carbon Adsorber (VARA 2)	52	4.0	77.0	47.7	15.8	1.22	298	14.5	8.01E+04
12	Carbon Adsorber w/Thermal Oxidizer (VARA 3)	42	4.5	77.0	29.3	12.8	1.37	298	8.9	5.03E+04

[a] Maricopa County unable to supply specific pollutant emission sources, therefore assumed that all facility-wide pollutant emissions from Stack IDs 1, 11, and 12.

Motorola-Mesa
Screen Modeling Results[ab]

Stack ID	Pollutant	Emission Rate[c] (lb/hr)	Emission Rate (g/s)	1- Hour Generic Modeling Results {(μg/m³)/(g/s)}	Maximum Predicted 1-Hour Concentration (μg/m³)	Maximum Predicted Annual Concentration (μg/m³)	Distance to Maximum Concentration (m)	Generic Cavity Results {(μg/m³)/(g/s)}	Maximum Cavity Concentration (μg/m³)
1	Ethylene Glycol	3.65E-02	4.60E-03	183	8.43E-01	6.75E-02	73	0.00E+00	0.00E+00
	Facility - Ethylene Glycol Maximum Combined Results				**8.43E-01**	**6.75E-02**	**73**	**-**	**0.00E+00**
1	Hydrogen Flouride (Hydroflouric Acid)	2.97E-01	3.74E-02	183	6.85E+00	5.48E-01	73	0.00E+00	0.00E+00
	Facility - Hydrogen Flouride Maximum Combined Results				**6.85E+00**	**5.48E-01**	**73**	**-**	**0.00E+00**
1	Xylene (mixed isomers)	2.05E-02	2.59E-03	183	4.74E-01	3.79E-02	73	0.00E+00	0.00E+00
	Facility - Xylene Maximum Combined Results				**4.74E-01**	**3.79E-02**	**73**	**-**	**0.00E+00**

[a] Results are with building dimensions (Stack ht./1.5 -0.1 m) x 40 m x 40 m). Assumed generic building length and width.
[b] Assumed all facility-wide emissions emitted from only Stack ID 1 (minimum F_{stk})
[c] Based upon TRI reported facility-wide Ethylene Glycol emissions (320 lb/yr)/(8,760 hr/yr), Hydrogen Flouride emissions (2,600 lb/yr)/(8,760 hr/yr), and Xylene emissions (180 lb/yr)/(8,760 hr/yr).

Motorola-Mesa ACC Analysis

Pollutant	AAC 1-Hour (μg/m³)	AAC Annual (μg/m³)	Percentage of 1-Hour AAC	Percentage of Annual AAC
Ethylene Glycol	5.00E+04	4.17E+02	1.69E-03	0.016
Hydrogen Flouride (Hydroflouric Acid)	1.00E+04	1.46E+01	0.069	3.8
Xylene (mixed isomers)	1.74E+06	1.04E+02	2.73E-05	0.036

Freescale Semiconductor Inc (was Motorola-Chandler)
Stack Parameters[a]

Stack ID	Description	Height (ft)	Diameter (ft)	Temp. (F)	Exit Vel. (ft/s)	Height (m)	Diameter (m)	Temp. (K)	Exit Vel. (m/s)	F_{stk}
13	MOS 12 Thermal Oxidizer Inc 102/103	50.0	3.5	185	29.0	15.2	1.1	358	8.8	4.31E+04
14	MOS 12 Thermal Oxidizer Inc 104	50.0	3.0	221	38.0	15.2	0.91	378	11.6	4.38E+04
15	MOS 12 Thermal Oxidizer Inc 105	50.0	3.0	221	38.0	15.2	0.91	378	11.6	4.38E+04
25	Harrington Water Scrubber / EF Bldg SC201	50.0	5.7	75.0	32.0	15.2	1.7	297	9.8	1.03E+05
26	Harrington Water Scrubber / EF Bldg SC202	50.0	4.5	75.0	52.0	15.2	1.4	297	15.8	1.06E+05
27	Harrington Water Scrubber / EF Bldg SC204	50.0	4.0	75.0	66.0	15.2	1.2	297	20.1	1.06E+05
28	Harrington Water Scrubber / EF Bldg SC205	50.0	4.0	75.0	66.0	15.2	1.2	297	20.1	1.06E+05
29	TRI-MER Water Scrubber / EF Bldg SC203	50.0	4.4	75.0	55.0	15.2	1.3	297	16.8	1.08E+05
30	TRI-MER Water Scrubber / EF Bldg SC206	50.0	4.4	75.0	55.0	15.2	1.3	297	16.8	1.08E+05
31	TRI-MER Water Scrubber / A Bldg SC006A	33.0	3.3	75.0	38.0	10.1	1.0	297	11.6	2.80E+04
32	TRI-MER Water Scrubber / A Bldg SC007A	33.0	3.3	75.0	38.0	10.1	1.0	297	11.6	2.80E+04
33	TRI-MER Water Scrubber / A Bldg SC008A	33.0	3.3	75.0	38.0	10.1	1.0	297	11.6	2.80E+04

[a] Maricopa County unable to supply specific pollutant emission sources, therefore assumed that facility-wide pollutant emissions from Stack IDs 13-15 and 25-33.

Freescale Semiconductor Inc (was Motorola-Chandler)
Screen Modeling Results[ab]

Stack ID	Pollutant	Emission Rate[c] (lb/hr)	Emission Rate (g/s)	1- Hour Generic Modeling Results {(μg/m³)/(g/s)}	Maximum Predicted 1-Hour Concentration (μg/m³)	Maximum Predicted Annual Concentration (μg/m³)	Distance to Maximum Concentration (m)	Generic Cavity Results {(μg/m³)/(g/s)}	Maximum Cavity Concentration (μg/m³)
31	Ethylene Glycol	2.51E-02	3.16E-03	236	7.48E-01	5.98E-02	25	0.00E+00	0.00E+00
	Facility - Ethylene Glycol Maximum Combined Results				**7.48E-01**	**5.98E-02**	**25**	**0.00E+00**	**0.00E+00**
31	Hydochloric Acid	2.97E-01	3.74E-02	236	8.84E+00	7.07E-01	25	0.00E+00	0.00E+00
	Facility - Hydrochloric Acid Combined Maximum Results				**8.84E+00**	**7.07E-01**	**25**	**0.00E+00**	**0.00E+00**
31	Hydrogen Flouride (Hydroflouric Acid)	9.36E-02	1.18E-02	236	2.79E+00	2.23E-01	25	0.00E+00	0.00E+00
	Facility - Hydrogen Flouride Combined Maximum Results				**2.79E+00**	**2.23E-01**	**25**	**0.00E+00**	**0.00E+00**

[a] Results are with building dimensions (Stack ht./1.5 -0.1 m) x 40 m x 40 m). Assumed generic building length and width.
[b] Facility-wide pollutant emissions assumed emitted from only Stack ID 31 (minimum F_{stk}, among Stack IDs 13-15 and 25-33).
[c] Based upon TRI reported Ethylene Glycol emissions (220 lb/yr)/(8,760 hr/yr), Hydrochloric Acid emissions (2,600 lb/yr)/(8,760 hr/yr), and Hydrogen Flouride emissions (820 lb/yr)/(8,760 hr/yr).

Freescale Semiconductor Inc (was Motorola-Chandler) AAC Analysis

Pollutant	AAC 1-Hour (μg/m³)	AAC Annual (μg/m³)	Percentage of 1-Hour AAC	Percentage of Annual AAC
Ethylene Glycol	5.00E+04	4.17E+02	1.50E-03	0.014
Hydrochloric Acid	1.60E+04	2.09E+01	0.055	3.4
Hydrogen Flouride (Hydroflouric Acid)	1.00E+04	1.46E+01	0.028	1.5

1 Isola Laminate Systems
2 Rogers Corporation ACMD-Dobson

Isola Laminate Systems
Stack Parameters[a]

Stack ID	Description	Height (ft)	Diameter (ft)	Temp. (F)	Exit Vel. (ft/s)	Height (m)	Diameter (m)	Temp. (K)	Exit Vel. (m/s)
210	Treater 1 - Oxidizer 1	56.0	2.8	816	32.2	17.1	0.86	709	9.8
211	Treater 2 - Oxidizer 2	56.0	3.0	820	52.9	17.1	0.91	711	16.1
212	Treater 3 - Oxidizer 3	54.0	2.3	827	52.3	16.5	0.69	715	15.9
410	Press 1	23.0	1.0	100	2.7	7.0	0.30	311	0.82
421	Press 2	10.0	0.67	100	2.6	3.0	0.20	311	0.79

[a] Maricopa County supplied specific emission sources of Dimethyl Formamide, Methanol, and Methyl Ethyl Ketone.

Isola Laminate Systems
Screen Modeling Results[ab]

Stack ID	Pollutant	Emission Ratec (lb/hr)	Emission Rate (g/s)	1- Hour Generic Modeling Results {(μg/m^3)/(g/s)}	Maximum Predicted 1-Hour Concentration (μg/m^3)	Maximum Predicted Annual Concentration (μg/m^3)	Distance to Maximum Concentration (m)	Generic Cavity Results {(μg/m^3)/(g/s)}	Maximum Cavity Concentration[d] (μg/m^3)
210	Dimethyl Formamide	9.15E-03	1.15E-03	64.4	7.43E-02	5.94E-03	34	0.00E+00	0.00E+00
211	Dimethyl Formamide	5.79E-01	7.29E-02	48.6	3.54E+00	2.83E-01	34	0.00E+00	0.00E+00
212	Dimethyl Formamide	5.67E-01	7.14E-02	53.5	3.82E+00	3.05E-01	33	0.00E+00	0.00E+00
410	Dimethyl Formamide	1.74E-02	2.19E-03	19,190	4.20E+01	3.36E+00	25	0.00E+00	0.00E+00
421	Dimethyl Formamide	4.64E-02	5.85E-03	28,360	1.66E+02	1.33E+01	25	3.04E+03	1.78E+01
	Facility - Dimethyl Formamide Maximum Combined Results				**2.15E+02**	**1.72E+01**	**25**	**-**	**1.78E+01**
210	Methanol	5.34E-05	6.73E-06	64.4	4.34E-04	3.47E-05	34	0.00E+00	0.00E+00
211	Methanol	2.94E-03	3.70E-04	48.6	1.80E-02	1.44E-03	34	0.00E+00	0.00E+00
212	Methanol	2.94E-03	3.70E-04	53.5	1.98E-02	1.58E-03	33	0.00E+00	0.00E+00
	Facility - Methanol Maximum Combined Results				**3.82E-02**	**3.06E-03**	**33**	**-**	**0.00E+00**
210	Methyl Ethyl Ketone (MEK)	1.34E-04	1.68E-05	64.4	1.08E-03	8.67E-05	34	0.00E+00	0.00E+00
211	Methyl Ethyl Ketone (MEK)	5.21E-03	6.56E-04	49	3.19E-02	2.55E-03	34	0.00E+00	0.00E+00
212	Methyl Ethyl Ketone (MEK)	5.07E-03	6.39E-04	53.5	3.42E-02	2.74E-03	33	0.00E+00	0.00E+00
	Facility - MEK Maximum Combined Results				**6.72E-02**	**5.37E-03**	**33**	**-**	**0.00E+00**

[a] Results are with building dimensions (Stack ht./1.5 -0.1 m) x 60 m x 113 m), except Stack ID 421 assumed minimum building height of 12 ft. Building length and width estimated from aerial photo.
[b] Maricopa County designated Stack IDs 410 and 421 as downward unobstructed and horizontal unobstructed, therefore they were modeled with 0.001 m/s exit velocity.
[c] Based upon TRI reported facility-wide Dimethyl Formamide emissions (9,120 lb/yr)/(7,488 hr/yr) distributed among stacks using ratio of Maricopa County reported 2002 facility-wide annual emissions to the reported emissions from each stack. Methanol and MEK emissions based upon Maricopa County reported 2002 annual emissions for each stack. Methanol facility-wide emissions (44 lb/yr)/(7,488 hr/yr) and MEK facility-wide emissions (78 lb/yr)/(7,488 hr/yr).
[d] Cavity length 21 m.

Isola Laminate Systems AAC Analysis

Pollutant	AAC 1-Hour (μg/m^3)	AAC Annual (μg/m^3)	Percentage of 1-Hour AAC	Percentage of Annual AAC
Dimethyl Formamide	1.64E+05	3.13E+01	0.13	55.0
Methanol	9.43E+05	4.17E+03	4.05E-06	7.33E-05
Methyl Ethyl Ketone (MEK)	5.02E+06	5.21E+03	1.34E-06	1.03E-04

Rogers Corporation ACMD-Dobson
Stack Parameters[a]

Stack ID	Description	Release Height (ft)	Sigma Y (ft)	Sigma Z (ft)	Release Height (m)	Sigma Y (m)	Sigma Z (m)
1	Generic Volume Source	12.0	23.4	11.2	3.7	7.1	3.4

[a] No stack parameters supplied by Maricopa County, assumed generic volume source based upon 2-story (24 ft high, 100-ft long) building.

Rogers Corporation ACMD-Dobson
Screen Modeling Results

Stack ID	Pollutant	Emission Rate[a] (lb/hr)	Emission Rate (g/s)	1- Hour Generic Modeling Results {(μg/m^3)/(g/s)}	Maximum Predicted 1-Hour Concentration (μg/m^3)	Maximum Predicted Annual Concentration (μg/m^3)	Distance to Maximum Concentration (m)	Generic Cavity Results {(μg/m^3)/(g/s)}	Maximum Cavity Concentration (μg/m^3)
1	Methyl Ethyl Ketone (MEK)	2.98E-01	3.75E-02	6,588	2.47E+02	1.98E+01	25	NA	NA
	Facility - MEK Maximum Combined Results				**2.47E+02**	**1.98E+01**	**25**	**NA**	**NA**
1	Methyl Isobutyl Ketone (Hexone)	6.00E-02	7.56E-03	6,588	4.98E+01	3.98E+00	25	NA	NA
	Facility - Methyl Isobutyl Ketone Maximum Combined Results				**4.98E+01**	**3.98E+00**	**25**	**NA**	**NA**

[a] Based upon TRI reported facility-wide MEK emissions (2,144 lb/yr)/(7,200 hr/yr) and Methyl Isobutyl Ketone emissions (432 lb/yr)/(7,200 hr/yr).

Rogers Corporation ACMD-Dobson AAC Analysis

Pollutant	AAC 1-Hour (μg/m^3)	AAC Annual (μg/m^3)	Percentage of 1-Hour AAC	Percentage of Annual AAC
Methyl Ethyl Ketone (MEK)	5.02E+06	5.21E+03	4.93E-03	0.38
Methyl Isobutyl Ketone (Hexone)	5.00E+05	3.13E+03	9.96E-03	0.13

1 Imation Corp.

Imation Corporation
Stack Parameters

Stack ID	Description	Height (ft)	Diameter (ft)	Temp. (F)	Exit Vel. (ft/s)	Height (m)	Diameter (m)	Temp. (K)	Exit Vel. (m/s)
EP1	None Given by Pima County	37.5	3.3	100.0	29.23	11.4	1.0	311	8.9

Imation Corporation
Screen Modeling Results[a]

Stack ID	Pollutant	Emission Rate[b] (lb/hr)	Emission Rate (g/s)	1- Hour Generic Modeling Results {(μg/m^3)/(g/s)}	Maximum Predicted 1-Hour Concentration (μg/m^3)	Maximum Predicted Annual Concentration (μg/m^3)	Distance to Maximum Concentration (m)	Generic Cavity Results {(μg/m^3)/(g/s)}	Maximum Cavity Concentration (μg/m^3)
EP1	Methyl Ethyl Ketone (MEK)	9.13E-01	1.15E-01	243	2.79E+01	2.23E+00	25	0.00E+00	0.00E+00
	Facility - MEK Maximum Combined Results				**2.79E+01**	**2.23E+00**	**25**	**-**	**0.00E+00**
EP1	Methyl Isobutyl Ketone (MIBK)	9.13E-01	1.15E-01	243	2.79E+01	2.23E+00	25	0.00E+00	0.00E+00
	Facility - MIBK Maximum Combined Results				**2.79E+01**	**2.23E+00**	**25**	**-**	**0.00E+00**

[a] Results are with building dimensions (Stack ht./1.5 -0.1 m) x 40 m x 40 m). Assumed generic building length and width.
[b] Pima County supplied PTE emission rates (lb/hr).

Imation Corporation AAC Analysis

Pollutant	AAC 1-Hour (μg/m^3)	AAC Annual (μg/m^3)	Percentage of 1-Hour AAC	Percentage of Annual AAC
Methyl Ethyl Ketone (MEK)	5.02E+06	5.21E+03	5.57E-04	0.043
Methyl Isobutyl Ketone (MIBK)	5.00E+05	3.13E+03	5.59E-03	0.071

1 Lear Jet Inc

Lear Jet Inc.
Stack Parameters

Stack ID	Description	Height (ft)	Diameter (ft)	Temp. (F)	Exit Vel. (ft/s)	Height (m)	Diameter (m)	Temp. (K)	Exit Vel. (m/s)
B-FWP-1	295 hp Emergency Fire Pump Engine	26.5	0.50	400	42.4	8.1	0.15	477	12.9
B-FWP-2	295 hp Emergency Fire Pump Engine	26.5	0.50	400	42.4	8.1	0.15	477	12.9
B-FWP-3	295 hp Emergency Fire Pump Engine	26.5	0.50	400	42.4	8.1	0.15	477	12.9

Stack Parameters[a]

Stack ID	Description	Release Height (ft)	Sigma Y (ft)	Sigma Z (ft)	Release Height (m)	Sigma Y (m)	Sigma Z (m)
1	Generic Volume Source	12.0	23.4	11.2	3.7	7.1	3.4

[a] Assumed generic volume source based upon 2-story (24 ft high, 100-ft long) building.

Lear Jet Inc.
Screen Modeling Results[ab]

Stack ID	Pollutant	Emission Rate[c] (lb/hr)	Emission Rate (g/s)	1- Hour Generic Modeling Results {(μg/m^3)/(g/s)}	Maximum Predicted 1-Hour Concentration (μg/m^3)	Maximum Predicted Annual Concentration (μg/m^3)	Distance to Maximum Concentration (m)	Generic Cavity Results {(μg/m^3)/(g/s)}	Maximum Cavity Concentration (μg/m^3)
B-FWP-1	Methyl Ethyl Ketone (MEK)	1.29E+00	1.63E-01	896	1.46E+02	1.17E+01	41	0.00E+00	0.00E+00
1	Methyl Ethyl Ketone (MEK)	1.29E+00	1.63E-01	6,588	1.07E+03	8.58E+01	25	0.00E+00	0.00E+00
				Facility - MEK Worst Case Results	**1.07E+03**	**8.58E+01**	**25**	**-**	**0.00E+00**
B-FWP-1	Toluene	2.17E+00	2.74E-01	896	2.45E+02	1.96E+01	41	0.00E+00	0.00E+00
1	Toluene	2.17E+00	2.74E-01	6,588	1.81E+03	1.44E+02	25	0.00E+00	0.00E+00
				Facility - Toluene Worst Case Results	**1.81E+03**	**1.64E+02**	**25**	**-**	**0.00E+00**

[a] Results are with building dimensions (Stack ht./1.5 -0.1 m) x 27 m x 42 m). Building length and width estimated from aerial photo.

[b] Three identical emergency generators with same stack characteristics. Facility-wide emissions modeled from one stack (B-FWP-1). Emissions are not typical engine emissions, therefore emissions modeled from generic volume source for comparison. Volume source produced worst case results.

[c] MEK emission rate based upon Pima County supplied facility wide emissions (11,321 lb/yr)/(8,760 hr/yr). Toluene emission rate based upon Pima County supplied facility-wide emissions (19,049 lb/yr)/(8,760 hr/yr).

Lear Jet Inc. AAC Analysis

Pollutant	AAC 1-Hour (μg/m^3)	AAC Annual (μg/m^3)	Percentage of 1-Hour AAC	Percentage of Annual AAC
Methyl Ethyl Ketone (MEK)	5.02E+06	5.21E+03	0.021	1.6
Toluene	1.92E+06	4.17E+02	0.094	39.3

1 Honeywell Engine Systems & Services

Honeywell Engine Systems & Services
Stack Parameters[a]

Stack ID	Description	Release Height (ft)	Sigma Y (ft)	Sigma Z (ft)	Release Height (m)	Sigma Y (m)	Sigma Z (m)
1	Generic Volume Source	12.0	23.4	11.2	3.7	7.1	3.4

[a] No stack parameters supplied by Maricopa County, assumed generic volume source based upon 2-story (24 ft high, 100-ft long) building.

Honeywell Engine Systems & Services
Screen Modeling Results

Stack ID	Pollutant	Emission Rate[a] (lb/hr)	Emission Rate (g/s)	1- Hour Generic Modeling Results {(μg/m^3)/(g/s)}	Maximum Predicted 1-Hour Concentration (μg/m^3)	Maximum Predicted Annual Concentration (μg/m^3)	Distance to Maximum Concentration (m)	Generic Cavity Results {(μg/m^3)/(g/s)}	Maximum Cavity Concentration (μg/m^3)
1	Methanol	1.19E+00	1.50E-01	6,588	9.85E+02	7.88E+01	25	NA	NA
			Facility - Styrene Maximum Combined Results		**9.85E+02**	**7.88E+01**	**25**	**NA**	**NA**

[a] Based upon TRI reported facility-wide Methanol emissions (5,696 lb/yr)/(4,800 hr/yr).

Honeywell Engine Systems & Services AAC Analysis

Pollutant	AAC 1-Hour (μg/m^3)	AAC Annual (μg/m^3)	Percentage of 1-Hour AAC	Percentage of Annual AAC
Methanol	9.43E+05	4.17E+03	0.104	1.9

1 US Air Force Plant No. 44

US Air Force Plant No. 44
Stack Parameters[a]

Stack ID	Description	Release Height (ft)	Sigma Y (ft)	Sigma Z (ft)	Release Height (m)	Sigma Y (m)	Sigma Z (m)
1	Generic Volume Source	12.0	23.4	11.2	3.7	7.1	3.4

[a] No stack parameters were available, assumed generic volume source based upon 2-story (24 ft high, 100-ft long) building.

US Air Force Plant No. 44
Screen Modeling Results

Stack ID	Pollutant	Emission Rate[a] (lb/hr)	Emission Rate (g/s)	1- Hour Generic Modeling Results {(μg/m^3)/(g/s)}	Maximum Predicted 1-Hour Concentration (μg/m^3)	Maximum Predicted Annual Concentration (μg/m^3)	Distance to Maximum Concentration (m)	Generic Cavity Results {(μg/m^3)/(g/s)}	Maximum Cavity Concentration (μg/m^3)
1	Methyl Ethyl Ketone (MEK)	7.95E-01	1.00E-01	6,588	6.60E+02	5.28E+01	25	NA	NA
				Facility - MEK Maximum Combined Results	**6.60E+02**	**5.28E+01**	**25**	**NA**	**NA**

[a] Based upon TRI reported MEK facility emissions of (6,960 lb/yr)/(8,760 hr/yr).

US Air Force Plant No. 44 AAC Analysis

Pollutant	AAC 1-Hour (μg/m^3)	AAC Annual (μg/m^3)	Percentage of 1-Hour AAC	Percentage of Annual AAC
Methyl Ethyl Ketone (MEK)	5.02E+06	5.21E+03	0.013	1.0

1 W.L. Gore & Associates Inc. Woody Mountain Campus

W.L. Gore & Associates Inc. Woody Mountain Campus
Stack Parameters[a]

Stack ID	Description	Release Height (ft)	Sigma Y (ft)	Sigma Z (ft)	Release Height (m)	Sigma Y (m)	Sigma Z (m)
1	Generic Volume Source	12.0	23.4	11.2	3.7	7.1	3.4

[a] No stack parameters were available, assumed generic volume source based upon 2-story (24 ft high, 100-ft long) building.

W.L. Gore & Associates Inc. Woody Mountain Campus
Screen Modeling Results

Stack ID	Pollutant	Emission Rate[a] (lb/hr)	Emission Rate (g/s)	1- Hour Generic Modeling Results {(μg/m^3)/(g/s)}	Maximum Predicted 1-Hour Concentration (μg/m^3)	Maximum Predicted Annual Concentration (μg/m^3)	Distance to Maximum Concentration (m)	Generic Cavity Results {(μg/m^3)/(g/s)}	Maximum Cavity Concentration (μg/m^3)
1	Methanol	1.89E+00	2.39E-01	6,588	1.57E+03	1.26E+02	25	NA	NA
				Facility - Methanol Maximum Combined Results	**1.57E+03**	**1.26E+02**	**25**	**NA**	**NA**

[a] Based upon ADEQ supplied facility-wide Methanol emissions (16,600 lb/yr)/(8,760 hr/yr).

W.L. Gore & Associates Inc. Woody Mountain Campus AAC Analysis

Pollutant	AAC 1-Hour (μg/m^3)	AAC Annual (μg/m^3)	Percentage of 1-Hour AAC	Percentage of Annual AAC
Methanol	9.43E+05	4.17E+03	0.17	3.0

1 Penn Racquet Sports

Penn Racquet Sports
Stack Parameters[a]

Stack ID	Description	Height (ft)	Diameter (ft)	Temp. (F)	Exit Vel. (ft/s)	Height (m)	Diameter (m)	Temp. (K)	Exit Vel. (m/s)
1	Carbon Adsorber #1	20.0	2.3	100	58.5	6.1	0.71	311	17.8
2	Carbon Adsorber #2	20.0	2.3	100	58.5	6.1	0.71	311	17.8
3	Carbon Adsorber #3	20.0	2.3	100	58.5	6.1	0.71	311	17.8
13	QA Lab Oven Vent	27.0	0.33	350	19.1	8.2	0.10	450	5.8

[a] Stack IDs 1, 2, 3, and 13 listed as the only Hexane emitting stacks.

Penn Racquet Sports
Screen Modeling Results[ab]

Stack ID	Pollutant	Emission Rate[c] (lb/hr)	Emission Rate (g/s)	1- Hour Generic Modeling Results {(μg/m^3)/(g/s)}	Maximum Predicted 1-Hour Concentration (μg/m^3)	Maximum Predicted Annual Concentration (μg/m^3)	Distance to Maximum Concentration (m)	Generic Cavity Results {(μg/m^3)/(g/s)}	Maximum Cavity Concentration (μg/m^3)
1	Hexane	2.59E+01	3.26E+00	353	1.15E+03	9.20E+01	25	0.00E+00	0.00E+00
		Facility - Hexane Maximum Combined Results			**1.15E+03**	**9.20E+01**	**25**	**-**	**0.00E+00**

[a] Results are with building dimensions (Stack ht./1.5 -0.1 m) x 66 m x 135 m). Building length and width estimated from aerial photo.

[b] Maricopa County was unable to supply a breakdown of Hexane emissions by source. Stack IDs 1-3 have the same stack characteristics, therefore facility-wide Hexane emissions assumed to be emitted from only Stack ID 1. The QA Lab Oven Vent (Stack ID 13) would likely have very small emissions of hexane. It was assumed that the hexane emissions from Stack ID 13 would be insignificant, therefore the facility-wide Hexane emissions were modeled only from Stack ID 1.

[c] Based upon TRI reported facility-wide Hexane emissions (163,023 lb/yr)/(6,300 hr/yr).

Penn Racquet Sports AAC Analysis

Pollutant	AAC 1-Hour (μg/m^3)	AAC Annual (μg/m^3)	Percentage of 1-Hour AAC	Percentage of Annual AAC
Hexane	1.16E+07	2.21E+03	9.87E-03	4.2

1 Marlam Industries Inc.

Marlam Industries Inc.
Stack Parameters

Stack ID	Description	Height (ft)	Diameter (ft)	Temp. (F)	Exit Vel. (ft/s)	Height (m)	Diameter (m)	Temp. (K)	Exit Vel. (m/s)
1	Gel Coat Spray Booth	24	2.8	75	40.7	7.3	0.86	297	12.4
3	Laminating Line	24	2.8	75	40.7	7.3	0.86	297	12.4

Marlam Industries Inc.
Screen Modeling Results[ab]

Stack ID	Pollutant	Emission Rate[c] (lb/hr)	Emission Rate (g/s)	1- Hour Generic Modeling Results {(μg/m^3)/(g/s)}	Maximum Predicted 1-Hour Concentration (μg/m^3)	Maximum Predicted Annual Concentration (μg/m^3)	Distance to Maximum Concentration (m)	Generic Cavity Results {(μg/m^3)/(g/s)}	Maximum Cavity Concentration[d] (μg/m^3)
1	Methyl Methacrylate	1.83E+00	2.30E-01	31,470	7.24E+03	5.80E+02	25	3.24E+03	7.47E+02
Facility - Methyl Methacrylate Maximum Combined Results					**7.24E+03**	**5.80E+02**	**25**	**-**	**7.47E+02**
1	Styrene	1.27E+01	1.61E+00	31,470	5.05E+04	4.04E+03	25	3.24E+03	5.21E+03
Facility - Styrene Maximum Combined Results					**5.05E+04**	**4.04E+03**	**25**	**-**	**5.21E+03**

[a] Results are with building dimensions (Stack ht./1.5 -0.1 m) x 43 m x 102 m). Building length and width estimated from aerial photo.

[b] Maricopa County designated Stack ID 1 as vertical obstructed and Stack 3 as horizontal unobstructed, therefore both stacks would be modeled with 0.001 m/s exit velocity.

[c] Stacks are identical, therefore facility-wide emissions of Methyl Merthacrylate and Styrene modeled from one stack (ID 1).
Methyl Merthacrylate based upon TRI reported facility-wide emissions (3,800 lb/yr)/(2,080 hr/yr). Styrene based upon TRI reported facility-wide emissions (26,500 lb/yr)/(2,080 hr/yr).

[d] Cavity length 23 m.

Marlam Industries Inc. AAC Analysis

Pollutant	AAC 1-Hour (μg/m^3)	AAC Annual (μg/m^3)	Percentage of 1-Hour AAC	Percentage of Annual AAC
Methyl Methacrylate	3.11E+05	7.30E+02	2.3	79.4
Styrene	5.54E+05	1.04E+03	9.1	389

Transwestern Pipeline - Kingman
Stack Parameters[a]

Stack ID	Description	Height (ft)	Diameter (ft)	Temp. (F)	Exit Vel. (ft/s)	Height (m)	Diameter (m)	Temp. (K)	Exit Vel. (m/s)
104	Compressor Turbine_GE-Gas-30,565HP	30.0	5.0	900	200	9.1	1.52	755	61.0
123	Aux Generator-Caterpillar 502 HP - Gas	20.0	0.50	862	78.4	6.1	0.15	734	23.9
124	Emergency Generator (519 hp-diesel)	10.0	0.25	700	96.3	3.0	0.076	644	29.4

[a] ADEQ supplied PTE emissions for only Stack ID 124. Assumed no emissions from the Stack IDs 104 and 123.

Transwestern Pipeline - Kingman
Screen Modeling Results[a]

Stack ID	Pollutant	Emission Rate[b] (lb/hr)	Emission Rate (g/s)	1- Hour Generic Modeling Results {(μg/m^3)/(g/s)}	Maximum Predicted 1-Hour Concentration (μg/m^3)	Maximum Predicted Annual Concentration (μg/m^3)	Distance to Maximum Concentration (m)	Generic Cavity Results {(μg/m^3)/(g/s)}	Maximum Cavity Concentration[c] (μg/m^3)
124	Formaldehyde	5.09E-01	6.42E-02	1,829	1.17E+02	9.39E+00	25	1.18E+03	7.57E+01
	Facility - Formaldehyde Maximum Combined Results				**1.17E+02**	**9.39E+00**	**25**	**-**	**7.57E+01**

[a] Results are with building dimensions (3.66 m x 40 m x 40 m). Assumed minimum building height of 12 ft. and generic building length and width.
[b] Based upon 2002 AZEI reported facility-wide Formaldehyde emissions (4,460 lb/yr)/(8,760 hr/yr). Assumed facility-wide emissions from Stack ID 124.
[c] Cavity length 19 m.

Transwestern Pipeline - Kingman AAC Analysis

Pollutant	AAC 1-Hour (μg/m^3)	AAC Annual (μg/m^3)	Percentage of 1-Hour AAC	Percentage of Annual AAC
Formaldehyde	1.70E+04	1.46E-01	0.69	6,429

1 Ashland Distribution Co.
2 BOCE

Ashland Distribution Company
Stack Parameters[a]

Stack ID	Description	Release Height (ft)	Sigma Y (ft)	Sigma Z (ft)	Release Height (m)	Sigma Y (m)	Sigma Z (m)
1	Generic Volume Source	12.0	23.4	11.2	3.7	7.1	3.4

[a] Unable to determine stack parameters from Maricopa County supplied information, assumed generic volume source based upon 2-story (24 ft high, 100-ft long) building. Facility emissions are from various tanks, filling and loading of containers, and other fugitive sources.

Ashland Distribution Company
Screen Modeling Results

Stack ID	Pollutant	Emission Rate[a] (lb/hr)	Emission Rate (g/s)	1- Hour Generic Modeling Results {(μg/m^3)/(g/s)}	Maximum Predicted 1-Hour Concentration (μg/m^3)	Maximum Predicted Annual Concentration (μg/m^3)	Distance to Maximum Concentration (m)	Generic Cavity Results {(μg/m^3)/(g/s)}	Maximum Cavity Concentration (μg/m^3)
1	Dichloromethane (Methyl Chloride)	2.50E-01	3.15E-02	6,588	2.08E+02	1.66E+01	25	NA	NA
	Facility - Dichloromethane Maximum Combined Results				**2.08E+02**	**1.66E+01**	**25**	**NA**	**NA**
1	Ethylene Glycol	1.14E-04	1.44E-05	6,588	9.48E-02	7.58E-03	25	NA	NA
	Facility - Ethylene Glycol Maximum Combined Results				**9.48E-02**	**7.58E-03**	**25**	**NA**	**NA**
1	Glycol Ethers	2.40E-03	3.02E-04	6,588	1.99E+00	1.59E-01	25	NA	NA
	Facility - Glycol Ethers Maximum Combined Results				**1.99E+00**	**1.59E-01**	**25**	**NA**	**NA**
1	Methanol	9.29E-02	1.17E-02	6,588	7.71E+01	6.17E+00	25	NA	NA
	Facility - Methanol Maximum Combined Results				**7.71E+01**	**6.17E+00**	**25**	**NA**	**NA**
1	Methyl Ethyl Ketone (MEK)	1.15E-01	1.45E-02	6,588	9.56E+01	7.65E+00	25	NA	NA
	Facility - MEK Maximum Combined Results				**9.56E+01**	**7.65E+00**	**25**	**NA**	**NA**
1	Styrene	4.57E-04	5.75E-05	6,588	3.79E-01	3.03E-02	25	NA	NA
	Facility - Styrene Maximum Combined Results				**3.79E-01**	**3.03E-02**	**25**	**NA**	**NA**
1	Toluene	6.42E-02	8.08E-03	6,588	5.33E+01	4.26E+00	25	NA	NA
	Facility - Toluene Maximum Combined Results				**5.33E+01**	**4.26E+00**	**25**	**NA**	**NA**

[a] Based upon TRI reported facility-wide Dichloremethane emissions (2,190 lb/yr)/(8,760 hr/yr), Ethylene Glycol emissions (1 lb/yr)/(8,760 hr/yr), Glycol Ethers emissions (21 lb/yr)/(8,760 hr/yr), Methanol emissions (814 lb/yr)/(8,760 hr/yr), MEK emissions (1,009 lb/yr)/(8,760 hr/yr), Styrene emissions (4 lb/yr)/(8,760 hr/yr), and Toluene emissions (562 lb/yr)/(8,760 hr/yr).

Ashland Distribution Company AAC Analysis

Pollutant	AAC 1-Hour (μg/m^3)	AAC Annual (μg/m^3)	Percentage of 1-Hour AAC	Percentage of Annual AAC
Dichloromethane (Methyl Chloride)	3.47E+05	4.03E+00	0.060	412
Ethylene Glycol	5.00E+04	4.17E+02	1.90E-04	1.82E-03
Glycol Ethers	2.50E+05	3.14E+00	7.96E-04	5.1
Methanol	9.43E+05	4.17E+03	8.18E-03	0.15
Methyl Ethyl Ketone (MEK)	5.02E+06	5.21E+03	1.91E-03	0.15
Styrene	5.54E+05	1.04E+03	6.84E-05	2.92E-03
Toluene	1.92E+06	4.17E+02	2.77E-03	1.0

BOCE

Stack Parameters[a]

Stack ID	Description	Release Height (ft)	Sigma Y (ft)	Sigma Z (ft)	Release Height (m)	Sigma Y (m)	Sigma Z (m)
1	Generic Volume Source	12.0	23.4	11.2	3.7	7.1	3.4

[a] No stack parameters., assumed generic volume source based upon 2-story (24 ft high, 100-ft long) building.

BOCE

Screen Modeling Results

Stack ID	Pollutant	Emission Rate[a] (lb/hr)	Emission Rate (g/s)	1- Hour Generic Modeling Results {(μg/m^3)/(g/s)}	Maximum Predicted 1-Hour Concentration (μg/m^3)	Maximum Predicted Annual Concentration (μg/m^3)	Distance to Maximum Concentration (m)	Generic Cavity Results {(μg/m^3)/(g/s)}	Maximum Cavity Concentration (μg/m^3)
1	Hydrochloric Acid	3.55E-01	4.47E-02	6,588	2.95E+02	2.36E+01	25	NA	NA
Facility - Hexane Maximum Combined Results					**2.95E+02**	**2.36E+01**	**25**	**NA**	**NA**

[a] Based upon TRI reported facility-wide Hydrochloric Acid emissions (3,109 lb/yr)/(8,760 hr/yr).

BOCE AAC Analysis

Pollutant	AAC 1-Hour (μg/m^3)	AAC Annual (μg/m^3)	Percentage of 1-Hour AAC	Percentage of Annual AAC
Hydrochloric Acid	1.60E+04	2.09E+01	1.8	113

1 BP Phoenix Terminal
2 Chevron Products Co. Phoenix Terminal
3 Conoco Phillips Phoenix Terminal
4 Shell Oil (was Equilon Phoenix)
5 Western States Petroleum Broadway
6 Western States Petroleum (2) 15th Street

BP Phoenix Terminal
Stack Parameters[a]

Stack ID	Description	Release Height (ft)	Sigma Y (ft)	Sigma Z (ft)	Release Height (m)	Sigma Y (m)	Sigma Z (m)
1	Generic Volume Source	12.0	23.4	11.2	3.7	7.1	3.4

[a] No stack parameters supplied by Maricopa County, assumed generic volume source based upon 2-story (24 ft high, 100-ft long) building. Facility emissions are from various tanks, filling and loading, and other fugitive sources.

BP Phoenix Terminal
Screen Modeling Results

Stack ID	Pollutant	Emission Rate[a] (lb/hr)	Emission Rate (g/s)	1- Hour Generic Modeling Results {(μg/m^3)/(g/s)}	Maximum Predicted 1-Hour Concentration (μg/m^3)	Maximum Predicted Annual Concentration (μg/m^3)	Distance to Maximum Concentration (m)	Generic Cavity Results {(μg/m^3)/(g/s)}	Maximum Cavity Concentration (μg/m^3)
1	Benzene	2.53E-02	3.19E-03	6,588	2.10E+01	1.68E+00	25	NA	NA
	Facility - Benzene Maximum Combined Results				**2.10E+01**	**1.68E+00**	**25**	**NA**	**NA**
1	Ethyl Benzene	7.19E-03	9.06E-04	6,588	5.97E+00	4.78E-01	25	NA	NA
	Facility - Ethyl Benzene Maximum Combined Results				**5.97E+00**	**4.78E-01**	**25**	**NA**	**NA**
1	Hexane	6.55E-02	8.26E-03	6,588	5.44E+01	4.35E+00	25	NA	NA
	Facility - Hexane Maximum Combined Results				**5.44E+01**	**4.35E+00**	**25**	**NA**	**NA**
1	Methyl Tert-Butyl Ether	3.12E-01	3.93E-02	6,588	2.59E+02	2.07E+01	25	NA	NA
	Facility - Methyl Tert-Butyl Ether Maximum Combined Results				**2.59E+02**	**2.07E+01**	**25**	**NA**	**NA**
1	Polycyclic Organic Matter (POM)	2.28E-05	2.88E-06	6,588	1.90E-02	1.52E-03	25	NA	NA
	Facility - POM Maximum Combined Results				**1.90E-02**	**1.52E-03**	**25**	**NA**	**NA**
1	Toluene	7.01E-02	8.83E-03	6,588	5.82E+01	4.65E+00	25	NA	NA
	Facility - Toluene Maximum Combined Results				**5.82E+01**	**4.65E+00**	**25**	**NA**	**NA**
1	Xylene (mixed isomers)	4.81E-02	6.06E-03	6,588	3.99E+01	3.19E+00	25	NA	NA
	Facility - Xylene Maximum Combined Results				**3.99E+01**	**3.19E+00**	**25**	**NA**	**NA**

[a] Based upon TRI reported facility-wide Benzene emissions (222 lb/yr)/(8,760 hr/yr), Ethyl Benzene emissions (63 lb/yr)/(8,760 hr/yr), Hexane emissions (574 lb/yr)/(8,760 hr/yr), Methyl Tert-Butyl Ether emissions (2,731 lb/yr)/(8,760 hr/yr), POM emissions (0.2 lb/yr)/(8,760 hr/yr), Toluene emissions (614 lb/yr)/(8,760 hr/yr), and Xylene emissions (421 lb/yr)/(8,760 hr/yr).

BP Phoenix Terminal AAC Analysis

Pollutant	AAC 1-Hour (μg/m^3)	AAC Annual (μg/m^3)	Percentage of 1-Hour AAC	Percentage of Annual AAC
Benzene	1.28E+06	2.43E-01	1.65E-03	693
Ethyl Benzene	2.50E+05	1.04E+03	2.39E-03	0.046
Hexane	1.16E+07	2.21E+03	4.67E-04	0.20
Methyl Tert-Butyl Ether	1.44E+06	7.40E+00	0.018	280
Polycyclic Organic Matter (POM)	5.00E+03	2.02E-03	3.79E-04	75.1
Toluene	1.92E+06	4.17E+02	3.03E-03	1.1
Xylene (mixed isomers)	1.74E+06	1.04E+02	2.30E-03	3.1

Chevron Products Co. Phoenix Terminal
Stack Parameters[a]

Stack ID	Description	Release Height (ft)	Sigma Y (ft)	Sigma Z (ft)	Release Height (m)	Sigma Y (m)	Sigma Z (m)
1	Generic Volume Source	12.0	23.4	11.2	3.7	7.1	3.4

[a] No stack parameters supplied by Maricopa County, assumed generic volume source based upon 2-story (24 ft high, 100-ft long) building. Facility emissions are from various tanks, filling and loading, and other fugitive sources.

Chevron Products Co. Phoenix Terminal
Screen Modeling Results

Stack ID	Pollutant	Emission Rate[a] (lb/hr)	Emission Rate (g/s)	1- Hour Generic Modeling Results {(μg/m^3)/(g/s)}	Maximum Predicted 1-Hour Concentration (μg/m^3)	Maximum Predicted Annual Concentration (μg/m^3)	Distance to Maximum Concentration (m)	Generic Cavity Results {(μg/m^3)/(g/s)}	Maximum Cavity Concentration (μg/m^3)
1	Benzene	4.01E-02	5.05E-03	6,588	3.33E+01	2.66E+00	25	NA	NA
	Facility - Benzene Maximum Combined Results				**3.33E+01**	**2.66E+00**	**25**	**NA**	**NA**
1	Ethyl Benzene	6.62E-03	8.34E-04	6,588	5.50E+00	4.40E-01	25	NA	NA
	Facility - Ethyl Benzene Maximum Combined Results				**5.50E+00**	**4.40E-01**	**25**	**NA**	**NA**
1	Hexane	6.19E-02	7.80E-03	6,588	5.14E+01	4.11E+00	25	NA	NA
	Facility - Hexane Maximum Combined Results				**5.14E+01**	**4.11E+00**	**25**	**NA**	**NA**
1	Methyl Tert-Butyl Ether	2.81E-01	3.54E-02	6,588	2.33E+02	1.87E+01	25	NA	NA
	Facility - Methyl Tert-Butyl Ether Maximum Combined Results				**2.33E+02**	**1.87E+01**	**25**	**NA**	**NA**
1	Toluene	7.08E-02	8.92E-03	6,588	5.88E+01	4.70E+00	25	NA	NA
	Facility - Toluene Maximum Combined Results				**5.88E+01**	**4.70E+00**	**25**	**NA**	**NA**
1	Xylene (mixed isomers)	3.31E-02	4.17E-03	6,588	2.75E+01	2.20E+00	25	NA	NA
	Facility - Xylene Maximum Combined Results				**2.75E+01**	**2.20E+00**	**25**	**NA**	**NA**

[a] Based upon TRI reported facility-wide Benzene emissions (351 lb/yr)/(8,760 hr/yr), Ethyl Benzene emissions (58 lb/yr)/(8,760 hr/yr), Hexane emissions (542 lb/yr)/(8,760 hr/yr), Methyl Tert-Butyl Ether emissions (2,462 lb/yr)/(8,760 hr/yr), Toluene emissions (620 lb/yr)/(8,760 hr/yr), and Xylene emissions (290 lb/yr)/(8,760 hr/yr).

Chevron Products Co. Phoenix Terminal AAC Analysis

Pollutant	AAC 1-Hour (μg/m^3)	AAC Annual (μg/m^3)	Percentage of 1-Hour AAC	Percentage of Annual AAC
Benzene	1.28E+06	2.43E-01	2.61E-03	1,095
Ethyl Benzene	2.50E+05	1.04E+03	2.20E-03	0.042
Hexane	1.16E+07	2.21E+03	4.41E-04	0.19
Methyl Tert-Butyl Ether	1.44E+06	7.40E+00	0.016	252
Toluene	1.92E+06	4.17E+02	3.06E-03	1.1
Xylene (mixed isomers)	1.74E+06	1.04E+02	1.58E-03	2.1

Conoco Phillips Phoenix Terminal
Stack Parameters[a]

Stack ID	Description	Release Height (ft)	Sigma Y (ft)	Sigma Z (ft)	Release Height (m)	Sigma Y (m)	Sigma Z (m)
1	Generic Volume Source	12.0	23.4	11.2	3.7	7.1	3.4

[a] No stack parameters supplied by Maricopa County, assumed generic volume source based upon 2-story (24 ft high, 100-ft long) building. Facility emissions are from various tanks, filling and loading, and other fugitive sources.

Conoco Phillips Phoenix Terminal
Screen Modeling Results

Stack ID	Pollutant	Emission Rate[a] (lb/hr)	Emission Rate (g/s)	1- Hour Generic Modeling Results {(μg/m^3)/(g/s)}	Maximum Predicted 1-Hour Concentration (μg/m^3)	Maximum Predicted Annual Concentration (μg/m^3)	Distance to Maximum Concentration (m)	Generic Cavity Results {(μg/m^3)/(g/s)}	Maximum Cavity Concentration (μg/m^3)
1	Benzene	1.32E-02	1.67E-03	6,588	1.10E+01	8.79E-01	25	NA	NA
	Facility - Benzene Maximum Combined Results				**1.10E+01**	**8.79E-01**	**25**	**NA**	**NA**
1	Ethyl Benzene	9.47E-03	1.19E-03	6,588	7.86E+00	6.29E-01	25	NA	NA
	Facility - Ethyl Benzene Maximum Combined Results				**7.86E+00**	**6.29E-01**	**25**	**NA**	**NA**
1	Hexane	5.14E-01	6.47E-02	6,588	4.26E+02	3.41E+01	25	NA	NA
	Facility - Hexane Maximum Combined Results				**4.26E+02**	**3.41E+01**	**25**	**NA**	**NA**
1	Toluene	5.71E-02	7.19E-03	6,588	4.74E+01	3.79E+00	25	NA	NA
	Facility - Toluene Maximum Combined Results				**4.74E+01**	**3.79E+00**	**25**	**NA**	**NA**
1	Xylene (mixed isomers)	4.11E-02	5.18E-03	6,588	3.41E+01	2.73E+00	25	NA	NA
	Facility - Xylene Maximum Combined Results				**3.41E+01**	**2.73E+00**	**25**	**NA**	**NA**

[a] Based upon TRI reported facility-wide Benzene emissions (116 lb/yr)/(8,760 hr/yr), Ethyl Benzene emissions (83 lb/yr)/(8,760 hr/yr), Hexane emissions (4,500 lb/yr)/(8,760 hr/yr), Toluene emissions (500 lb/yr)/(8,760 hr/yr), and Xylene emissions (360 lb/yr)/(8,760 hr/yr).

Conoco Phillips Phoenix Terminal AAC Analysis

Pollutant	AAC 1-Hour (μg/m^3)	AAC Annual (μg/m^3)	Percentage of 1-Hour AAC	Percentage of Annual AAC
Benzene	1.28E+06	2.43E-01	8.61E-04	362
Ethyl Benzene	2.50E+05	1.04E+03	3.15E-03	0.060
Hexane	1.16E+07	2.21E+03	3.66E-03	1.5
Toluene	1.92E+06	4.17E+02	2.46E-03	0.91
Xylene (mixed isomers)	1.74E+06	1.04E+02	1.97E-03	2.6

Shell Oil (was Equilon Phoenix)
Stack Parameters

Stack ID	Description	Height (ft)	Diameter (ft)	Temp. (F)	Exit Vel. (ft/s)	Height (m)	Diameter (m)	Temp. (K)	Exit Vel. (m/s)
1	Carbon Adsorption Vapor Recovery System	10	0.83	175	18.6	3.0	0.25	352	5.7

Stack Parameters[a]

Stack ID	Description	Release Height (ft)	Sigma Y (ft)	Sigma Z (ft)	Release Height (m)	Sigma Y (m)	Sigma Z (m)
2	Generic Volume Source	12.0	23.4	11.2	3.7	7.1	3.4

[a] Vapor recovery system (Stack ID 1) only controls emissions from the motor truck loading of ethanol, diesel and gasoline. In addition, the facility has emissions from various tanks and other fugitive sources. Maricopa County was not able to supply a breakdown of emissions from just the vapor recovery system. Therefore, for comparison purposes a second scenario was modeled that assumed facility-wide emissions were from a generic volume source based upon 2-story (24 ft high, 100-ft long) building.

Shell Oil (was Equilon Phoenix)
Screen Modeling Results[a]

Stack ID	Pollutant	Emission Rate[b] (lb/hr)	Emission Rate (g/s)	1- Hour Generic Modeling Results {(μg/m^3)/(g/s)}	Maximum Predicted 1-Hour Concentration (μg/m^3)	Maximum Predicted Annual Concentration (μg/m^3)	Distance to Maximum Concentration (m)	Generic Cavity Results {(μg/m^3)/(g/s)}	Maximum Cavity Concentration[c] (μg/m^3)
1	Benzene	5.71E-02	7.19E-03	23,660	1.70E+02	1.36E+01	25	2.08E+03	1.50E+01
2	Benzene	5.71E-02	7.19E-03	6,588	4.74E+01	3.79E+00	25	NA	NA
				Facility - Benzene Worst Case Results	**1.70E+02**	**1.36E+01**	**25**	**2.08E+03**	**1.50E+01**
1	Ethyl Benzene	5.71E-02	7.19E-03	23,660	1.70E+02	1.36E+01	25	2.08E+03	1.50E+01
2	Ethyl Benzene	5.71E-02	7.19E-03	6,588	4.74E+01	3.79E+00	25	NA	NA
				Facility - Ethyl Benzene Worst Case Results	**1.70E+02**	**1.36E+01**	**25**	**2.08E+03**	**1.50E+01**
1	Hexane	5.71E-02	7.19E-03	23,660	1.70E+02	1.36E+01	25	2.08E+03	1.50E+01
2	Hexane	5.71E-02	7.19E-03	6,588	4.74E+01	3.79E+00	25	NA	NA
				Facility - Hexane Worst Case Results	**1.70E+02**	**1.36E+01**	**25**	**2.08E+03**	**1.50E+01**
1	Methyl Tert-Butyl Ether	5.20E-01	6.56E-02	23,660	1.55E+03	1.24E+02	25	2.08E+03	1.36E+02
2	Methyl Tert-Butyl Ether	5.20E-01	6.56E-02	6,588	4.32E+02	3.46E+01	25	NA	NA
				Facility - Methyl Tert-Butyl Ether Worst Case Results	**1.55E+03**	**1.24E+02**	**25**	**2.08E+03**	**1.36E+02**
1	Toluene	5.71E-02	7.19E-03	23,660	1.70E+02	1.36E+01	25	2.08E+03	1.50E+01
2	Toluene	5.71E-02	7.19E-03	6,588	4.74E+01	3.79E+00	25	NA	NA
				Facility - Toluene Worst Case Results	**1.70E+02**	**1.36E+01**	**25**	**2.08E+03**	**1.50E+01**
1	Xylene (mixed isomers)	5.71E-02	7.19E-03	23,660	1.70E+02	1.36E+01	25	2.08E+03	1.50E+01
2	Xylene (mixed isomers)	5.71E-02	7.19E-03	6,588	4.74E+01	3.79E+00	25	NA	NA
				Facility - Xylene Worst Case Results	**1.70E+02**	**1.36E+01**	**25**	**2.08E+03**	**1.50E+01**

[a] Results for Stack ID 1 used building dimensions (3.66 m x 40 m x 40 m). Assumed minimum building height of 12 ft. Assumed generic building length and width.
[b] Based upon TRI reported facility-wide Benzene emissions (500 lb/yr)/(8,760 hr/yr), Ethyl Benzene emissions (500 lb/yr)/(8,760 hr/yr), Hexane emissions (500 lb/yr)/(8,760 hr/yr), Methyl Tert-Butyl Ether emissions (4,558 lb/yr)/(8,760 hr/yr), Toluene emissions (500 lb/yr)/(8,760 hr/yr), and Xylene emissions (500 lb/yr)/(8,760 hr/yr).
[c] Cavity length 19 m.

Shell Oil (was Equilon Phoenix) AAC Analysis

Pollutant	AAC 1-Hour (μg/m^3)	AAC Annual (μg/m^3)	Percentage of 1-Hour AAC	Percentage of Annual AAC
Benzene	1.28E+06	2.43E-01	1.33E-02	5,602
Ethyl Benzene	2.50E+05	1.04E+03	0.068	1.3
Hexane	1.16E+07	2.21E+03	1.46E-03	0.62
Methyl Tert-Butyl Ether	1.44E+06	7.40E+00	0.107	1,677
Toluene	1.92E+06	4.17E+02	8.85E-03	3.3
Xylene (mixed isomers)	1.74E+06	1.04E+02	9.80E-03	13.1

Western States Petroleum Broadway
Stack Parameters[a]

Stack ID	Description	Release Height (ft)	Sigma Y (ft)	Sigma Z (ft)	Release Height (m)	Sigma Y (m)	Sigma Z (m)
1	Generic Volume Source	12.0	23.4	11.2	3.7	7.1	3.4

[a] No stack parameters supplied by Maricopa County, assumed generic volume source based upon 2-story (24 ft high, 100-ft long) building. Facility emissions are from various tanks, filling and loading, and other fugitive sources.

Western States Petroleum Broadway
Screen Modeling Results

Stack ID	Pollutant	Emission Rate[a] (lb/hr)	Emission Rate (g/s)	1- Hour Generic Modeling Results {(μg/m^3)/(g/s)}	Maximum Predicted 1-Hour Concentration (μg/m^3)	Maximum Predicted Annual Concentration (μg/m^3)	Distance to Maximum Concentration (m)	Generic Cavity Results {(μg/m^3)/(g/s)}	Maximum Cavity Concentration (μg/m^3)
1	Benzene	3.78E-02	4.76E-03	6,588	3.14E+01	2.51E+00	25	NA	NA
	Facility - Benzene Maximum Combined Results				**3.14E+01**	**2.51E+00**	**25**	**NA**	**NA**
1	Cumene	1.18E-02	1.49E-03	6,588	9.81E+00	7.85E-01	25	NA	NA
	Facility - Cumene Maximum Combined Results				**9.81E+00**	**7.85E-01**	**25**	**NA**	**NA**
1	Ethyl Benzene	3.79E-02	4.78E-03	6,588	3.15E+01	2.52E+00	25	NA	NA
	Facility - Ethyl Benzene Maximum Combined Results				**3.15E+01**	**2.52E+00**	**25**	**NA**	**NA**
1	Hexane	2.36E-02	2.98E-03	6,588	1.96E+01	1.57E+00	25	NA	NA
	Facility - Hexane Maximum Combined Results				**1.96E+01**	**1.57E+00**	**25**	**NA**	**NA**
1	Methanol	2.44E-01	3.07E-02	6,588	2.02E+02	1.62E+01	25	NA	NA
	Facility - Methanol Maximum Combined Results				**2.02E+02**	**1.62E+01**	**25**	**NA**	**NA**
1	Methyl Tert-Butyl Ether	3.54E-01	4.46E-02	6,588	2.94E+02	2.35E+01	25	NA	NA
	Facility - Methyl Tert-Butyl Ether Maximum Combined Results				**2.94E+02**	**2.35E+01**	**25**	**NA**	**NA**
1	Toluene	1.70E-01	2.15E-02	6,588	1.41E+02	1.13E+01	25	NA	NA
	Facility - Toluene Maximum Combined Results				**1.41E+02**	**1.13E+01**	**25**	**NA**	**NA**
1	Xylene (mixed isomers)	1.69E-01	2.13E-02	6,588	1.41E+02	1.12E+01	25	NA	NA
	Facility - Xylene Maximum Combined Results				**1.41E+02**	**1.12E+01**	**25**	**NA**	**NA**

[a] Based upon TRI reported facility-wide Benzene emissions (331 lb/yr)/(8,760 hr/yr), Cumene emissions (104 lb/yr)/(8,760 hr/yr), Ethyl Benzene emissions (332 lb/yr)/(8,760 hr/yr), Hexane emissions (207 lb/yr)/(8,760 hr/yr), Methanol emissions (2,135 lb/yr)/(8,760 hr/yr), Methyl Tert-Butyl Ether emissions (3,104 lb/yr)/(8,760 hr/yr), Toluene emissions (1,492 lb/yr)/(8,760 hr/yr), and Xylene emissions (1,484 lb/yr)/(8,760 hr/yr).

Western States Petroleum Broadway AAC Analysis

Pollutant	AAC 1-Hour (μg/m^3)	AAC Annual (μg/m^3)	Percentage of 1-Hour AAC	Percentage of Annual AAC
Benzene	1.28E+06	2.43E-01	2.46E-03	1,033
Cumene	9.35E+05	4.17E+02	3.37E-03	0.19
Ethyl Benzene	2.50E+05	1.04E+03	0.013	0.24
Hexane	1.16E+07	2.21E+03	1.68E-04	0.071
Methanol	9.43E+05	4.17E+03	0.031	0.39
Methyl Tert-Butyl Ether	1.44E+06	7.40E+00	9.79E-03	318
Toluene	1.92E+06	4.17E+02	7.35E-03	2.7
Xylene (mixed isomers)	1.74E+06	1.04E+02	8.10E-03	10.8

Western States Petroleum (2) 15th Street
Stack Parameters[a]

Stack ID	Description	Release Height (ft)	Sigma Y (ft)	Sigma Z (ft)	Release Height (m)	Sigma Y (m)	Sigma Z (m)
1	Generic Volume Source	12.0	23.4	11.2	3.7	7.1	3.4

[a] No stack parameters supplied by Maricopa County, assumed generic volume source based upon 2-story (24 ft high, 100-ft long) building. Facility emissions are from various tanks, filling and loading, and other fugitive sources.

Western States Petroleum (2) 15th Street
Screen Modeling Results

Stack ID	Pollutant	Emission Rate[a] (lb/hr)	Emission Rate (g/s)	1- Hour Generic Modeling Results {(μg/m^3)/(g/s)}	Maximum Predicted 1-Hour Concentration (μg/m^3)	Maximum Predicted Annual Concentration (μg/m^3)	Distance to Maximum Concentration (m)	Generic Cavity Results {(μg/m^3)/(g/s)}	Maximum Cavity Concentration (μg/m^3)
1	Benzene	3.12E-02	3.93E-03	6,588	2.59E+01	2.07E+00	25	NA	NA
	Facility - Benzene Maximum Combined Results				**2.59E+01**	**2.07E+00**	**25**	**NA**	**NA**
1	Ethyl Benzene	3.13E-02	3.95E-03	6,588	2.60E+01	2.08E+00	25	NA	NA
	Facility - Ethyl Benzene Maximum Combined Results				**2.60E+01**	**2.08E+00**	**25**	**NA**	**NA**
1	Methanol	6.54E-02	8.24E-03	6,588	5.43E+01	4.34E+00	25	NA	NA
	Facility - Methanol Maximum Combined Results				**5.43E+01**	**4.34E+00**	**25**	**NA**	**NA**
1	Methyl Tert-Butyl Ether	2.93E-01	3.69E-02	6,588	2.43E+02	1.94E+01	25	NA	NA
	Facility - Methyl Tert-Butyl Ether Maximum Combined Results				**2.43E+02**	**1.94E+01**	**25**	**NA**	**NA**
1	Toluene	1.41E-01	1.77E-02	6,588	1.17E+02	9.34E+00	25	NA	NA
	Facility - Toluene Maximum Combined Results				**1.17E+02**	**9.34E+00**	**25**	**NA**	**NA**
1	Xylene (mixed isomers)	1.40E-01	1.76E-02	6,588	1.16E+02	9.29E+00	25	NA	NA
	Facility - Xylene Maximum Combined Results				**1.16E+02**	**9.29E+00**	**25**	**NA**	**NA**

[a] Based upon TRI reported facility-wide Benzene emissions (274 lb/yr)/(8,760 hr/yr), Ethyl Benzene emissions (274 lb/yr)/(8,760 hr/yr), Methanol emissions (573 lb/yr)/(8,760 hr/yr), Methyl Tert-Butyl Ether emissions (2,564 lb/yr)/(8,760 hr/yr), Toluene emissions (1,233 lb/yr)/(8,760 hr/yr), and Xylene emissions (1,225 lb/yr)/(8,760 hr/yr).

Western States Petroleum (2) 15th Street AAC Analysis

Pollutant	AAC 1-Hour (μg/m^3)	AAC Annual (μg/m^3)	Percentage of 1-Hour AAC	Percentage of Annual AAC
Benzene	1.28E+06	2.43E-01	2.03E-03	853
Ethyl Benzene	2.50E+05	1.04E+03	0.010	0.20
Methanol	9.43E+05	4.17E+03	5.76E-03	0.10
Methyl Tert-Butyl Ether	1.44E+06	7.40E+00	0.017	263
Toluene	1.92E+06	4.17E+02	6.07E-03	2.2
Xylene (mixed isomers)	1.74E+06	1.04E+02	6.69E-03	8.9

1 L&M Laminates & Marble

L&M Laminates & Marble
Stack Parameters[a]

Stack ID	Description	Release Height (ft)	Sigma Y (ft)	Sigma Z (ft)	Release Height (m)	Sigma Y (m)	Sigma Z (m)
1	Generic Volume Source	12.0	23.4	11.2	3.7	7.1	3.4

[a] No stack parameters supplied by Maricopa County, assumed generic volume source based upon 2-story (24 ft high, 100-ft long) building.

L&M Laminates & Marble
Screen Modeling Results

Stack ID	Pollutant	Emission Rate[a] (lb/hr)	Emission Rate (g/s)	1- Hour Generic Modeling Results {(μg/m^3)/(g/s)}	Maximum Predicted 1-Hour Concentration (μg/m^3)	Maximum Predicted Annual Concentration (μg/m^3)	Distance to Maximum Concentration (m)	Generic Cavity Results {(μg/m^3)/(g/s)}	Maximum Cavity Concentration (μg/m^3)
1	Styrene	1.11E+01	1.40E+00	6,588	9.22E+03	7.38E+02	25	NA	NA
Facility - Styrene Maximum Combined Results					**9.22E+03**	**7.38E+02**	**25**	**NA**	**NA**

[a] Based upon TRI reported facility-wide Styrene emissions (46,226 lb/yr)/(4,160 hr/yr).

L&M Laminates & Marble AAC Analysis

Pollutant	AAC 1-Hour (μg/m^3)	AAC Annual (μg/m^3)	Percentage of 1-Hour AAC	Percentage of Annual AAC
Styrene	5.54E+05	1.04E+03	1.7	71.0