ULTRAMAR AUXILIARY SHIP EMISSIONS - SHIPACE.DAT ; 1/15/02 * OUTPUT OF AMI/SBCAPCD ACE2588 MODEL VERS. 93288 *
Input File: d:\2105ship\shipace.dat Output File: d:\2105ship\shipace.out 01/16/02 09:03:14 Page - 1

***** A C E 2 5 8 8 --- ASSESSMENT OF CHEMICAL EXPOSURE FOR AB 2588 --- VERSION 93288 *****

*** A MULTI-SOURCE, MULTI-POLLUTANT, MULTI-PATHWAY RISK ASSESSMENT MODEL

DEVELOPED BY APPLIED MODELING INC. AND SANTA BARBARA COUNTY APCD ***

Distributed and Maintained by CAPCOA

*** INPUT MODELING PARAMETERS ***

```
DISPERSION MODELING OPTION =                1
RISK ASSESSMENT OPTION =                    0
NONCANCER ACUTE OPTION =                    1
DIAGNOSTIC PRINT OUTPUT OPTION =            1
NUMBER OF RECEPTORS =                       2
NUMBER OF SOURCES =                         1
NUMBER OF POLLUTANTS =                     20
NUMBER OF DISPERSION MODELING HOURS =    8760
NUMBER OF DISPERSION MODELING DAYS =      365

IDODIS = 1 ==> ISCST DISPERSION MODELING WITH SEQUENTIAL METEOROLOGY
               ANNUAL CONCENTRATIONS COMPUTED AS AVERAGES OF 1-HOUR CONC.

IDORISK = 0 ==> FULL MODEL RUN FOR RISK ASSESSMENT FROM ALL SOURCES AT ALL RECEPTORS

IDOACU = 1 ==> NONCANCER ACUTE EXPOSURE PERFORMED

IDOPRT = 1 ==> DIAGNOSTIC PRINT OUTPUT CREATED

IDENTIFICATION NUMBERS OF MODELED POLLUTANTS:

   20    1    3   10   13   22   36   38  162   70  163   78   83   85   87
  111  130  137  145  151
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*** POLLUTANT-SPECIFIC DATA ***

NAME	SYMBOL	NUM	UNIT RISK (ug/m3)-1	POTENCY (mg/kg-d)-1	ACUTE AEL (ug/m3)	CHRONIC AEL (ug/m3)	ORAL DOSE (mg/kg-d)	CHRONIC TOX ENDPOINTS CV	CN	IM	KI	LI	RP	RE	SK	ACUTE TOX ENDPOINTS CV	CN	IM	KI	LI	RP	RE	EY
Butadiene-1,3	BUTAD	20	1.70E-04	0.00E+00	0.00E+00	2.00E+01	0.00E+00	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0
Acetaldehyde	ACETA	1	2.70E-06	0.00E+00	0.00E+00	9.00E+00	0.00E+00	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0
Acrolein	ACROL	3	0.00E+00	0.00E+00	1.90E-01	6.00E-02	0.00E+00	0	0	0	0	0	0	1	0	0	0	0	0	0	0	1	0
Arsenic	As	10	3.30E-03	1.50E+00	1.90E-01	5.00E-01	1.00E-03	1	1	0	0	0	0	1	1	0	0	0	0	0	1	0	0
Benzene	BENZE	13	2.90E-05	0.00E+00	1.30E+03	6.00E+01	0.00E+00	0	1	0	0	0	0	0	0	1	0	1	0	0	1	0	0
Cadmium	Cd	22	4.20E-03	0.00E+00	0.00E+00	3.50E+00	1.00E-03	0	0	0	1	0	0	1	0	0	0	0	0	0	0	0	0
Chromium (hex.)	Cr	36	1.50E-01	4.20E-01	0.00E+00	2.00E-03	5.00E-03	0	0	0	1	1	0	1	0	0	0	0	0	0	0	0	0
Copper	Cu	38	0.00E+00	0.00E+00	1.00E+02	2.40E+00	0.00E+00	0	0	0	0	0	0	1	0	0	0	0	0	0	0	1	0
Ethyl Benzene	ETBEN	162	0.00E+00	0.00E+00	0.00E+00	2.00E+03	0.00E+00	0	0	1	1	1	0	0	0	0	0	0	0	0	0	0	0
Formaldehyde	HCHO	70	6.00E-06	0.00E+00	9.40E+01	3.00E+00	0.00E+00	0	0	0	0	0	0	1	1	0	0	1	0	0	0	1	1
Hexane	HEXAN	163	0.00E+00	0.00E+00	0.00E+00	7.00E+03	0.00E+00	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Hydrochloric acid	HCl	78	0.00E+00	0.00E+00	2.10E+03	9.00E+00	0.00E+00	0	0	0	0	0	0	1	0	0	0	0	0	0	0	1	1
Lead	Pb	83	1.20E-05	8.50E-03	0.00E+00	0.00E+00	0.00E+00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Manganese	Mn	85	0.00E+00	0.00E+00	0.00E+00	2.00E-01	0.00E+00	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Mercury	Hg	87	0.00E+00	0.00E+00	1.80E+00	9.00E-02	3.00E-04	0	1	0	0	0	0	0	0	0	0	0	0	0	1	0	0
Nickel	Ni	111	2.60E-04	0.00E+00	6.00E+00	5.00E-02	0.00E+00	1	0	0	0	0	0	1	0	0	0	1	0	0	0	1	0
Polycyclic arom. HC	PAH	130	1.10E-03	1.20E+01	0.00E+00	0.00E+00	0.00E+00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Selenium	Se	137	1.40E-04	0.00E+00	2.00E+00	5.00E-01	0.00E+00	0	0	0	0	0	0	1	0	0	0	0	0	0	0	1	1
Toluene	TOL	145	0.00E+00	0.00E+00	3.70E+04	3.00E+02	0.00E+00	0	1	0	0	0	1	1	0	0	1	0	0	0	1	1	1
Xylene	XYLEN	151	0.00E+00	0.00E+00	2.20E+04	7.00E+02	0.00E+00	0	1	0	0	0	0	1	0	0	0	0	0	0	0	1	1

TOTAL NUMBER OF MODELED POLLUTANTS = 20

NUMBER OF CARCINOGENIC POLLUTANTS = 11

20 1 10 13 22 36 70 83 111 130
137

NUMBER OF MULTIPATHWAY POLLUTANTS = 6

10 22 36 83 87 130

NUMBER OF POLLUTANTS WITH ACUTE NON-CANCER RISK = 11

3 10 13 38 70 78 87 111 137 145
151

MAXIMUM NUMBER OF ACUTE TOXICOLOGICAL ENDPOINTS = 4

NUMBER OF POLLUTANTS WITH CHRONIC NON-CANCER RISK = 18

20 1 3 10 13 22 36 38 162 70
163 78 85 87 111 137 145 151

MAXIMUM NUMBER OF CHRONIC TOXICOLOGICAL ENDPOINTS = 4

REQUIRED TOTAL ARRAY SIZE = 488 WORDS

*** INPUT SOURCE EMISSION RATES ****

FOR SOURCE # 1 SHIP
OPERATING HOURS = 8760.00 SURFACE AREA (m2) = 1.000E+00 DEPOSITION ADJUST. FACTOR = 1.00000

POLLUTANT NAME	POLLUTANT NUMBER	1-HOUR RATE (g/s)	1-HOUR RATE (lb/hr)	ANNUAL RATE (g/s)	ANNUAL RATE (lb/yr)
BUTAD	20	1.370E-03	1.087E-02	1.820E-04	1.265E+01
ACETA	1	4.930E-03	3.913E-02	6.560E-04	4.561E+01
ACROL	3	2.140E-04	1.698E-03	2.840E-05	1.974E+00
As	10	1.010E-05	8.016E-05	1.340E-06	9.316E-02
BENZE	13	1.170E-03	9.286E-03	1.560E-04	1.085E+01
Cd	22	9.450E-06	7.500E-05	1.260E-06	8.760E-02
Cr	36	6.300E-07	5.000E-06	8.370E-08	5.819E-03
Cu	38	2.580E-05	2.048E-04	3.430E-06	2.385E-01
ETBEN	162	6.870E-05	5.452E-04	9.120E-06	6.341E-01
HCHO	70	1.090E-02	8.651E-02	1.440E-03	1.001E+02
HEXAN	163	1.690E-04	1.341E-03	2.250E-05	1.564E+00
HCl	78	1.170E-03	9.286E-03	1.560E-04	1.085E+01
Pb	83	5.230E-05	4.151E-04	6.950E-06	4.832E-01
Mn	85	1.950E-05	1.548E-04	2.600E-06	1.808E-01
Hg	87	1.260E-05	1.000E-04	1.670E-06	1.161E-01
Ni	111	2.460E-05	1.952E-04	3.260E-06	2.266E-01
PAH	130	3.520E-04	2.794E-03	4.680E-05	3.254E+00
Se	137	1.390E-05	1.103E-04	1.840E-06	1.279E-01
TOL	145	6.640E-04	5.270E-03	8.820E-05	6.132E+00
XYLEN	151	2.670E-04	2.119E-03	3.550E-05	2.468E+00

*** INPUT FACILITY-WIDE EMISSION RATES ***

POLLUTANT NAME	POLLUTANT NUMBER	1-HOUR RATE (g/s)	1-HOUR RATE (lb/hr)	ANNUAL RATE (g/s)	ANNUAL RATE (lb/yr)
BUTAD	20	1.370E-03	1.087E-02	1.820E-04	1.265E+01
ACETA	1	4.930E-03	3.913E-02	6.560E-04	4.561E+01
ACROL	3	2.140E-04	1.698E-03	2.840E-05	1.974E+00
As	10	1.010E-05	8.016E-05	1.340E-06	9.316E-02
BENZE	13	1.170E-03	9.286E-03	1.560E-04	1.085E+01
Cd	22	9.450E-06	7.500E-05	1.260E-06	8.760E-02
Cr	36	6.300E-07	5.000E-06	8.370E-08	5.819E-03
Cu	38	2.580E-05	2.048E-04	3.430E-06	2.385E-01
ETBEN	162	6.870E-05	5.452E-04	9.120E-06	6.341E-01
HCHO	70	1.090E-02	8.651E-02	1.440E-03	1.001E+02
HEXAN	163	1.690E-04	1.341E-03	2.250E-05	1.564E+00
HCl	78	1.170E-03	9.286E-03	1.560E-04	1.085E+01
Pb	83	5.230E-05	4.151E-04	6.950E-06	4.832E-01
Mn	85	1.950E-05	1.548E-04	2.600E-06	1.808E-01
Hg	87	1.260E-05	1.000E-04	1.670E-06	1.161E-01
Ni	111	2.460E-05	1.952E-04	3.260E-06	2.266E-01
PAH	130	3.520E-04	2.794E-03	4.680E-05	3.254E+00
Se	137	1.390E-05	1.103E-04	1.840E-06	1.279E-01
TOL	145	6.640E-04	5.270E-03	8.820E-05	6.132E+00
XYLEN	151	2.670E-04	2.119E-03	3.550E-05	2.468E+00

*** INPUT POLLUTANT BACKGROUND CONCENTRATIONS (ug/m3) ****

POLLUTANT NAME	POLLUTANT NUMBER	1-HOUR BACKG.	ANNUAL BACKG.
BUTAD	20	0.000E+00	0.000E+00
ACETA	1	0.000E+00	0.000E+00
ACROL	3	0.000E+00	0.000E+00
As	10	0.000E+00	0.000E+00
BENZE	13	0.000E+00	0.000E+00
Cd	22	0.000E+00	0.000E+00
Cr	36	0.000E+00	0.000E+00
Cu	38	0.000E+00	0.000E+00
ETBEN	162	0.000E+00	0.000E+00
HCHO	70	0.000E+00	0.000E+00
HEXAN	163	0.000E+00	0.000E+00
HCl	78	0.000E+00	0.000E+00
Pb	83	0.000E+00	0.000E+00
Mn	85	0.000E+00	0.000E+00
Hg	87	0.000E+00	0.000E+00
Ni	111	0.000E+00	0.000E+00
PAH	130	0.000E+00	0.000E+00
Se	137	0.000E+00	0.000E+00
TOL	145	0.000E+00	0.000E+00
XYLEN	151	0.000E+00	0.000E+00

*** INPUT RECEPTOR DATA ***

RECEPTOR #	RECEPTOR NAME	X-COORD	Y-COORD	ELEVATION	POPULATION	GARDEN FRAC	SCREEN X/Q
1	MAX ANNUAL	800.00	0.00	0.00	0	0.44000	0.000E+00
2	MAX HOURLY	1000.00	600.00	0.00	0	0.44000	0.000E+00

*** PATHWAY-SPECIFIC DATA ***

*** RISK LEVELS ***

Significant risk level		1.00E-05	
Zone of impact risk level		1.00E-06	
Significant hazard index for acute exposure		1.00	
Significant hazard index for chronic exposure		1.00	
*** INHALATION PATHWAY ***			
Respiration rate (RR) (m3/d)		20.0	
Average body weight (ABW) (kg)		70.0	
*** MULTIPATHWAY POLLUTANTS ***			
Number of multipathway pollutants		27	
Symbol and identification number	- Arsenic	As	10
	- Beryllium	Be	17
	- Cadmium	Cd	22
	- Chlorobenzene	CBZ	29
	- Chromium (hex.)	Cr	36
	- Dioxins/Dibenzofuran	TCDD	55
	- 2-Chlorophenol	CPHE2	33
	- p-Dichlorobenzene	PDCB	48
	- Hexachlorobenzene	HCB	74
	- Hexachlorocyclohexan	HCHEX	75
	- Lead	Pb	83
	- Mercury	Hg	87
	- NNitrosodiethylamine	NNETH	101
	- NNitrosodimethylamin	NNMET	102
	- NNitrosodiphenylamin	PNPHE	105
	- NNitrosodinbutylamin	NNBUT	103
	- NNitrosodinpropylami	NNDPP	104
	- NNitromethyethylamin	NNMEL	106
	- NNitrosomorpholine	NNMPH	107
	- NNitrosopiperidine	NNPRD	108
	- NNitrosopyrrolidine	NNPLD	109
	- Naphthalene	NAPTH	110
	- PAH	PAH	130
	- Polychlor. biphenyls	PCB	129
	- Pentachlorophenol	PENTA	155
	- 2,4,6Trichlorophenol	TC246	147
	- 2,4,5Trichlorophenol	TC245	157
*** SOIL ***			
Vertical rate of deposition	- Arsenic	0.02	
(Dep_rate) (m/s)	- Beryllium	0.02	
	- Cadmium	0.02	
	- Chlorobenzene	0.02	
	- Chromium (hex.)	0.02	
	- Dioxins/Dibenzofuran	0.02	
	- 2-Chlorophenol	0.02	
	- p-Dichlorobenzene	0.02	

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                                        - Hexachlorobenzene    0.02
                                        - Hexachlorocyclohexan 0.02
                                        - Lead                 0.02
                                        - Mercury              0.02
                                        - NNitrosodiethylamine 0.02
                                        - NNitrosodimethylamin 0.02
                                        - NNitrosodiphenylamin 0.02
                                        - NNitrosodinbutylamin 0.02
                                        - NNitrosodinpropylami 0.02
                                        - NNitromethyethylamin 0.02
                                        - NNitrosomorpholine   0.02
                                        - NNitrosopiperidine   0.02
                                        - NNitrosopyrrolidine  0.02
                                        - Naphthalene          0.02
                                        - PAH                  0.02
                                        - Polychlor. biphenyls 0.02
                                        - Pentachlorophenol    0.02
                                        - 2,4,6Trichlorophenol 0.02
                                        - 2,4,5Trichlorophenol 0.02
   Beginning of evaluation period (To) (d)                     0.0
   End of evaluation period (Tf) (d)                           25550.0
   Soil mixing depth for human ingestion (SD) (m)              0.0100
   Soil bulk density (BD) (kg/m3)                              1333.0
   Chemical half-life in soil (t1/2)(d) - Arsenic                1.00E+08
                                        - Beryllium              1.00E+08
                                        - Cadmium                1.00E+08
                                        - Chlorobenzene          1.50E+02
                                        - Chromium (hex.)        1.00E+08
                                        - Dioxins/Dibenzofuran   4.38E+03
                                        - 2-Chlorophenol         7.00E+01
                                        - p-Dichlorobenzene      1.80E+02
                                        - Hexachlorobenzene      2.09E+03
                                        - Hexachlorocyclohexan   1.70E+02
                                        - Lead                   1.00E+08
                                        - Mercury                1.00E+08
                                        - NNitrosodiethylamine   1.80E+02
                                        - NNitrosodimethylamin   1.80E+02
                                        - NNitrosodiphenylamin   1.80E+02
                                        - NNitrosodinbutylamin   1.80E+02
                                        - NNitrosodinpropylami   1.80E+02
                                        - NNitromethyethylamin   1.80E+02
                                        - NNitrosomorpholine     1.80E+02
                                        - NNitrosopiperidine     1.80E+02
                                        - NNitrosopyrrolidine    1.80E+02
                                        - Naphthalene            4.80E+02
                                        - PAH                    4.80E+02
                                        - Polychlor. biphenyls   3.60E+03
                                        - Pentachlorophenol      1.78E+02
                                        - 2,4,6Trichlorophenol   7.00E+01
                                        - 2,4,5Trichlorophenol   6.90E+02
       *** WATER ***
   Location (receptor #) of drinking water source                -1
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    Site-specific water surface area (SA) (m2)                  -1.0
    Site-specific water volume (WV) (kg)                        -1.0
    Site-specific number of volume changes per year (VC)        -1.0
    Site-specific fraction of run-off water (ROf)               -1.0
    Wash coefficient-fraction of material washed by runoff (WC) -1.0
    Site-specific watershed area impacted (WSIA) (m2)           -1.0
    Site-specific average annual rainfall (RF) (m)              -1.0
    Site-specific watershed  run-off coefficient (ROC)          -1.0
         *** VEGETATION ***
    Location (receptor #) of crop source                            0
    Soil mixing depth (SD) for homegrown crops (m)              0.150
    Interception coefficient for root crops (IFC_ROOT)          0.0
    Interception coefficient for leafy crops (IFC_LEAFY)        0.20
    Interception coefficient for vine crops (IFC_VINE)          0.10
    Weathering constant (k) (1/d)                               0.0495
    Crop yield (Y) (kg/m2)                                      2.0
    Crop growth period  (T) (d)                                 90.0
    Root uptake (UF2) - ROOT            - Arsenic                 2.00E-03
                                        - Beryllium               4.00E-04
                                        - Cadmium                 4.00E-02
                                        - Chlorobenzene         -1.0
                                        - Chromium (hex.)         1.00E-03
                                        - Dioxins/Dibenzofuran -1.0
                                        - 2-Chlorophenol        -1.0
                                        - p-Dichlorobenzene     -1.0
                                        - Hexachlorobenzene     -1.0
                                        - Hexachlorocyclohexan -1.0
                                        - Lead                    2.00E-03
                                        - Mercury                 2.00E-02
                                        - NNitrosodiethylamine -1.0
                                        - NNitrosodimethylamin -1.0
                                        - NNitrosodiphenylamin -1.0
                                        - NNitrosodinbutylamin -1.0
                                        - NNitrosodinpropylami -1.0
                                        - NNitromethyethylamin -1.0
                                        - NNitrosomorpholine   -1.0
                                        - NNitrosopiperidine   -1.0
                                        - NNitrosopyrrolidine  -1.0
                                        - Naphthalene          -1.0
                                        - PAH                  -1.0
                                        - Polychlor. biphenyls -1.0
                                        - Pentachlorophenol    -1.0
                                        - 2,4,6Trichlorophenol -1.0
                                        - 2,4,5Trichlorophenol -1.0
    Root uptake (UF2) - LEAF            - Arsenic                 4.00E-03
                                        - Beryllium               1.00E-03
                                        - Cadmium                 6.00E-02
                                        - Chlorobenzene         -1.0
                                        - Chromium (hex.)         8.00E-04
                                        - Dioxins/Dibenzofuran -1.0
                                        - 2-Chlorophenol        -1.0
                                        - p-Dichlorobenzene     -1.0
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                                    - Hexachlorobenzene    -1.0
                                    - Hexachlorocyclohexan -1.0
                                    - Lead                  5.00E-03
                                    - Mercury               9.00E-02
                                    - NNitrosodiethylamine -1.0
                                    - NNitrosodimethylamin -1.0
                                    - NNitrosodiphenylamin -1.0
                                    - NNitrosodinbutylamin -1.0
                                    - NNitrosodinpropylami -1.0
                                    - NNitromethyethylamin -1.0
                                    - NNitrosomorpholine   -1.0
                                    - NNitrosopiperidine   -1.0
                                    - NNitrosopyrrolidine  -1.0
                                    - Naphthalene          -1.0
                                    - PAH                  -1.0
                                    - Polychlor. biphenyls -1.0
                                    - Pentachlorophenol    -1.0
                                    - 2,4,6Trichlorophenol -1.0
                                    - 2,4,5Trichlorophenol -1.0
   Root uptake (UF2) - VINE         - Arsenic               9.00E-04
                                    - Beryllium             2.00E-04
                                    - Cadmium               2.00E-02
                                    - Chlorobenzene        -1.0
                                    - Chromium (hex.)       6.00E-04
                                    - Dioxins/Dibenzofuran -1.0
                                    - 2-Chlorophenol       -1.0
                                    - p-Dichlorobenzene    -1.0
                                    - Hexachlorobenzene    -1.0
                                    - Hexachlorocyclohexan -1.0
                                    - Lead                  1.00E-03
                                    - Mercury               3.00E-02
                                    - NNitrosodiethylamine -1.0
                                    - NNitrosodimethylamin -1.0
                                    - NNitrosodiphenylamin -1.0
                                    - NNitrosodinbutylamin -1.0
                                    - NNitrosodinpropylami -1.0
                                    - NNitromethyethylamin -1.0
                                    - NNitrosomorpholine   -1.0
                                    - NNitrosopiperidine   -1.0
                                    - NNitrosopyrrolidine  -1.0
                                    - Naphthalene          -1.0
                                    - PAH                  -1.0
                                    - Polychlor. biphenyls -1.0
                                    - Pentachlorophenol    -1.0
                                    - 2,4,6Trichlorophenol -1.0
                                    - 2,4,5Trichlorophenol -1.0
   Octanol:water partition factor (Kow) - Arsenic          -1.0
                                    - Beryllium            -1.0
                                    - Cadmium              -1.0
                                    - Chlorobenzene        -1.0
                                    - Chromium (hex.)      -1.0
                                    - Dioxins/Dibenzofuran -1.0
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                                        - 2-Chlorophenol       -1.0
                                        - p-Dichlorobenzene    -1.0
                                        - Hexachlorobenzene    -1.0
                                        - Hexachlorocyclohexan -1.0
                                        - Lead                 -1.0
                                        - Mercury              -1.0
                                        - NNitrosodiethylamine -1.0
                                        - NNitrosodimethylamin -1.0
                                        - NNitrosodiphenylamin -1.0
                                        - NNitrosodinbutylamin -1.0
                                        - NNitrosodinpropylami -1.0
                                        - NNitromethyethylamin -1.0
                                        - NNitrosomorpholine   -1.0
                                        - NNitrosopiperidine   -1.0
                                        - NNitrosopyrrolidine  -1.0
                                        - Naphthalene          -1.0
                                        - PAH                  -1.0
                                        - Polychlor. biphenyls -1.0
                                        - Pentachlorophenol    -1.0
                                        - 2,4,6Trichlorophenol -1.0
                                        - 2,4,5Trichlorophenol -1.0
   Organic carbon partition coeff (Koc) - Arsenic              -1.0
                                        - Beryllium            -1.0
                                        - Cadmium              -1.0
                                        - Chlorobenzene        -1.0
                                        - Chromium (hex.)      -1.0
                                        - Dioxins/Dibenzofuran -1.0
                                        - 2-Chlorophenol       -1.0
                                        - p-Dichlorobenzene    -1.0
                                        - Hexachlorobenzene    -1.0
                                        - Hexachlorocyclohexan -1.0
                                        - Lead                 -1.0
                                        - Mercury              -1.0
                                        - NNitrosodiethylamine -1.0
                                        - NNitrosodimethylamin -1.0
                                        - NNitrosodiphenylamin -1.0
                                        - NNitrosodinbutylamin -1.0
                                        - NNitrosodinpropylami -1.0
                                        - NNitromethyethylamin -1.0
                                        - NNitrosomorpholine   -1.0
                                        - NNitrosopiperidine   -1.0
                                        - NNitrosopyrrolidine  -1.0
                                        - Naphthalene          -1.0
                                        - PAH                  -1.0
                                        - Polychlor. biphenyls -1.0
                                        - Pentachlorophenol    -1.0
                                        - 2,4,6Trichlorophenol -1.0
                                        - 2,4,5Trichlorophenol -1.0
   Fraction of organic in soil (Foc)                           0.10
        *** ANIMAL PRODUCTS ***
   Location (receptor #) of animal farm                           -1
   Soil mixing depth (SD) for animal pasture (m)               0.010
```

Soil mixing depth (SD) for animal feed (m)		0.150
Inhalation rate (RR) (m3/d)	- Cattle/Lactating	8.00E+01
	- Pigs	7.00E+00
	- Poultry	1.00E+00
	- Goats/Sheep	6.00E+00
Water ingestion rate (WI) (kg/d)	- Cattle/Lactating	1.00E+02
	- Pigs	8.00E+00
	- Poultry	6.00E-01
	- Goats/Sheep	6.00E+00
Site-specific % water ingested from contaminated water (%SW)		0.25
Site-specific % diet provided by grazing (%G)		0.50
Site-specific % feed other than pasture locally grown (L)		1.00
Feed ingestion rate (FI) (kg/d)	- Cattle	8.00E+00
	- Lactating	1.60E+01
	- Pigs	2.00E+00
	- Poultry	3.00E-01
	- Goats/Sheep	2.00E+00
Soil ingested as % of feed ingested	- Cattle/Lactating	1.00E-02
(%Sf)	- Pigs	1.00E-02
	- Poultry	1.00E-02
	- Goats/Sheep	1.00E-02
Soil ingested as % of pasture	- Cattle/Lactating	5.00E-02
ingested (%Sp)	- Pigs	3.00E-02
	- Poultry	3.00E-02
	- Goats/Sheep	7.00E-02
Transfer coefficient of contaminant	- Arsenic	2.00E-03
from diet to meat product	- Beryllium	1.00E-03
(Fi_meat)	- Cadmium	3.50E-04
	- Chlorobenzene	-1.0
	- Chromium (hex.)	9.20E-03
	- Dioxins/Dibenzofuran	4.00E-01
	- 2-Chlorophenol	-1.0
	- p-Dichlorobenzene	-1.0
	- Hexachlorobenzene	-1.0
	- Hexachlorocyclohexan	-1.0
	- Lead	4.00E-04
	- Mercury	2.70E-02
	- NNitrosodiethylamine	-1.0
	- NNitrosodimethylamin	-1.0
	- NNitrosodiphenylamin	-1.0
	- NNitrosodinbutylamin	-1.0
	- NNitrosodinpropylami	-1.0
	- NNitromethyethylamin	-1.0
	- NNitrosomorpholine	-1.0
	- NNitrosopiperidine	-1.0
	- NNitrosopyrrolidine	-1.0
	- Naphthalene	-1.0
	- PAH	-1.0
	- Polychlor. biphenyls	5.00E-02
	- Pentachlorophenol	-1.0
	- 2,4,6Trichlorophenol	9.00E-05
	- 2,4,5Trichlorophenol	-1.0

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   Transfer coefficient of contaminant  - Arsenic                6.20E-05
     from diet to milk product          - Beryllium              9.10E-07
       (Fi_milk)                        - Cadmium                1.00E-03
                                        - Chlorobenzene        -1.0
                                        - Chromium (hex.)        1.00E-05
                                        - Dioxins/Dibenzofuran   4.00E-02
                                        - 2-Chlorophenol       -1.0
                                        - p-Dichlorobenzene    -1.0
                                        - Hexachlorobenzene    -1.0
                                        - Hexachlorocyclohexan -1.0
                                        - Lead                   2.60E-04
                                        - Mercury                9.70E-06
                                        - NNitrosodiethylamine -1.0
                                        - NNitrosodimethylamin -1.0
                                        - NNitrosodiphenylamin -1.0
                                        - NNitrosodinbutylamin -1.0
                                        - NNitrosodinpropylami -1.0
                                        - NNitromethyethylamin -1.0
                                        - NNitrosomorpholine   -1.0
                                        - NNitrosopiperidine   -1.0
                                        - NNitrosopyrrolidine  -1.0
                                        - Naphthalene          -1.0
                                        - PAH                  -1.0
                                        - Polychlor. biphenyls   1.00E-02
                                        - Pentachlorophenol    -1.0
                                        - 2,4,6Trichlorophenol   4.20E-05
                                        - 2,4,5Trichlorophenol -1.0
   Transfer coefficient of contaminant  - Arsenic                2.00E-03
     from diet to egg product           - Beryllium              1.00E-03
       (Fi_egg)                         - Cadmium                3.50E-04
                                        - Chlorobenzene        -1.0
                                        - Chromium (hex.)        9.20E-03
                                        - Dioxins/Dibenzofuran   4.00E-01
                                        - 2-Chlorophenol       -1.0
                                        - p-Dichlorobenzene    -1.0
                                        - Hexachlorobenzene    -1.0
                                        - Hexachlorocyclohexan -1.0
                                        - Lead                   4.00E-04
                                        - Mercury                2.70E-02
                                        - NNitrosodiethylamine -1.0
                                        - NNitrosodimethylamin -1.0
                                        - NNitrosodiphenylamin -1.0
                                        - NNitrosodinbutylamin -1.0
                                        - NNitrosodinpropylami -1.0
                                        - NNitromethyethylamin -1.0
                                        - NNitrosomorpholine   -1.0
                                        - NNitrosopiperidine   -1.0
                                        - NNitrosopyrrolidine  -1.0
                                        - Naphthalene          -1.0
                                        - PAH                  -1.0
                                        - Polychlor. biphenyls   5.00E-02
                                        - Pentachlorophenol    -1.0
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                                        - 2,4,6Trichlorophenol   9.00E-05
                                        - 2,4,5Trichlorophenol -1.0
    Location (receptor #) of animal's water source                -1
    Site-specific water surface area (SA) (m2)                  1000.0
    Site-specific water volume (WV) (kg)                          2.00E+06
    Site-specific number of volume changes per year (VC)        5.0
    Site-specific fraction of run-off water (ROf)               -1.0
    Wash coefficient-fraction of material washed by runoff (WC) -1.0
    Site-specific watershed area impacted (WSIA) (m2)           -1.0
    Site-specific average annual rainfall (RF) (m)              -1.0
    Site-specific watershed  run-off coefficient (ROC)          -1.0
         *** FISH PRODUCTS ***
    Location (receptor #) of fish farm/pond/lake/stream           -1
    Site-specific water surface area (SA) (m2)                    1.50E+05
    Site-specific water volume (WV) (kg)                          3.00E+08
    Site-specific number of volume changes per year (VC)        5000.0
    Site-specific fraction of run-off water (ROf)               -1.0
    Wash coefficient-fraction of material washed by runoff (WC) -1.0
    Site-specific watershed area impacted (WSIA) (m2)           -1.0
    Site-specific average annual rainfall (RF) (m)              -1.0
    Site-specific watershed  run-off coefficient (ROC)          -1.0
    Bioconcentration factor (BCF)       - Arsenic                 4.00E+00
                                        - Beryllium               1.90E+01
                                        - Cadmium                 1.00E+02
                                        - Chlorobenzene         -1.0
                                        - Chromium (hex.)         2.00E+00
                                        - Dioxins/Dibenzofuran    5.00E+03
                                        - 2-Chlorophenol        -1.0
                                        - p-Dichlorobenzene     -1.0
                                        - Hexachlorobenzene       8.00E+03
                                        - Hexachlorocyclohexan -1.0
                                        - Lead                    1.55E+02
                                        - Mercury                 5.00E+03
                                        - NNitrosodiethylamine -1.0
                                        - NNitrosodimethylamin -1.0
                                        - NNitrosodiphenylamin -1.0
                                        - NNitrosodinbutylamin -1.0
                                        - NNitrosodinpropylami -1.0
                                        - NNitromethyethylamin -1.0
                                        - NNitrosomorpholine    -1.0
                                        - NNitrosopiperidine    -1.0
                                        - NNitrosopyrrolidine   -1.0
                                        - Naphthalene             1.55E+03
                                        - PAH                     1.55E+03
                                        - Polychlor. biphenyls    1.00E+05
                                        - Pentachlorophenol     -1.0
                                        - 2,4,6Trichlorophenol    5.00E+02
                                        - 2,4,5Trichlorophenol -1.0
         *** DERMAL ABSORPTION PATHWAY ***
    Surface area of exposed skin (SA) (cm2)                     4656.0
    Soil loading on skin (SL)                                   0.50
    Fraction absorbed across skin (ABS)  - Arsenic                1.00E-03
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                                        - Beryllium             1.00E-03
                                        - Cadmium               2.00E-03
                                        - Chlorobenzene         1.00E-01
                                        - Chromium (hex.)       1.00E-02
                                        - Dioxins/Dibenzofuran  2.00E-02
                                        - 2-Chlorophenol        1.00E-01
                                        - p-Dichlorobenzene     1.00E-01
                                        - Hexachlorobenzene     1.00E-01
                                        - Hexachlorocyclohexan  1.00E-01
                                        - Lead                  1.00E-03
                                        - Mercury               1.00E-02
                                        - NNitrosodiethylamine  1.00E-01
                                        - NNitrosodimethylamin  1.00E-01
                                        - NNitrosodiphenylamin  1.00E-01
                                        - NNitrosodinbutylamin  1.00E-01
                                        - NNitrosodinpropylami  1.00E-01
                                        - NNitromethyethylamin  1.00E-01
                                        - NNitrosomorpholine    1.00E-01
                                        - NNitrosopiperidine    1.00E-01
                                        - NNitrosopyrrolidine   1.00E-01
                                        - Naphthalene           3.00E-02
                                        - PAH                   3.00E-02
                                        - Polychlor. biphenyls  1.50E-01
                                        - Pentachlorophenol     1.00E-01
                                        - 2,4,6Trichlorophenol  1.00E-01
                                        - 2,4,5Trichlorophenol  1.00E-01
        *** SOIL INGESTION PATHWAY ***
   Lifetime average soil ingestion rate per day (Is) (mg/d)    110.0
   Gastrointestinal absorption factor   - Arsenic              1.00E+00
     (GI)                               - Beryllium            1.00E+00
                                        - Cadmium              1.00E+00
                                        - Chlorobenzene        1.00E+00
                                        - Chromium (hex.)      1.00E+00
                                        - Dioxins/Dibenzofuran 1.00E+00
                                        - 2-Chlorophenol       1.00E+00
                                        - p-Dichlorobenzene    1.00E+00
                                        - Hexachlorobenzene    1.00E+00
                                        - Hexachlorocyclohexan 1.00E+00
                                        - Lead                 1.00E+00
                                        - Mercury              1.00E+00
                                        - NNitrosodiethylamine 1.00E+00
                                        - NNitrosodimethylamin 1.00E+00
                                        - NNitrosodiphenylamin 1.00E+00
                                        - NNitrosodinbutylamin 1.00E+00
                                        - NNitrosodinpropylami 1.00E+00
                                        - NNitromethyethylamin 1.00E+00
                                        - NNitrosomorpholine   1.00E+00
                                        - NNitrosopiperidine   1.00E+00
                                        - NNitrosopyrrolidine  1.00E+00
                                        - Naphthalene          1.00E+00
                                        - PAH                  1.00E+00
                                        - Polychlor. biphenyls 1.00E+00
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                                        - Pentachlorophenol      1.00E+00
                                        - 2,4,6Trichlorophenol   1.00E+00
                                        - 2,4,5Trichlorophenol   1.00E+00
   Bioavailability factors (BIO)        - Arsenic              1.0
                                        - Beryllium            1.0
                                        - Cadmium              1.0
                                        - Chlorobenzene        1.0
                                        - Chromium (hex.)      1.0
                                        - Dioxins/Dibenzofuran   4.30E-01
                                        - 2-Chlorophenol       1.0
                                        - p-Dichlorobenzene    1.0
                                        - Hexachlorobenzene    1.0
                                        - Hexachlorocyclohexan 1.0
                                        - Lead                 1.0
                                        - Mercury              1.0
                                        - NNitrosodiethylamine 1.0
                                        - NNitrosodimethylamin 1.0
                                        - NNitrosodiphenylamin 1.0
                                        - NNitrosodinbutylamin 1.0
                                        - NNitrosodinpropylami 1.0
                                        - NNitromethyethylamin 1.0
                                        - NNitrosomorpholine   1.0
                                        - NNitrosopiperidine   1.0
                                        - NNitrosopyrrolidine  1.0
                                        - Naphthalene          1.0
                                        - PAH                  1.0
                                        - Polychlor. biphenyls 1.0
                                        - Pentachlorophenol    1.0
                                        - 2,4,6Trichlorophenol 1.0
                                        - 2,4,5Trichlorophenol 1.0
        *** WATER INGESTION PATHWAY ***
   Lifetime average water ingestion rate per day (Iw) (l/d)    2.0
        *** FOOD INGESTION - PLANT PRODUCTS PATHWAY ***
   Site-specific fraction of root vegetable homegrown (L_Ir)   0.100
   Site-specific fraction of leafy veget homegrown (L_leafy)   0.100
   Site-specific fraction of vine veget homegrown (L_vine)     0.100
   Daily consumption rate of root vegetable (IF_Ir) (kg/d)     0.050
   Daily consumption rate of leafy veget (IF_leafy) (kg/d)     0.010
   Daily consumption rate of vine veget (IF_vine) (kg/d)       0.250
        *** FOOD INGESTION - ANIMAL PRODUCTS PATHWAY ***
   Site-specific fraction of milk locally produced (L_Im)      0.00
   Site-specific fraction of milk from cows                    0.00
   Site-specific fraction of milk from goats                   0.00
   Site-specific fraction of meat locally produced (L_Ib)      0.50
   Site-specific fraction of meat from cows                    0.50
   Site-specific fraction of meat from pigs                    0.00
   Site-specific fraction of meat from poultry                 0.50
   Site-specific fraction of meat from goats/sheep             0.00
   Site-specific fraction of eggs locally produced             1.00
   Site-specific fraction of fish locally produced (L_Ifi)     0.00
   Daily consumption rate of milk (IF_Im) (kg/d)               0.30
   Daily consumption rate of meat (IF_Ib) (kg/d)               0.10
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    Daily consumption rate of egg (kg/d)                        0.05
    Daily consumption rate of fish (IF_Ifi) (kg/d)              0.023
         *** MOTHER'S MILK PATHWAY ***
    Beginning of exposure period for mother (d)                 0.0
    End of exposure period for mother (d)                       9490.0
    Daily breast-milk ingestion rate (DERm) (kg/d)              0.90
    Frequency of exposure (F) (d)                               365.0
    Period of exposure (YR) (yr)                                1.00
    Infant average body weight (ABS) (kg)                       6.50
    Fraction of contaminant partitioned to mother's fat (f1)    0.90
    Percent fat of mother's milk (f3)                           0.040
    Percent mother's weight that is fat (f2)                    0.330
    Contaminant half-life in mother      - Arsenic              -1.0
      (t1/2) (d)                         - Beryllium            -1.0
                                         - Cadmium              -1.0
                                         - Chlorobenzene        -1.0
                                         - Chromium (hex.)      -1.0
                                         - Dioxins/Dibenzofuran 2117.00
                                         - 2-Chlorophenol       -1.0
                                         - p-Dichlorobenzene    -1.0
                                         - Hexachlorobenzene    -1.0
                                         - Hexachlorocyclohexan -1.0
                                         - Lead                 -1.0
                                         - Mercury              -1.0
                                         - NNitrosodiethylamine -1.0
                                         - NNitrosodimethylamin -1.0
                                         - NNitrosodiphenylamin -1.0
                                         - NNitrosodinbutylamin -1.0
                                         - NNitrosodinpropylami -1.0
                                         - NNitromethyethylamin -1.0
                                         - NNitrosomorpholine   -1.0
                                         - NNitrosopiperidine   -1.0
                                         - NNitrosopyrrolidine  -1.0
                                         - Naphthalene          -1.0
                                         - PAH                  1460.0
                                         - Polychlor. biphenyls 1460.0
                                         - Pentachlorophenol    -1.0
                                         - 2,4,6Trichlorophenol -1.0
                                         - 2,4,5Trichlorophenol -1.0
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ULTRAMAR AUXILIARY SHIP EMISSIONS - SHIPACE.DAT ; 1/15/02 * OUTPUT OF AMI/SBCAPCD ACE2588 MODEL VERS. 93288 *
Input File: d:\2105ship\shipace.dat Output File: d:\2105ship\shipace.out 01/16/02 09:03:14 Page - 20

*** PREDICTED PEAK 1-HOUR CONCENTRATIONS (ug/m3) FROM ALL SOURCES ***

RECEPTOR	BUTAD	ACETA	ACROL	As	BENZE	Cd	Cr	Cu	ETBEN	HCHO
1	1.380E-02	4.968E-02	2.156E-03	1.018E-04	1.179E-02	9.522E-05	6.348E-06	2.600E-04	6.923E-04	1.098E-01
2	1.601E-02	5.763E-02	2.501E-03	1.181E-04	1.368E-02	1.105E-04	7.364E-06	3.016E-04	8.030E-04	1.274E-01

ABOVE CONCENTRATIONS DO NOT INCLUDE THE FOLLOWING BACKGROUND CONCENTRATIONS:

	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00

*** PREDICTED PEAK 1-HOUR CONCENTRATIONS (ug/m3) FROM ALL SOURCES ***

RECEPTOR	HEXAN	HCl	Pb	Mn	Hg	Ni	PAH	Se	TOL	XYLEN
1	1.703E-03	1.179E-02	5.270E-04	1.965E-04	1.270E-04	2.479E-04	3.547E-03	1.401E-04	6.691E-03	2.690E-03
2	1.975E-03	1.368E-02	6.113E-04	2.279E-04	1.473E-04	2.876E-04	4.115E-03	1.625E-04	7.762E-03	3.121E-03

ABOVE CONCENTRATIONS DO NOT INCLUDE THE FOLLOWING BACKGROUND CONCENTRATIONS:

	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00

ULTRAMAR AUXILIARY SHIP EMISSIONS - SHIPACE.DAT ; 1/15/02 * OUTPUT OF AMI/SBCAPCD ACE2588 MODEL VERS. 93288 *
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*** PREDICTED ANNUAL CONCENTRATIONS (ug/m3) FROM ALL SOURCES ***

RECEPTOR	BUTAD	ACETA	ACROL	As	BENZE	Cd	Cr	Cu	ETBEN	HCHO
1	2.040E-04	7.352E-04	3.183E-05	1.502E-06	1.748E-04	1.412E-06	9.381E-08	3.844E-06	1.022E-05	1.614E-03
2	3.019E-05	1.088E-04	4.711E-06	2.223E-07	2.588E-05	2.090E-07	1.388E-08	5.690E-07	1.513E-06	2.389E-04

ABOVE CONCENTRATIONS DO NOT INCLUDE THE FOLLOWING BACKGROUND CONCENTRATIONS:

	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00

ULTRAMAR AUXILIARY SHIP EMISSIONS - SHIPACE.DAT ; 1/15/02 * OUTPUT OF AMI/SBCAPCD ACE2588 MODEL VERS. 93288 *
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*** PREDICTED ANNUAL CONCENTRATIONS (ug/m3) FROM ALL SOURCES ***

RECEPTOR	HEXAN	HCl	Pb	Mn	Hg	Ni	PAH	Se	TOL	XYLEN
1	2.522E-05	1.748E-04	7.789E-06	2.914E-06	1.872E-06	3.654E-06	5.245E-05	2.062E-06	9.885E-05	3.979E-05
2	3.732E-06	2.588E-05	1.153E-06	4.313E-07	2.770E-07	5.408E-07	7.763E-06	3.052E-07	1.463E-05	5.889E-06

ABOVE CONCENTRATIONS DO NOT INCLUDE THE FOLLOWING BACKGROUND CONCENTRATIONS:

	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00

**** RECEPTOR TOTAL CANCER RISK AND EXCESS BURDEN ***

RECEPTOR	INHALE	DERMAL	SOIL	WATER	PLANTS	ANIMAL	MOTHER MILK	SUM	POPULATION	BURDEN
1	1.354E-07	5.501E-08	9.254E-08	0.000E+00	4.205E-07	0.000E+00	0.000E+00	7.035E-07	0	0.000E+00
2	2.004E-08	8.141E-09	1.370E-08	0.000E+00	6.224E-08	0.000E+00	0.000E+00	1.041E-07	0	0.000E+00

RECEPTOR # 1 HAS MAXIMUM PEAK RISK OF 7.035E-07
PEAK RECEPTOR LOCATED AT (X, Y) = 800.000 0.000
RECEPTOR POPULATION = 0
RECEPTOR BURDEN = 0.000E+00

TOTAL CANCER EXCESS BURDEN FROM ALL RECEPTORS = 0.000E+00
BURDEN COMPUTED WITH ZONE OF IMPACT RISK LEVEL = 1.000E-06

*** 70-YEAR LIFETIME CANCER RISK BY SOURCE FOR PEAK RECEPTOR # 1 ***

SOURCE	INHALE	DERMAL	SOIL	WATER	PLANTS	ANIMAL	MOTHER MILK	SUM
1	1.354E-07	5.501E-08	9.254E-08	0.000E+00	4.205E-07	0.000E+00	0.000E+00	7.035E-07
SUM	1.354E-07	5.501E-08	9.254E-08	0.000E+00	4.205E-07	0.000E+00	0.000E+00	7.035E-07

RECEPTOR RISK OF 7.035E-07 IS BELOW SIGNIFICANT RISK LEVEL OF 1.000E-05

RECEPTOR RISK OF 7.035E-07 IS BELOW IMPACT ZONE RISK LEVEL OF 1.000E-06

*** 70-YEAR LIFETIME CANCER RISK BY POLLUTANT FOR PEAK RECEPTOR # 1 ***

POLLUTANT	INHALE	DERMAL	SOIL	WATER	PLANTS	ANIMAL	MOTHER MILK	SUM
BUTAD	3.468E-08	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	3.468E-08
ACETA	1.985E-09	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	1.985E-09
As	4.956E-09	1.241E-10	5.862E-09	0.000E+00	1.629E-09	0.000E+00	0.000E+00	1.257E-08
BENZE	5.070E-09	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	5.070E-09
Cd	5.931E-09	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	5.931E-09
Cr	1.407E-08	2.170E-11	1.025E-10	0.000E+00	2.751E-11	0.000E+00	0.000E+00	1.422E-08
HCHO	9.683E-09	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	9.683E-09
Pb	9.347E-11	3.646E-12	1.723E-10	0.000E+00	4.823E-11	0.000E+00	0.000E+00	3.176E-10
Ni	9.499E-10	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	9.499E-10
PAH	5.770E-08	5.486E-08	8.640E-08	0.000E+00	4.188E-07	0.000E+00	0.000E+00	6.178E-07
Se	2.887E-10	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	2.887E-10
SUM	1.354E-07	5.501E-08	9.254E-08	0.000E+00	4.205E-07	0.000E+00	0.000E+00	7.035E-07

RECEPTOR RISK OF 7.035E-07 IS BELOW SIGNIFICANT RISK LEVEL OF 1.000E-05

RECEPTOR RISK OF 7.035E-07 IS BELOW IMPACT ZONE RISK LEVEL OF 1.000E-06

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*** 70-YEAR LIFETIME DOSE (mg/kg/d) BY POLLUTANT FOR PEAK RECEPTOR # 1 ***

POLLUTANT	INHALE	DERMAL	SOIL	WATER	PLANTS	ANIMAL	MOTHER MILK	SUM
BUTAD	5.828E-08	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	5.828E-08
ACETA	2.101E-07	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	2.101E-07
As	4.291E-10	8.271E-11	3.908E-09	0.000E+00	1.086E-09	0.000E+00	0.000E+00	5.506E-09
BENZE	4.995E-08	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	4.995E-08
Cd	4.035E-10	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	4.035E-10
Cr	2.680E-11	5.166E-11	2.441E-10	0.000E+00	6.550E-11	0.000E+00	0.000E+00	3.881E-10
HCHO	4.611E-07	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	4.611E-07
Pb	2.225E-09	4.290E-10	2.027E-08	0.000E+00	5.674E-09	0.000E+00	0.000E+00	2.860E-08
Ni	1.044E-09	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	1.044E-09
PAH	1.499E-08	4.571E-09	7.200E-09	0.000E+00	3.490E-08	0.000E+00	0.000E+00	6.166E-08
Se	5.892E-10	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	5.892E-10

*** 44-YEAR LIFETIME CANCER RISK BY SOURCE FOR PEAK RECEPTOR # 1 ***

SOURCE	INHALE	DERMAL	SOIL	WATER	PLANTS	ANIMAL	MOTHER MILK	SUM
1	8.511E-08	3.557E-08	6.111E-08	0.000E+00	2.644E-07	0.000E+00	1.429E-07	5.891E-07
SUM	8.511E-08	3.557E-08	6.111E-08	0.000E+00	2.644E-07	0.000E+00	1.429E-07	5.891E-07

RECEPTOR RISK OF 5.891E-07 IS BELOW SIGNIFICANT RISK LEVEL OF 1.000E-05

RECEPTOR RISK OF 5.891E-07 IS BELOW IMPACT ZONE RISK LEVEL OF 1.000E-06

44-YEAR LIFETIME RISK OF 5.891E-07 IS LOWER THAN 70-YEAR LIFETIME RISK OF 7.035E-07

*** 44-YEAR LIFETIME CANCER RISK BY POLLUTANT FOR PEAK RECEPTOR # 1 ***

POLLUTANT	INHALE	DERMAL	SOIL	WATER	PLANTS	ANIMAL	MOTHER MILK	SUM
BUTAD	2.180E-08	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	2.180E-08
ACETA	1.248E-09	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	1.248E-09
As	3.115E-09	1.069E-10	5.053E-09	0.000E+00	1.054E-09	0.000E+00	0.000E+00	9.329E-09
BENZE	3.187E-09	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	3.187E-09
Cd	3.728E-09	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	3.728E-09
Cr	8.845E-09	1.870E-11	8.838E-11	0.000E+00	1.759E-11	0.000E+00	0.000E+00	8.969E-09
HCHO	6.087E-09	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	6.087E-09
Pb	5.875E-11	3.143E-12	1.485E-10	0.000E+00	3.129E-11	0.000E+00	0.000E+00	2.417E-10
Ni	5.971E-10	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	5.971E-10
PAH	3.627E-08	3.544E-08	5.582E-08	0.000E+00	2.633E-07	0.000E+00	1.429E-07	5.337E-07
Se	1.815E-10	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	1.815E-10
SUM	8.511E-08	3.557E-08	6.111E-08	0.000E+00	2.644E-07	0.000E+00	1.429E-07	5.891E-07

RECEPTOR RISK OF 5.891E-07 IS BELOW SIGNIFICANT RISK LEVEL OF 1.000E-05

RECEPTOR RISK OF 5.891E-07 IS BELOW IMPACT ZONE RISK LEVEL OF 1.000E-06

44-YEAR LIFETIME RISK OF 5.891E-07 IS LOWER THAN 70-YEAR LIFETIME RISK OF 7.035E-07

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*** 44-YEAR LIFETIME DOSE (mg/kg/d) BY POLLUTANT FOR PEAK RECEPTOR # 1 ***

POLLUTANT	INHALE	DERMAL	SOIL	WATER	PLANTS	ANIMAL	MOTHER MILK	SUM
BUTAD	5.828E-08	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	5.828E-08
ACETA	2.101E-07	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	2.101E-07
As	4.291E-10	1.134E-10	5.360E-09	0.000E+00	1.118E-09	0.000E+00	0.000E+00	7.020E-09
BENZE	4.995E-08	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	4.995E-08
Cd	4.035E-10	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	4.035E-10
Cr	2.680E-11	7.085E-11	3.348E-10	0.000E+00	6.664E-11	0.000E+00	0.000E+00	4.991E-10
HCHO	4.611E-07	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	4.611E-07
Pb	2.225E-09	5.883E-10	2.780E-08	0.000E+00	5.857E-09	0.000E+00	0.000E+00	3.647E-08
Ni	1.044E-09	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	1.044E-09
PAH	1.499E-08	4.699E-09	7.401E-09	0.000E+00	3.490E-08	0.000E+00	1.191E-08	7.390E-08
Se	5.892E-10	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	5.892E-10

*** MAXIMUM ACUTE HAZARD INDEX BY POLLUTANT ***

POLLUTANT	PEAK CONC (ug/m3)	BACKGR (ug/m3)	TOTAL (ug/m3)	AEL (ug/m3)	HAZARD INDEX	RECEPTOR
ACROL	2.501E-03	0.000E+00	2.501E-03	1.900E-01	1.317E-02	2
As	1.181E-04	0.000E+00	1.181E-04	1.900E-01	6.214E-04	2
BENZE	1.368E-02	0.000E+00	1.368E-02	1.300E+03	1.052E-05	2
Cu	3.016E-04	0.000E+00	3.016E-04	1.000E+02	3.016E-06	2
HCHO	1.274E-01	0.000E+00	1.274E-01	9.400E+01	1.355E-03	2
HCl	1.368E-02	0.000E+00	1.368E-02	2.100E+03	6.513E-06	2
Hg	1.473E-04	0.000E+00	1.473E-04	1.800E+00	8.182E-05	2
Ni	2.876E-04	0.000E+00	2.876E-04	6.000E+00	4.793E-05	2
Se	1.625E-04	0.000E+00	1.625E-04	2.000E+00	8.124E-05	2
TOL	7.762E-03	0.000E+00	7.762E-03	3.700E+04	2.098E-07	2
XYLEN	3.121E-03	0.000E+00	3.121E-03	2.200E+04	1.419E-07	2

*** RECEPTOR ACUTE HAZARD INDICES BY TOXICOLOGICAL ENDPOINTS ***

FROM ALL SOURCES AND POLLUTANTS

RECEPTOR	CV	CNS	IMMUN	KIDN	LIVER	REPRO	RESP	EYE
1	9.069E-06	1.808E-07	1.219E-03	0.000E+00	0.000E+00	6.154E-04	1.264E-02	1.244E-03
2	1.052E-05	2.098E-07	1.414E-03	0.000E+00	0.000E+00	7.139E-04	1.466E-02	1.444E-03

RECEPTOR # 2 HAS MAXIMUM ACUTE HAZARD INDEX OF 1.466E-02

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*** ACUTE HAZARD INDEX BY POLLUTANT FOR PEAK RECEPTOR # 2 ***

POLLUTANT	CONC (ug/m3)	BACKGR (ug/m3)	AEL (ug/m3)	CV	CNS	IMMUN	KIDN	LIVER	REPRO	RESP	EYE
ACROL	2.501E-03	0.000E+00	1.900E-01	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	1.317E-02	0.000E+00
As	1.181E-04	0.000E+00	1.900E-01	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	6.214E-04	0.000E+00	0.000E+00
BENZE	1.368E-02	0.000E+00	1.300E+03	1.052E-05	0.000E+00	1.052E-05	0.000E+00	0.000E+00	1.052E-05	0.000E+00	0.000E+00
Cu	3.016E-04	0.000E+00	1.000E+02	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	3.016E-06	0.000E+00
HCHO	1.274E-01	0.000E+00	9.400E+01	0.000E+00	0.000E+00	1.355E-03	0.000E+00	0.000E+00	0.000E+00	1.355E-03	1.355E-03
HCl	1.368E-02	0.000E+00	2.100E+03	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	6.513E-06	6.513E-06
Hg	1.473E-04	0.000E+00	1.800E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	8.182E-05	0.000E+00	0.000E+00
Ni	2.876E-04	0.000E+00	6.000E+00	0.000E+00	0.000E+00	4.793E-05	0.000E+00	0.000E+00	0.000E+00	4.793E-05	0.000E+00
Se	1.625E-04	0.000E+00	2.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	8.124E-05	8.124E-05
TOL	7.762E-03	0.000E+00	3.700E+04	0.000E+00	2.098E-07	0.000E+00	0.000E+00	0.000E+00	2.098E-07	2.098E-07	2.098E-07
XYLEN	3.121E-03	0.000E+00	2.200E+04	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	1.419E-07	1.419E-07
			SUM =	1.052E-05	2.098E-07	1.414E-03	0.000E+00	0.000E+00	7.139E-04	1.466E-02	1.444E-03

*** ACUTE HAZARD INDEX BY SOURCE FOR PEAK RECEPTOR # 2 ***

POLLUTANT ACROL AEL (ug/m3) = 1.900E-01 BACKGR. (ug/m3) = 0.000E+00

	CV	CNS	IMMUN	KIDN	LIVER	REPRO	RESP	EYE
SOURCE # 1	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	1.317E-02	0.000E+00
SUM =	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	1.317E-02	0.000E+00

POLLUTANT As AEL (ug/m3) = 1.900E-01 BACKGR. (ug/m3) = 0.000E+00

	CV	CNS	IMMUN	KIDN	LIVER	REPRO	RESP	EYE
SOURCE # 1	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	6.214E-04	0.000E+00	0.000E+00
SUM =	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	6.214E-04	0.000E+00	0.000E+00

POLLUTANT BENZE AEL (ug/m3) = 1.300E+03 BACKGR. (ug/m3) = 0.000E+00

	CV	CNS	IMMUN	KIDN	LIVER	REPRO	RESP	EYE
SOURCE # 1	1.052E-05	0.000E+00	1.052E-05	0.000E+00	0.000E+00	1.052E-05	0.000E+00	0.000E+00
SUM =	1.052E-05	0.000E+00	1.052E-05	0.000E+00	0.000E+00	1.052E-05	0.000E+00	0.000E+00

POLLUTANT Cu AEL (ug/m3) = 1.000E+02 BACKGR. (ug/m3) = 0.000E+00

	CV	CNS	IMMUN	KIDN	LIVER	REPRO	RESP	EYE
SOURCE # 1	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	3.016E-06	0.000E+00
SUM =	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	3.016E-06	0.000E+00

POLLUTANT HCHO AEL (ug/m3) = 9.400E+01 BACKGR. (ug/m3) = 0.000E+00

	CV	CNS	IMMUN	KIDN	LIVER	REPRO	RESP	EYE
SOURCE # 1	0.000E+00	0.000E+00	1.355E-03	0.000E+00	0.000E+00	0.000E+00	1.355E-03	1.355E-03
SUM =	0.000E+00	0.000E+00	1.355E-03	0.000E+00	0.000E+00	0.000E+00	1.355E-03	1.355E-03

POLLUTANT HCl AEL (ug/m3) = 2.100E+03 BACKGR. (ug/m3) = 0.000E+00

	CV	CNS	IMMUN	KIDN	LIVER	REPRO	RESP	EYE
SOURCE # 1	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	6.513E-06	6.513E-06
SUM =	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	6.513E-06	6.513E-06

POLLUTANT Hg AEL (ug/m3) = 1.800E+00 BACKGR. (ug/m3) = 0.000E+00

	CV	CNS	IMMUN	KIDN	LIVER	REPRO	RESP	EYE
SOURCE # 1	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	8.182E-05	0.000E+00	0.000E+00
SUM =	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	8.182E-05	0.000E+00	0.000E+00

POLLUTANT Ni AEL (ug/m3) = 6.000E+00 BACKGR. (ug/m3) = 0.000E+00

	CV	CNS	IMMUN	KIDN	LIVER	REPRO	RESP	EYE
SOURCE # 1	0.000E+00	0.000E+00	4.793E-05	0.000E+00	0.000E+00	0.000E+00	4.793E-05	0.000E+00
SUM =	0.000E+00	0.000E+00	4.793E-05	0.000E+00	0.000E+00	0.000E+00	4.793E-05	0.000E+00

POLLUTANT Se AEL (ug/m3) = 2.000E+00 BACKGR. (ug/m3) = 0.000E+00

	CV	CNS	IMMUN	KIDN	LIVER	REPRO	RESP	EYE
SOURCE # 1	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	8.124E-05	8.124E-05
SUM =	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	8.124E-05	8.124E-05

POLLUTANT TOL AEL (ug/m3) = 3.700E+04 BACKGR. (ug/m3) = 0.000E+00

	CV	CNS	IMMUN	KIDN	LIVER	REPRO	RESP	EYE
SOURCE # 1	0.000E+00	2.098E-07	0.000E+00	0.000E+00	0.000E+00	2.098E-07	2.098E-07	2.098E-07
SUM =	0.000E+00	2.098E-07	0.000E+00	0.000E+00	0.000E+00	2.098E-07	2.098E-07	2.098E-07

POLLUTANT XYLEN AEL (ug/m3) = 2.200E+04 BACKGR. (ug/m3) = 0.000E+00

	CV	CNS	IMMUN	KIDN	LIVER	REPRO	RESP	EYE
SOURCE # 1	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	1.419E-07	1.419E-07
SUM =	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	1.419E-07	1.419E-07

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*** MAXIMUM CHRONIC EXPOSURE BY POLLUTANT FROM ALL SOURCES ***

POL.	INHALE	DERMAL	SOIL	WATER	PLANTS	ANIMAL	MOT MILK	NON-INH DOSE SUM	ACCEPTABL ORAL DOSE	INH CONC (ug/m3)	BACKGR (ug/m3)	AEL (ug/m3)	HAZARD INDEX	REC.
	**********	PATHWAY DOSE (mg/kg-d)	**********											
BUTAD	5.83E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.04E-04	0.00E+00	2.00E+01	1.02E-05	1
ACETA	2.10E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	7.35E-04	0.00E+00	9.00E+00	8.17E-05	1
ACROL	9.09E-09	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.18E-05	0.00E+00	6.00E-02	5.30E-04	1
As	4.29E-10	8.27E-11	3.91E-09	0.00E+00	1.09E-09	0.00E+00	0.00E+00	5.08E-09	1.00E-03	1.50E-06	0.00E+00	5.00E-01	8.08E-06	1
BENZE	5.00E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.75E-04	0.00E+00	6.00E+01	2.91E-06	1
Cd	4.03E-10	1.56E-10	3.67E-09	0.00E+00	2.63E-09	0.00E+00	0.00E+00	6.46E-09	1.00E-03	1.41E-06	0.00E+00	3.50E+00	6.87E-06	1
Cr	2.68E-11	5.17E-11	2.44E-10	0.00E+00	6.55E-11	0.00E+00	0.00E+00	3.61E-10	5.00E-03	9.38E-08	0.00E+00	2.00E-03	4.70E-05	1
Cu	1.10E-09	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.84E-06	0.00E+00	2.40E+00	1.60E-06	1
ETBEN	2.92E-09	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.02E-05	0.00E+00	2.00E+03	5.11E-09	1
HCHO	4.61E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.61E-03	0.00E+00	3.00E+00	5.38E-04	1
HEXAN	7.20E-09	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.52E-05	0.00E+00	7.00E+03	3.60E-09	1
HCl	5.00E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.75E-04	0.00E+00	9.00E+00	1.94E-05	1
Mn	8.33E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.91E-06	0.00E+00	2.00E-01	1.46E-05	1
Hg	5.35E-10	1.03E-09	4.87E-09	0.00E+00	4.02E-09	0.00E+00	0.00E+00	9.92E-09	3.00E-04	1.87E-06	0.00E+00	9.00E-02	5.39E-05	1
Ni	1.04E-09	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.65E-06	0.00E+00	5.00E-02	7.31E-05	1
Se	5.89E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.06E-06	0.00E+00	5.00E-01	4.12E-06	1
TOL	2.82E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	9.88E-05	0.00E+00	3.00E+02	3.29E-07	1
XYLEN	1.14E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.98E-05	0.00E+00	7.00E+02	5.68E-08	1

*** RECEPTOR CHRONIC HAZARD INDICES BY TOXICOLOGICAL ENDPOINTS ***
FROM ALL SOURCES AND POLLUTANTS

RECEPTOR	CV	CNS	IMMUN	KIDN	LIVER	REPRO	RESP	SKIN
1	8.115E-05	7.982E-05	5.111E-09	5.385E-05	4.698E-05	1.053E-05	1.299E-03	5.460E-04
2	1.201E-05	1.181E-05	7.564E-10	7.970E-06	6.953E-06	1.558E-06	1.923E-04	8.082E-05

RECEPTOR # 1 HAS HIGHEST CHRONIC HAZARD INDEX OF 1.299E-03

ULTRAMAR AUXILIARY SHIP EMISSIONS - SHIPACE.DAT ; 1/15/02 * OUTPUT OF AMI/SBCAPCD ACE2588 MODEL VERS. 93288 *
Input File: d:\2105ship\shipace.dat Output File: d:\2105ship\shipace.out 01/16/02 09:03:14 Page - 39

*** CHRONIC HAZARD INDEX BY POLLUTANT FOR PEAK RECEPTOR # 1 ***

POLLUTANT	ORAL DOSE (mg/kg-d)	BACKGR (ug/m3)	AEL (ug/m3)	CV	CNS	IMMUN	KIDN	LIVER	REPRO	RESP	SKIN
BUTAD	0.000E+00	0.000E+00	2.000E+01	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	1.020E-05	0.000E+00	0.000E+00
ACETA	0.000E+00	0.000E+00	9.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	8.169E-05	0.000E+00
ACROL	0.000E+00	0.000E+00	6.000E-02	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	5.305E-04	0.000E+00
As	1.000E-03	0.000E+00	5.000E-01	8.080E-06	8.080E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00	3.004E-06	8.080E-06
BENZE	0.000E+00	0.000E+00	6.000E+01	0.000E+00	2.914E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
Cd	1.000E-03	0.000E+00	3.500E+00	0.000E+00	0.000E+00	0.000E+00	6.866E-06	0.000E+00	0.000E+00	4.035E-07	0.000E+00
Cr	5.000E-03	0.000E+00	2.000E-03	0.000E+00	0.000E+00	0.000E+00	4.698E-05	4.698E-05	0.000E+00	4.690E-05	0.000E+00
Cu	0.000E+00	0.000E+00	2.400E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	1.602E-06	0.000E+00
ETBEN	0.000E+00	0.000E+00	2.000E+03	0.000E+00	0.000E+00	5.111E-09	5.111E-09	5.111E-09	0.000E+00	0.000E+00	0.000E+00
HCHO	0.000E+00	0.000E+00	3.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	5.380E-04	5.380E-04
HEXAN	0.000E+00	0.000E+00	7.000E+03	0.000E+00	3.602E-09	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
HCl	0.000E+00	0.000E+00	9.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	1.943E-05	0.000E+00
Mn	0.000E+00	0.000E+00	2.000E-01	0.000E+00	1.457E-05	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
Hg	3.000E-04	0.000E+00	9.000E-02	0.000E+00	5.387E-05	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
Ni	0.000E+00	0.000E+00	5.000E-02	7.307E-05	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	7.307E-05	0.000E+00
Se	0.000E+00	0.000E+00	5.000E-01	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	4.124E-06	0.000E+00
TOL	0.000E+00	0.000E+00	3.000E+02	0.000E+00	3.295E-07	0.000E+00	0.000E+00	0.000E+00	3.295E-07	3.295E-07	0.000E+00
XYLEN	0.000E+00	0.000E+00	7.000E+02	0.000E+00	5.684E-08	0.000E+00	0.000E+00	0.000E+00	0.000E+00	5.684E-08	0.000E+00
			SUM =	8.115E-05	7.982E-05	5.111E-09	5.385E-05	4.698E-05	1.053E-05	1.299E-03	5.460E-04

*** CHRONIC HAZARD INDEX BY SOURCE FOR PEAK RECEPTOR # 1 ***

POLLUTANT BUTAD ACCEPTABLE EXPOSURE LEVEL (ug/m3) = 2.000E+01 BACKG. (ug/m3) = 0.000E+00 ORAL DOSE (mg/kg-d) = 0.000E+00

	CV	CNS	IMMUN	KIDN	LIVER	REPRO	RESP	SKIN
SOURCE # 1	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	1.020E-05	0.000E+00	0.000E+00
SUM =	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	1.020E-05	0.000E+00	0.000E+00

POLLUTANT ACETA ACCEPTABLE EXPOSURE LEVEL (ug/m3) = 9.000E+00 BACKG. (ug/m3) = 0.000E+00 ORAL DOSE (mg/kg-d) = 0.000E+00

	CV	CNS	IMMUN	KIDN	LIVER	REPRO	RESP	SKIN
SOURCE # 1	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	8.169E-05	0.000E+00
SUM =	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	8.169E-05	0.000E+00

POLLUTANT ACROL ACCEPTABLE EXPOSURE LEVEL (ug/m3) = 6.000E-02 BACKG. (ug/m3) = 0.000E+00 ORAL DOSE (mg/kg-d) = 0.000E+00

	CV	CNS	IMMUN	KIDN	LIVER	REPRO	RESP	SKIN
SOURCE # 1	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	5.305E-04	0.000E+00
SUM =	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	5.305E-04	0.000E+00

POLLUTANT As ACCEPTABLE EXPOSURE LEVEL (ug/m3) = 5.000E-01 BACKG. (ug/m3) = 0.000E+00 ORAL DOSE (mg/kg-d) = 1.000E-03

	CV	CNS	IMMUN	KIDN	LIVER	REPRO	RESP	SKIN
SOURCE # 1	8.080E-06	8.080E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00	3.004E-06	8.080E-06
SUM =	8.080E-06	8.080E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00	3.004E-06	8.080E-06

POLLUTANT BENZE ACCEPTABLE EXPOSURE LEVEL (ug/m3) = 6.000E+01 BACKG. (ug/m3) = 0.000E+00 ORAL DOSE (mg/kg-d) = 0.000E+00

	CV	CNS	IMMUN	KIDN	LIVER	REPRO	RESP	SKIN
SOURCE # 1	0.000E+00	2.914E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
SUM =	0.000E+00	2.914E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00

POLLUTANT Cd ACCEPTABLE EXPOSURE LEVEL (ug/m3) = 3.500E+00 BACKG. (ug/m3) = 0.000E+00 ORAL DOSE (mg/kg-d) = 1.000E-03

	CV	CNS	IMMUN	KIDN	LIVER	REPRO	RESP	SKIN
SOURCE # 1	0.000E+00	0.000E+00	0.000E+00	6.866E-06	0.000E+00	0.000E+00	4.035E-07	0.000E+00
SUM =	0.000E+00	0.000E+00	0.000E+00	6.866E-06	0.000E+00	0.000E+00	4.035E-07	0.000E+00

POLLUTANT Cr ACCEPTABLE EXPOSURE LEVEL (ug/m3) = 2.000E-03 BACKG. (ug/m3) = 0.000E+00 ORAL DOSE (mg/kg-d) = 5.000E-03

	CV	CNS	IMMUN	KIDN	LIVER	REPRO	RESP	SKIN
SOURCE # 1	0.000E+00	0.000E+00	0.000E+00	4.698E-05	4.698E-05	0.000E+00	4.690E-05	0.000E+00
SUM =	0.000E+00	0.000E+00	0.000E+00	4.698E-05	4.698E-05	0.000E+00	4.690E-05	0.000E+00

POLLUTANT Cu ACCEPTABLE EXPOSURE LEVEL (ug/m3) = 2.400E+00 BACKG. (ug/m3) = 0.000E+00 ORAL DOSE (mg/kg-d) = 0.000E+00

	CV	CNS	IMMUN	KIDN	LIVER	REPRO	RESP	SKIN
SOURCE # 1	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	1.602E-06	0.000E+00
SUM =	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	1.602E-06	0.000E+00

POLLUTANT ETBEN ACCEPTABLE EXPOSURE LEVEL (ug/m3) = 2.000E+03 BACKG. (ug/m3) = 0.000E+00 ORAL DOSE (mg/kg-d) = 0.000E+00

	CV	CNS	IMMUN	KIDN	LIVER	REPRO	RESP	SKIN
SOURCE # 1	0.000E+00	0.000E+00	5.111E-09	5.111E-09	5.111E-09	0.000E+00	0.000E+00	0.000E+00
SUM =	0.000E+00	0.000E+00	5.111E-09	5.111E-09	5.111E-09	0.000E+00	0.000E+00	0.000E+00

POLLUTANT HCHO ACCEPTABLE EXPOSURE LEVEL (ug/m3) = 3.000E+00 BACKG. (ug/m3) = 0.000E+00 ORAL DOSE (mg/kg-d) = 0.000E+00

	CV	CNS	IMMUN	KIDN	LIVER	REPRO	RESP	SKIN
SOURCE # 1	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	5.380E-04	5.380E-04
SUM =	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	5.380E-04	5.380E-04

POLLUTANT HEXAN ACCEPTABLE EXPOSURE LEVEL (ug/m3) = 7.000E+03 BACKG. (ug/m3) = 0.000E+00 ORAL DOSE (mg/kg-d) = 0.000E+00

	CV	CNS	IMMUN	KIDN	LIVER	REPRO	RESP	SKIN
SOURCE # 1	0.000E+00	3.602E-09	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
SUM =	0.000E+00	3.602E-09	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00

POLLUTANT HCl ACCEPTABLE EXPOSURE LEVEL (ug/m3) = 9.000E+00 BACKG. (ug/m3) = 0.000E+00 ORAL DOSE (mg/kg-d) = 0.000E+00

	CV	CNS	IMMUN	KIDN	LIVER	REPRO	RESP	SKIN
SOURCE # 1	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	1.943E-05	0.000E+00
SUM =	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	1.943E-05	0.000E+00

POLLUTANT Mn ACCEPTABLE EXPOSURE LEVEL (ug/m3) = 2.000E-01 BACKG. (ug/m3) = 0.000E+00 ORAL DOSE (mg/kg-d) = 0.000E+00

	CV	CNS	IMMUN	KIDN	LIVER	REPRO	RESP	SKIN
SOURCE # 1	0.000E+00	1.457E-05	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
SUM =	0.000E+00	1.457E-05	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00

POLLUTANT Hg ACCEPTABLE EXPOSURE LEVEL (ug/m3) = 9.000E-02 BACKG. (ug/m3) = 0.000E+00 ORAL DOSE (mg/kg-d) = 3.000E-04

	CV	CNS	IMMUN	KIDN	LIVER	REPRO	RESP	SKIN
SOURCE # 1	0.000E+00	5.387E-05	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
SUM =	0.000E+00	5.387E-05	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00

POLLUTANT Ni ACCEPTABLE EXPOSURE LEVEL (ug/m3) = 5.000E-02 BACKG. (ug/m3) = 0.000E+00 ORAL DOSE (mg/kg-d) = 0.000E+00

	CV	CNS	IMMUN	KIDN	LIVER	REPRO	RESP	SKIN
SOURCE # 1	7.307E-05	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	7.307E-05	0.000E+00
SUM =	7.307E-05	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	7.307E-05	0.000E+00

POLLUTANT Se ACCEPTABLE EXPOSURE LEVEL (ug/m3) = 5.000E-01 BACKG. (ug/m3) = 0.000E+00 ORAL DOSE (mg/kg-d) = 0.000E+00

	CV	CNS	IMMUN	KIDN	LIVER	REPRO	RESP	SKIN
SOURCE # 1	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	4.124E-06	0.000E+00
SUM =	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	4.124E-06	0.000E+00

POLLUTANT TOL ACCEPTABLE EXPOSURE LEVEL (ug/m3) = 3.000E+02 BACKG. (ug/m3) = 0.000E+00 ORAL DOSE (mg/kg-d) = 0.000E+00

	CV	CNS	IMMUN	KIDN	LIVER	REPRO	RESP	SKIN
SOURCE # 1	0.000E+00	3.295E-07	0.000E+00	0.000E+00	0.000E+00	3.295E-07	3.295E-07	0.000E+00
SUM =	0.000E+00	3.295E-07	0.000E+00	0.000E+00	0.000E+00	3.295E-07	3.295E-07	0.000E+00

POLLUTANT XYLEN ACCEPTABLE EXPOSURE LEVEL (ug/m3) = 7.000E+02 BACKG. (ug/m3) = 0.000E+00 ORAL DOSE (mg/kg-d) = 0.000E+00

	CV	CNS	IMMUN	KIDN	LIVER	REPRO	RESP	SKIN
SOURCE # 1	0.000E+00	5.684E-08	0.000E+00	0.000E+00	0.000E+00	0.000E+00	5.684E-08	0.000E+00
SUM =	0.000E+00	5.684E-08	0.000E+00	0.000E+00	0.000E+00	0.000E+00	5.684E-08	0.000E+00

*** SUMMARY OF MAXIMUM PREDICTED RISKS ***

CANCER RISK ASSESSMENT

```
SIGNIFICANT RISK LEVEL =    1.000E-05
IMPACT ZONE RISK LEVEL =    1.000E-06
MAXIMUM PEAK RISK =         7.035E-07
PREDICTED AT RECEPTOR #             1
TOTAL EXCESS BURDEN =       0.000E+00
```

0 RECEPTORS WITH RISK EXCEEDING SIGNIFICANT RISK LEVEL OF 1.000E-05

ACUTE EXPOSURE TO NON-CANCER POLLUTANTS

```
SIGNIFICANT HAZARD INDEX  =                 1.0000
MAXIMUM HAZARD INDEX FOR AN ENDPOINT =      0.0147
PREDICTED AT RECEPTOR #                          2
```

0 RECEPTORS WITH HAZARD INDEX .GE. 1.0000 FOR ONE OR MORE TOXICOLOGICAL ENDPOINTS

CHRONIC EXPOSURE TO NON-CANCER POLLUTANTS

```
SIGNIFICANT HAZARD INDEX =                 1.0000
MAXIMUM HAZARD INDEX FOR AN ENDPOINT =     0.0013
PREDICTED AT RECEPTOR #                         1
```

0 RECEPTORS WITH HAZARD INDEX .GE. 1.0000 FOR ONE OR MORE TOXICOLOGICAL ENDPOINTS

*** END OF ACE2588 SIMULATION ***