

APPENDIX 8.1E

# Screening Level Risk Assessment

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California Air Resources Board  
And  
Office of Environmental Health Hazard Assessment  
Health Risk Assessment Program  
Version 2.0e

ACUTE INHALATION EXPOSURE REPORT  
MAXIMUM IMPACT

Run Made By

TWA

MID

Project : MID

Mar. 27, 2003

Pollutant Database Date : Nov. 15, 2000  
Database Reference..... : CAPCOA Risk Assessment Guidelines

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DILUTION FACTOR FOR POINT UNDER EVALUATION

X/Q (ug/m3)/(g/s) : 1.00E+00  
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MAX. 1-HR EMISSION RATE INFORMATION

File: HOUR.M96

Pollutant Name	Emission Rate (g/s)
ACROLEIN	2.210E-03
AMMONIA	8.160E+00
ARSENIC AND COMPOUNDS (INOR	1.570E-05
BENZENE	1.990E-03
COPPER AND COMPOUNDS	7.080E-05
FORMALDEHYDE	2.200E-01
NICKEL AND COMPOUNDS	1.310E-05
PROPYLENE OXIDE	2.860E-02
TOLUENE	4.250E-02
XYLENES	1.560E-02

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ACUTE INHALATION HAZARD INDEX

Pollutant	Resp	CV/BL	CNS	Eye	Repro	Kidn	GI/LV	Immun
ACROLEIN	0.0116	--	--	0.0116	--	--	--	--
AMMONIA	0.0025	--	--	0.0025	--	--	--	--
ARSENIC AND COM	--	--	--	--	<.0001	--	--	--
BENZENE	--	<.0001	--	--	<.0001	--	--	<.0001
COPPER AND COMP	<.0001	--	--	--	--	--	--	--
FORMALDEHYDE	0.0023	--	--	0.0023	--	--	--	0.0023
NICKEL AND COMP	<.0001	--	--	--	--	--	--	<.0001
PROPYLENE OXIDE	<.0001	--	--	<.0001	<.0001	--	--	--
TOLUENE	<.0001	--	<.0001	<.0001	<.0001	--	--	--
XYLENES	<.0001	--	--	<.0001	--	--	--	--
Total Acute	0.0165	<.0001	<.0001	0.0165	<.0001	--	--	0.0023

A Zero Background Concentration file was used to perform this analysis, therefore, there is no contribution from background pollutants.

California Air Resources Board  
And  
Office of Environmental Health Hazard Assessment  
Health Risk Assessment Program  
Version 2.0e

ACUTE INHALATION EXPOSURE REPORT  
RESIDENTIAL

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Mar. 27, 2003

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DILUTION FACTOR FOR POINT UNDER EVALUATION

X/Q (ug/m3)/(g/s) : 1.00E+00  
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MAX. 1-HR EMISSION RATE INFORMATION

File: HOURR.M96

Pollutant Name	Emission Rate (g/s)
ACROLEIN	1.630E-05
AMMONIA	6.020E-02
ARSENIC AND COMPOUNDS (INOR	4.160E-06
BENZENE	1.470E-05
COPPER AND COMPOUNDS	1.870E-05
FORMALDEHYDE	1.620E-03
NICKEL AND COMPOUNDS	3.470E-06
PROPYLENE OXIDE	2.110E-04
TOLUENE	3.130E-04
XYLENES	1.150E-04

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ACUTE INHALATION HAZARD INDEX

Pollutant	Resp	CV/BL	CNS	Eye	Repro	Kidn	GI/LV	Immun
ACROLEIN	<.0001	--	--	<.0001	--	--	--	--
AMMONIA	<.0001	--	--	<.0001	--	--	--	--
ARSENIC AND COM	--	--	--	--	<.0001	--	--	--
BENZENE	--	<.0001	--	--	<.0001	--	--	<.0001
COPPER AND COMP	<.0001	--	--	--	--	--	--	--
FORMALDEHYDE	<.0001	--	--	<.0001	--	--	--	<.0001
NICKEL AND COMP	<.0001	--	--	--	--	--	--	<.0001
PROPYLENE OXIDE	<.0001	--	--	<.0001	<.0001	--	--	--
TOLUENE	<.0001	--	<.0001	<.0001	<.0001	--	--	--
XYLENES	<.0001	--	--	<.0001	--	--	--	--
Total Acute	0.0001	<.0001	<.0001	0.0001	<.0001	--	--	<.0001

A Zero Background Concentration file was used to perform this analysis, therefore, there is no contribution from background pollutants.

California Air Resources Board  
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Health Risk Assessment Program  
Version 2.0e

ACUTE INHALATION EXPOSURE REPORT  
SENSITIVE RECEPTORS

Run Made By

TWA

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Mar. 27, 2003

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Database Reference..... : CAPCOA Risk Assessment Guidelines

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DILUTION FACTOR FOR POINT UNDER EVALUATION

X/Q (ug/m3)/(g/s) : 1.00E+00  
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MAX. 1-HR EMISSION RATE INFORMATION

File: HOURS.M96

Pollutant Name	Emission Rate (g/s)
ACROLEIN	3.980E-04
AMMONIA	1.470E+00
ARSENIC AND COMPOUNDS (INOR	1.960E-06
BENZENE	3.590E-04
COPPER AND COMPOUNDS	8.840E-06
FORMALDEHYDE	3.950E-02
NICKEL AND COMPOUNDS	1.640E-06
PROPYLENE OXIDE	5.150E-03
TOLUENE	7.650E-03
XYLENES	2.810E-03

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ACUTE INHALATION HAZARD INDEX

Pollutant	Resp	CV/BL	CNS	Eye	Repro	Kidn	GI/LV	Immun
ACROLEIN	0.0021	--	--	0.0021	--	--	--	--
AMMONIA	0.0005	--	--	0.0005	--	--	--	--
ARSENIC AND COM	--	--	--	--	<.0001	--	--	--
BENZENE	--	<.0001	--	--	<.0001	--	--	<.0001
COPPER AND COMP	<.0001	--	--	--	--	--	--	--
FORMALDEHYDE	0.0004	--	--	0.0004	--	--	--	0.0004
NICKEL AND COMP	<.0001	--	--	--	--	--	--	<.0001
PROPYLENE OXIDE	<.0001	--	--	<.0001	<.0001	--	--	--
TOLUENE	<.0001	--	<.0001	<.0001	<.0001	--	--	--
XYLENES	<.0001	--	--	<.0001	--	--	--	--
Total Acute	0.0030	<.0001	<.0001	0.0030	<.0001	--	--	0.0004

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California Air Resources Board  
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Version 2.0e

ACUTE INHALATION EXPOSURE REPORT  
WORKER

Run Made By

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DILUTION FACTOR FOR POINT UNDER EVALUATION

X/Q (ug/m3)/(g/s) : 1.00E+00  
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MAX. 1-HR EMISSION RATE INFORMATION

File: HOURW.M96

Pollutant Name	Emission Rate (g/s)
ACROLEIN	2.970E-06
AMMONIA	1.100E-02
ARSENIC AND COMPOUNDS (INOR	2.620E-06
BENZENE	2.680E-06
COPPER AND COMPOUNDS	1.180E-05
FORMALDEHYDE	2.950E-04
NICKEL AND COMPOUNDS	2.180E-06
PROPYLENE OXIDE	3.840E-05
TOLUENE	5.710E-05
XYLENES	2.100E-05

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ACUTE INHALATION HAZARD INDEX

Pollutant	Resp	CV/BL	CNS	Eye	Repro	Kidn	GI/LV	Immun
ACROLEIN	<.0001	--	--	<.0001	--	--	--	--
AMMONIA	<.0001	--	--	<.0001	--	--	--	--
ARSENIC AND COM	--	--	--	--	<.0001	--	--	--
BENZENE	--	<.0001	--	--	<.0001	--	--	<.0001
COPPER AND COMP	<.0001	--	--	--	--	--	--	--
FORMALDEHYDE	<.0001	--	--	<.0001	--	--	--	<.0001
NICKEL AND COMP	<.0001	--	--	--	--	--	--	<.0001
PROPYLENE OXIDE	<.0001	--	--	<.0001	<.0001	--	--	--
TOLUENE	<.0001	--	<.0001	<.0001	<.0001	--	--	--
XYLENES	<.0001	--	--	<.0001	--	--	--	--
Total Acute	<.0001	<.0001	<.0001	<.0001	<.0001	--	--	<.0001

A Zero Background Concentration file was used to perform this analysis, therefore, there is no contribution from background pollutants.

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INDIVIDUAL CANCER RISK REPORT  
MAXIMUM IMPACT

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DILUTION FACTOR FOR POINT UNDER EVALUATION

X/Q (ug/m3)/(g/s) : 1.00E+00  
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ANNUAL AVERAGE EMISSION RATE INFORMATION

File: ANN.E96

Pollutant Name	Emission Rate (g/s)
1,3-BUTADIENE	7.380E-07
ACETALDEHYDE	1.050E-03
ACROLEIN	2.150E-05
AMMONIA	7.930E-02
ARSENIC AND COMPOUNDS (INOR	1.110E-06
BENZENE	1.940E-05
CADMIUM AND COMPOUNDS	1.850E-07
CHROMIUM 6+	3.140E-07
COPPER AND COMPOUNDS	5.000E-06
ETHYL BENZENE	1.900E-04
FORMALDEHYDE	2.130E-03
LEAD AND COMPOUNDS	7.390E-07
MANGANESE AND COMPOUNDS	3.330E-06
N-HEXANE	1.510E-03
NAPHTHALENE	9.650E-06
NICKEL AND COMPOUNDS	9.240E-07
PAH: BENZ (A) ANTHRACENE	1.310E-07
PAH: BENZO (A) PYRENE	8.080E-08
PAH: BENZO (B) FLUORANTHENE	6.570E-08
PAH: BENZO (K) FLUORANTHENE	6.390E-08
PAH: CHRYSENE	1.470E-07
PAH: DIBENZ (A, H) ANTHRACENE	1.370E-07
PAH: INDENO (1, 2, 3-C, D) PYRENE	1.370E-07
PROPYLENE (PROPENE)	4.480E-03
PROPYLENE OXIDE	2.780E-04
TOLUENE	4.130E-04
TRICHLOROETHYLENE	6.070E-07
XYLENES	1.520E-04
ZINC COMPOUNDS	1.980E-05

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EXPOSURE ROUTE INFORMATION

File: ROUTE.I96

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Deposition Velocity (m/s) .....: 0.020

Fraction of Homegrown Produce ..: 0.000

Dilution Factor for Farm/Ranch X/Q (ug/m3)/(g/s) .....: 0.0000

Fraction of Animals' Diet From Grazing .....: 0.0000

Fraction of Animals' Diet From Impacted Feed .....: 0.0000

Fraction of Animals' Water Impacted by Deposition ...: 0.0000

    Surface Area (m2) .....: 0.000E+00

    Volume (liters) .....: 0.000E+00

    Volume Changes .....: 0.000E+00

Fraction of Meat in Diet Impacted ...: 0.0000

    Beef .....: 0.0000

    Pork .....: 0.0000

    Lamb/Goat .....: 0.0000

    Chicken .....: 0.0000

Fraction of Milk in Diet Impacted ...: 0.0000

    Goat Milk Fraction ...: 0.0000

Fraction of Eggs in Diet Impacted ...: 0.0000

Fraction of Impacted Drinking Water : 0.0000

    X/Q at water source ...: 0.0000

    Surface Area (m2) .....: 0.000E+00

    Volume (liters) .....: 0.000E+00

    Volume changes .....: 0.000E+00

Fraction of Fish from Impacted Water: 0.0000

    X/Q at Fish Source ...: 0.0000

    Surface Area (m2) .....: 0.000E+00

    Volume (liters) .....: 0.000E+00

    Volume changes .....: 0.000E+00

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44 YEAR  
INDIVIDUAL CANCER RISK BY POLLUTANT AND ROUTE

Pollutant	Air	Soil	Skin	Garden	MMilk	Other
1,3-BUTADIENE	7.89E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
ACETALDEHYDE	1.78E-09	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
ARSENIC AND COM	2.30E-09	3.74E-09	7.90E-11	0.00E+00	0.00E+00	0.00E+00
BENZENE	3.54E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
CADMIUM AND COM	4.88E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
CHROMIUM 6+	2.96E-08	2.96E-10	6.26E-11	0.00E+00	0.00E+00	0.00E+00
FORMALDEHYDE	8.03E-09	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
LEAD AND COMPOU	5.57E-12	1.41E-11	2.98E-13	0.00E+00	0.00E+00	0.00E+00
NICKEL AND COMP	1.51E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
PAH:BENZ(A)ANTH	9.06E-12	1.39E-11	8.85E-12	0.00E+00	3.57E-11	0.00E+00
PAH:BENZO(A)PYR	5.59E-11	8.60E-11	5.46E-11	0.00E+00	2.20E-10	0.00E+00
PAH:BENZO(B)FLU	4.54E-12	6.99E-12	4.44E-12	0.00E+00	1.79E-11	0.00E+00
PAH:BENZO(K)FLU	4.42E-12	6.80E-12	4.32E-12	0.00E+00	1.74E-11	0.00E+00
PAH:CHRYSENE	1.02E-12	1.56E-12	9.93E-13	0.00E+00	4.01E-12	0.00E+00
PAH:DIBENZ(A,H)	1.03E-10	4.98E-11	3.16E-11	0.00E+00	1.28E-10	0.00E+00
PAH:INDENO(1,2,	9.47E-12	1.46E-11	9.26E-12	0.00E+00	3.73E-11	0.00E+00
PROPYLENE OXIDE	6.47E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
TRICHLOROETHYLE	7.63E-13	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Route Total	4.36E-08	4.22E-09	2.56E-10	0.00E+00	4.60E-10	0.00E+00

TOTAL RISK: 4.86E-08



70 YEAR  
INDIVIDUAL CANCER RISK BY POLLUTANT AND ROUTE

Pollutant	Air	Soil	Skin	Garden	MMilk	Other
1,3-BUTADIENE	1.25E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
ACETALDEHYDE	2.83E-09	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
ARSENIC AND COM	3.66E-09	4.33E-09	9.17E-11	0.00E+00	0.00E+00	0.00E+00
BENZENE	5.63E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
CADMIUM AND COM	7.77E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
CHROMIUM 6+	4.71E-08	3.43E-10	7.26E-11	0.00E+00	0.00E+00	0.00E+00
FORMALDEHYDE	1.28E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
LEAD AND COMPOU	8.87E-12	1.63E-11	3.46E-13	0.00E+00	0.00E+00	0.00E+00
NICKEL AND COMP	2.40E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
PAH:BENZ(A)ANTH	1.44E-11	2.16E-11	1.37E-11	0.00E+00	0.00E+00	0.00E+00
PAH:BENZO(A)PYR	8.89E-11	1.33E-10	8.45E-11	0.00E+00	0.00E+00	0.00E+00
PAH:BENZO(B)FLU	7.23E-12	1.08E-11	6.87E-12	0.00E+00	0.00E+00	0.00E+00
PAH:BENZO(K)FLU	7.03E-12	1.05E-11	6.68E-12	0.00E+00	0.00E+00	0.00E+00
PAH:CHRYSENE	1.62E-12	2.42E-12	1.54E-12	0.00E+00	0.00E+00	0.00E+00
PAH:DIBENZ(A,H)	1.64E-10	7.71E-11	4.90E-11	0.00E+00	0.00E+00	0.00E+00
PAH:INDENO(1,2,	1.51E-11	2.26E-11	1.43E-11	0.00E+00	0.00E+00	0.00E+00
PROPYLENE OXIDE	1.03E-09	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
TRICHLOROETHYLE	1.21E-12	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Route Total	6.94E-08	4.97E-09	3.41E-10	0.00E+00	0.00E+00	0.00E+00
TOTAL RISK:	7.47E-08					

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INDIVIDUAL CANCER RISK REPORT  
RESIDENTIAL

Run Made By

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Project : MID

Mar. 27, 2003

Pollutant Database Date : Nov. 15, 2000  
Database Reference..... : CAPCOA Risk Assessment Guidelines

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DILUTION FACTOR FOR POINT UNDER EVALUATION

X/Q (ug/m3)/(g/s) : 1.00E+00  
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ANNUAL AVERAGE EMISSION RATE INFORMATION

File: ANNR.E96

Pollutant Name	Emission Rate (g/s)
1,3-BUTADIENE	8.180E-09
ACETALDEHYDE	1.160E-05
ACROLEIN	2.380E-07
AMMONIA	8.790E-04
ARSENIC AND COMPOUNDS (INOR	1.430E-08
BENZENE	2.150E-07
CADMIUM AND COMPOUNDS	2.380E-09
CHROMIUM 6+	4.050E-09
COPPER AND COMPOUNDS	6.430E-08
ETHYL BENZENE	2.100E-06
FORMALDEHYDE	2.360E-05
LEAD AND COMPOUNDS	9.530E-09
MANGANESE AND COMPOUNDS	4.290E-08
N-HEXANE	1.670E-05
NAPHTHALENE	1.070E-07
NICKEL AND COMPOUNDS	1.190E-08
PAH:BENZ(A)ANTHRACENE	1.460E-09
PAH:BENZO(A)PYRENE	8.950E-10
PAH:BENZO(B)FLUORANTHENE	7.280E-10
PAH:BENZO(K)FLUORANTHENE	7.080E-10
PAH:CHRYSENE	1.620E-09
PAH:DIBENZ(A,H)ANTHRACENE	1.510E-09
PAH:INDENO(1,2,3-C,D)PYRENE	1.510E-09
PROPYLENE (PROPENE)	4.960E-05
PROPYLENE OXIDE	3.080E-06
TOLUENE	4.570E-06
TRICHLOROETHYLENE	7.820E-09
XYLENES	1.680E-06
ZINC COMPOUNDS	2.550E-07

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EXPOSURE ROUTE INFORMATION

File: ROUTE.I96

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Deposition Velocity (m/s) .....: 0.020

Fraction of Homegrown Produce ..: 0.000

Dilution Factor for Farm/Ranch X/Q (ug/m3)/(g/s) .....: 0.0000

Fraction of Animals' Diet From Grazing .....: 0.0000

Fraction of Animals' Diet From Impacted Feed .....: 0.0000

Fraction of Animals' Water Impacted by Deposition ....: 0.0000

    Surface Area (m2) .....: 0.000E+00

    Volume (liters) .....: 0.000E+00

    Volume Changes .....: 0.000E+00

Fraction of Meat in Diet Impacted ...: 0.0000

    Beef .....: 0.0000

    Pork .....: 0.0000

    Lamb/Goat .....: 0.0000

    Chicken .....: 0.0000

Fraction of Milk in Diet Impacted ...: 0.0000

    Goat Milk Fraction ...: 0.0000

Fraction of Eggs in Diet Impacted ...: 0.0000

Fraction of Impacted Drinking Water : 0.0000

    X/Q at water source ...: 0.0000

    Surface Area (m2) .....: 0.000E+00

    Volume (liters) .....: 0.000E+00

    Volume changes .....: 0.000E+00

Fraction of Fish from Impacted Water: 0.0000

    X/Q at Fish Source ...: 0.0000

    Surface Area (m2) .....: 0.000E+00

    Volume (liters) .....: 0.000E+00

    Volume changes .....: 0.000E+00

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44 YEAR  
INDIVIDUAL CANCER RISK BY POLLUTANT AND ROUTE

Pollutant	Air	Soil	Skin	Garden	MMilk	Other
1,3-BUTADIENE	8.74E-13	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
ACETALDEHYDE	1.97E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
ARSENIC AND COM	2.97E-11	4.81E-11	1.02E-12	0.00E+00	0.00E+00	0.00E+00
BENZENE	3.92E-12	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
CADMIUM AND COM	6.28E-12	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
CHROMIUM 6+	3.82E-10	3.82E-12	8.08E-13	0.00E+00	0.00E+00	0.00E+00
FORMALDEHYDE	8.90E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
LEAD AND COMPOU	7.19E-14	1.82E-13	3.85E-15	0.00E+00	0.00E+00	0.00E+00
NICKEL AND COMP	1.94E-12	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
PAH:BENZ(A)ANTH	1.01E-13	1.55E-13	9.87E-14	0.00E+00	3.98E-13	0.00E+00
PAH:BENZO(A)PYR	6.19E-13	9.53E-13	6.05E-13	0.00E+00	2.44E-12	0.00E+00
PAH:BENZO(B)FLU	5.03E-14	7.75E-14	4.92E-14	0.00E+00	1.98E-13	0.00E+00
PAH:BENZO(K)FLU	4.90E-14	7.54E-14	4.78E-14	0.00E+00	1.93E-13	0.00E+00
PAH:CHRYSENE	1.12E-14	1.72E-14	1.09E-14	0.00E+00	4.41E-14	0.00E+00
PAH:DIBENZ(A,H)	1.14E-12	5.49E-13	3.49E-13	0.00E+00	1.41E-12	0.00E+00
PAH:INDENO(1,2,	1.04E-13	1.61E-13	1.02E-13	0.00E+00	4.12E-13	0.00E+00
PROPYLENE OXIDE	7.16E-12	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
TRICHLOROETHYLE	9.83E-15	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Route Total	5.43E-10	5.41E-11	3.09E-12	0.00E+00	5.09E-12	0.00E+00

TOTAL RISK: 6.05E-10



70 YEAR  
INDIVIDUAL CANCER RISK BY POLLUTANT AND ROUTE

Pollutant	Air	Soil	Skin	Garden	MMilk	Other
1,3-BUTADIENE	1.39E-12	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
ACETALDEHYDE	3.13E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
ARSENIC AND COM	4.72E-11	5.58E-11	1.18E-12	0.00E+00	0.00E+00	0.00E+00
BENZENE	6.24E-12	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
CADMIUM AND COM	1.00E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
CHROMIUM 6+	6.08E-10	4.43E-12	9.37E-13	0.00E+00	0.00E+00	0.00E+00
FORMALDEHYDE	1.42E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
LEAD AND COMPOU	1.14E-13	2.11E-13	4.46E-15	0.00E+00	0.00E+00	0.00E+00
NICKEL AND COMP	3.09E-12	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
PAH: BENZ (A) ANTH	1.61E-13	2.40E-13	1.53E-13	0.00E+00	0.00E+00	0.00E+00
PAH: BENZO (A) PYR	9.85E-13	1.47E-12	9.36E-13	0.00E+00	0.00E+00	0.00E+00
PAH: BENZO (B) FLU	8.01E-14	1.20E-13	7.61E-14	0.00E+00	0.00E+00	0.00E+00
PAH: BENZO (K) FLU	7.79E-14	1.17E-13	7.40E-14	0.00E+00	0.00E+00	0.00E+00
PAH: CHRYSENE	1.78E-14	2.67E-14	1.69E-14	0.00E+00	0.00E+00	0.00E+00
PAH: DIBENZ (A, H)	1.81E-12	8.50E-13	5.40E-13	0.00E+00	0.00E+00	0.00E+00
PAH: INDENO (1, 2,	1.66E-13	2.49E-13	1.58E-13	0.00E+00	0.00E+00	0.00E+00
PROPYLENE OXIDE	1.14E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
TRICHLOROETHYLE	1.56E-14	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Route Total	8.63E-10	6.35E-11	4.08E-12	0.00E+00	0.00E+00	0.00E+00

TOTAL RISK: 9.31E-10

California Air Resources Board  
And  
Office of Environmental Health Hazard Assessment  
Health Risk Assessment Program  
Version 2.0e

INDIVIDUAL CANCER RISK REPORT  
SENSITIVE RECEPTORS

Run Made By

TWA

MID

Project : MID

Mar. 27, 2003

Pollutant Database Date : Nov. 15, 2000  
Database Reference..... : CAPCOA Risk Assessment Guidelines

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DILUTION FACTOR FOR POINT UNDER EVALUATION

X/Q (ug/m3)/(g/s) : 1.00E+00  
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ANNUAL AVERAGE EMISSION RATE INFORMATION

File: ANNS.E96

Pollutant Name	Emission Rate (g/s)
1,3-BUTADIENE	6.870E-07
ACETALDEHYDE	9.740E-04
ACROLEIN	2.000E-05
AMMONIA	7.340E-02
ARSENIC AND COMPOUNDS (INOR	2.560E-08
BENZENE	1.800E-05
CADMIUM AND COMPOUNDS	4.270E-09
CHROMIUM 6+	7.270E-09
COPPER AND COMPOUNDS	1.150E-07
ETHYL BENZENE	1.760E-04
FORMALDEHYDE	1.990E-03
LEAD AND COMPOUNDS	1.710E-08
MANGANESE AND COMPOUNDS	7.690E-08
N-HEXANE	1.400E-03
NAPHTHALENE	8.980E-06
NICKEL AND COMPOUNDS	2.140E-08
PAH:BENZ(A)ANTHRACENE	1.220E-07
PAH:BENZO(A)PYRENE	7.520E-08
PAH:BENZO(B)FLUORANTHENE	6.110E-08
PAH:BENZO(K)FLUORANTHENE	5.950E-08
PAH:CHRYSENE	1.360E-07
PAH:DIBENZ(A,H)ANTHRACENE	1.270E-07
PAH:INDENO(1,2,3-C,D)PYRENE	1.270E-07
PROPYLENE (PROPENE)	4.170E-03
PROPYLENE OXIDE	2.590E-04
TOLUENE	3.840E-04
TRICHLOROETHYLENE	1.400E-08
XYLENES	1.410E-04
ZINC COMPOUNDS	4.570E-07

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EXPOSURE ROUTE INFORMATION

File: ROUTE.I96

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Deposition Velocity (m/s) .....: 0.020

Fraction of Homegrown Produce ..: 0.000

Dilution Factor for Farm/Ranch X/Q (ug/m3)/(g/s) .....: 0.0000

Fraction of Animals' Diet From Grazing .....: 0.0000

Fraction of Animals' Diet From Impacted Feed .....: 0.0000

Fraction of Animals' Water Impacted by Deposition ...: 0.0000

    Surface Area (m2) .....: 0.000E+00

    Volume (liters) .....: 0.000E+00

    Volume Changes .....: 0.000E+00

Fraction of Meat in Diet Impacted ...: 0.0000

    Beef .....: 0.0000

    Pork .....: 0.0000

    Lamb/Goat .....: 0.0000

    Chicken .....: 0.0000

Fraction of Milk in Diet Impacted ...: 0.0000

    Goat Milk Fraction ...: 0.0000

Fraction of Eggs in Diet Impacted ...: 0.0000

Fraction of Impacted Drinking Water : 0.0000

    X/Q at water source ...: 0.0000

    Surface Area (m2) .....: 0.000E+00

    Volume (liters) .....: 0.000E+00

    Volume changes .....: 0.000E+00

Fraction of Fish from Impacted Water: 0.0000

    X/Q at Fish Source ...: 0.0000

    Surface Area (m2) .....: 0.000E+00

    Volume (liters) .....: 0.000E+00

    Volume changes .....: 0.000E+00

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44 YEAR  
INDIVIDUAL CANCER RISK BY POLLUTANT AND ROUTE

Pollutant	Air	Soil	Skin	Garden	MMilk	Other
1,3-BUTADIENE	7.34E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
ACETALDEHYDE	1.65E-09	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
ARSENIC AND COM	5.31E-11	8.61E-11	1.82E-12	0.00E+00	0.00E+00	0.00E+00
BENZENE	3.28E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
CADMIUM AND COM	1.13E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
CHROMIUM 6+	6.85E-10	6.85E-12	1.45E-12	0.00E+00	0.00E+00	0.00E+00
FORMALDEHYDE	7.51E-09	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
LEAD AND COMPOU	1.29E-13	3.26E-13	6.90E-15	0.00E+00	0.00E+00	0.00E+00
NICKEL AND COMP	3.50E-12	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
PAH: BENZ(A) ANTH	8.44E-12	1.30E-11	8.24E-12	0.00E+00	3.32E-11	0.00E+00
PAH: BENZO(A) PYR	5.20E-11	8.00E-11	5.08E-11	0.00E+00	2.05E-10	0.00E+00
PAH: BENZO(B) FLU	4.22E-12	6.50E-12	4.13E-12	0.00E+00	1.67E-11	0.00E+00
PAH: BENZO(K) FLU	4.11E-12	6.33E-12	4.02E-12	0.00E+00	1.62E-11	0.00E+00
PAH: CHRYSENE	9.40E-13	1.45E-12	9.19E-13	0.00E+00	3.71E-12	0.00E+00
PAH: DIBENZ(A,H)	9.58E-11	4.62E-11	2.93E-11	0.00E+00	1.18E-10	0.00E+00
PAH: INDENO(1,2,	8.78E-12	1.35E-11	8.58E-12	0.00E+00	3.46E-11	0.00E+00
PROPYLENE OXIDE	6.02E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
TRICHLOROETHYLE	1.76E-14	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Route Total	1.11E-08	2.60E-10	1.09E-10	0.00E+00	4.28E-10	0.00E+00

TOTAL RISK: 1.19E-08

70 YEAR  
INDIVIDUAL CANCER RISK BY POLLUTANT AND ROUTE

Pollutant	Air	Soil	Skin	Garden	MMilk	Other
1,3-BUTADIENE	1.17E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
ACETALDEHYDE	2.63E-09	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
ARSENIC AND COM	8.45E-11	9.99E-11	2.11E-12	0.00E+00	0.00E+00	0.00E+00
BENZENE	5.22E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
CADMIUM AND COM	1.79E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
CHROMIUM 6+	1.09E-09	7.95E-12	1.68E-12	0.00E+00	0.00E+00	0.00E+00
FORMALDEHYDE	1.19E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
LEAD AND COMPOU	2.05E-13	3.78E-13	8.01E-15	0.00E+00	0.00E+00	0.00E+00
NICKEL AND COMP	5.56E-12	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
PAH: BENZ(A) ANTH	1.34E-11	2.01E-11	1.28E-11	0.00E+00	0.00E+00	0.00E+00
PAH: BENZO(A) PYR	8.27E-11	1.24E-10	7.86E-11	0.00E+00	0.00E+00	0.00E+00
PAH: BENZO(B) FLU	6.72E-12	1.01E-11	6.39E-12	0.00E+00	0.00E+00	0.00E+00
PAH: BENZO(K) FLU	6.55E-12	9.80E-12	6.22E-12	0.00E+00	0.00E+00	0.00E+00
PAH: CHRYSENE	1.50E-12	2.24E-12	1.42E-12	0.00E+00	0.00E+00	0.00E+00
PAH: DIBENZ(A,H)	1.52E-10	7.15E-11	4.54E-11	0.00E+00	0.00E+00	0.00E+00
PAH: INDENO(1,2,	1.40E-11	2.09E-11	1.33E-11	0.00E+00	0.00E+00	0.00E+00
PROPYLENE OXIDE	9.58E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
TRICHLOROETHYLE	2.80E-14	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Route Total	1.76E-08	3.67E-10	1.68E-10	0.00E+00	0.00E+00	0.00E+00

TOTAL RISK: 1.82E-08

California Air Resources Board  
And  
Office of Environmental Health Hazard Assessment  
Health Risk Assessment Program  
Version 2.0e

INDIVIDUAL CANCER RISK REPORT  
WORKER

Run Made By

TWA

MID

Project : MID

Mar. 27, 2003

Pollutant Database Date : Nov. 15, 2000  
Database Reference..... : CAPCOA Risk Assessment Guidelines

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DILUTION FACTOR FOR POINT UNDER EVALUATION

X/Q (ug/m3)/(g/s) : 1.00E+00  
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ANNUAL AVERAGE EMISSION RATE INFORMATION

File: ANNW.E96

Pollutant Name	Emission Rate (g/s)
1,3-BUTADIENE	2.360E-10
ACETALDEHYDE	3.340E-07
ACROLEIN	6.860E-09
AMMONIA	2.540E-05
ARSENIC AND COMPOUNDS (INOR	3.640E-09
BENZENE	6.190E-09
CADMIUM AND COMPOUNDS	6.060E-10
CHROMIUM 6+	1.030E-09
COPPER AND COMPOUNDS	1.640E-08
ETHYL BENZENE	6.060E-08
FORMALDEHYDE	6.820E-07
LEAD AND COMPOUNDS	2.420E-09
MANGANESE AND COMPOUNDS	1.090E-08
N-HEXANE	4.810E-07
NAPHTHALENE	3.090E-09
NICKEL AND COMPOUNDS	3.030E-09
PAH: BENZ (A) ANTHRACENE	4.200E-11
PAH: BENZO (A) PYRENE	2.580E-11
PAH: BENZO (B) FLUORANTHENE	2.100E-11
PAH: BENZO (K) FLUORANTHENE	2.040E-11
PAH: CHRYSENE	4.680E-11
PAH: DIBENZ (A, H) ANTHRACENE	4.370E-11
PAH: INDENO (1, 2, 3-C, D) PYRENE	4.370E-11
PROPYLENE (PROPENE)	1.430E-06
PROPYLENE OXIDE	8.880E-08
TOLUENE	1.320E-07
TRICHLOROETHYLENE	1.990E-09
XYLENES	4.850E-08
ZINC COMPOUNDS	6.490E-08

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EXPOSURE ROUTE INFORMATION

File: ROUTE.I96

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Deposition Velocity (m/s) .....: 0.020  
Fraction of Homegrown Produce ..: 0.000  
Dilution Factor for Farm/Ranch X/Q (ug/m3)/(g/s) .....: 0.0000  
Fraction of Animals' Diet From Grazing .....: 0.0000  
Fraction of Animals' Diet From Impacted Feed .....: 0.0000  
Fraction of Animals' Water Impacted by Deposition ...: 0.0000  
    Surface Area (m2) .....: 0.000E+00  
    Volume (liters) .....: 0.000E+00  
    Volume Changes .....: 0.000E+00

Fraction of Meat in Diet Impacted ...: 0.0000  
    Beef .....: 0.0000  
    Pork .....: 0.0000  
    Lamb/Goat .....: 0.0000  
    Chicken .....: 0.0000

Fraction of Milk in Diet Impacted ...: 0.0000  
    Goat Milk Fraction ...: 0.0000

Fraction of Eggs in Diet Impacted ...: 0.0000

Fraction of Impacted Drinking Water : 0.0000  
    X/Q at water source ...: 0.0000  
    Surface Area (m2) .....: 0.000E+00  
    Volume (liters) .....: 0.000E+00  
    Volume changes .....: 0.000E+00

Fraction of Fish from Impacted Water: 0.0000  
    X/Q at Fish Source ....: 0.0000  
    Surface Area (m2) .....: 0.000E+00  
    Volume (liters) .....: 0.000E+00  
    Volume changes .....: 0.000E+00  
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44 YEAR  
INDIVIDUAL CANCER RISK BY POLLUTANT AND ROUTE

Pollutant	Air	Soil	Skin	Garden	MMilk	Other
1,3-BUTADIENE	2.52E-14	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
ACETALDEHYDE	5.67E-13	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
ARSENIC AND COM	7.55E-12	1.22E-11	2.59E-13	0.00E+00	0.00E+00	0.00E+00
BENZENE	1.13E-13	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
CADMIUM AND COM	1.60E-12	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
CHROMIUM 6+	9.71E-11	9.70E-13	2.05E-13	0.00E+00	0.00E+00	0.00E+00
FORMALDEHYDE	2.57E-12	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
LEAD AND COMPOU	1.83E-14	4.61E-14	9.77E-16	0.00E+00	0.00E+00	0.00E+00
NICKEL AND COMP	4.95E-13	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
PAH:BENZ(A)ANTH	2.90E-15	4.47E-15	2.84E-15	0.00E+00	1.14E-14	0.00E+00
PAH:BENZO(A)PYR	1.78E-14	2.75E-14	1.74E-14	0.00E+00	7.03E-14	0.00E+00
PAH:BENZO(B)FLU	1.45E-15	2.23E-15	1.42E-15	0.00E+00	5.72E-15	0.00E+00
PAH:BENZO(K)FLU	1.41E-15	2.17E-15	1.38E-15	0.00E+00	5.56E-15	0.00E+00
PAH:CHRYSENE	3.24E-16	4.98E-16	3.16E-16	0.00E+00	1.28E-15	0.00E+00
PAH:DIBENZ(A,H)	3.30E-14	1.59E-14	1.01E-14	0.00E+00	4.07E-14	0.00E+00
PAH:INDENO(1,2,	3.02E-15	4.65E-15	2.95E-15	0.00E+00	1.19E-14	0.00E+00
PROPYLENE OXIDE	2.07E-13	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
TRICHLOROETHYLE	2.50E-15	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Route Total	1.10E-10	1.33E-11	5.02E-13	0.00E+00	1.47E-13	0.00E+00

TOTAL RISK: 1.24E-10

70 YEAR  
INDIVIDUAL CANCER RISK BY POLLUTANT AND ROUTE

Pollutant	Air	Soil	Skin	Garden	MMilk	Other
1,3-BUTADIENE	4.01E-14	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
ACETALDEHYDE	9.02E-13	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
ARSENIC AND COM	1.20E-11	1.42E-11	3.01E-13	0.00E+00	0.00E+00	0.00E+00
BENZENE	1.80E-13	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
CADMIUM AND COM	2.55E-12	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
CHROMIUM 6+	1.55E-10	1.13E-12	2.38E-13	0.00E+00	0.00E+00	0.00E+00
FORMALDEHYDE	4.09E-12	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
LEAD AND COMPOU	2.90E-14	5.35E-14	1.13E-15	0.00E+00	0.00E+00	0.00E+00
NICKEL AND COMP	7.88E-13	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
PAH:BENZ(A)ANTH	4.62E-15	6.92E-15	4.39E-15	0.00E+00	0.00E+00	0.00E+00
PAH:BENZO(A)PYR	2.84E-14	4.25E-14	2.70E-14	0.00E+00	0.00E+00	0.00E+00
PAH:BENZO(B)FLU	2.31E-15	3.46E-15	2.20E-15	0.00E+00	0.00E+00	0.00E+00
PAH:BENZO(K)FLU	2.24E-15	3.36E-15	2.13E-15	0.00E+00	0.00E+00	0.00E+00
PAH:CHRYSENE	5.15E-16	7.71E-16	4.89E-16	0.00E+00	0.00E+00	0.00E+00
PAH:DIBENZ(A,H)	5.24E-14	2.46E-14	1.56E-14	0.00E+00	0.00E+00	0.00E+00
PAH:INDENO(1,2,	4.81E-15	7.20E-15	4.57E-15	0.00E+00	0.00E+00	0.00E+00
PROPYLENE OXIDE	3.29E-13	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
TRICHLOROETHYLE	3.98E-15	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Route Total	1.76E-10	1.55E-11	5.96E-13	0.00E+00	0.00E+00	0.00E+00

TOTAL RISK: 1.92E-10

California Air Resources Board  
And  
Office of Environmental Health Hazard Assessment  
Health Risk Assessment Program  
Version 2.0e

CHRONIC INHALATION EXPOSURE REPORT  
MAXIMUM IMPACT

Run Made By

TWA

MID

Project : MID

Mar. 27, 2003

Pollutant Database Date : Nov. 15, 2000  
Database Reference..... : CAPCOA Risk Assessment Guidelines

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DILUTION FACTOR FOR POINT UNDER EVALUATION

X/Q (ug/m3)/(g/s) : 1.00E+00  
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ANNUAL AVERAGE EMISSION RATE INFORMATION

File: ANN.E96

Pollutant Name	Emission Rate (g/s)
1,3-BUTADIENE	7.380E-07
ACETALDEHYDE	1.050E-03
ACROLEIN	2.150E-05
AMMONIA	7.930E-02
ARSENIC AND COMPOUNDS (INOR	1.110E-06
BENZENE	1.940E-05
CADMIUM AND COMPOUNDS	1.850E-07
CHROMIUM 6+	3.140E-07
COPPER AND COMPOUNDS	5.000E-06
ETHYL BENZENE	1.900E-04
FORMALDEHYDE	2.130E-03
LEAD AND COMPOUNDS	7.390E-07
MANGANESE AND COMPOUNDS	3.330E-06
N-HEXANE	1.510E-03
NAPHTHALENE	9.650E-06
NICKEL AND COMPOUNDS	9.240E-07
PAH:BENZ(A)ANTHRACENE	1.310E-07
PAH:BENZO(A)PYRENE	8.080E-08
PAH:BENZO(B)FLUORANTHENE	6.570E-08
PAH:BENZO(K)FLUORANTHENE	6.390E-08
PAH:CHRYSENE	1.470E-07
PAH:DIBENZ(A,H)ANTHRACENE	1.370E-07
PAH:INDENO(1,2,3-C,D)PYRENE	1.370E-07
PROPYLENE (PROPENE)	4.480E-03
PROPYLENE OXIDE	2.780E-04
TOLUENE	4.130E-04
TRICHLOROETHYLENE	6.070E-07
XYLENES	1.520E-04
ZINC COMPOUNDS	1.980E-05

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CHRONIC INHALATION HAZARD INDEX

Pollutant	Resp	CV/BL	CNS	Skin	Repro	Kidn	GI/LV	Immun
1,3-BUTADIENE	--	--	--	--	<.0001	--	--	--
ACETALDEHYDE	0.0001	--	--	--	--	--	--	--
ACROLEIN	0.0004	--	--	0.0004	--	--	--	--
AMMONIA	0.0004	--	--	--	--	--	--	--
ARSENIC AND COM	--	<.0001	<.0001	--	<.0001	--	--	--
BENZENE	--	<.0001	<.0001	--	<.0001	--	--	--
CADMIUM AND COM	<.0001	--	--	--	--	<.0001	--	--
CHROMIUM 6+	<.0001	--	--	--	--	--	--	--
COPPER AND COMP	<.0001	--	--	--	--	--	--	--
ETHYL BENZENE	--	--	--	--	<.0001	<.0001	<.0001	--
FORMALDEHYDE	0.0007	--	--	0.0007	--	--	--	--
MANGANESE AND C	--	--	<.0001	--	--	--	--	--
N-HEXANE	--	--	<.0001	--	--	--	--	--
NAPHTHALENE	<.0001	--	--	--	--	--	--	--
NICKEL AND COMP	<.0001	<.0001	--	--	--	--	--	--
PROPYLENE (PROP	<.0001	--	--	--	--	--	--	--
PROPYLENE OXIDE	<.0001	--	--	--	--	--	--	--
TOLUENE	<.0001	--	<.0001	--	<.0001	--	--	--
TRICHLOROETHYLE	--	--	<.0001	<.0001	--	--	--	--
XYLENES	<.0001	--	<.0001	--	--	--	--	--
ZINC COMPOUNDS	<.0001	<.0001	--	--	--	--	--	--
Total Chronic	0.0016	<.0001	<.0001	0.0011	<.0001	<.0001	<.0001	--

A Zero Background Concentration file was used to perform this analysis, therefore, there is no contribution from background pollutants.

California Air Resources Board  
And  
Office of Environmental Health Hazard Assessment  
Health Risk Assessment Program  
Version 2.0e

CHRONIC INHALATION EXPOSURE REPORT  
RESIDENTIAL

Run Made By

TWA

MID

Project : MID

Mar. 27, 2003

Pollutant Database Date : Nov. 15, 2000  
Database Reference..... : CAPCOA Risk Assessment Guidelines

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DILUTION FACTOR FOR POINT UNDER EVALUATION

X/Q (ug/m3)/(g/s) : 1.00E+00  
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ANNUAL AVERAGE EMISSION RATE INFORMATION

File: ANNR.E96

Pollutant Name	Emission Rate (g/s)
1,3-BUTADIENE	8.180E-09
ACETALDEHYDE	1.160E-05
ACROLEIN	2.380E-07
AMMONIA	8.790E-04
ARSENIC AND COMPOUNDS (INOR	1.430E-08
BENZENE	2.150E-07
CADMIUM AND COMPOUNDS	2.380E-09
CHROMIUM 6+	4.050E-09
COPPER AND COMPOUNDS	6.430E-08
ETHYL BENZENE	2.100E-06
FORMALDEHYDE	2.360E-05
LEAD AND COMPOUNDS	9.530E-09
MANGANESE AND COMPOUNDS	4.290E-08
N-HEXANE	1.670E-05
NAPHTHALENE	1.070E-07
NICKEL AND COMPOUNDS	1.190E-08
PAH: BENZ (A) ANTHRACENE	1.460E-09
PAH: BENZO (A) PYRENE	8.950E-10
PAH: BENZO (B) FLUORANTHENE	7.280E-10
PAH: BENZO (K) FLUORANTHENE	7.080E-10
PAH: CHRYSENE	1.620E-09
PAH: DIBENZ (A, H) ANTHRACENE	1.510E-09
PAH: INDENO (1, 2, 3-C, D) PYRENE	1.510E-09
PROPYLENE (PROPENE)	4.960E-05
PROPYLENE OXIDE	3.080E-06
TOLUENE	4.570E-06
TRICHLOROETHYLENE	7.820E-09
XYLENES	1.680E-06
ZINC COMPOUNDS	2.550E-07

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CHRONIC INHALATION HAZARD INDEX

Pollutant	Resp	CV/BL	CNS	Skin	Repro	Kidn	GI/LV	Immun
1,3-BUTADIENE	--	--	--	--	<.0001	--	--	--
ACETALDEHYDE	<.0001	--	--	--	--	--	--	--
ACROLEIN	<.0001	--	--	<.0001	--	--	--	--
AMMONIA	<.0001	--	--	--	--	--	--	--
ARSENIC AND COM	--	<.0001	<.0001	--	<.0001	--	--	--
BENZENE	--	<.0001	<.0001	--	<.0001	--	--	--
CADMIUM AND COM	<.0001	--	--	--	--	<.0001	--	--
CHROMIUM 6+	<.0001	--	--	--	--	--	--	--
COPPER AND COMP	<.0001	--	--	--	--	--	--	--
ETHYL BENZENE	--	--	--	--	<.0001	<.0001	<.0001	--
FORMALDEHYDE	<.0001	--	--	<.0001	--	--	--	--
MANGANESE AND C	--	--	<.0001	--	--	--	--	--
N-HEXANE	--	--	<.0001	--	--	--	--	--
NAPHTHALENE	<.0001	--	--	--	--	--	--	--
NICKEL AND COMP	<.0001	<.0001	--	--	--	--	--	--
PROPYLENE (PROP	<.0001	--	--	--	--	--	--	--
PROPYLENE OXIDE	<.0001	--	--	--	--	--	--	--
TOLUENE	<.0001	--	<.0001	--	<.0001	--	--	--
TRICHLOROETHYLE	--	--	<.0001	<.0001	--	--	--	--
XYLENES	<.0001	--	<.0001	--	--	--	--	--
ZINC COMPOUNDS	<.0001	<.0001	--	--	--	--	--	--
Total Chronic	<.0001	<.0001	<.0001	<.0001	<.0001	<.0001	<.0001	--

A Zero Background Concentration file was used to perform this analysis, therefore, there is no contribution from background pollutants.

California Air Resources Board  
And  
Office of Environmental Health Hazard Assessment  
Health Risk Assessment Program  
Version 2.0e

CHRONIC INHALATION EXPOSURE REPORT  
SENSITIVE RECEPTORS

Run Made By

TWA

MID

Project : MID

Mar. 27, 2003

Pollutant Database Date : Nov. 15, 2000  
Database Reference..... : CAPCOA Risk Assessment Guidelines

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DILUTION FACTOR FOR POINT UNDER EVALUATION

X/Q (ug/m3)/(g/s) : 1.00E+00

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ANNUAL AVERAGE EMISSION RATE INFORMATION

File: ANNS.E96

Pollutant Name	Emission Rate (g/s)
1,3-BUTADIENE	6.870E-07
ACETALDEHYDE	9.740E-04
ACROLEIN	2.000E-05
AMMONIA	7.340E-02
ARSENIC AND COMPOUNDS (INOR	2.560E-08
BENZENE	1.800E-05
CADMIUM AND COMPOUNDS	4.270E-09
CHROMIUM 6+	7.270E-09
COPPER AND COMPOUNDS	1.150E-07
ETHYL BENZENE	1.760E-04
FORMALDEHYDE	1.990E-03
LEAD AND COMPOUNDS	1.710E-08
MANGANESE AND COMPOUNDS	7.690E-08
N-HEXANE	1.400E-03
NAPHTHALENE	8.980E-06
NICKEL AND COMPOUNDS	2.140E-08
PAH: BENZ (A) ANTHRACENE	1.220E-07
PAH: BENZO (A) PYRENE	7.520E-08
PAH: BENZO (B) FLUORANTHENE	6.110E-08
PAH: BENZO (K) FLUORANTHENE	5.950E-08
PAH: CHRYSENE	1.360E-07
PAH: DIBENZ (A, H) ANTHRACENE	1.270E-07
PAH: INDENO (1, 2, 3-C, D) PYRENE	1.270E-07
PROPYLENE (PROPENE)	4.170E-03
PROPYLENE OXIDE	2.590E-04
TOLUENE	3.840E-04
TRICHLOROETHYLENE	1.400E-08
XYLENES	1.410E-04
ZINC COMPOUNDS	4.570E-07

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CHRONIC INHALATION HAZARD INDEX

Pollutant	Resp	CV/BL	CNS	Skin	Repro	Kidn	GI/LV	Immun
1,3-BUTADIENE	--	--	--	--	<.0001	--	--	--
ACETALDEHYDE	0.0001	--	--	--	--	--	--	--
ACROLEIN	0.0003	--	--	0.0003	--	--	--	--
AMMONIA	0.0004	--	--	--	--	--	--	--
ARSENIC AND COM	--	<.0001	<.0001	--	<.0001	--	--	--
BENZENE	--	<.0001	<.0001	--	<.0001	--	--	--
CADMIUM AND COM	<.0001	--	--	--	--	<.0001	--	--
CHROMIUM 6+	<.0001	--	--	--	--	--	--	--
COPPER AND COMP	<.0001	--	--	--	--	--	--	--
ETHYL BENZENE	--	--	--	--	<.0001	<.0001	<.0001	--
FORMALDEHYDE	0.0007	--	--	0.0007	--	--	--	--
MANGANESE AND C	--	--	<.0001	--	--	--	--	--
N-HEXANE	--	--	<.0001	--	--	--	--	--
NAPHTHALENE	<.0001	--	--	--	--	--	--	--
NICKEL AND COMP	<.0001	<.0001	--	--	--	--	--	--
PROPYLENE (PROP	<.0001	--	--	--	--	--	--	--
PROPYLENE OXIDE	<.0001	--	--	--	--	--	--	--
TOLUENE	<.0001	--	<.0001	--	<.0001	--	--	--
TRICHLOROETHYLE	--	--	<.0001	<.0001	--	--	--	--
XYLENES	<.0001	--	<.0001	--	--	--	--	--
ZINC COMPOUNDS	<.0001	<.0001	--	--	--	--	--	--
Total Chronic	0.0015	<.0001	<.0001	0.0010	<.0001	<.0001	<.0001	--

A Zero Background Concentration file was used to perform this analysis, therefore, there is no contribution from background pollutants.

California Air Resources Board  
And  
Office of Environmental Health Hazard Assessment  
Health Risk Assessment Program  
Version 2.0e

CHRONIC INHALATION EXPOSURE REPORT  
WORKER

Run Made By

TWA

MID

Project : MID

Mar. 27, 2003

Pollutant Database Date : Nov. 15, 2000  
Database Reference..... : CAPCOA Risk Assessment Guidelines

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DILUTION FACTOR FOR POINT UNDER EVALUATION

X/Q (ug/m3)/(g/s) : 1.00E+00

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ANNUAL AVERAGE EMISSION RATE INFORMATION

File: ANNW.E96

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Pollutant Name	Emission Rate (g/s)
1,3-BUTADIENE	2.360E-10
ACETALDEHYDE	3.340E-07
ACROLEIN	6.860E-09
AMMONIA	2.540E-05
ARSENIC AND COMPOUNDS (INOR	3.640E-09
BENZENE	6.190E-09
CADMIUM AND COMPOUNDS	6.060E-10
CHROMIUM 6+	1.030E-09
COPPER AND COMPOUNDS	1.640E-08
ETHYL BENZENE	6.060E-08
FORMALDEHYDE	6.820E-07
LEAD AND COMPOUNDS	2.420E-09
MANGANESE AND COMPOUNDS	1.090E-08
N-HEXANE	4.810E-07
NAPHTHALENE	3.090E-09
NICKEL AND COMPOUNDS	3.030E-09
PAH: BENZ (A) ANTHRACENE	4.200E-11
PAH: BENZO (A) PYRENE	2.580E-11
PAH: BENZO (B) FLUORANTHENE	2.100E-11
PAH: BENZO (K) FLUORANTHENE	2.040E-11
PAH: CHRYSENE	4.680E-11
PAH: DIBENZ (A, H) ANTHRACENE	4.370E-11
PAH: INDENO (1, 2, 3-C, D) PYRENE	4.370E-11
PROPYLENE (PROPENE)	1.430E-06
PROPYLENE OXIDE	8.880E-08
TOLUENE	1.320E-07
TRICHLOROETHYLENE	1.990E-09
XYLENES	4.850E-08
ZINC COMPOUNDS	6.490E-08

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CHRONIC INHALATION HAZARD INDEX

Pollutant	Resp	CV/BL	CNS	Skin	Repro	Kidn	GI/LV	Immun
1,3-BUTADIENE	--	--	--	--	<.0001	--	--	--
ACETALDEHYDE	<.0001	--	--	--	--	--	--	--
ACROLEIN	<.0001	--	--	<.0001	--	--	--	--
AMMONIA	<.0001	--	--	--	--	--	--	--
ARSENIC AND COM	--	<.0001	<.0001	--	<.0001	--	--	--
BENZENE	--	<.0001	<.0001	--	<.0001	--	--	--
CADMIUM AND COM	<.0001	--	--	--	--	<.0001	--	--
CHROMIUM 6+	<.0001	--	--	--	--	--	--	--
COPPER AND COMP	<.0001	--	--	--	--	--	--	--
ETHYL BENZENE	--	--	--	--	<.0001	<.0001	<.0001	--
FORMALDEHYDE	<.0001	--	--	<.0001	--	--	--	--
MANGANESE AND C	--	--	<.0001	--	--	--	--	--
N-HEXANE	--	--	<.0001	--	--	--	--	--
NAPHTHALENE	<.0001	--	--	--	--	--	--	--
NICKEL AND COMP	<.0001	<.0001	--	--	--	--	--	--
PROPYLENE (PROP	<.0001	--	--	--	--	--	--	--
PROPYLENE OXIDE	<.0001	--	--	--	--	--	--	--
TOLUENE	<.0001	--	<.0001	--	<.0001	--	--	--
TRICHLOROETHYLE	--	--	<.0001	<.0001	--	--	--	--
XYLENES	<.0001	--	<.0001	--	--	--	--	--
ZINC COMPOUNDS	<.0001	<.0001	--	--	--	--	--	--
Total Chronic	<.0001	<.0001	<.0001	<.0001	<.0001	<.0001	<.0001	--

A Zero Background Concentration file was used to perform this analysis, therefore, there is no contribution from background pollutants.

California Air Resources Board  
And  
Office of Environmental Health Hazard Assessment  
Health Risk Assessment Program  
Version 2.0e

CHRONIC NONINHALATION EXPOSURE REPORT  
MAXIMUM IMPACT

Run Made By

TWA

MID

Project : MID

Mar. 27, 2003

Pollutant Database Date : Nov. 15, 2000  
Database Reference..... : CAPCOA Risk Assessment Guidelines

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DILUTION FACTOR FOR POINT UNDER EVALUATION

X/Q (ug/m3)/(g/s) : 1.00E+00

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ANNUAL AVERAGE EMISSION RATE INFORMATION

File: ANN.E96

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Pollutant Name	Emission Rate (g/s)
1,3-BUTADIENE	7.380E-07
ACETALDEHYDE	1.050E-03
ACROLEIN	2.150E-05
AMMONIA	7.930E-02
ARSENIC AND COMPOUNDS (INOR	1.110E-06
BENZENE	1.940E-05
CADMIUM AND COMPOUNDS	1.850E-07
CHROMIUM 6+	3.140E-07
COPPER AND COMPOUNDS	5.000E-06
ETHYL BENZENE	1.900E-04
FORMALDEHYDE	2.130E-03
LEAD AND COMPOUNDS	7.390E-07
MANGANESE AND COMPOUNDS	3.330E-06
N-HEXANE	1.510E-03
NAPHTHALENE	9.650E-06
NICKEL AND COMPOUNDS	9.240E-07
PAH: BENZ (A) ANTHRACENE	1.310E-07
PAH: BENZO (A) PYRENE	8.080E-08
PAH: BENZO (B) FLUORANTHENE	6.570E-08
PAH: BENZO (K) FLUORANTHENE	6.390E-08
PAH: CHRYSENE	1.470E-07
PAH: DIBENZ (A, H) ANTHRACENE	1.370E-07
PAH: INDENO (1, 2, 3-C, D) PYRENE	1.370E-07
PROPYLENE (PROPENE)	4.480E-03
PROPYLENE OXIDE	2.780E-04
TOLUENE	4.130E-04
TRICHLOROETHYLENE	6.070E-07
XYLENES	1.520E-04
ZINC COMPOUNDS	1.980E-05

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EXPOSURE ROUTE INFORMATION

File: ROUTE.I96

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Deposition Velocity (m/s) .....: 0.020

Fraction of Homegrown Produce ..: 0.000

Dilution Factor for Farm/Ranch X/Q (ug/m3)/(g/s) .....: 0.0000

Fraction of Animals' Diet From Grazing .....: 0.0000

Fraction of Animals' Diet From Impacted Feed .....: 0.0000

Fraction of Animals' Water Impacted by Deposition ....: 0.0000

    Surface Area (m2) .....: 0.000E+00

    Volume (liters) .....: 0.000E+00

    Volume Changes .....: 0.000E+00

Fraction of Meat in Diet Impacted ...: 0.0000

    Beef .....: 0.0000

    Pork .....: 0.0000

    Lamb/Goat .....: 0.0000

    Chicken .....: 0.0000

Fraction of Milk in Diet Impacted ...: 0.0000

    Goat Milk Fraction ...: 0.0000

Fraction of Eggs in Diet Impacted ...: 0.0000

Fraction of Impacted Drinking Water : 0.0000

    X/Q at water source ...: 0.0000

    Surface Area (m2) .....: 0.000E+00

    Volume (liters) .....: 0.000E+00

    Volume changes .....: 0.000E+00

Fraction of Fish from Impacted Water: 0.0000

    X/Q at Fish Source ...: 0.0000

    Surface Area (m2) .....: 0.000E+00

    Volume (liters) .....: 0.000E+00

    Volume changes .....: 0.000E+00

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CHRONIC NONINHALATION EXPOSURE

Pollutant	Avg. Dose (mg/kg-d)	REL (mg/kg-d)	Avg Dose/REL
1,3-BUTADIENE	---	---	---
ACETALDEHYDE	---	---	---
ACROLEIN	---	---	---
AMMONIA	---	---	---
ARSENIC AND COMPOUNDS (I	2.95E-09	3.00E-04	9.83E-06
BENZENE	---	---	---
CADMIUM AND COMPOUNDS	5.02E-10	5.00E-04	1.00E-06
CHROMIUM 6+	9.90E-10	2.00E-02	4.95E-08
COPPER AND COMPOUNDS	---	---	---
ETHYL BENZENE	---	---	---
FORMALDEHYDE	---	---	---
LEAD AND COMPOUNDS	1.96E-09	---	---
MANGANESE AND COMPOUNDS	---	---	---
N-HEXANE	---	---	---
NAPHTHALENE	4.13E-09	---	---
NICKEL AND COMPOUNDS	---	5.00E-02	---
PAH: BENZ (A) ANTHRACENE	2.94E-11	---	---
PAH: BENZO (A) PYRENE	1.81E-11	---	---
PAH: BENZO (B) FLUORANTHENE	1.47E-11	---	---
PAH: BENZO (K) FLUORANTHENE	1.43E-11	---	---
PAH: CHRYSENE	3.30E-11	---	---
PAH: DIBENZ (A, H) ANTHRACEN	3.07E-11	---	---
PAH: INDENO (1, 2, 3-C, D) PYR	3.07E-11	---	---
PROPYLENE (PROPENE)	---	---	---
PROPYLENE OXIDE	---	---	---
TOLUENE	---	---	---
TRICHLOROETHYLENE	---	---	---
XYLENES	---	---	---
ZINC COMPOUNDS	---	---	---

California Air Resources Board  
And  
Office of Environmental Health Hazard Assessment  
Health Risk Assessment Program  
Version 2.0e

CHRONIC NONINHALATION EXPOSURE REPORT  
RESIDENTIAL

Run Made By

TWA

MID

Project : MID

Mar. 27, 2003

Pollutant Database Date : Nov. 15, 2000  
Database Reference..... : CAPCOA Risk Assessment Guidelines

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DILUTION FACTOR FOR POINT UNDER EVALUATION

X/Q (ug/m3)/(g/s) : 1.00E+00  
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ANNUAL AVERAGE EMISSION RATE INFORMATION

File: ANNR.E96

Pollutant Name	Emission Rate (g/s)
1,3-BUTADIENE	8.180E-09
ACETALDEHYDE	1.160E-05
ACROLEIN	2.380E-07
AMMONIA	8.790E-04
ARSENIC AND COMPOUNDS (INOR	1.430E-08
BENZENE	2.150E-07
CADMIUM AND COMPOUNDS	2.380E-09
CHROMIUM 6+	4.050E-09
COPPER AND COMPOUNDS	6.430E-08
ETHYL BENZENE	2.100E-06
FORMALDEHYDE	2.360E-05
LEAD AND COMPOUNDS	9.530E-09
MANGANESE AND COMPOUNDS	4.290E-08
N-HEXANE	1.670E-05
NAPHTHALENE	1.070E-07
NICKEL AND COMPOUNDS	1.190E-08
PAH: BENZ (A) ANTHRACENE	1.460E-09
PAH: BENZO (A) PYRENE	8.950E-10
PAH: BENZO (B) FLUORANTHENE	7.280E-10
PAH: BENZO (K) FLUORANTHENE	7.080E-10
PAH: CHRYSENE	1.620E-09
PAH: DIBENZ (A, H) ANTHRACENE	1.510E-09
PAH: INDENO (1, 2, 3-C, D) PYRENE	1.510E-09
PROPYLENE (PROPENE)	4.960E-05
PROPYLENE OXIDE	3.080E-06
TOLUENE	4.570E-06
TRICHLOROETHYLENE	7.820E-09
XYLENES	1.680E-06
ZINC COMPOUNDS	2.550E-07

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EXPOSURE ROUTE INFORMATION

File: ROUTE.I96

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Deposition Velocity (m/s) .....: 0.020

Fraction of Homegrown Produce .: 0.000

Dilution Factor for Farm/Ranch X/Q (ug/m3)/(g/s) .....: 0.0000

Fraction of Animals' Diet From Grazing .....: 0.0000

Fraction of Animals' Diet From Impacted Feed .....: 0.0000

Fraction of Animals' Water Impacted by Deposition ....: 0.0000

    Surface Area (m2) .....: 0.000E+00

    Volume (liters) .....: 0.000E+00

    Volume Changes .....: 0.000E+00

Fraction of Meat in Diet Impacted ...: 0.0000

    Beef .....: 0.0000

    Pork .....: 0.0000

    Lamb/Goat .....: 0.0000

    Chicken .....: 0.0000

Fraction of Milk in Diet Impacted ...: 0.0000

    Goat Milk Fraction ...: 0.0000

Fraction of Eggs in Diet Impacted ...: 0.0000

Fraction of Impacted Drinking Water : 0.0000

    X/Q at water source ...: 0.0000

    Surface Area (m2) .....: 0.000E+00

    Volume (liters) .....: 0.000E+00

    Volume changes .....: 0.000E+00

Fraction of Fish from Impacted Water: 0.0000

    X/Q at Fish Source ...: 0.0000

    Surface Area (m2) .....: 0.000E+00

    Volume (liters) .....: 0.000E+00

    Volume changes .....: 0.000E+00

---

CHRONIC NONINHALATION EXPOSURE

Pollutant	Avg. Dose (mg/kg-d)	REL (mg/kg-d)	Avg Dose/REL
1,3-BUTADIENE	---	---	---
ACETALDEHYDE	---	---	---
ACROLEIN	---	---	---
AMMONIA	---	---	---
ARSENIC AND COMPOUNDS (I	3.80E-11	3.00E-04	1.27E-07
BENZENE	---	---	---
CADMIUM AND COMPOUNDS	6.46E-12	5.00E-04	1.29E-08
CHROMIUM 6+	1.28E-11	2.00E-02	6.39E-10
COPPER AND COMPOUNDS	---	---	---
ETHYL BENZENE	---	---	---
FORMALDEHYDE	---	---	---
LEAD AND COMPOUNDS	2.53E-11	---	---
MANGANESE AND COMPOUNDS	---	---	---
N-HEXANE	---	---	---
NAPHTHALENE	4.58E-11	---	---
NICKEL AND COMPOUNDS	---	5.00E-02	---
PAH: BENZ (A) ANTHRACENE	3.28E-13	---	---
PAH: BENZO (A) PYRENE	2.01E-13	---	---
PAH: BENZO (B) FLUORANTHENE	1.63E-13	---	---
PAH: BENZO (K) FLUORANTHENE	1.59E-13	---	---
PAH: CHRYSENE	3.64E-13	---	---
PAH: DIBENZ (A, H) ANTHRACEN	3.39E-13	---	---
PAH: INDENO (1, 2, 3-C, D) PYR	3.39E-13	---	---
PROPYLENE (PROPENE)	---	---	---
PROPYLENE OXIDE	---	---	---
TOLUENE	---	---	---
TRICHLOROETHYLENE	---	---	---
XYLENES	---	---	---
ZINC COMPOUNDS	---	---	---

California Air Resources Board  
And  
Office of Environmental Health Hazard Assessment  
Health Risk Assessment Program  
Version 2.0e

CHRONIC NONINHALATION EXPOSURE REPORT  
SENSITIVE RECEPTORS

Run Made By

TWA

MID

Project : MID

Mar. 27, 2003

Pollutant Database Date : Nov. 15, 2000  
Database Reference..... : CAPCOA Risk Assessment Guidelines

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DILUTION FACTOR FOR POINT UNDER EVALUATION

X/Q (ug/m3)/(g/s) : 1.00E+00  
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ANNUAL AVERAGE EMISSION RATE INFORMATION

File: ANNS.E96

Pollutant Name	Emission Rate (g/s)
1,3-BUTADIENE	6.870E-07
ACETALDEHYDE	9.740E-04
ACROLEIN	2.000E-05
AMMONIA	7.340E-02
ARSENIC AND COMPOUNDS (INOR	2.560E-08
BENZENE	1.800E-05
CADMIUM AND COMPOUNDS	4.270E-09
CHROMIUM 6+	7.270E-09
COPPER AND COMPOUNDS	1.150E-07
ETHYL BENZENE	1.760E-04
FORMALDEHYDE	1.990E-03
LEAD AND COMPOUNDS	1.710E-08
MANGANESE AND COMPOUNDS	7.690E-08
N-HEXANE	1.400E-03
NAPHTHALENE	8.980E-06
NICKEL AND COMPOUNDS	2.140E-08
PAH: BENZ (A) ANTHRACENE	1.220E-07
PAH: BENZO (A) PYRENE	7.520E-08
PAH: BENZO (B) FLUORANTHENE	6.110E-08
PAH: BENZO (K) FLUORANTHENE	5.950E-08
PAH: CHRYSENE	1.360E-07
PAH: DIBENZ (A, H) ANTHRACENE	1.270E-07
PAH: INDENO (1, 2, 3-C, D) PYRENE	1.270E-07
PROPYLENE (PROPENE)	4.170E-03
PROPYLENE OXIDE	2.590E-04
TOLUENE	3.840E-04
TRICHLOROETHYLENE	1.400E-08
XYLENES	1.410E-04
ZINC COMPOUNDS	4.570E-07

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EXPOSURE ROUTE INFORMATION

File: ROUTE.I96

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Deposition Velocity (m/s) .....: 0.020

Fraction of Homegrown Produce ..: 0.000

Dilution Factor for Farm/Ranch X/Q (ug/m3)/(g/s) .....: 0.0000

Fraction of Animals' Diet From Grazing .....: 0.0000

Fraction of Animals' Diet From Impacted Feed .....: 0.0000

Fraction of Animals' Water Impacted by Deposition ....: 0.0000

    Surface Area (m2) .....: 0.000E+00

    Volume (liters) .....: 0.000E+00

    Volume Changes .....: 0.000E+00

Fraction of Meat in Diet Impacted ...: 0.0000

    Beef .....: 0.0000

    Pork .....: 0.0000

    Lamb/Goat .....: 0.0000

    Chicken .....: 0.0000

Fraction of Milk in Diet Impacted ...: 0.0000

    Goat Milk Fraction ...: 0.0000

Fraction of Eggs in Diet Impacted ...: 0.0000

Fraction of Impacted Drinking Water : 0.0000

    X/Q at water source ...: 0.0000

    Surface Area (m2) .....: 0.000E+00

    Volume (liters) .....: 0.000E+00

    Volume changes .....: 0.000E+00

Fraction of Fish from Impacted Water: 0.0000

    X/Q at Fish Source ...: 0.0000

    Surface Area (m2) .....: 0.000E+00

    Volume (liters) .....: 0.000E+00

    Volume changes .....: 0.000E+00

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CHRONIC NONINHALATION EXPOSURE

Pollutant	Avg. Dose (mg/kg-d)	REL (mg/kg-d)	Avg Dose/REL
1,3-BUTADIENE	---	---	---
ACETALDEHYDE	---	---	---
ACROLEIN	---	---	---
AMMONIA	---	---	---
ARSENIC AND COMPOUNDS (I	6.80E-11	3.00E-04	2.27E-07
BENZENE	---	---	---
CADMIUM AND COMPOUNDS	1.16E-11	5.00E-04	2.32E-08
CHROMIUM 6+	2.29E-11	2.00E-02	1.15E-09
COPPER AND COMPOUNDS	---	---	---
ETHYL BENZENE	---	---	---
FORMALDEHYDE	---	---	---
LEAD AND COMPOUNDS	4.54E-11	---	---
MANGANESE AND COMPOUNDS	---	---	---
N-HEXANE	---	---	---
NAPHTHALENE	3.84E-09	---	---
NICKEL AND COMPOUNDS	---	5.00E-02	---
PAH: BENZ (A) ANTHRACENE	2.74E-11	---	---
PAH: BENZO (A) PYRENE	1.69E-11	---	---
PAH: BENZO (B) FLUORANTHENE	1.37E-11	---	---
PAH: BENZO (K) FLUORANTHENE	1.34E-11	---	---
PAH: CHRYSENE	3.05E-11	---	---
PAH: DIBENZ (A, H) ANTHRACEN	2.85E-11	---	---
PAH: INDENO (1,2,3-C, D) PYR	2.85E-11	---	---
PROPYLENE (PROPENE)	---	---	---
PROPYLENE OXIDE	---	---	---
TOLUENE	---	---	---
TRICHLOROETHYLENE	---	---	---
XYLENES	---	---	---
ZINC COMPOUNDS	---	---	---

California Air Resources Board  
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Version 2.0e

CHRONIC NONINHALATION EXPOSURE REPORT  
WORKER

Run Made By

TWA

MID

Project : MID

Mar. 27, 2003

Pollutant Database Date : Nov. 15, 2000  
Database Reference..... : CAPCOA Risk Assessment Guidelines

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DILUTION FACTOR FOR POINT UNDER EVALUATION

X/Q (ug/m3)/(g/s) : 1.00E+00  
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ANNUAL AVERAGE EMISSION RATE INFORMATION

File: ANNW.E96

Pollutant Name	Emission Rate (g/s)
1,3-BUTADIENE	2.360E-10
ACETALDEHYDE	3.340E-07
ACROLEIN	6.860E-09
AMMONIA	2.540E-05
ARSENIC AND COMPOUNDS (INOR	3.640E-09
BENZENE	6.190E-09
CADMIUM AND COMPOUNDS	6.060E-10
CHROMIUM 6+	1.030E-09
COPPER AND COMPOUNDS	1.640E-08
ETHYL BENZENE	6.060E-08
FORMALDEHYDE	6.820E-07
LEAD AND COMPOUNDS	2.420E-09
MANGANESE AND COMPOUNDS	1.090E-08
N-HEXANE	4.810E-07
NAPHTHALENE	3.090E-09
NICKEL AND COMPOUNDS	3.030E-09
PAH: BENZ (A) ANTHRACENE	4.200E-11
PAH: BENZO (A) PYRENE	2.580E-11
PAH: BENZO (B) FLUORANTHENE	2.100E-11
PAH: BENZO (K) FLUORANTHENE	2.040E-11
PAH: CHRYSENE	4.680E-11
PAH: DIBENZ (A, H) ANTHRACENE	4.370E-11
PAH: INDENO (1, 2, 3-C, D) PYRENE	4.370E-11
PROPYLENE (PROPENE)	1.430E-06
PROPYLENE OXIDE	8.880E-08
TOLUENE	1.320E-07
TRICHLOROETHYLENE	1.990E-09
XYLENES	4.850E-08
ZINC COMPOUNDS	6.490E-08

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EXPOSURE ROUTE INFORMATION

File: ROUTE.I96

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Deposition Velocity (m/s) .....: 0.020

Fraction of Homegrown Produce ..: 0.000

Dilution Factor for Farm/Ranch X/Q (ug/m3)/(g/s) .....: 0.0000

Fraction of Animals' Diet From Grazing .....: 0.0000

Fraction of Animals' Diet From Impacted Feed .....: 0.0000

Fraction of Animals' Water Impacted by Deposition ...: 0.0000

    Surface Area (m2) .....: 0.000E+00

    Volume (liters) .....: 0.000E+00

    Volume Changes .....: 0.000E+00

Fraction of Meat in Diet Impacted ...: 0.0000

    Beef .....: 0.0000

    Pork .....: 0.0000

    Lamb/Goat .....: 0.0000

    Chicken .....: 0.0000

Fraction of Milk in Diet Impacted ...: 0.0000

    Goat Milk Fraction ...: 0.0000

Fraction of Eggs in Diet Impacted ...: 0.0000

Fraction of Impacted Drinking Water : 0.0000

    X/Q at water source ...: 0.0000

    Surface Area (m2) .....: 0.000E+00

    Volume (liters) .....: 0.000E+00

    Volume changes .....: 0.000E+00

Fraction of Fish from Impacted Water: 0.0000

    X/Q at Fish Source ...: 0.0000

    Surface Area (m2) .....: 0.000E+00

    Volume (liters) .....: 0.000E+00

    Volume changes .....: 0.000E+00

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CHRONIC NONINHALATION EXPOSURE

Pollutant	Avg. Dose (mg/kg-d)	REL (mg/kg-d)	Avg Dose/REL
1,3-BUTADIENE	---	---	---
ACETALDEHYDE	---	---	---
ACROLEIN	---	---	---
AMMONIA	---	---	---
ARSENIC AND COMPOUNDS (I	9.67E-12	3.00E-04	3.22E-08
BENZENE	---	---	---
CADMIUM AND COMPOUNDS	1.64E-12	5.00E-04	3.29E-09
CHROMIUM 6+	3.25E-12	2.00E-02	1.62E-10
COPPER AND COMPOUNDS	---	---	---
ETHYL BENZENE	---	---	---
FORMALDEHYDE	---	---	---
LEAD AND COMPOUNDS	6.43E-12	---	---
MANGANESE AND COMPOUNDS	---	---	---
N-HEXANE	---	---	---
NAPHTHALENE	1.32E-12	---	---
NICKEL AND COMPOUNDS	---	5.00E-02	---
PAH: BENZ (A) ANTHRACENE	9.43E-15	---	---
PAH: BENZO (A) PYRENE	5.79E-15	---	---
PAH: BENZO (B) FLUORANTHENE	4.71E-15	---	---
PAH: BENZO (K) FLUORANTHENE	4.58E-15	---	---
PAH: CHRYSENE	1.05E-14	---	---
PAH: DIBENZ (A, H) ANTHRACEN	9.81E-15	---	---
PAH: INDENO (1, 2, 3-C, D) PYR	9.81E-15	---	---
PROPYLENE (PROPENE)	---	---	---
PROPYLENE OXIDE	---	---	---
TOLUENE	---	---	---
TRICHLOROETHYLENE	---	---	---
XYLENES	---	---	---
ZINC COMPOUNDS	---	---	---