

**A GUIDE TO SELECTED ALGORITHMS, DISTRIBUTIONS, AND  
DATABASES USED IN EXPOSURE MODELS DEVELOPED  
BY THE OFFICE OF AIR QUALITY PLANNING AND STANDARDS**

**APPENDICES**

by

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## **Appendix A**

### **Distribution of Energy Expenditure Rates Associated with CHAD Location Descriptors**

Distributions for Energy Expenditure Rates By Activity Code, Age, and Occupation (if applicable).

Notes:

1. Activities coded as 10... are activities with codes beginning with 10.
2. OCC: occupational categories.
3. DN: distribution number
4. DL: distribution type (T = triangular, N = normal, U = uniform, E = exponential, P = point)
5. Activities starting with 17... are calculated based on age.
  - Age = 1 if respondent < 25 years
  - Age = 2 if respondent 25 - 39 years
  - Age = 3 if respondent > 40 years

ACTIV-ITY	AGE	OCC	DN	DL	MEAN	MED	SD	MIN	MAX	FLAG	LEFT	RIGHT
10...	X	ADMIN	4	L	1.7	1.7	0.3	1.4	2.7	0	0.16	0.01
10...	X	PROF	5	T	2.9	2.7	1	1.2	5.6	0	0	0
10...	X	ADMSUP	4	L	1.7	1.7	0.3	1.4	2.7	0	0.16	0.01
10...	X	TECH	5	T	3.3	3.3	0.4	2.5	4.5	1	0	0
10...	X	TRANS	4	L	3.3	3	1.5	1.3	8.4	1	0.03	0.01
10...	X	SALE	5	T	2.9	2.7	1	1.2	5.6	0	0	0
10...	X	SERV	5	T	5.2	5.3	1.4	1.6	8.4	1	0	0
10...	X	HSHLD	4	L	3.6	3.5	0.8	2.5	6	1	0.07	0.01
10...	X	PROTECT	5	T	2.9	2.7	1	1.2	5.6	0	0	0
10...	X	PREC	5	T	3.3	3.3	0.4	2.5	4.5	1	0	0
10...	X	MACH	2	U	5.3	5.3	0.7	4	6.5	1	0	0
10...	X	FARM	4	L	7.5	7	3	3.6	17	1	0.04	0.01
10...	X	LABOR	5	T	8.5	8.4	2.1	3.6	13.8	1	0	0
17100	1	X	4	L	5.7	5	3	1.4	16	1	0.01	0.01
17100	2	X	1	N	5	5	2	1	9	1	0.02	0.02
17100	3	X	1	N	4.5	4.5	1.4	1.7	7.3	1	0.02	0.02
17110	1	X	4	L	3.6	3.2	1.9	1.4	10	1	0.05	0.01
17110	2	X	4	L	3.6	3.2	1.9	1.4	10	1	0.05	0.01
17110	3	X	4	L	3.4	3	1.7	1.4	9	1	0.05	0.01
17111	1	X	1	N	5.6	5.6	2.1	1.4	9.8	1	0.02	0.02
17111	2	X	1	N	5.8	5.8	2.4	1	10.6	1	0.02	0.02
17111	3	X	1	N	4.7	4.7	1.8	1.1	8.3	1	0.02	0.02
17112	1	X	2	U	3.8	3.8	1	2	5.5	1	0	0
17112	2	X	2	U	3.8	3.8	1	2	5.5	1	0	0
17112	3	X	2	U	3.5	3.5	0.9	2	5	1	0	0
17120	1	X	4	L	4.2	3.9	1.5	2	9	1	0.03	0.01
17120	2	X	4	L	4.2	3.9	1.5	2	9	1	0.03	0.01
17120	3	X	6	P	3.5	3.5	.	.	.	1	.	.
17121	1	X	4	L	4.2	3.9	1.5	2	9	1	0.03	0.01
17121	2	X	4	L	4.2	3.9	1.5	2	9	1	0.03	0.01
17121	3	X	6	P	3.5	3.5	.	.	.	1	.	.
17130	1	X	4	L	5.8	5.5	1.8	1.8	11.3	1	0	0.01
17130	2	X	1	N	5.7	5.7	1.8	2.1	9.3	1	0.02	0.02
17130	3	X	1	N	4.7	4.7	1.2	2.3	7.1	1	0.02	0.02
17131	1	X	4	L	5.8	5.5	1.8	1.8	11.3	1	0	0.01
17131	2	X	1	N	5.7	5.7	1.8	2.1	9.3	1	0.02	0.02
17131	3	X	1	N	4.7	4.7	1.2	2.3	7.1	1	0.02	0.02
17140	1	X	1	N	5.3	5.3	1.8	1.7	8.9	1	0.02	0.02
17140	2	X	1	N	5.2	5.2	1.7	1.7	8.9	1	0.02	0.01

ACTIV-ITY	AGE	OCC	DN	DL	MEAN	MED	SD	MIN	MAX	FLAG	LEFT	RIGHT
17140	3	X	1	N	3.8	3.8	1	1.8	5.8	1	0.02	0.02
17144	1	X	1	N	5.3	5.3	1.8	1.7	8.9	1	0.02	0.02
17144	2	X	1	N	5.2	5.2	1.7	1.7	8.9	1	0.02	0.01
17144	3	X	1	N	3.8	3.8	1	1.8	5.8	1	0.02	0.02
17180	1	X	4	L	6.6	5.9	3.2	2	17.4	1	0.01	0.01
17180	2	X	1	N	6	6	2	2	10	1	0.02	0.02
17180	3	X	1	N	4.8	4.8	1.4	2	7.6	1	0.02	0.02
10200	X	X	2	U	1.8	1.8	0.4	1	2.5	0	0	0
10300	X	X	2	U	1.8	1.8	0.4	1	2.5	0	0	0
11000	X	X	5	T	4.7	4.6	1.3	1.5	8	1	0	0
11100	X	X	4	L	2.6	2.5	0.5	2	4	0	0.13	0.01
11110	X	X	3	E	2.8	2.5	0.9	1.9	4	0	0	0.02
11200	X	X	3	E	3.4	3	1.4	2	5	1	0	0.01
11210	X	X	2	U	2.5	2.5	0.1	2.3	2.7	0	0	0
11220	X	X	3	E	4.1	3.5	1.9	2.2	5	1	0	0.01
11300	X	X	1	N	5	5	1	2	7	1	0	0.02
11310	X	X	3	E	5.3	4.5	2.7	2.6	6	1	0	0
11400	X	X	3	E	2.2	2	0.7	1.5	4	0	0	0.02
11410	X	X	6	P	2	2	.	.	.	0	.	.
11500	X	X	6	P	2	2	.	.	.	0	.	.
11600	X	X	1	N	4.5	4.5	1.5	2	8	1	0.05	0.01
11610	X	X	6	P	4.5	4.5	.	.	.	1	.	.
11620	X	X	3	E	4.9	4.5	1.4	3.5	6	1	0	0
11630	X	X	5	T	3.5	3.4	0.4	3	4.5	1	0	0
11640	X	X	3	E	4.7	4.5	0.7	4	6	1	0	0
11650	X	X	2	U	4.5	4.5	1.4	2	7	1	0	0
11700	X	X	2	U	3.5	3.5	0.9	2	5	1	0	0
11800	X	X	2	U	3.3	3.3	0.1	3	3.5	1	0	0
11900	X	X	3	E	6.6	5.5	3.6	3	9	1	0	0
12000	X	X	4	L	3.1	3	0.7	2.5	5	1	0.2	0.01
12100	X	X	2	U	3.3	3.3	0.1	3	3.5	1	0	0
12200	X	X	2	U	3.3	3.3	0.1	3	3.5	1	0	0
12300	X	X	2	U	2.8	2.8	0.1	2.5	3	0	0	0
12400	X	X	2	U	2.8	2.8	0.1	2.5	3	0	0	0
12500	X	X	2	U	2.8	2.8	0.1	2.5	3	0	0	0
12600	X	X	2	U	4.5	4.5	0.3	4	5	1	0	0
12700	X	X	2	U	3.2	3.2	0.1	3	3.3	1	0	0
12800	X	X	2	U	3	3	0.3	2.5	3.5	1	0	0
13000	X	X	5	T	3.8	3.7	0.8	2	6	1	0	0
13100	X	X	2	U	3.3	3.3	0.4	2.5	4	1	0	0
13200	X	X	5	T	3.7	3.6	0.8	2	6	1	0	0
13210	X	X	5	T	3.9	3.8	0.8	2.2	6	1	0	0
13220	X	X	2	U	3.4	3.4	0.6	2.3	4.5	1	0	0
13230	X	X	2	U	3.5	3.5	0.6	2.5	4.5	1	0	0
13300	X	X	2	U	3.5	3.5	0.6	2.5	4.5	1	0	0
13400	X	X	2	U	3.5	3.5	0.6	2.5	4.5	1	0	0
13500	X	X	2	U	3.5	3.5	0.6	2.5	4.5	1	0	0
13600	X	X	2	U	3.5	3.5	0.6	2.5	4.5	1	0	0
13700	X	X	2	U	3.5	3.5	0.6	2.5	4.5	1	0	0
13800	X	X	2	U	3.5	3.5	0.6	2.5	4.5	1	0	0

ACTIV-ITY	AGE	OCC	DN	DL	MEAN	MED	SD	MIN	MAX	FLAG	LEFT	RIGHT
14000	X	X	2	U	2	2	0.6	1	3	0	0	0
14100	X	X	1	N	2	2	0.3	1	4	0	0	0
14110	X	X	2	U	3	3	0.6	2	4	1	0	0
14120	X	X	2	U	1.8	1.8	0.4	1	2.5	0	0	0
14200	X	X	2	U	1.8	1.8	0.4	1	2.5	0	0	0
14300	X	X	4	L	3.1	3	0.7	2.5	5	1	0.2	0.01
14400	X	X	2	U	1.8	1.8	0.1	1.5	2	0	0	0
14500	X	X	4	L	0.9	0.9	0.1	0.8	1.1	0	0.09	0.01
14600	X	X	6	P	2.5	2.5	.	.	.	0	.	.
14700	X	X	5	T	2	2	0.4	1	2.9	0	0	0
15000	X	X	4	L	1.9	1.8	0.7	1.4	4	0	0.23	0.01
15100	X	X	2	U	2.1	2.1	0.4	1.4	2.8	0	0	0
15110	X	X	2	U	2.3	2.3	0.4	1.5	3	0	0	0
15120	X	X	2	U	2.1	2.1	0.4	1.4	2.8	0	0	0
15130	X	X	2	U	2	2	0.3	1.4	2.5	0	0	0
15140	X	X	2	U	1.8	1.8	0.2	1.4	2.2	0	0	0
15200	X	X	2	U	2.2	2.2	0.5	1.4	3	0	0	0
15300	X	X	6	P	1.8	1.8	.	.	.	0	.	.
15400	X	X	2	U	2.3	2.3	0.4	1.5	3	0	0	0
15500	X	X	2	U	2.8	2.8	0.7	1.5	4	0	0	0
16000	X	X	4	L	2.2	2	1.1	1	6	0	0.07	0.01
16100	X	X	2	U	2.7	2.7	0.8	1.4	4	0	0	0
16200	X	X	2	U	1.7	1.7	0.2	1.4	2	0	0	0
16210	X	X	2	U	1.7	1.7	0.2	1.4	2	0	0	0
16300	X	X	2	U	1.3	1.3	0.2	1	1.6	0	0	0
16400	X	X	2	U	1.7	1.7	0.4	1	2.3	0	0	0
16500	X	X	2	U	2.5	2.5	0.3	2	2.9	0	0	0
16600	X	X	2	U	1.5	1.5	0.3	1	1.9	0	0	0
16700	X	X	4	L	3.3	3	1.4	1.5	8	1	0.05	0.01
16800	X	X	4	L	3.3	3	1.4	1.5	8	1	0.05	0.01
16900	X	X	2	U	3.8	3.8	1.3	1.5	6	1	0	0
17113	X	X	2	U	3	3	0.6	2	4	1	0	0
17114	X	X	5	T	3.1	3.2	0.6	1.4	4	1	0	0
17122	X	X	2	U	1.5	1.5	0.2	1.2	1.8	0	0	0
17141	X	X	5	T	2.8	2.7	0.8	1.5	5	0	0	0
17142	X	X	5	T	2	1.9	0.4	1.5	3	0	0	0
17143	X	X	2	U	2.5	2.5	0.3	2	3	0	0	0
17150	X	X	5	T	3.3	3.2	0.6	2.4	5	1	0	0
17160	X	X	2	U	1.6	1.6	0.2	1.2	2	0	0	0
17170	X	X	2	U	5	5	1.7	2	8	1	0	0
17200	X	X	4	L	1.3	1.3	0.3	1	2.3	0	0.14	0.01
17210	X	X	2	U	1.5	1.5	0.2	1.2	1.8	0	0	0
17211	X	X	2	U	.	.	.	1.2	.	0	0	.
17212	X	X	2	U	.	.	.	1.2	.	0	0	.
17213	X	X	2	U	.	.	.	1.2	.	0	0	.
17214	X	X	2	U	.	.	.	1.2	.	0	0	.
17215	X	X	2	U	.	.	.	1.2	.	0	0	.
17216	X	X	2	U	2.7	2.7	0.8	1.4	4	0	0	0
17220	X	X	4	L	1.2	1.2	0.4	0.9	2.3	0	0.15	0.01
17221	X	X	2	U	1.2	1.2	0.1	1	1.3	0	0	0

ACTIV-ITY	AGE	OCC	DN	DL	MEAN	MED	SD	MIN	MAX	FLAG	LEFT	RIGHT
17222	X	X	2	U	1.9	1.9	0.2	1.5	2.3	0	0	0
17223	X	X	6	P	1	1	.	.	.	0	.	.
17230	X	X	2	U	1.3	1.3	0.2	1	1.6	0	0	0
17231	X	X	2	U	1.3	1.3	0.2	1	1.6	0	0	0
17232	X	X	2	U	1.3	1.3	0.2	1	1.6	0	0	0
17233	X	X	2	U	1.3	1.3	0.2	1	1.6	0	0	0
17240	X	X	2	U	1.4	1.4	0.2	1	1.8	0	0	0
17241	X	X	2	U	1.4	1.4	0.2	1	1.8	0	0	0
17242	X	X	2	U	1.4	1.4	0.2	1	1.8	0	0	0
17250	X	X	2	U	1.2	1.2	0.1	1	1.3	0	0	0
17260	X	X	2	U	1.9	1.9	0.2	1.5	2.3	0	0	0
17300	X	X	2	U	1.5	1.5	0.2	1.2	1.8	0	0	0
18000	X	X	4	L	2.3	2	1.3	1	7	0	0.1	0.01
18100	X	X	4	L	2.3	2	1.3	1	7	0	0.1	0.01
18200	X	X	4	L	2.3	2	1.3	1	7	0	0.1	0.01
18300	X	X	4	L	2.3	2	1.3	1	7	0	0.1	0.01
18400	X	X	4	L	2.3	2	1.3	1	7	0	0.1	0.01
18500	X	X	4	L	2.3	2	1.3	1	7	0	0.1	0.01
18600	X	X	4	L	2.3	2	1.3	1	7	0	0.1	0.01
18700	X	X	4	L	2.3	2	1.3	1	7	0	0.1	0.01
18800	X	X	4	L	2.3	2	1.3	1	7	0	0.1	0.01
18900	X	X	4	L	2.3	2	1.3	1	7	0	0.1	0.01
18910	X	X	4	L	2.3	2	1.3	1	7	0	0.1	0.01
18920	X	X	4	L	2.3	2	1.3	1.8	7	0	0.42	0.01

## CHAD Activity Codes

### <10> Work and Other Income Producing Activities

10000: work and other income producing activities, general

10100: work, general

10110: work, general, for organizational activities

10111: work for professional/union organizations

10112: work for special interest identity organizations

10113: work for political party and civic participation

10114: work for volunteer/ helping organizations

10115: work of/ for religious groups

10116: work for fraternal organizations

10117: work for child/ youth/ family organizations

10118: work for other organizations

10120: work, income-related only

10130: work, secondary (income-related)

10200: unemployment

10300: breaks

### <11> Household Activities

11000: general household activities

11100: prepare food

11110: prepare and clean-up food

11200: indoor chores

11210: clean-up food

11220: clean house

11300: outdoor chores

11310: clean outdoors

11400: care of clothes

11410: wash clothes

11500: build a fire

11600: repair, general

11610: repair of boat

11620: paint home/ room

11630: repair/ maintain car

11640: home repairs

11650: other repairs

11700: care for plants

11800: care for pets/ animals

11900: other household

### <12> Child Care

12000: child care, general

12100: care of baby

12200: care of child

12300: help/teach

12400: talk/read

12500: play indoors



12600: play outdoors

12700: medical care-child

12800: other child care

**<13> Obtain Goods and Services**

13000: obtain goods and services, general

13100: dry clean

13200: shop/ run errands, general

13210: shop for food

13220: shop for clothes or household goods

13230: run errands

13300: obtain personal care service

13400: obtain medical service

13500: obtain government/ financial services

13600: obtain car service

13700: other repairs

13800: other services

**<14> Personal Needs and Care**

14000: personal needs and care, general

14100: shower, bathe, personal hygiene

14110: shower, bathe

14120: personal hygiene

14200: medical care

14300: help and care

14400: eat

14500: sleep or nap

14600: dress, groom

14700: other personal needs

**<15> Education and Professional Training**

15000: general education and professional training

15100: attend full-time school

15110: attend day-care

15120: attend K-12

15130: attend college or trade school

15140: attend adult education and special training

15200: attend other classes

15300: do homework

15400: use library

15500: other education

**<16> Entertainment/ Social Activities**

16000: general entertainment/ social activities

16100: attend sports events

16200: participate in social, political, or religious activities

16210: practice religion

16300: view movie

16400: attend theater

16500: visit museums

16600: visit

16700: attend a party  
16800: go to bar/ lounge  
16900: other entertainment/ social events  
**<17> Leisure**  
17000: leisure, general  
17100: participate in sports and active leisure  
    17110: participate in sports  
        17111: hunting, fishing, hiking  
        17112: golf  
        17113: bowling/ pool/ ping pong/ pinball  
        17114: yoga  
    17120: participate in outdoor leisure  
        17121: play, unspecified  
        17122: passive, sitting  
    17130: exercise  
        17131: walk, bike, or jog (not in transit)  
    17140: create art, music, participate in hobbies  
        17141: participate in hobbies  
        17142: create domestic crafts  
        17143: create art  
        17144: perform music/ drama/ dance  
    17150: play games  
    17160: use of computer  
    17170: participate in recess and physical education  
    17180: other sports and active leisure  
17200: participate in passive leisure  
    17210: watch  
        17211: watch adult at work  
        17212: watch someone provide childcare  
        17213: watch personal care  
        17214: watch education  
        17215: watch organizational activities  
        17216: watch recreation  
    17220: listen to radio/ listen to recorded music/ watch t.v.  
        17221: listen to radio  
        17222: listen to recorded music  
        17223: watch t.v.  
    17230: read, general  
        17231: read books  
        17232: read magazine/ not ascertained  
        17233: read newspaper  
    17240: converse/ write  
        17241: converse  
        17242: write for leisure/ pleasure/ paperwork  
    17250: think and relax  
    17260: other passive leisure  
17300: other leisure

**<18> Travel**

18000: travel, general

18100: travel during work

18200: travel to/from work

18300: travel for child care

18400: travel for goods and services

18500: travel for personal care

18600: travel for education

18700: travel for organizational activity

18800: travel for event/ social activity

18900: travel for leisure

    18910: travel for active leisure

    18920: travel for passive leisure

## **Appendix B**

### **Microenvironmental Factors Developed for HAPEM4**

## Microenvironmental Factors by Pollutant, Microenvironment, and Source Category for Specified HAPs

Pollutant: <u>Acetaldehyde</u> (#1) HAPEM ME / Number	ADD ( $\mu\text{g}/\text{m}^3$ )	PROX [Data Code] <sup>a</sup>		PEN [Data Code] <sup>a</sup>	MULT = PROX $\times$ PEN		Reference Sources
		Onroad <sup>b</sup>	Major, area, and nonroad <sup>c</sup>		Onroad <sup>d</sup>	Major, area, and nonroad <sup>d</sup>	
Car - In vehicle / 1		3.5 [2]	1.0 [3]	0.90 [2]	3.15	0.9	
Bus - In vehicle / 2		3.5 [2]	1.0 [3]	0.90 [2]	3.15	0.9	
Truck - In vehicle / 3		3.5 [2]	1.0 [3]	0.90 [2]	3.15	0.9	
Other - In vehicle / 4		3.5 [2]	1.0 [3]	0.90 [2]	3.15	0.9	
Public garage - Indoors / 5		1.0 [3]	1.0 [3]	0.80 [2]	0.8	0.8	
Parking lot/garage - Outdoors / 6		2.7 [2]	1.0 [3]	1.0 [3]	2.7	1	
Near road - Outdoors / 7		2.7 [2]	1.0 [3]	1.0 [3]	2.7	1	
Motorcycle - Outdoors / 8		2.7 [2]	1.0 [3]	1.0 [3]	2.7	1	
Service station - Indoors / 9		1.0 [3]	1.0 [3]	0.80 [2]	0.8	0.8	
Service station - Outdoors / 10		2.7 [2]	1.0 [3]	1.0 [3]	2.7	1	
Residential garage - Indoors / 11		1.0 [3]	1.0 [3]	0.81 [2]	0.81	0.81	
Other repair shop - Indoors / 12		1.0 [3]	1.0 [3]	0.80 [2]	0.8	0.8	
Residence (no CO source) - Indoors/13		1.0 [3]	1.0 [3]	0.75 [1]	0.75	0.75	MZ 27
Residence (gas stove) - Indoors / 14		1.0 [3]	1.0 [3]	0.81 [2]	0.81	0.81	
Residence (attached garage) - Indoors/15		1.0 [3]	1.0 [3]	0.81 [2]	0.81	0.81	
Residence (stove and garage)- Indoors/16		1.0 [3]	1.0 [3]	0.81 [2]	0.81	0.81	
Office - Indoors / 17		1.0 [3]	1.0 [3]	0.55 [1]	0.55	0.55	MZ 10
Store - Indoors / 18		1.0 [3]	1.0 [3]	0.80 [2]	0.8	0.8	
Restaurant - Indoors / 19		1.0 [3]	1.0 [3]	0.80 [2]	0.8	0.8	
Manufacturing facility - Indoors / 20		1.0 [3]	1.0 [3]	0.80 [2]	0.8	0.8	
School - Indoors / 21		1.0 [3]	1.0 [3]	0.80 [2]	0.8	0.8	
Church- Indoors / 22		1.0 [3]	1.0 [3]	0.80 [2]	0.8	0.8	
Shopping mall - Indoors / 23		1.0 [3]	1.0 [3]	0.80 [2]	0.8	0.8	
Auditorium - Indoors / 24		1.0 [3]	1.0 [3]	0.80 [2]	0.8	0.8	
Health care facility - Indoors / 25		1.0 [3]	1.0 [3]	0.80 [2]	0.8	0.8	
Other public building - Indoors / 26		1.0 [3]	1.0 [3]	0.80 [2]	0.8	0.8	
Other location - Indoors / 27		1.0 [3]	1.0 [3]	0.80 [2]	0.8	0.8	
Not specified - Indoors / 28		1.0 [3]	1.0 [3]	0.80 [2]	0.8	0.8	
Construction site - Outdoors / 29		1.0 [3]	1.0 [3]	1.0 [3]	1	1	
Residential grounds - Outdoors / 30		1.0 [3]	1.0 [3]	1.0 [3]	1	1	
School grounds - Outdoors / 31		1.0 [3]	1.0 [3]	1.0 [3]	1	1	
Sports arena - Outdoors / 32		1.0 [3]	1.0 [3]	1.0 [3]	1	1	
Park/golf course - Outdoors / 33		1.0 [3]	1.0 [3]	1.0 [3]	1	1	
Other location - Outdoors / 34		1.0 [3]	1.0 [3]	1.0 [3]	1	1	
Not specified - Outdoors / 35		1.0 [3]	1.0 [3]	1.0 [3]	1	1	
Train/subway - In vehicle / 36		3.5 [2]	1.0 [3]	0.90 [2]	3.15	0.9	
Airplane - In vehicle / 37		0.0 [3]	0.0 [3]	0.90 [2]	0	0	

<sup>a</sup> Data Code: 1 = value obtained from literature; 2 = value obtained using grouping scheme; 3 = default value.

<sup>b</sup> Onroad vehicle source category (see text).

<sup>c</sup> Major, area, and nonroad-mobile source categories (see text).

<sup>d</sup> The MULT factor is the product of the PROX factor and the PEN factor for the onroad vehicle source category and for the major, area, and nonroad-mobile source categories for this pollutant.

Formula: Microenvironmental concentration,  $\mu\text{g}/\text{m}^3 = \text{ADD} + (\text{PROX})(\text{PEN})(\text{monitor concentration, } \mu\text{g}/\text{m}^3)$ .

Abbreviations: ADD = additive factor; PROX = proximity factor; PEN = penetration factor; MULT = PROX  $\times$  PEN.

Pollutant: <u>Acrolein</u> (#2) HAPEM ME / Number	ADD ( $\mu\text{g}/\text{m}^3$ )	PROX [Data Code] <sup>a</sup>		PEN [Data Code] <sup>a</sup>	MULT = PROX $\times$ PEN		Reference Sources
		Onroad <sup>b</sup>	Major, area, and nonroad <sup>c</sup>		Onroad <sup>d</sup>	Major, area, and nonroad <sup>d</sup>	
Car - In vehicle / 1		3.5 [2]	1.0 [3]	0.90 [2]	3.15	0.9	
Bus - In vehicle / 2		3.5 [2]	1.0 [3]	0.90 [2]	3.15	0.9	
Truck - In vehicle / 3		3.5 [2]	1.0 [3]	0.90 [2]	3.15	0.9	
Other - In vehicle / 4		3.5 [2]	1.0 [3]	0.90 [2]	3.15	0.9	
Public garage - Indoors / 5		1.0 [3]	1.0 [3]	0.80 [2]	0.8	0.8	
Parking lot/garage - Outdoors / 6		2.7 [2]	1.0 [3]	1.0 [3]	2.7	1	
Near road - Outdoors / 7		2.7 [2]	1.0 [3]	1.0 [3]	2.7	1	
Motorcycle - Outdoors / 8		2.7 [2]	1.0 [3]	1.0 [3]	2.7	1	
Service station - Indoors / 9		1.0 [3]	1.0 [3]	0.80 [2]	0.8	0.8	
Service station - Outdoors / 10		2.7 [2]	1.0 [3]	1.0 [3]	2.7	1	
Residential garage - Indoors / 11		1.0 [3]	1.0 [3]	0.81 [2]	0.81	0.81	
Other repair shop - Indoors / 12		1.0 [3]	1.0 [3]	0.80 [2]	0.8	0.8	
Residence (no CO source) - Indoors/13		1.0 [3]	1.0 [3]	0.81 [2]	0.81	0.81	
Residence (gas stove) - Indoors / 14		1.0 [3]	1.0 [3]	0.81 [2]	0.81	0.81	
Residence (attached garage) - Indoors/15		1.0 [3]	1.0 [3]	0.81 [2]	0.81	0.81	
Residence (stove and garage)- Indoors/16		1.0 [3]	1.0 [3]	0.81 [2]	0.81	0.81	
Office - Indoors / 17		1.0 [3]	1.0 [3]	0.80 [2]	0.8	0.8	
Store - Indoors / 18		1.0 [3]	1.0 [3]	0.80 [2]	0.8	0.8	
Restaurant - Indoors / 19		1.0 [3]	1.0 [3]	0.80 [2]	0.8	0.8	
Manufacturing facility - Indoors / 20		1.0 [3]	1.0 [3]	0.80 [2]	0.8	0.8	
School - Indoors / 21		1.0 [3]	1.0 [3]	0.80 [2]	0.8	0.8	
Church- Indoors / 22		1.0 [3]	1.0 [3]	0.80 [2]	0.8	0.8	
Shopping mall - Indoors / 23		1.0 [3]	1.0 [3]	0.80 [2]	0.8	0.8	
Auditorium - Indoors / 24		1.0 [3]	1.0 [3]	0.80 [2]	0.8	0.8	
Health care facility - Indoors / 25		1.0 [3]	1.0 [3]	0.80 [2]	0.8	0.8	
Other public building - Indoors / 26		1.0 [3]	1.0 [3]	0.80 [2]	0.8	0.8	
Other location - Indoors / 27		1.0 [3]	1.0 [3]	0.80 [2]	0.8	0.8	
Not specified - Indoors / 28		1.0 [3]	1.0 [3]	0.80 [2]	0.8	0.8	
Construction site - Outdoors / 29		1.0 [3]	1.0 [3]	1.0 [3]	1	1	
Residential grounds - Outdoors / 30		1.0 [3]	1.0 [3]	1.0 [3]	1	1	
School grounds - Outdoors / 31		1.0 [3]	1.0 [3]	1.0 [3]	1	1	
Sports arena - Outdoors / 32		1.0 [3]	1.0 [3]	1.0 [3]	1	1	
Park/golf course - Outdoors / 33		1.0 [3]	1.0 [3]	1.0 [3]	1	1	
Other location - Outdoors / 34		1.0 [3]	1.0 [3]	1.0 [3]	1	1	
Not specified - Outdoors / 35		1.0 [3]	1.0 [3]	1.0 [3]	1	1	
Train/subway - In vehicle / 36		3.5 [2]	1.0 [3]	0.90 [2]	3.15	0.9	
Airplane - In vehicle / 37		0.0 [3]	0.0 [3]	0.90 [2]	0	0	

<sup>a</sup> Data Code: 1 = value obtained from literature; 2 = value obtained using grouping scheme; 3 = default value.

<sup>b</sup> Onroad vehicle source category (see text).

<sup>c</sup> Major, area, and nonroad-mobile source categories (see text).

<sup>d</sup> The MULT factor is the product of the PROX factor and the PEN factor for the onroad vehicle source category and for the major, area, and nonroad-mobile source categories for this pollutant.

Formula: Microenvironmental concentration,  $\mu\text{g}/\text{m}^3 = \text{ADD} + (\text{PROX})(\text{PEN})(\text{monitor concentration, } \mu\text{g}/\text{m}^3)$ .

Abbreviations: ADD = additive factor; PROX = proximity factor; PEN = penetration factor; MULT = PROX  $\times$  PEN.

<b>Pollutant: <u>Acrylonitrile</u> (#3)</b>	<b>ADD (<math>\mu\text{g}/\text{m}^3</math>)</b>	<b>PROX [Data Code] <sup>a, b</sup></b>	<b>PEN [Data Code] <sup>a</sup></b>	<b>MULT</b>	<b>Reference Sources</b>
<b>HAPEM ME / Number</b>					
Car - In vehicle / 1		1.0 [3]	0.88 [2]	0.88	
Bus - In vehicle / 2		1.0 [3]	0.88 [2]	0.88	
Truck - In vehicle / 3		1.0 [3]	0.88 [2]	0.88	
Other - In vehicle / 4		1.0 [3]	0.88 [2]	0.88	
Public garage - Indoors / 5		1.0 [3]	0.81 [2]	0.81	
Parking lot/garage - Outdoors / 6		1.0 [3]	1.0 [3]	1	
Near road - Outdoors / 7		1.0 [3]	1.0 [3]	1	
Motorcycle - Outdoors / 8		1.0 [3]	1.0 [3]	1	
Service station - Indoors / 9		1.0 [3]	0.81 [2]	0.81	
Service station - Outdoors / 10		1.0 [3]	1.0 [3]	1	
Residential garage - Indoors / 11		1.0 [3]	0.72 [2]	0.72	
Other repair shop - Indoors / 12		1.0 [3]	0.81 [2]	0.81	
Residence (no CO source) - Indoors/13		1.0 [3]	0.72 [2]	0.72	
Residence (gas stove) - Indoors / 14		1.0 [3]	0.72 [2]	0.72	
Residence (attached garage) - Indoors/15		1.0 [3]	0.72 [2]	0.72	
Residence (stove and garage)- Indoors/16		1.0 [3]	0.72 [2]	0.72	
Office - Indoors / 17		1.0 [3]	0.81 [2]	0.81	
Store - Indoors / 18		1.0 [3]	0.81 [2]	0.81	
Restaurant - Indoors / 19		1.0 [3]	0.81 [2]	0.81	
Manufacturing facility - Indoors / 20		1.0 [3]	0.81 [2]	0.81	
School - Indoors / 21		1.0 [3]	0.81 [2]	0.81	
Church- Indoors / 22		1.0 [3]	0.81 [2]	0.81	
Shopping mall - Indoors / 23		1.0 [3]	0.81 [2]	0.81	
Auditorium - Indoors / 24		1.0 [3]	0.81 [2]	0.81	
Health care facility - Indoors / 25		1.0 [3]	0.81 [2]	0.81	
Other public building - Indoors / 26		1.0 [3]	0.81 [2]	0.81	
Other location - Indoors / 27		1.0 [3]	0.81 [2]	0.81	
Not specified - Indoors / 28		1.0 [3]	0.81 [2]	0.81	
Construction site - Outdoors / 29		1.0 [3]	1.0 [3]	1	
Residential grounds - Outdoors / 30		1.0 [3]	1.0 [3]	1	
School grounds - Outdoors / 31		1.0 [3]	1.0 [3]	1	
Sports arena - Outdoors / 32		1.0 [3]	1.0 [3]	1	
Park/golf course - Outdoors / 33		1.0 [3]	1.0 [3]	1	
Other location - Outdoors / 34		1.0 [3]	1.0 [3]	1	
Not specified - Outdoors / 35		1.0 [3]	1.0 [3]	1	
Train/subway - In vehicle / 36		1.0 [3]	0.88 [2]	0.88	
Airplane - In vehicle / 37		0.0 [3]	0.88 [2]	0	

<sup>a</sup> Data Code: 1 = value obtained from literature; 2 = value obtained using grouping scheme; 3 = default value.

<sup>b</sup> The PROX factor is assumed to be the same for each source category for this pollutant.

<b>Pollutant: Arsenic compnds (#4)</b>	<b>ADD (<math>\mu\text{g}/\text{m}^3</math>)</b>	<b>PROX [Data Code] <sup>a, b</sup></b>	<b>PEN [Data Code] <sup>a</sup></b>	<b>MULT</b>	<b>Reference Sources</b>
Car - In vehicle / 1		1.0 [3]	0.88 [2]	0.88	
Bus - In vehicle / 2		1.0 [3]	0.88 [2]	0.88	
Truck - In vehicle / 3		1.0 [3]	0.88 [2]	0.88	
Other - In vehicle / 4		1.0 [3]	0.88 [2]	0.88	
Public garage - Indoors / 5		1.0 [3]	0.78 [2]	0.78	
Parking lot/garage - Outdoors / 6		1.0 [3]	1.0 [3]	1	
Near road - Outdoors / 7		1.0 [3]	1.0 [3]	1	
Motorcycle - Outdoors / 8		1.0 [3]	1.0 [3]	1	
Service station - Indoors / 9		1.0 [3]	0.78 [2]	0.78	
Service station - Outdoors / 10		1.0 [3]	1.0 [3]	1	
Residential garage - Indoors / 11		1.0 [3]	0.77 [2]	0.77	
Other repair shop - Indoors / 12		1.0 [3]	0.78 [2]	0.78	
Residence (no CO source) - Indoors/13		1.0 [3]	0.77 [2]	0.77	
Residence (gas stove) - Indoors / 14		1.0 [3]	0.77 [2]	0.77	
Residence (attached garage) - Indoors/15		1.0 [3]	0.77 [2]	0.77	
Residence (stove and garage)- Indoors/16		1.0 [3]	0.77 [2]	0.77	
Office - Indoors / 17		1.0 [3]	0.78 [2]	0.78	
Store - Indoors / 18		1.0 [3]	0.78 [2]	0.78	
Restaurant - Indoors / 19		1.0 [3]	0.78 [2]	0.78	
Manufacturing facility - Indoors / 20		1.0 [3]	0.78 [2]	0.78	
School - Indoors / 21		1.0 [3]	0.78 [2]	0.78	
Church- Indoors / 22		1.0 [3]	0.78 [2]	0.78	
Shopping mall - Indoors / 23		1.0 [3]	0.78 [2]	0.78	
Auditorium - Indoors / 24		1.0 [3]	0.78 [2]	0.78	
Health care facility - Indoors / 25		1.0 [3]	0.78 [2]	0.78	
Other public building - Indoors / 26		1.0 [3]	0.78 [2]	0.78	
Other location - Indoors / 27		1.0 [3]	0.78 [2]	0.78	
Not specified - Indoors / 28		1.0 [3]	0.78 [2]	0.78	
Construction site - Outdoors / 29		1.0 [3]	1.0 [3]	1	
Residential grounds - Outdoors / 30		1.0 [3]	1.0 [3]	1	
School grounds - Outdoors / 31		1.0 [3]	1.0 [3]	1	
Sports arena - Outdoors / 32		1.0 [3]	1.0 [3]	1	
Park/golf course - Outdoors / 33		1.0 [3]	1.0 [3]	1	
Other location - Outdoors / 34		1.0 [3]	1.0 [3]	1	
Not specified - Outdoors / 35		1.0 [3]	1.0 [3]	1	
Train/subway - In vehicle / 36		1.0 [3]	0.88 [2]	0.88	
Airplane - In vehicle / 37		0.0 [3]	0.88 [2]	0	

<sup>a</sup> Data Code: 1 = value obtained from literature; 2 = value obtained using grouping scheme; 3 = default value.

<sup>b</sup> The PROX factor is assumed to be the same for each source category for this pollutant.



Pollutant: <b>Benzene (#5)</b> HAPEM ME / Number	ADD µg/m <sup>3</sup>	PROX [Data Code] <sup>a</sup>		PEN [Data Code] <sup>a</sup>	MULT = PROX × PEN		Reference Sources
		Onroad <sup>b</sup>	Major, area, and nonroad <sup>c</sup>		Onroad <sup>d</sup>	Major, area, and nonroad <sup>d</sup>	
Car - In vehicle / 1		6.9 [1]	1.0 [3]	0.96 [1]	6.6	0.96	MZ 28
Bus - In vehicle / 2		3.5 [1]	1.0 [3]	0.79 [1]	2.8	0.79	MZ 14 <sup>e</sup> , RA 7 <sup>f</sup>
Truck - In vehicle / 3		5.2 [2]	1.0 [3]	0.88 [2]	4.6	0.88	
Other - In vehicle / 4		5.2 [2]	1.0 [3]	0.88 [2]	4.6	0.88	
Public garage - Indoors / 5		1.0 [3]	1.0 [3]	0.86 [1]	0.9	0.86	RA 24
Parking lot/garage - Outdoors / 6		4.4 [2]	1.0 [3]	1.0 [3]	4.4	1	
Near road - Outdoors / 7		4.4 [1]	1.0 [3]	1.0 [3]	4.4	1	MZ 28
Motorcycle - Outdoors / 8		4.4 [2]	1.0 [3]	1.0 [3]	4.4	1	
Service station - Indoors / 9		1.0 [3]	1.0 [3]	0.78 [2]	0.8	0.78	
Service station - Outdoors / 10		4.4 [2]	1.0 [3]	1.0 [3]	4.4	1	
Residential garage - Indoors / 11		1.0 [3]	1.0 [3]	0.77 [2]	0.8	0.77	
Other repair shop - Indoors / 12		1.0 [3]	1.0 [3]	0.78 [2]	0.8	0.78	
Residence (no CO source) - Indoors/13		1.0 [3]	1.0 [3]	0.88 [1]	0.9	0.88	MZ 2
Residence (gas stove) - Indoors / 14		1.0 [3]	1.0 [3]	0.77 [2]	0.8	0.77	
Residence (attached garage) - Indoors/15		1.0 [3]	1.0 [3]	1.0 [1]	1.0	1	TL 18
Residence (stove and garage)- Indoors/16		1.0 [3]	1.0 [3]	0.77 [2]	0.8	0.77	
Office - Indoors / 17		1.0 [3]	1.0 [3]	0.63 [1]	0.6	0.63	MZ 39
Store - Indoors / 18		1.0 [3]	1.0 [3]	0.78 [2]	0.8	0.78	
Restaurant - Indoors / 19		1.0 [3]	1.0 [3]	0.9 [1]	0.9	0.9	RA 35
Manufacturing facility - Indoors / 20		1.0 [3]	1.0 [3]	0.78 [2]	0.8	0.78	
School - Indoors / 21		1.0 [3]	1.0 [3]	0.7 [1]	0.7	0.7	MZ 1
Church- Indoors / 22		1.0 [3]	1.0 [3]	0.78 [2]	0.8	0.78	
Shopping mall - Indoors / 23		1.0 [3]	1.0 [3]	0.78 [2]	0.8	0.78	
Auditorium - Indoors / 24		1.0 [3]	1.0 [3]	0.78 [2]	0.8	0.78	
Health care facility - Indoors / 25		1.0 [3]	1.0 [3]	0.78 [2]	0.8	0.78	
Other public building - Indoors / 26		1.0 [3]	1.0 [3]	0.78 [2]	0.8	0.78	
Other location - Indoors / 27		1.0 [3]	1.0 [3]	0.78 [2]	0.8	0.78	
Not specified - Indoors / 28		1.0 [3]	1.0 [3]	0.78 [2]	0.8	0.78	
Construction site - Outdoors / 29		1.0 [3]	1.0 [3]	1.0 [3]	1.0	1	
Residential grounds - Outdoors / 30		1.0 [3]	1.0 [3]	1.0 [3]	1.0	1	
School grounds - Outdoors / 31		1.0 [3]	1.0 [3]	1.0 [3]	1.0	1	
Sports arena - Outdoors / 32		1.0 [3]	1.0 [3]	1.0 [3]	1.0	1	
Park/golf course - Outdoors / 33		1.0 [3]	1.0 [3]	1.0 [3]	1.0	1	
Other location - Outdoors / 34		1.0 [3]	1.0 [3]	1.0 [3]	1.0	1	
Not specified - Outdoors / 35		1.0 [3]	1.0 [3]	1.0 [3]	1.0	1	
Train/subway - In vehicle / 36		5.2 [2]	1.0 [3]	0.88 [2]	4.6	0.88	
Airplane - In vehicle / 37		0.0 [3]	0.0 [3]	0.88 [2]	0.0	0	

<sup>a</sup> Data Code: 1 = value obtained from literature; 2 = value obtained using grouping scheme; 3 = default value.

<sup>b</sup> Onroad vehicle source category (see text).

<sup>c</sup> Major, area, and nonroad-mobile source categories (see text).

<sup>d</sup> The MULT factor is the product of the PROX factor and the PEN factor for the onroad vehicle source category and for the major, area, and nonroad-mobile source categories for this pollutant.

<sup>e</sup> Reference used to derive PROX factor

<sup>f</sup> Reference used to derive PEN factor

Formula: Microenvironmental concentration, µg/m<sup>3</sup> = ADD + (PROX)(PEN)(monitor concentration, µg/m<sup>3</sup>).

Abbreviations: ADD = additive factor; PROX = proximity factor; PEN = penetration factor; MULT = PROX × PEN.

<b>Pollutant: Beryllium cmpds (#6)</b>	<b>ADD</b> <b>(<math>\mu\text{g}/\text{m}^3</math>)</b>	<b>PROX</b> <b>[Data Code]<sup>a, b</sup></b>	<b>PEN</b> <b>[Data Code]<sup>a</sup></b>	<b>MULT</b>	<b>Reference Sources</b>
Car - In vehicle / 1		1.0 [3]	0.88 [2]	0.88	
Bus - In vehicle / 2		1.0 [3]	0.88 [2]	0.88	
Truck - In vehicle / 3		1.0 [3]	0.88 [2]	0.88	
Other - In vehicle / 4		1.0 [3]	0.88 [2]	0.88	
Public garage - Indoors / 5		1.0 [3]	0.78 [2]	0.78	
Parking lot/garage - Outdoors / 6		1.0 [3]	1.0 [3]	1	
Near road - Outdoors / 7		1.0 [3]	1.0 [3]	1	
Motorcycle - Outdoors / 8		1.0 [3]	1.0 [3]	1	
Service station - Indoors / 9		1.0 [3]	0.78 [2]	0.78	
Service station - Outdoors / 10		1.0 [3]	1.0 [3]	1	
Residential garage - Indoors / 11		1.0 [3]	0.77 [2]	0.77	
Other repair shop - Indoors / 12		1.0 [3]	0.78 [2]	0.78	
Residence (no CO source) - Indoors/13		1.0 [3]	0.77 [2]	0.77	
Residence (gas stove) - Indoors / 14		1.0 [3]	0.77 [2]	0.77	
Residence (attached garage) - Indoors/15		1.0 [3]	0.77 [2]	0.77	
Residence (stove and garage)- Indoors/16		1.0 [3]	0.77 [2]	0.77	
Office - Indoors / 17		1.0 [3]	0.78 [2]	0.78	
Store - Indoors / 18		1.0 [3]	0.78 [2]	0.78	
Restaurant - Indoors / 19		1.0 [3]	0.78 [2]	0.78	
Manufacturing facility - Indoors / 20		1.0 [3]	0.78 [2]	0.78	
School - Indoors / 21		1.0 [3]	0.78 [2]	0.78	
Church- Indoors / 22		1.0 [3]	0.78 [2]	0.78	
Shopping mall - Indoors / 23		1.0 [3]	0.78 [2]	0.78	
Auditorium - Indoors / 24		1.0 [3]	0.78 [2]	0.78	
Health care facility - Indoors / 25		1.0 [3]	0.78 [2]	0.78	
Other public building - Indoors / 26		1.0 [3]	0.78 [2]	0.78	
Other location - Indoors / 27		1.0 [3]	0.7 <sup>c</sup> [1]	0.7	MZ 24
Not specified - Indoors / 28		1.0 [3]	0.78 [2]	0.78	
Construction site - Outdoors / 29		1.0 [3]	1.0 [3]	1	
Residential grounds - Outdoors / 30		1.0 [3]	1.0 [3]	1	
School grounds - Outdoors / 31		1.0 [3]	1.0 [3]	1	
Sports arena - Outdoors / 32		1.0 [3]	1.0 [3]	1	
Park/golf course - Outdoors / 33		1.0 [3]	1.0 [3]	1	
Other location - Outdoors / 34		1.0 [3]	1.0 [3]	1	
Not specified - Outdoors / 35		1.0 [3]	1.0 [3]	1	
Train/subway - In vehicle / 36		1.0 [3]	0.88 [2]	0.88	
Airplane - In vehicle / 37		0.0 [3]	0.88 [2]	0	

<sup>a</sup> Data Code: 1 = value obtained from literature; 2 = value obtained using grouping scheme; 3 = default value.

<sup>b</sup> The PROX factor is assumed to be the same for each source category for this pollutant.

<sup>c</sup> Indoor location is a laboratory

Pollutant: 1,3-butadiene (#7) HAPEM ME / Number	ADD ( $\mu\text{g}/\text{m}^3$ )	PROX [Data Code] <sup>a</sup>		PEN [Data Code] <sup>a</sup>	MULT = PROX $\times$ PEN		Reference Sources
		Onroad <sup>b</sup>	Major, area, and nonroad <sup>c</sup>		Onroad <sup>d</sup>	Major, area, and nonroad <sup>d</sup>	
Car - In vehicle / 1		2.2 [1]	1.0 [3]	1.0 [1]	2.2	1	MZ 28
Bus - In vehicle / 2		3.5 [2]	1.0 [3]	0.9 [1]	3.15	0.9	RA 7
Truck - In vehicle / 3		2.8 [2]	1.0 [3]	0.90 [2]	2.52	0.9	
Other - In vehicle / 4		2.8 [2]	1.0 [3]	0.90 [2]	2.52	0.9	
Public garage - Indoors / 5		1.0 [3]	1.0 [3]	0.80 [2]	0.8	0.8	
Parking lot/garage - Outdoors / 6		1.0 [2]	1.0 [3]	1.0 [3]	1	1	
Near road - Outdoors / 7		1.0 [1]	1.0 [3]	1.0 [3]	1	1	MZ 28
Motorcycle - Outdoors / 8		1.0 [2]	1.0 [3]	1.0 [3]	1	1	
Service station - Indoors / 9		1.0 [3]	1.0 [3]	0.80 [2]	0.8	0.8	
Service station - Outdoors / 10		1.0 [2]	1.0 [3]	1.0 [3]	1	1	
Residential garage - Indoors / 11		1.0 [3]	1.0 [3]	0.81 [2]	0.81	0.81	
Other repair shop - Indoors / 12		1.0 [3]	1.0 [3]	0.80 [2]	0.8	0.8	
Residence (no CO source) - Indoors/13		1.0 [3]	1.0 [3]	0.81 [2]	0.81	0.81	
Residence (gas stove) - Indoors / 14		1.0 [3]	1.0 [3]	0.81 [2]	0.81	0.81	
Residence (attached garage) - Indoors/15		1.0 [3]	1.0 [3]	0.81 [2]	0.81	0.81	
Residence (stove and garage)- Indoors/16		1.0 [3]	1.0 [3]	0.81 [2]	0.81	0.81	
Office - Indoors / 17		1.0 [3]	1.0 [3]	0.80 [2]	0.8	0.8	
Store - Indoors / 18		1.0 [3]	1.0 [3]	0.80 [2]	0.8	0.8	
Restaurant - Indoors / 19		1.0 [3]	1.0 [3]	0.80 [2]	0.8	0.8	
Manufacturing facility - Indoors / 20		1.0 [3]	1.0 [3]	0.80 [2]	0.8	0.8	
School - Indoors / 21		1.0 [3]	1.0 [3]	0.80 [2]	0.8	0.8	
Church- Indoors / 22		1.0 [3]	1.0 [3]	0.80 [2]	0.8	0.8	
Shopping mall - Indoors / 23		1.0 [3]	1.0 [3]	0.80 [2]	0.8	0.8	
Auditorium - Indoors / 24		1.0 [3]	1.0 [3]	0.80 [2]	0.8	0.8	
Health care facility - Indoors / 25		1.0 [3]	1.0 [3]	0.80 [2]	0.8	0.8	
Other public building - Indoors / 26		1.0 [3]	1.0 [3]	0.80 [2]	0.8	0.8	
Other location - Indoors / 27		1.0 [3]	1.0 [3]	0.80 [2]	0.8	0.8	
Not specified - Indoors / 28		1.0 [3]	1.0 [3]	0.80 [2]	0.8	0.8	
Construction site - Outdoors / 29		1.0 [3]	1.0 [3]	1.0 [3]	1	1	
Residential grounds - Outdoors / 30		1.0 [3]	1.0 [3]	1.0 [3]	1	1	
School grounds - Outdoors / 31		1.0 [3]	1.0 [3]	1.0 [3]	1	1	
Sports arena - Outdoors / 32		1.0 [3]	1.0 [3]	1.0 [3]	1	1	
Park/golf course - Outdoors / 33		1.0 [3]	1.0 [3]	1.0 [3]	1	1	
Other location - Outdoors / 34		1.0 [3]	1.0 [3]	1.0 [3]	1	1	
Not specified - Outdoors / 35		1.0 [3]	1.0 [3]	1.0 [3]	1	1	
Train/subway - In vehicle / 36		2.8 [2]	1.0 [3]	0.90 [2]	2.52	0.9	
Airplane - In vehicle / 37		0.0 [3]	0.0 [3]	0.90 [2]	0	0	

<sup>a</sup> Data Code: 1 = value obtained from literature; 2 = value obtained using grouping scheme; 3 = default value.

<sup>b</sup> Onroad vehicle source category (see text).

<sup>c</sup> Major, area, and nonroad-mobile source categories (see text).

<sup>d</sup> The MULT factor is the product of the PROX factor and the PEN factor for the onroad vehicle source category and for the major, area, and nonroad-mobile source categories for this pollutant.

Formula: Microenvironmental concentration,  $\mu\text{g}/\text{m}^3 = \text{ADD} + (\text{PROX})(\text{PEN})(\text{monitor concentration, } \mu\text{g}/\text{m}^3)$ .

Abbreviations: ADD = additive factor; PROX = proximity factor; PEN = penetration factor; MULT = PROX  $\times$  PEN.

<b>Pollutant: Cadmium compounds (#8)</b>	<b>ADD (<math>\mu\text{g}/\text{m}^3</math>)</b>	<b>PROX [Data Code] <sup>a</sup></b>	<b>PEN [Data Code] <sup>a</sup></b>	<b>MULT</b>	<b>Reference Sources</b>
Car - In vehicle / 1		1.0 [3]	0.88 [2]	0.88	
Bus - In vehicle / 2		1.0 [3]	0.88 [2]	0.88	
Truck - In vehicle / 3		1.0 [3]	0.88 [2]	0.88	
Other - In vehicle / 4		1.0 [3]	0.88 [2]	0.88	
Public garage - Indoors / 5		1.0 [3]	0.78 [2]	0.78	
Parking lot/garage - Outdoors / 6		1.0 [3]	1.0 [3]	1	
Near road - Outdoors / 7		1.0 [3]	1.0 [3]	1	
Motorcycle - Outdoors / 8		1.0 [3]	1.0 [3]	1	
Service station - Indoors / 9		1.0 [3]	0.78 [2]	0.78	
Service station - Outdoors / 10		1.0 [3]	1.0 [3]	1	
Residential garage - Indoors / 11		1.0 [3]	0.77 [2]	0.77	
Other repair shop - Indoors / 12		1.0 [3]	0.78 [2]	0.78	
Residence (no CO source) - Indoors/13		1.0 [3]	0.77 [2]	0.77	
Residence (gas stove) - Indoors / 14		1.0 [3]	0.77 [2]	0.77	
Residence (attached garage) - Indoors/15		1.0 [3]	0.77 [2]	0.77	
Residence (stove and garage)- Indoors/16		1.0 [3]	0.77 [2]	0.77	
Office - Indoors / 17		1.0 [3]	0.78 [2]	0.78	
Store - Indoors / 18		1.0 [3]	0.78 [2]	0.78	
Restaurant - Indoors / 19		1.0 [3]	0.78 [2]	0.78	
Manufacturing facility - Indoors / 20		1.0 [3]	0.78 [2]	0.78	
School - Indoors / 21		1.0 [3]	0.78 [2]	0.78	
Church- Indoors / 22		1.0 [3]	0.78 [2]	0.78	
Shopping mall - Indoors / 23		1.0 [3]	0.78 [2]	0.78	
Auditorium - Indoors / 24		1.0 [3]	0.78 [2]	0.78	
Health care facility - Indoors / 25		1.0 [3]	0.78 [2]	0.78	
Other public building - Indoors / 26		1.0 [3]	0.78 [2]	0.78	
Other location - Indoors / 27		1.0 [3]	0.78 [2]	0.78	
Not specified - Indoors / 28		1.0 [3]	0.78 [2]	0.78	
Construction site - Outdoors / 29		1.0 [3]	1.0 [3]	1	
Residential grounds - Outdoors / 30		1.0 [3]	1.0 [3]	1	
School grounds - Outdoors / 31		1.0 [3]	1.0 [3]	1	
Sports arena - Outdoors / 32		1.0 [3]	1.0 [3]	1	
Park/golf course - Outdoors / 33		1.0 [3]	1.0 [3]	1	
Other location - Outdoors / 34		1.0 [3]	1.0 [3]	1	
Not specified - Outdoors / 35		1.0 [3]	1.0 [3]	1	
Train/subway - In vehicle / 36		1.0 [3]	0.88 [2]	0.88	
Airplane - In vehicle / 37		0.0 [3]	0.88 [2]	0	

<sup>a</sup> Data Code: 1 = value obtained from literature; 2 = value obtained using grouping scheme; 3 = default value.

<sup>b</sup> The PROX factor is assumed to be the same for each source category for this pollutant.

<b>Pollutant: Carbon tetrachloride (#9)</b>	<b>ADD (<math>\mu\text{g}/\text{m}^3</math>)</b>	<b>PROX [Data Code] <sup>a</sup></b>	<b>PEN [Data Code] <sup>a</sup></b>	<b>MULT</b>	<b>Reference Sources</b>
Car - In vehicle / 1		1.0 [3]	0.88 [2]	0.88	
Bus - In vehicle / 2		1.0 [3]	0.88 [2]	0.88	
Truck - In vehicle / 3		1.0 [3]	0.88 [2]	0.88	
Other - In vehicle / 4		1.0 [3]	0.88 [2]	0.88	
Public garage - Indoors / 5		1.0 [3]	0.78 [2]	0.78	
Parking lot/garage - Outdoors / 6		1.0 [3]	1.0 [3]	1	
Near road - Outdoors / 7		1.0 [3]	1.0 [3]	1	
Motorcycle - Outdoors / 8		1.0 [3]	1.0 [3]	1	
Service station - Indoors / 9		1.0 [3]	0.78 [2]	0.78	
Service station - Outdoors / 10		1.0 [3]	1.0 [3]	1	
Residential garage - Indoors / 11		1.0 [3]	0.77 [2]	0.77	
Other repair shop - Indoors / 12		1.0 [3]	0.78 [2]	0.78	
Residence (no CO source) - Indoors/13		1.0 [3]	0.55 [1]	0.55	MZ 27
Residence (gas stove) - Indoors / 14		1.0 [3]	0.77 [2]	0.77	
Residence (attached garage) - Indoors/15		1.0 [3]	0.77 [2]	0.77	
Residence (stove and garage)- Indoors/16		1.0 [3]	0.77 [2]	0.77	
Office - Indoors / 17		1.0 [3]	0.78 [2]	0.78	
Store - Indoors / 18		1.0 [3]	0.78 [2]	0.78	
Restaurant - Indoors / 19		1.0 [3]	0.78 [2]	0.78	
Manufacturing facility - Indoors / 20		1.0 [3]	0.78 [2]	0.78	
School - Indoors / 21		1.0 [3]	0.78 [2]	0.78	
Church- Indoors / 22		1.0 [3]	0.78 [2]	0.78	
Shopping mall - Indoors / 23		1.0 [3]	0.78 [2]	0.78	
Auditorium - Indoors / 24		1.0 [3]	0.78 [2]	0.78	
Health care facility - Indoors / 25		1.0 [3]	0.78 [2]	0.78	
Other public building - Indoors / 26		1.0 [3]	0.78 [2]	0.78	
Other location - Indoors / 27		1.0 [3]	0.78 [2]	0.78	
Not specified - Indoors / 28		1.0 [3]	0.78 [2]	0.78	
Construction site - Outdoors / 29		1.0 [3]	1.0 [3]	1	
Residential grounds - Outdoors / 30		1.0 [3]	1.0 [3]	1	
School grounds - Outdoors / 31		1.0 [3]	1.0 [3]	1	
Sports arena - Outdoors / 32		1.0 [3]	1.0 [3]	1	
Park/golf course - Outdoors / 33		1.0 [3]	1.0 [3]	1	
Other location - Outdoors / 34		1.0 [3]	1.0 [3]	1	
Not specified - Outdoors / 35		1.0 [3]	1.0 [3]	1	
Train/subway - In vehicle / 36		1.0 [3]	0.88 [2]	0.88	
Airplane - In vehicle / 37		0.0 [3]	0.88 [2]	0	

<sup>a</sup> Data Code: 1 = value obtained from literature; 2 = value obtained using grouping scheme; 3 = default value.

<sup>b</sup> The PROX factor is assumed to be the same for each source category for this pollutant.

<b>Pollutant: Chloroform (#10)</b>	<b>ADD</b> <b>(<math>\mu\text{g}/\text{m}^3</math>)</b>	<b>PROX</b> <b>[Data Code] <sup>a</sup></b>	<b>PEN</b> <b>[Data Code] <sup>a</sup></b>	<b>MULT</b>	<b>Reference</b> <b>Sources</b>
<b>HAPEM ME / Number</b>					
Car - In vehicle / 1		1.0 [3]	0.88 [2]	0.88	
Bus - In vehicle / 2		1.0 [3]	0.88 [2]	0.88	
Truck - In vehicle / 3		1.0 [3]	0.88 [2]	0.88	
Other - In vehicle / 4		1.0 [3]	0.88 [2]	0.88	
Public garage - Indoors / 5		1.0 [3]	0.78 [2]	0.78	
Parking lot/garage - Outdoors / 6		1.0 [3]	1.0 [3]	1	
Near road - Outdoors / 7		1.0 [3]	1.0 [3]	1	
Motorcycle - Outdoors / 8		1.0 [3]	1.0 [3]	1	
Service station - Indoors / 9		1.0 [3]	0.78 [2]	0.78	
Service station - Outdoors / 10		1.0 [3]	1.0 [3]	1	
Residential garage - Indoors / 11		1.0 [3]	0.77 [2]	0.77	
Other repair shop - Indoors / 12		1.0 [3]	0.78 [2]	0.78	
Residence (no CO source) - Indoors/13		1.0 [3]	0.85 [1]	0.85	MZ 38
Residence (gas stove) - Indoors / 14		1.0 [3]	0.77 [2]	0.77	
Residence (attached garage) - Indoors/15		1.0 [3]	0.77 [2]	0.77	
Residence (stove and garage)- Indoors/16		1.0 [3]	0.77 [2]	0.77	
Office - Indoors / 17		1.0 [3]	0.78 [2]	0.78	
Store - Indoors / 18		1.0 [3]	0.78 [2]	0.78	
Restaurant - Indoors / 19		1.0 [3]	0.78 [2]	0.78	
Manufacturing facility - Indoors / 20		1.0 [3]	0.78 [2]	0.78	
School - Indoors / 21		1.0 [3]	0.78 [2]	0.78	
Church- Indoors / 22		1.0 [3]	0.78 [2]	0.78	
Shopping mall - Indoors / 23		1.0 [3]	0.78 [2]	0.78	
Auditorium - Indoors / 24		1.0 [3]	0.78 [2]	0.78	
Health care facility - Indoors / 25		1.0 [3]	0.78 [2]	0.78	
Other public building - Indoors / 26		1.0 [3]	0.78 [2]	0.78	
Other location - Indoors / 27		1.0 [3]	0.78 [2]	0.78	
Not specified - Indoors / 28		1.0 [3]	0.78 [2]	0.78	
Construction site - Outdoors / 29		1.0 [3]	1.0 [3]	1	
Residential grounds - Outdoors / 30		1.0 [3]	1.0 [3]	1	
School grounds - Outdoors / 31		1.0 [3]	1.0 [3]	1	
Sports arena - Outdoors / 32		1.0 [3]	1.0 [3]	1	
Park/golf course - Outdoors / 33		1.0 [3]	1.0 [3]	1	
Other location - Outdoors / 34		1.0 [3]	1.0 [3]	1	
Not specified - Outdoors / 35		1.0 [3]	1.0 [3]	1	
Train/subway - In vehicle / 36		1.0 [3]	0.88 [2]	0.88	
Airplane - In vehicle / 37		0.0 [3]	0.88 [2]	0	

<sup>a</sup> Data Code: 1 = value obtained from literature; 2 = value obtained using grouping scheme; 3 = default value.

<sup>b</sup> The PROX factor is assumed to be the same for each source category for this pollutant.

<b>Pollutant: Chromium compounds (#11)</b>	<b>ADD (<math>\mu\text{g}/\text{m}^3</math>)</b>	<b>PROX [Data Code]<sup>a</sup></b>	<b>PEN [Data Code]<sup>a</sup></b>	<b>MULT</b>	<b>Reference Sources</b>
Car - In vehicle / 1		1.0 [3]	0.88 [2]	0.88	
Bus - In vehicle / 2		1.0 [3]	0.88 [2]	0.88	
Truck - In vehicle / 3		1.0 [3]	0.88 [2]	0.88	
Other - In vehicle / 4		1.0 [3]	0.88 [2]	0.88	
Public garage - Indoors / 5		1.0 [3]	0.78 [2]	0.78	
Parking lot/garage - Outdoors / 6		1.0 [3]	1.0 [3]	1	
Near road - Outdoors / 7		1.0 [3]	1.0 [3]	1	
Motorcycle - Outdoors / 8		1.0 [3]	1.0 [3]	1	
Service station - Indoors / 9		1.0 [3]	0.78 [2]	0.78	
Service station - Outdoors / 10		1.0 [3]	1.0 [3]	1	
Residential garage - Indoors / 11		1.0 [3]	0.77 [2]	0.77	
Other repair shop - Indoors / 12		1.0 [3]	0.78 [2]	0.78	
Residence (no CO source) - Indoors/13		1.0 [3]	0.35 [1]	0.35	TL 9
Residence (gas stove) - Indoors / 14		1.0 [3]	0.77 [2]	0.77	
Residence (attached garage) - Indoors/15		1.0 [3]	0.77 [2]	0.77	
Residence (stove and garage)- Indoors/16		1.0 [3]	0.77 [2]	0.77	
Office - Indoors / 17		1.0 [3]	0.78 [2]	0.78	
Store - Indoors / 18		1.0 [3]	0.78 [2]	0.78	
Restaurant - Indoors / 19		1.0 [3]	0.78 [2]	0.78	
Manufacturing facility - Indoors / 20		1.0 [3]	0.31 (Cr <sup>6+</sup> ); 0.62 Tot (Cr) [1]	0.31	TL 11
School - Indoors / 21		1.0 [3]	0.78 [2]	0.78	
Church- Indoors / 22		1.0 [3]	0.78 [2]	0.78	
Shopping mall - Indoors / 23		1.0 [3]	0.78 [2]	0.78	
Auditorium - Indoors / 24		1.0 [3]	0.78 [2]	0.78	
Health care facility - Indoors / 25		1.0 [3]	0.78 [2]	0.78	
Other public building - Indoors / 26		1.0 [3]	0.78 [2]	0.78	
Other location - Indoors / 27		1.0 [3]	0.78 [2]	0.78	
Not specified - Indoors / 28		1.0 [3]	0.78 [2]	0.78	
Construction site - Outdoors / 29		1.0 [3]	1.0 [3]	1	
Residential grounds - Outdoors / 30		1.0 [3]	1.0 [3]	1	
School grounds - Outdoors / 31		1.0 [3]	1.0 [3]	1	
Sports arena - Outdoors / 32		1.0 [3]	1.0 [3]	1	
Park/golf course - Outdoors / 33		1.0 [3]	1.0 [3]	1	
Other location - Outdoors / 34		1.0 [3]	1.0 [3]	1	
Not specified - Outdoors / 35		1.0 [3]	1.0 [3]	1	
Train/subway - In vehicle / 36		1.0 [3]	0.88 [2]	0.88	
Airplane - In vehicle / 37		0.0 [3]	0.88 [2]	0	

<sup>a</sup> Data Code: 1 = value obtained from literature; 2 = value obtained using grouping scheme; 3 = default value.

<sup>b</sup> The PROX factor is assumed to be the same for each source category for this pollutant.

<b>Pollutant: Coke oven emissions (#12)</b>	<b>ADD (<math>\mu\text{g}/\text{m}^3</math>)</b>	<b>PROX [Data Code] <sup>a, b</sup></b>	<b>PEN [Data Code] <sup>a</sup></b>	<b>MULT</b>	<b>Reference Sources</b>
Car - In vehicle / 1		1.0 [3]			
Bus - In vehicle / 2		1.0 [3]			
Truck - In vehicle / 3		1.0 [3]			
Other - In vehicle / 4		1.0 [3]			
Public garage - Indoors / 5		1.0 [3]			
Parking lot/garage - Outdoors / 6		1.0 [3]			
Near road - Outdoors / 7		1.0 [3]			
Motorcycle - Outdoors / 8		1.0 [3]			
Service station - Indoors / 9		1.0 [3]			
Service station - Outdoors / 10		1.0 [3]			
Residential garage - Indoors / 11		1.0 [3]			
Other repair shop - Indoors / 12		1.0 [3]			
Residence (no CO source) - Indoors/13		1.0 [3]			
Residence (gas stove) - Indoors / 14		1.0 [3]			
Residence (attached garage) - Indoors/15		1.0 [3]			
Residence (stove and garage)- Indoors/16		1.0 [3]			
Office - Indoors / 17		1.0 [3]			
Store - Indoors / 18		1.0 [3]			
Restaurant - Indoors / 19		1.0 [3]			
Manufacturing facility - Indoors / 20		1.0 [3]			
School - Indoors / 21		1.0 [3]			
Church- Indoors / 22		1.0 [3]			
Shopping mall - Indoors / 23		1.0 [3]			
Auditorium - Indoors / 24		1.0 [3]			
Health care facility - Indoors / 25		1.0 [3]			
Other public building - Indoors / 26		1.0 [3]			
Other location - Indoors / 27		1.0 [3]			
Not specified - Indoors / 28		1.0 [3]			
Construction site - Outdoors / 29		1.0 [3]			
Residential grounds - Outdoors / 30		1.0 [3]			
School grounds - Outdoors / 31		1.0 [3]			
Sports arena - Outdoors / 32		1.0 [3]			
Park/golf course - Outdoors / 33		1.0 [3]			
Other location - Outdoors / 34		1.0 [3]			
Not specified - Outdoors / 35		1.0 [3]			
Train/subway - In vehicle / 36		1.0 [3]			
Airplane - In vehicle / 37		0.0 [3]			

<sup>a</sup> Data Code: 1 = value obtained from literature; 2 = value obtained using grouping scheme; 3 = default value.

<sup>b</sup> The PROX factor is assumed to be the same for each source category for this pollutant.



<b>Pollutant: 1,2-dichloroethane (ethylene dichloride) (#13)</b>	<b>ADD (<math>\mu\text{g}/\text{m}^3</math>)</b>	<b>PROX [Data Code] <sup>a</sup></b>	<b>PEN [Data Code] <sup>a</sup></b>	<b>MULT</b>	<b>Reference Sources</b>
<b>HAPEM ME / Number</b>					
Car - In vehicle / 1		1.0 [3]	0.88 [2]	0.88	
Bus - In vehicle / 2		1.0 [3]	0.88 [2]	0.88	
Truck - In vehicle / 3		1.0 [3]	0.88 [2]	0.88	
Other - In vehicle / 4		1.0 [3]	0.88 [2]	0.88	
Public garage - Indoors / 5		1.0 [3]	0.78 [2]	0.78	
Parking lot/garage - Outdoors / 6		1.0 [3]	1.0 [3]	1	
Near road - Outdoors / 7		1.0 [3]	1.0 [3]	1	
Motorcycle - Outdoors / 8		1.0 [3]	1.0 [3]	1	
Service station - Indoors / 9		1.0 [3]	0.78 [2]	0.78	
Service station - Outdoors / 10		1.0 [3]	1.0 [3]	1	
Residential garage - Indoors / 11		1.0 [3]	0.77 [2]	0.77	
Other repair shop - Indoors / 12		1.0 [3]	0.78 [2]	0.78	
Residence (no CO source) - Indoors/13		1.0 [3]	1.0 [1]	1	MZ 38
Residence (gas stove) - Indoors / 14		1.0 [3]	0.77 [2]	0.77	
Residence (attached garage) - Indoors/15		1.0 [3]	0.77 [2]	0.77	
Residence (stove and garage)- Indoors/16		1.0 [3]	0.77 [2]	0.77	
Office - Indoors / 17		1.0 [3]	0.78 [2]	0.78	
Store - Indoors / 18		1.0 [3]	0.78 [2]	0.78	
Restaurant - Indoors / 19		1.0 [3]	0.78 [2]	0.78	
Manufacturing facility - Indoors / 20		1.0 [3]	0.78 [2]	0.78	
School - Indoors / 21		1.0 [3]	0.78 [2]	0.78	
Church- Indoors / 22		1.0 [3]	0.78 [2]	0.78	
Shopping mall - Indoors / 23		1.0 [3]	0.78 [2]	0.78	
Auditorium - Indoors / 24		1.0 [3]	0.78 [2]	0.78	
Health care facility - Indoors / 25		1.0 [3]	0.78 [2]	0.78	
Other public building - Indoors / 26		1.0 [3]	0.78 [2]	0.78	
Other location - Indoors / 27		1.0 [3]	0.78 [2]	0.78	
Not specified - Indoors / 28		1.0 [3]	0.78 [2]	0.78	
Construction site - Outdoors / 29		1.0 [3]	1.0 [3]	1	
Residential grounds - Outdoors / 30		1.0 [3]	1.0 [3]	1	
School grounds - Outdoors / 31		1.0 [3]	1.0 [3]	1	
Sports arena - Outdoors / 32		1.0 [3]	1.0 [3]	1	
Park/golf course - Outdoors / 33		1.0 [3]	1.0 [3]	1	
Other location - Outdoors / 34		1.0 [3]	1.0 [3]	1	
Not specified - Outdoors / 35		1.0 [3]	1.0 [3]	1	
Train/subway - In vehicle / 36		1.0 [3]	0.88 [2]	0.88	
Airplane - In vehicle / 37		0.0 [3]	0.88 [2]	0	

<sup>a</sup> Data Code: 1 = value obtained from literature; 2 = value obtained using grouping scheme; 3 = default value.

<sup>b</sup> The PROX factor is assumed to be the same for each source category for this pollutant.

<b>Pollutant: 1,3-dichloropropene (#14)</b>	<b>ADD (<math>\mu\text{g}/\text{m}^3</math>)</b>	<b>PROX [Data Code] <sup>a, b</sup></b>	<b>PEN [Data Code] <sup>a</sup></b>	<b>MULT</b>	<b>Reference Sources</b>
Car - In vehicle / 1		1.0 [3]	0.90 [2]	0.9	
Bus - In vehicle / 2		1.0 [3]	0.90 [2]	0.9	
Truck - In vehicle / 3		1.0 [3]	0.90 [2]	0.9	
Other - In vehicle / 4		1.0 [3]	0.90 [2]	0.9	
Public garage - Indoors / 5		1.0 [3]	0.80 [2]	0.8	
Parking lot/garage - Outdoors / 6		1.0 [3]	1.0 [3]	1	
Near road - Outdoors / 7		1.0 [3]	1.0 [3]	1	
Motorcycle - Outdoors / 8		1.0 [3]	1.0 [3]	1	
Service station - Indoors / 9		1.0 [3]	0.80 [2]	0.8	
Service station - Outdoors / 10		1.0 [3]	1.0 [3]	1	
Residential garage - Indoors / 11		1.0 [3]	0.81 [2]	0.81	
Other repair shop - Indoors / 12		1.0 [3]	0.80 [2]	0.8	
Residence (no CO source) - Indoors/13		1.0 [3]	0.81 [1]	0.81	TL 3
Residence (gas stove) - Indoors / 14		1.0 [3]	0.81 [2]	0.81	
Residence (attached garage) - Indoors/15		1.0 [3]	0.81 [2]	0.81	
Residence (stove and garage)- Indoors/16		1.0 [3]	0.81 [2]	0.81	
Office - Indoors / 17		1.0 [3]	0.80 [2]	0.8	
Store - Indoors / 18		1.0 [3]	0.80 [2]	0.8	
Restaurant - Indoors / 19		1.0 [3]	0.80 [2]	0.8	
Manufacturing facility - Indoors / 20		1.0 [3]	0.80 [2]	0.8	
School - Indoors / 21		1.0 [3]	0.80 [2]	0.8	
Church- Indoors / 22		1.0 [3]	0.80 [2]	0.8	
Shopping mall - Indoors / 23		1.0 [3]	0.80 [2]	0.8	
Auditorium - Indoors / 24		1.0 [3]	0.80 [2]	0.8	
Health care facility - Indoors / 25		1.0 [3]	0.80 [2]	0.8	
Other public building - Indoors / 26		1.0 [3]	0.80 [2]	0.8	
Other location - Indoors / 27		1.0 [3]	0.80 [2]	0.8	
Not specified - Indoors / 28		1.0 [3]	0.80 [2]	0.8	
Construction site - Outdoors / 29		1.0 [3]	1.0 [3]	1	
Residential grounds - Outdoors / 30		1.0 [3]	1.0 [3]	1	
School grounds - Outdoors / 31		1.0 [3]	1.0 [3]	1	
Sports arena - Outdoors / 32		1.0 [3]	1.0 [3]	1	
Park/golf course - Outdoors / 33		1.0 [3]	1.0 [3]	1	
Other location - Outdoors / 34		1.0 [3]	1.0 [3]	1	
Not specified - Outdoors / 35		1.0 [3]	1.0 [3]	1	
Train/subway - In vehicle / 36		1.0 [3]	0.90 [2]	0.9	
Airplane - In vehicle / 37		0.0 [3]	0.90 [2]	0	

<sup>a</sup> Data Code: 1 = value obtained from literature; 2 = value obtained using grouping scheme; 3 = default value.

<sup>b</sup> The PROX factor is assumed to be the same for each source category for this pollutant.

<b>Pollutant: Ethylene dibromide (dibromoethane) (#15)</b>	<b>ADD (<math>\mu\text{g}/\text{m}^3</math>)</b>	<b>PROX [Data Code] <sup>a</sup></b>	<b>PEN [Data Code] <sup>a</sup></b>	<b>MULT</b>	<b>Reference Sources</b>
<b>HAPEM ME / Number</b>					
Car - In vehicle / 1		1.0 [3]	0.88 [2]	0.88	
Bus - In vehicle / 2		1.0 [3]	0.88 [2]	0.88	
Truck - In vehicle / 3		1.0 [3]	0.88 [2]	0.88	
Other - In vehicle / 4		1.0 [3]	0.88 [2]	0.88	
Public garage - Indoors / 5		1.0 [3]	0.78 [2]	0.78	
Parking lot/garage - Outdoors / 6		1.0 [3]	1.0 [3]	1	
Near road - Outdoors / 7		1.0 [3]	1.0 [3]	1	
Motorcycle - Outdoors / 8		1.0 [3]	1.0 [3]	1	
Service station - Indoors / 9		1.0 [3]	0.78 [2]	0.78	
Service station - Outdoors / 10		1.0 [3]	1.0 [3]	1	
Residential garage - Indoors / 11		1.0 [3]	0.77 [2]	0.77	
Other repair shop - Indoors / 12		1.0 [3]	0.78 [2]	0.78	
Residence (no CO source) - Indoors/13		1.0 [3]	0.77 [2]	0.77	
Residence (gas stove) - Indoors / 14		1.0 [3]	0.77 [2]	0.77	
Residence (attached garage) - Indoors/15		1.0 [3]	0.77 [2]	0.77	
Residence (stove and garage)- Indoors/16		1.0 [3]	0.77 [2]	0.77	
Office - Indoors / 17		1.0 [3]	0.78 [2]	0.78	
Store - Indoors / 18		1.0 [3]	0.78 [2]	0.78	
Restaurant - Indoors / 19		1.0 [3]	0.78 [2]	0.78	
Manufacturing facility - Indoors / 20		1.0 [3]	0.78 [2]	0.78	
School - Indoors / 21		1.0 [3]	0.78 [2]	0.78	
Church- Indoors / 22		1.0 [3]	0.78 [2]	0.78	
Shopping mall - Indoors / 23		1.0 [3]	0.78 [2]	0.78	
Auditorium - Indoors / 24		1.0 [3]	0.78 [2]	0.78	
Health care facility - Indoors / 25		1.0 [3]	0.78 [2]	0.78	
Other public building - Indoors / 26		1.0 [3]	0.78 [2]	0.78	
Other location - Indoors / 27		1.0 [3]	0.78 [2]	0.78	
Not specified - Indoors / 28		1.0 [3]	0.78 [2]	0.78	
Construction site - Outdoors / 29		1.0 [3]	1.0 [3]	1	
Residential grounds - Outdoors / 30		1.0 [3]	1.0 [3]	1	
School grounds - Outdoors / 31		1.0 [3]	1.0 [3]	1	
Sports arena - Outdoors / 32		1.0 [3]	1.0 [3]	1	
Park/golf course - Outdoors / 33		1.0 [3]	1.0 [3]	1	
Other location - Outdoors / 34		1.0 [3]	1.0 [3]	1	
Not specified - Outdoors / 35		1.0 [3]	1.0 [3]	1	
Train/subway - In vehicle / 36		1.0 [3]	0.88 [2]	0.88	
Airplane - In vehicle / 37		0.0 [3]	0.88 [2]	0	

<sup>a</sup> Data Code: 1 = value obtained from literature; 2 = value obtained using grouping scheme; 3 = default value.

<sup>b</sup> The PROX factor is assumed to be the same for each source category for this pollutant.

<b>Pollutant: Ethylene oxide (#16)</b>	<b>ADD (<math>\mu\text{g}/\text{m}^3</math>)</b>	<b>PROX [Data Code] <sup>a</sup></b>	<b>PEN [Data Code] <sup>a</sup></b>	<b>MULT</b>	<b>Reference Sources</b>
<b>HAPEM ME / Number</b>					
Car - In vehicle / 1		1.0 [3]	0.88 [2]	0.88	
Bus - In vehicle / 2		1.0 [3]	0.88 [2]	0.88	
Truck - In vehicle / 3		1.0 [3]	0.88 [2]	0.88	
Other - In vehicle / 4		1.0 [3]	0.88 [2]	0.88	
Public garage - Indoors / 5		1.0 [3]	0.78 [2]	0.78	
Parking lot/garage - Outdoors / 6		1.0 [3]	1.0 [3]	1	
Near road - Outdoors / 7		1.0 [3]	1.0 [3]	1	
Motorcycle - Outdoors / 8		1.0 [3]	1.0 [3]	1	
Service station - Indoors / 9		1.0 [3]	0.78 [2]	0.78	
Service station - Outdoors / 10		1.0 [3]	1.0 [3]	1	
Residential garage - Indoors / 11		1.0 [3]	0.77 [2]	0.77	
Other repair shop - Indoors / 12		1.0 [3]	0.78 [2]	0.78	
Residence (no CO source) - Indoors/13		1.0 [3]	0.77 [2]	0.77	
Residence (gas stove) - Indoors / 14		1.0 [3]	0.77 [2]	0.77	
Residence (attached garage) - Indoors/15		1.0 [3]	0.77 [2]	0.77	
Residence (stove and garage)- Indoors/16		1.0 [3]	0.77 [2]	0.77	
Office - Indoors / 17		1.0 [3]	0.78 [2]	0.78	
Store - Indoors / 18		1.0 [3]	0.78 [2]	0.78	
Restaurant - Indoors / 19		1.0 [3]	0.78 [2]	0.78	
Manufacturing facility - Indoors / 20		1.0 [3]	0.78 [2]	0.78	
School - Indoors / 21		1.0 [3]	0.78 [2]	0.78	
Church- Indoors / 22		1.0 [3]	0.78 [2]	0.78	
Shopping mall - Indoors / 23		1.0 [3]	0.78 [2]	0.78	
Auditorium - Indoors / 24		1.0 [3]	0.78 [2]	0.78	
Health care facility - Indoors / 25		1.0 [3]	0.78 [2]	0.78	
Other public building - Indoors / 26		1.0 [3]	0.78 [2]	0.78	
Other location - Indoors / 27		1.0 [3]	0.78 [2]	0.78	
Not specified - Indoors / 28		1.0 [3]	0.78 [2]	0.78	
Construction site - Outdoors / 29		1.0 [3]	1.0 [3]	1	
Residential grounds - Outdoors / 30		1.0 [3]	1.0 [3]	1	
School grounds - Outdoors / 31		1.0 [3]	1.0 [3]	1	
Sports arena - Outdoors / 32		1.0 [3]	1.0 [3]	1	
Park/golf course - Outdoors / 33		1.0 [3]	1.0 [3]	1	
Other location - Outdoors / 34		1.0 [3]	1.0 [3]	1	
Not specified - Outdoors / 35		1.0 [3]	1.0 [3]	1	
Train/subway - In vehicle / 36		1.0 [3]	0.88 [2]	0.88	
Airplane - In vehicle / 37		0.0 [3]	0.88 [2]	0	

<sup>a</sup> Data Code: 1 = value obtained from literature; 2 = value obtained using grouping scheme; 3 = default value.

<sup>b</sup> The PROX factor is assumed to be the same for each source category for this pollutant.

Pollutant: <u>Formaldehyde</u> (#17) HAPEM ME / Number	ADD ( $\mu\text{g}/\text{m}^3$ )	PROX [Data Code] <sup>a</sup>		PEN [Data Code] <sup>a</sup>	MULT = PROX $\times$ PEN		Reference Sources
		Onroad <sup>b</sup>	Major, area, and nonroad <sup>c</sup>		Onroad <sup>d</sup>	Major, area, and nonroad <sup>d</sup>	
Car - In vehicle/1		3.5 [2]	1.0 [3]	0.88 [2]	3.08	0.88	
Bus - In vehicle/2		3.5 [2]	1.0 [3]	0.88 [2]	3.08	0.88	
Truck - In vehicle/3		3.5 [2]	1.0 [3]	0.88 [2]	3.08	0.88	
Other - In vehicle/4		3.5 [2]	1.0 [3]	0.88 [2]	3.08	0.88	
Public garage - Indoors/5		1.0 [3]	1.0 [3]	0.81 [2]	0.81	0.81	
Parking lot/garage - Outdoors/ 6		2.7 [2]	1.0 [3]	1.0 [3]	2.7	1	
Near road - Outdoors/7		2.7 [2]	1.0 [3]	1.0 [3]	2.7	1	
Motorcycle - Outdoors/ 8		2.7 [2]	1.0 [3]	1.0 [3]	2.7	1	
Service station - Indoors/9		1.0 [3]	1.0 [3]	0.81 [2]	0.81	0.81	
Service station - Outdoors/10		2.7 [2]	1.0 [3]	1.0 [3]	2.7	1	
Residential garage - Indoors/11		1.0 [3]	1.0 [3]	0.72 [2]	0.72	0.72	
Other repair shop - Indoors/12		1.0 [3]	1.0 [3]	0.81 [2]	0.81	0.81	
Residence (no CO source) - Indoors/13		1.0 [3]	1.0 [3]	0.5 [1]	0.5	0.5	MZ 15
Residence (gas stove) - Indoors/14		1.0 [3]	1.0 [3]	0.72 [2]	0.72	0.72	
Residence (attached garage) - Indoors/15		1.0 [3]	1.0 [3]	0.72 [2]	0.72	0.72	
Residence (stove and garage)- Indoors/16		1.0 [3]	1.0 [3]	0.72 [2]	0.72	0.72	
Office - Indoors / 17		1.0 [3]	1.0 [3]	0.81 [2]	0.81	0.81	
Store - Indoors / 18		1.0 [3]	1.0 [3]	0.81 [2]	0.81	0.81	
Restaurant - Indoors / 19		1.0 [3]	1.0 [3]	0.81 [2]	0.81	0.81	
Manufacturing facility - Indoors / 20		1.0 [3]	1.0 [3]	0.81 [2]	0.81	0.81	
School - Indoors / 21		1.0 [3]	1.0 [3]	0.81 [2]	0.81	0.81	
Church- Indoors/22		1.0 [3]	1.0 [3]	0.81 [2]	0.81	0.81	
Shopping mall - Indoors/23		1.0 [3]	1.0 [3]	0.81 [2]	0.81	0.81	
Auditorium - Indoors / 24		1.0 [3]	1.0 [3]	0.81 [2]	0.81	0.81	
Health care facility - Indoors/25		1.0 [3]	1.0 [3]	0.81 [2]	0.81	0.81	
Other public building - Indoors/26		1.0 [3]	1.0 [3]	0.81 [2]	0.81	0.81	
Other location - Indoors/27		1.0 [3]	1.0 [3]	0.81 [2]	0.81	0.81	
Not specified - Indoors/28		1.0 [3]	1.0 [3]	0.81 [2]	0.81	0.81	
Construction site - Outdoors/29		1.0 [3]	1.0 [3]	1.0 [3]	1	1	
Residential grounds - Outdoors/30		1.0 [3]	1.0 [3]	1.0 [3]	1	1	
School grounds - Outdoors/31		1.0 [3]	1.0 [3]	1.0 [3]	1	1	
Sports arena - Outdoors/32		1.0 [3]	1.0 [3]	1.0 [3]	1	1	
Park/golf course - Outdoors/33		1.0 [3]	1.0 [3]	1.0 [3]	1	1	
Other location - Outdoors/34		1.0 [3]	1.0 [3]	1.0 [3]	1	1	
Not specified - Outdoors/35		1.0 [3]	1.0 [3]	1.0 [3]	1	1	
Train/subway - In vehicle/36		3.5 [2]	1.0 [3]	0.88 [2]	3.08	0.88	
Airplane - In vehicle/37		0.0 [3]	0.0 [3]	0.88 [2]	0	0	

<sup>a</sup> Data Code: 1 = value obtained from literature; 2 = value obtained using grouping scheme; 3 = default value.

<sup>b</sup> Onroad vehicle source category (see text).

<sup>c</sup> Major, area, and nonroad-mobile source categories (see text).

<sup>d</sup> The MULT factor is the product of the PROX factor and the PEN factor for the onroad vehicle source category and for the major, area, and nonroad-mobile source categories for this pollutant.

Formula: Microenvironmental concentration,  $\mu\text{g}/\text{m}^3 = \text{ADD} + (\text{PROX})(\text{PEN})(\text{monitor concentration, } \mu\text{g}/\text{m}^3)$ .

Abbreviations: ADD = additive factor; PROX = proximity factor; PEN = penetration factor; MULT = PROX  $\times$  PEN.

<b>Pollutant: Hexachlorobenzene (#18)</b>	<b>ADD</b> <b>(<math>\mu\text{g}/\text{m}^3</math>)</b>	<b>PROX</b> <b>[Data Code] <sup>a, b</sup></b>	<b>PEN</b> <b>[Data Code] <sup>a</sup></b>	<b>MULT</b>	<b>Reference</b> <b>Sources</b>
Car - In vehicle / 1		1.0 [3]	0.88 [2]	0.88	
Bus - In vehicle / 2		1.0 [3]	0.88 [2]	0.88	
Truck - In vehicle / 3		1.0 [3]	0.88 [2]	0.88	
Other - In vehicle / 4		1.0 [3]	0.88 [2]	0.88	
Public garage - Indoors / 5		1.0 [3]	0.78 [2]	0.78	
Parking lot/garage - Outdoors / 6		1.0 [3]	1.0 [3]	1	
Near road - Outdoors / 7		1.0 [3]	1.0 [3]	1	
Motorcycle - Outdoors / 8		1.0 [3]	1.0 [3]	1	
Service station - Indoors / 9		1.0 [3]	0.78 [2]	0.78	
Service station - Outdoors / 10		1.0 [3]	1.0 [3]	1	
Residential garage - Indoors / 11		1.0 [3]	0.77 [2]	0.77	
Other repair shop - Indoors / 12		1.0 [3]	0.78 [2]	0.78	
Residence (no CO source) - Indoors/13		1.0 [3]	0.82 [1]	0.82	TL 3
Residence (gas stove) - Indoors / 14		1.0 [3]	0.77 [2]	0.77	
Residence (attached garage) - Indoors/15		1.0 [3]	0.77 [2]	0.77	
Residence (stove and garage)- Indoors/16		1.0 [3]	0.77 [2]	0.77	
Office - Indoors / 17		1.0 [3]	0.78 [2]	0.78	
Store - Indoors / 18		1.0 [3]	0.78 [2]	0.78	
Restaurant - Indoors / 19		1.0 [3]	0.78 [2]	0.78	
Manufacturing facility - Indoors / 20		1.0 [3]	0.78 [2]	0.78	
School - Indoors / 21		1.0 [3]	0.78 [2]	0.78	
Church- Indoors / 22		1.0 [3]	0.78 [2]	0.78	
Shopping mall - Indoors / 23		1.0 [3]	0.78 [2]	0.78	
Auditorium - Indoors / 24		1.0 [3]	0.78 [2]	0.78	
Health care facility - Indoors / 25		1.0 [3]	0.78 [2]	0.78	
Other public building - Indoors / 26		1.0 [3]	0.78 [2]	0.78	
Other location - Indoors / 27		1.0 [3]	0.78 [2]	0.78	
Not specified - Indoors / 28		1.0 [3]	0.78 [2]	0.78	
Construction site - Outdoors / 29		1.0 [3]	1.0 [3]	1	
Residential grounds - Outdoors / 30		1.0 [3]	1.0 [3]	1	
School grounds - Outdoors / 31		1.0 [3]	1.0 [3]	1	
Sports arena - Outdoors / 32		1.0 [3]	1.0 [3]	1	
Park/golf course - Outdoors / 33		1.0 [3]	1.0 [3]	1	
Other location - Outdoors / 34		1.0 [3]	1.0 [3]	1	
Not specified - Outdoors / 35		1.0 [3]	1.0 [3]	1	
Train/subway - In vehicle / 36		1.0 [3]	0.88 [2]	0.88	
Airplane - In vehicle / 37		0.0 [3]	0.88 [2]	0	

<sup>a</sup> Data Code: 1 = value obtained from literature; 2 = value obtained using grouping scheme; 3 = default value.

<sup>b</sup> The PROX factor is assumed to be the same for each source category for this pollutant.

<b>Pollutant: Hydrazine (#19)</b>	<b>ADD</b> <b>(<math>\mu\text{g}/\text{m}^3</math>)</b>	<b>PROX</b> <b>[Data Code] <sup>a, b</sup></b>	<b>PEN</b> <b>[Data Code] <sup>a</sup></b>	<b>MULT</b>	<b>Reference</b> <b>Sources</b>
<b>HAPEM ME / Number</b>					
Car - In vehicle / 1		1.0 [3]	0.90 [2]	0.9	
Bus - In vehicle / 2		1.0 [3]	0.90 [2]	0.9	
Truck - In vehicle / 3		1.0 [3]	0.90 [2]	0.9	
Other - In vehicle / 4		1.0 [3]	0.90 [2]	0.9	
Public garage - Indoors / 5		1.0 [3]	0.80 [2]	0.8	
Parking lot/garage - Outdoors / 6		1.0 [3]	1.0 [3]	1	
Near road - Outdoors / 7		1.0 [3]	1.0 [3]	1	
Motorcycle - Outdoors / 8		1.0 [3]	1.0 [3]	1	
Service station - Indoors / 9		1.0 [3]	0.80 [2]	0.8	
Service station - Outdoors / 10		1.0 [3]	1.0 [3]	1	
Residential garage - Indoors / 11		1.0 [3]	0.81 [2]	0.81	
Other repair shop - Indoors / 12		1.0 [3]	0.80 [2]	0.8	
Residence (no CO source) - Indoors/13		1.0 [3]	0.81 [2]	0.81	
Residence (gas stove) - Indoors / 14		1.0 [3]	0.81 [2]	0.81	
Residence (attached garage) - Indoors/15		1.0 [3]	0.81 [2]	0.81	
Residence (stove and garage)- Indoors/16		1.0 [3]	0.81 [2]	0.81	
Office - Indoors / 17		1.0 [3]	0.80 [2]	0.8	
Store - Indoors / 18		1.0 [3]	0.80 [2]	0.8	
Restaurant - Indoors / 19		1.0 [3]	0.80 [2]	0.8	
Manufacturing facility - Indoors / 20		1.0 [3]	0.80 [2]	0.8	
School - Indoors / 21		1.0 [3]	0.80 [2]	0.8	
Church- Indoors / 22		1.0 [3]	0.80 [2]	0.8	
Shopping mall - Indoors / 23		1.0 [3]	0.80 [2]	0.8	
Auditorium - Indoors / 24		1.0 [3]	0.80 [2]	0.8	
Health care facility - Indoors / 25		1.0 [3]	0.80 [2]	0.8	
Other public building - Indoors / 26		1.0 [3]	0.80 [2]	0.8	
Other location - Indoors / 27		1.0 [3]	0.80 [2]	0.8	
Not specified - Indoors / 28		1.0 [3]	0.80 [2]	0.8	
Construction site - Outdoors / 29		1.0 [3]	1.0 [3]	1	
Residential grounds - Outdoors / 30		1.0 [3]	1.0 [3]	1	
School grounds - Outdoors / 31		1.0 [3]	1.0 [3]	1	
Sports arena - Outdoors / 32		1.0 [3]	1.0 [3]	1	
Park/golf course - Outdoors / 33		1.0 [3]	1.0 [3]	1	
Other location - Outdoors / 34		1.0 [3]	1.0 [3]	1	
Not specified - Outdoors / 35		1.0 [3]	1.0 [3]	1	
Train/subway - In vehicle / 36		1.0 [3]	0.90 [2]	0.9	
Airplane - In vehicle / 37		0.0 [3]	0.90 [2]	0	

<sup>a</sup> Data Code: 1 = value obtained from literature; 2 = value obtained using grouping scheme; 3 = default value.

<sup>b</sup> The PROX factor is assumed to be the same for each source category for this pollutant.

<b>Pollutant: Lead compounds - organic (#20)</b>	<b>ADD (<math>\mu\text{g}/\text{m}^3</math>)</b>	<b>PROX [Data Code] <sup>a, b</sup></b>	<b>PEN [Data Code] <sup>a</sup></b>	<b>MULT</b>	<b>Reference Sources</b>
Car - In vehicle / 1		1.0 [3]	0.88 [2]	0.88	
Bus - In vehicle / 2		1.0 [3]	0.88 [2]	0.88	
Truck - In vehicle / 3		1.0 [3]	0.88 [2]	0.88	
Other - In vehicle / 4		1.0 [3]	0.88 [2]	0.88	
Public garage - Indoors / 5		1.0 [3]	0.78 [2]	0.78	
Parking lot/garage - Outdoors / 6		1.0 [3]	1.0 [3]	1	
Near road - Outdoors / 7		1.0 [3]	1.0 [3]	1	
Motorcycle - Outdoors / 8		1.0 [3]	1.0 [3]	1	
Service station - Indoors / 9		1.0 [3]	0.78 [2]	0.78	
Service station - Outdoors / 10		1.0 [3]	1.0 [3]	1	
Residential garage - Indoors / 11		1.0 [3]	0.77 [2]	0.77	
Other repair shop - Indoors / 12		1.0 [3]	0.78 [2]	0.78	
Residence (no CO source) - Indoors/13		1.0 [3]	0.77 [2]	0.77	
Residence (gas stove) - Indoors / 14		1.0 [3]	0.77 [2]	0.77	
Residence (attached garage) - Indoors/15		1.0 [3]	0.77 [2]	0.77	
Residence (stove and garage)- Indoors/16		1.0 [3]	0.77 [2]	0.77	
Office - Indoors / 17		1.0 [3]	0.78 [2]	0.78	
Store - Indoors / 18		1.0 [3]	0.78 [2]	0.78	
Restaurant - Indoors / 19		1.0 [3]	0.78 [2]	0.78	
Manufacturing facility - Indoors / 20		1.0 [3]	0.78 [2]	0.78	
School - Indoors / 21		1.0 [3]	0.78 [2]	0.78	
Church- Indoors / 22		1.0 [3]	0.78 [2]	0.78	
Shopping mall - Indoors / 23		1.0 [3]	0.78 [2]	0.78	
Auditorium - Indoors / 24		1.0 [3]	0.78 [2]	0.78	
Health care facility - Indoors / 25		1.0 [3]	0.78 [2]	0.78	
Other public building - Indoors / 26		1.0 [3]	0.78 [2]	0.78	
Other location - Indoors / 27		1.0 [3]	0.78 [2]	0.78	
Not specified - Indoors / 28		1.0 [3]	0.78 [2]	0.78	
Construction site - Outdoors / 29		1.0 [3]	1.0 [3]	1	
Residential grounds - Outdoors / 30		1.0 [3]	1.0 [3]	1	
School grounds - Outdoors / 31		1.0 [3]	1.0 [3]	1	
Sports arena - Outdoors / 32		1.0 [3]	1.0 [3]	1	
Park/golf course - Outdoors / 33		1.0 [3]	1.0 [3]	1	
Other location - Outdoors / 34		1.0 [3]	1.0 [3]	1	
Not specified - Outdoors / 35		1.0 [3]	1.0 [3]	1	
Train/subway - In vehicle / 36		1.0 [3]	0.88 [2]	0.88	
Airplane - In vehicle / 37		0.0 [3]	0.88 [2]	0	

<sup>a</sup> Data Code: 1 = value obtained from literature; 2 = value obtained using grouping scheme; 3 = default value.

<sup>b</sup> The PROX factor is assumed to be the same for each source category for this pollutant.



<b>Pollutant: Lead compounds - inorganic (#21)</b>	<b>ADD</b> <b>(<math>\mu\text{g}/\text{m}^3</math>)</b>	<b>PROX</b> <b>[Data Code] <sup>a, b</sup></b>	<b>PEN</b> <b>[Data Code] <sup>a</sup></b>	<b>MULT</b>	<b>Reference Sources</b>
Car - In vehicle / 1		1.0 [3]	0.88 [2]	0.88	
Bus - In vehicle / 2		1.0 [3]	0.88 [2]	0.88	
Truck - In vehicle / 3		1.0 [3]	0.88 [2]	0.88	
Other - In vehicle / 4		1.0 [3]	0.88 [2]	0.88	
Public garage - Indoors / 5		1.0 [3]	0.78 [2]	0.78	
Parking lot/garage - Outdoors / 6		1.0 [3]	1.0 [3]	1	
Near road - Outdoors / 7		1.0 [3]	1.0 [3]	1	
Motorcycle - Outdoors / 8		1.0 [3]	1.0 [3]	1	
Service station - Indoors / 9		1.0 [3]	0.78 [2]	0.78	
Service station - Outdoors / 10		1.0 [3]	1.0 [3]	1	
Residential garage - Indoors / 11		1.0 [3]	0.77 [2]	0.77	
Other repair shop - Indoors / 12		1.0 [3]	0.78 [2]	0.78	
Residence (no CO source) - Indoors/13		1.0 [3]	0.91 <sup>c</sup> [1]	0.91	RA 29, TL12
Residence (gas stove) - Indoors / 14		1.0 [3]	0.77 [2]	0.77	
Residence (attached garage) - Indoors/15		1.0 [3]	0.77 [2]	0.77	
Residence (stove and garage)- Indoors/16		1.0 [3]	0.77 [2]	0.77	
Office - Indoors / 17		1.0 [3]	0.86 [1]	0.86	TL 8
Store - Indoors / 18		1.0 [3]	0.78 [2]	0.78	
Restaurant - Indoors / 19		1.0 [3]	0.78 [2]	0.78	
Manufacturing facility - Indoors / 20		1.0 [3]	0.78 [2]	0.78	
School - Indoors / 21		1.0 [3]	0.78 [2]	0.78	
Church- Indoors / 22		1.0 [3]	0.78 [2]	0.78	
Shopping mall - Indoors / 23		1.0 [3]	0.78 [2]	0.78	
Auditorium - Indoors / 24		1.0 [3]	0.78 [2]	0.78	
Health care facility - Indoors / 25		1.0 [3]	0.78 [2]	0.78	
Other public building - Indoors / 26		1.0 [3]	0.63 [1]	0.63	TL 12
Other location - Indoors / 27		1.0 [3]	0.78 [2]	0.78	
Not specified - Indoors / 28		1.0 [3]	0.78 [2]	0.78	
Construction site - Outdoors / 29		1.0 [3]	1.0 [3]	1	
Residential grounds - Outdoors / 30		1.0 [3]	1.0 [3]	1	
School grounds - Outdoors / 31		1.0 [3]	1.0 [3]	1	
Sports arena - Outdoors / 32		1.0 [3]	1.0 [3]	1	
Park/golf course - Outdoors / 33		1.0 [3]	1.0 [3]	1	
Other location - Outdoors / 34		1.0 [3]	1.0 [3]	1	
Not specified - Outdoors / 35		1.0 [3]	1.0 [3]	1	
Train/subway - In vehicle / 36		1.0 [3]	0.88 [2]	0.88	
Airplane - In vehicle / 37		0.0 [3]	0.88 [2]	0	

<sup>a</sup> Data Code: 1 = value obtained from literature; 2 = value obtained using grouping scheme; 3 = default value.

<sup>b</sup> The PROX factor is assumed to be the same for each source category for this pollutant.

<sup>c</sup> Average of values from RA 29 and TL12.

<b>Pollutant: Manganese cmpds (#22)</b>	<b>ADD (<math>\mu\text{g}/\text{m}^3</math>)</b>	<b>PROX [Data Code] <sup>a, b</sup></b>	<b>PEN [Data Code] <sup>a</sup></b>	<b>MULT</b>	<b>Reference Sources</b>
Car - In vehicle / 1		1.0 [3]	0.88 [2]	0.88	
Bus - In vehicle / 2		1.0 [3]	0.88 [2]	0.88	
Truck - In vehicle / 3		1.0 [3]	0.88 [2]	0.88	
Other - In vehicle / 4		1.0 [3]	0.88 [2]	0.88	
Public garage - Indoors / 5		1.0 [3]	0.78 [2]	0.78	
Parking lot/garage - Outdoors / 6		1.0 [3]	1.0 [3]	1	
Near road - Outdoors / 7		1.0 [3]	1.0 [3]	1	
Motorcycle - Outdoors / 8		1.0 [3]	1.0 [3]	1	
Service station - Indoors / 9		1.0 [3]	0.78 [2]	0.78	
Service station - Outdoors / 10		1.0 [3]	1.0 [3]	1	
Residential garage - Indoors / 11		1.0 [3]	0.77 [2]	0.77	
Other repair shop - Indoors / 12		1.0 [3]	0.78 [2]	0.78	
Residence (no CO source) - Indoors/13		1.0 [3]	0.61 [1]	0.61	MZ 6, MZ 7
Residence (gas stove) - Indoors / 14		1.0 [3]	0.77 [2]	0.77	
Residence (attached garage) - Indoors/15		1.0 [3]	0.77 [2]	0.77	
Residence (stove and garage)- Indoors/16		1.0 [3]	0.77 [2]	0.77	
Office - Indoors / 17		1.0 [3]	0.78 [2]	0.78	
Store - Indoors / 18		1.0 [3]	0.78 [2]	0.78	
Restaurant - Indoors / 19		1.0 [3]	0.78 [2]	0.78	
Manufacturing facility - Indoors / 20		1.0 [3]	0.78 [2]	0.78	
School - Indoors / 21		1.0 [3]	0.78 [2]	0.78	
Church- Indoors / 22		1.0 [3]	0.78 [2]	0.78	
Shopping mall - Indoors / 23		1.0 [3]	0.78 [2]	0.78	
Auditorium - Indoors / 24		1.0 [3]	0.78 [2]	0.78	
Health care facility - Indoors / 25		1.0 [3]	0.78 [2]	0.78	
Other public building - Indoors / 26		1.0 [3]	0.78 [2]	0.78	
Other location - Indoors / 27		1.0 [3]	0.78 [2]	0.78	
Not specified - Indoors / 28		1.0 [3]	0.78 [2]	0.78	
Construction site - Outdoors / 29		1.0 [3]	1.0 [3]	1	
Residential grounds - Outdoors / 30		1.0 [3]	1.0 [3]	1	
School grounds - Outdoors / 31		1.0 [3]	1.0 [3]	1	
Sports arena - Outdoors / 32		1.0 [3]	1.0 [3]	1	
Park/golf course - Outdoors / 33		1.0 [3]	1.0 [3]	1	
Other location - Outdoors / 34		1.0 [3]	1.0 [3]	1	
Not specified - Outdoors / 35		1.0 [3]	1.0 [3]	1	
Train/subway - In vehicle / 36		1.0 [3]	0.88 [2]	0.88	
Airplane - In vehicle / 37		0.0 [3]	0.88 [2]	0	

<sup>a</sup> Data Code: 1 = value obtained from literature; 2 = value obtained using grouping scheme; 3 = default value.

<sup>b</sup> The PROX factor is assumed to be the same for each source category for this pollutant.

<b>Pollutant: Mercury compounds (#23)</b>	<b>ADD</b> <b>(<math>\mu\text{g}/\text{m}^3</math>)</b>	<b>PROX</b> <b>[Data Code] <sup>a, b</sup></b>	<b>PEN</b> <b>[Data Code] <sup>a</sup></b>	<b>MULT</b>	<b>Reference</b> <b>Sources</b>
<b>HAPEM ME / Number</b>					
Car - In vehicle / 1		1.0 [3]	0.88 [2]	0.88	
Bus - In vehicle / 2		1.0 [3]	0.88 [2]	0.88	
Truck - In vehicle / 3		1.0 [3]	0.88 [2]	0.88	
Other - In vehicle / 4		1.0 [3]	0.88 [2]	0.88	
Public garage - Indoors / 5		1.0 [3]	0.78 [2]	0.78	
Parking lot/garage - Outdoors / 6		1.0 [3]	1.0 [3]	1	
Near road - Outdoors / 7		1.0 [3]	1.0 [3]	1	
Motorcycle - Outdoors / 8		1.0 [3]	1.0 [3]	1	
Service station - Indoors / 9		1.0 [3]	0.78 [2]	0.78	
Service station - Outdoors / 10		1.0 [3]	1.0 [3]	1	
Residential garage - Indoors / 11		1.0 [3]	0.77 [2]	0.77	
Other repair shop - Indoors / 12		1.0 [3]	0.78 [2]	0.78	
Residence (no CO source) - Indoors/13		1.0 [3]	0.77 [2]	0.77	
Residence (gas stove) - Indoors / 14		1.0 [3]	0.77 [2]	0.77	
Residence (attached garage) - Indoors/15		1.0 [3]	0.77 [2]	0.77	
Residence (stove and garage)- Indoors/16		1.0 [3]	0.77 [2]	0.77	
Office - Indoors / 17		1.0 [3]	0.78 [2]	0.78	
Store - Indoors / 18		1.0 [3]	0.78 [2]	0.78	
Restaurant - Indoors / 19		1.0 [3]	0.78 [2]	0.78	
Manufacturing facility - Indoors / 20		1.0 [3]	0.78 [2]	0.78	
School - Indoors / 21		1.0 [3]	0.78 [2]	0.78	
Church- Indoors / 22		1.0 [3]	0.78 [2]	0.78	
Shopping mall - Indoors / 23		1.0 [3]	0.78 [2]	0.78	
Auditorium - Indoors / 24		1.0 [3]	0.78 [2]	0.78	
Health care facility - Indoors / 25		1.0 [3]	0.78 [2]	0.78	
Other public building - Indoors / 26		1.0 [3]	0.78 [2]	0.78	
Other location - Indoors / 27		1.0 [3]	0.78 [2]	0.78	
Not specified - Indoors / 28		1.0 [3]	0.78 [2]	0.78	
Construction site - Outdoors / 29		1.0 [3]	1.0 [3]	1	
Residential grounds - Outdoors / 30		1.0 [3]	1.0 [3]	1	
School grounds - Outdoors / 31		1.0 [3]	1.0 [3]	1	
Sports arena - Outdoors / 32		1.0 [3]	1.0 [3]	1	
Park/golf course - Outdoors / 33		1.0 [3]	1.0 [3]	1	
Other location - Outdoors / 34		1.0 [3]	1.0 [3]	1	
Not specified - Outdoors / 35		1.0 [3]	1.0 [3]	1	
Train/subway - In vehicle / 36		1.0 [3]	0.88 [2]	0.88	
Airplane - In vehicle / 37		0.0 [3]	0.88 [2]	0	

<sup>a</sup> Data Code: 1 = value obtained from literature; 2 = value obtained using grouping scheme; 3 = default value.

<sup>b</sup> The PROX factor is assumed to be the same for each source category for this pollutant.

<b>Pollutant: Methylene chloride (dichloromethane) (#24)</b>	<b>ADD (<math>\mu\text{g}/\text{m}^3</math>)</b>	<b>PROX [Data Code] <sup>a, b</sup></b>	<b>PEN [Data Code] <sup>a</sup></b>	<b>MULT</b>	<b>Reference Sources</b>
Car - In vehicle / 1		1.0 [3]	0.88 [2]	0.88	
Bus - In vehicle / 2		1.0 [3]	0.88 [2]	0.88	
Truck - In vehicle / 3		1.0 [3]	0.88 [2]	0.88	
Other - In vehicle / 4		1.0 [3]	0.88 [2]	0.88	
Public garage - Indoors / 5		1.0 [3]	0.78 [2]	0.78	
Parking lot/garage - Outdoors / 6		1.0 [3]	1.0 [3]	1	
Near road - Outdoors / 7		1.0 [3]	1.0 [3]	1	
Motorcycle - Outdoors / 8		1.0 [3]	1.0 [3]	1	
Service station - Indoors / 9		1.0 [3]	0.78 [2]	0.78	
Service station - Outdoors / 10		1.0 [3]	1.0 [3]	1	
Residential garage - Indoors / 11		1.0 [3]	0.77 [2]	0.77	
Other repair shop - Indoors / 12		1.0 [3]	0.78 [2]	0.78	
Residence (no CO source) - Indoors/13		1.0 [3]	0.77 [2]	0.77	
Residence (gas stove) - Indoors / 14		1.0 [3]	0.77 [2]	0.77	
Residence (attached garage) - Indoors/15		1.0 [3]	0.77 [2]	0.77	
Residence (stove and garage)- Indoors/16		1.0 [3]	0.77 [2]	0.77	
Office - Indoors / 17		1.0 [3]	1.0 [1]	1	MZ 39, TL 10
Store - Indoors / 18		1.0 [3]	0.78 [2]	0.78	
Restaurant - Indoors / 19		1.0 [3]	0.78 [2]	0.78	
Manufacturing facility - Indoors / 20		1.0 [3]	0.78 [2]	0.78	
School - Indoors / 21		1.0 [3]	0.78 [2]	0.78	
Church- Indoors / 22		1.0 [3]	0.78 [2]	0.78	
Shopping mall - Indoors / 23		1.0 [3]	0.78 [2]	0.78	
Auditorium - Indoors / 24		1.0 [3]	0.78 [2]	0.78	
Health care facility - Indoors / 25		1.0 [3]	0.78 [2]	0.78	
Other public building - Indoors / 26		1.0 [3]	0.78 [2]	0.78	
Other location - Indoors / 27		1.0 [3]	0.78 [2]	0.78	
Not specified - Indoors / 28		1.0 [3]	0.78 [2]	0.78	
Construction site - Outdoors / 29		1.0 [3]	1.0 [3]	1	
Residential grounds - Outdoors / 30		1.0 [3]	1.0 [3]	1	
School grounds - Outdoors / 31		1.0 [3]	1.0 [3]	1	
Sports arena - Outdoors / 32		1.0 [3]	1.0 [3]	1	
Park/golf course - Outdoors / 33		1.0 [3]	1.0 [3]	1	
Other location - Outdoors / 34		1.0 [3]	1.0 [3]	1	
Not specified - Outdoors / 35		1.0 [3]	1.0 [3]	1	
Train/subway - In vehicle / 36		1.0 [3]	0.88 [2]	0.88	
Airplane - In vehicle / 37		0.0 [3]	0.88 [2]	0	

<sup>a</sup> Data Code: 1 = value obtained from literature; 2 = value obtained using grouping scheme; 3 = default value.

<sup>b</sup> The PROX factor is assumed to be the same for each source category for this pollutant.

<b>Pollutant: Nickel compounds (#25)</b>	<b>ADD (<math>\mu\text{g}/\text{m}^3</math>)</b>	<b>PROX [Data Code] <sup>a, b</sup></b>	<b>PEN [Data Code] <sup>a</sup></b>	<b>MULT</b>	<b>Reference Sources</b>
<b>HAPEM ME / Number</b>					
Car - In vehicle / 1		1.0 [3]	0.88 [2]	0.88	
Bus - In vehicle / 2		1.0 [3]	0.88 [2]	0.88	
Truck - In vehicle / 3		1.0 [3]	0.88 [2]	0.88	
Other - In vehicle / 4		1.0 [3]	0.88 [2]	0.88	
Public garage - Indoors / 5		1.0 [3]	0.78 [2]	0.78	
Parking lot/garage - Outdoors / 6		1.0 [3]	1.0 [3]	1	
Near road - Outdoors / 7		1.0 [3]	1.0 [3]	1	
Motorcycle - Outdoors / 8		1.0 [3]	1.0 [3]	1	
Service station - Indoors / 9		1.0 [3]	0.78 [2]	0.78	
Service station - Outdoors / 10		1.0 [3]	1.0 [3]	1	
Residential garage - Indoors / 11		1.0 [3]	0.77 [2]	0.77	
Other repair shop - Indoors / 12		1.0 [3]	0.78 [2]	0.78	
Residence (no CO source) - Indoors/13		1.0 [3]	0.77 [2]	0.77	
Residence (gas stove) - Indoors / 14		1.0 [3]	0.77 [2]	0.77	
Residence (attached garage) - Indoors/15		1.0 [3]	0.77 [2]	0.77	
Residence (stove and garage)- Indoors/16		1.0 [3]	0.77 [2]	0.77	
Office - Indoors / 17		1.0 [3]	0.78 [2]	0.78	
Store - Indoors / 18		1.0 [3]	0.78 [2]	0.78	
Restaurant - Indoors / 19		1.0 [3]	0.78 [2]	0.78	
Manufacturing facility - Indoors / 20		1.0 [3]	0.78 [2]	0.78	
School - Indoors / 21		1.0 [3]	0.78 [2]	0.78	
Church- Indoors / 22		1.0 [3]	0.78 [2]	0.78	
Shopping mall - Indoors / 23		1.0 [3]	0.78 [2]	0.78	
Auditorium - Indoors / 24		1.0 [3]	0.78 [2]	0.78	
Health care facility - Indoors / 25		1.0 [3]	0.78 [2]	0.78	
Other public building - Indoors / 26		1.0 [3]	0.78 [2]	0.78	
Other location - Indoors / 27		1.0 [3]	0.78 [2]	0.78	
Not specified - Indoors / 28		1.0 [3]	0.78 [2]	0.78	
Construction site - Outdoors / 29		1.0 [3]	1.0 [3]	1	
Residential grounds - Outdoors / 30		1.0 [3]	1.0 [3]	1	
School grounds - Outdoors / 31		1.0 [3]	1.0 [3]	1	
Sports arena - Outdoors / 32		1.0 [3]	1.0 [3]	1	
Park/golf course - Outdoors / 33		1.0 [3]	1.0 [3]	1	
Other location - Outdoors / 34		1.0 [3]	1.0 [3]	1	
Not specified - Outdoors / 35		1.0 [3]	1.0 [3]	1	
Train/subway - In vehicle / 36		1.0 [3]	0.88 [2]	0.88	
Airplane - In vehicle / 37		0.0 [3]	0.88 [2]	0	

<sup>a</sup> Data Code: 1 = value obtained from literature; 2 = value obtained using grouping scheme; 3 = default value.

<sup>b</sup> The PROX factor is assumed to be the same for each source category for this pollutant.

<b>Pollutant: 7-PAH : (Lower and upper bound) (#26)</b>	<b>ADD (<math>\mu\text{g}/\text{m}^3</math>)</b>	<b>PROX [Data Code] <sup>a, b</sup></b>	<b>PEN [Data Code] <sup>a</sup></b>	<b>MULT</b>	<b>Reference Sources</b>
<b>HAPEM ME / Number</b>					
Car - In vehicle / 1		1.0 [3]	0.88 [2]	0.88	
Bus - In vehicle / 2		1.0 [3]	0.88 [2]	0.88	
Truck - In vehicle / 3		1.0 [3]	0.88 [2]	0.88	
Other - In vehicle / 4		1.0 [3]	0.88 [2]	0.88	
Public garage - Indoors / 5		1.0 [3]	0.81 [2]	0.81	
Parking lot/garage - Outdoors / 6		1.0 [3]	1.0 [3]	1	
Near road - Outdoors / 7		1.0 [3]	1.0 [3]	1	
Motorcycle - Outdoors / 8		1.0 [3]	1.0 [3]	1	
Service station - Indoors / 9		1.0 [3]	0.81 [2]	0.81	
Service station - Outdoors / 10		1.0 [3]	1.0 [3]	1	
Residential garage - Indoors / 11		1.0 [3]	0.72 [2]	0.72	
Other repair shop - Indoors / 12		1.0 [3]	0.81 [2]	0.81	
Residence (no CO source) - Indoors/13		1.0 [3]	0.7 [1]	0.7	MZ 17
Residence (gas stove) - Indoors / 14		1.0 [3]	0.72 [2]	0.72	
Residence (attached garage) - Indoors/15		1.0 [3]	0.72 [2]	0.72	
Residence (stove and garage)- Indoors/16		1.0 [3]	0.72 [2]	0.72	
Office - Indoors / 17		1.0 [3]	0.81 [2]	0.81	
Store - Indoors / 18		1.0 [3]	0.81 [2]	0.81	
Restaurant - Indoors / 19		1.0 [3]	0.81 [2]	0.81	
Manufacturing facility - Indoors / 20		1.0 [3]	0.81 [2]	0.81	
School - Indoors / 21		1.0 [3]	0.81 [2]	0.81	
Church- Indoors / 22		1.0 [3]	0.81 [2]	0.81	
Shopping mall - Indoors / 23		1.0 [3]	0.81 [2]	0.81	
Auditorium - Indoors / 24		1.0 [3]	0.81 [2]	0.81	
Health care facility - Indoors / 25		1.0 [3]	0.81 [2]	0.81	
Other public building - Indoors / 26		1.0 [3]	0.81 [2]	0.81	
Other location - Indoors / 27		1.0 [3]	0.81 [2]	0.81	
Not specified - Indoors / 28		1.0 [3]	0.81 [2]	0.81	
Construction site - Outdoors / 29		1.0 [3]	1.0 [3]	1	
Residential grounds - Outdoors / 30		1.0 [3]	1.0 [3]	1	
School grounds - Outdoors / 31		1.0 [3]	1.0 [3]	1	
Sports arena - Outdoors / 32		1.0 [3]	1.0 [3]	1	
Park/golf course - Outdoors / 33		1.0 [3]	1.0 [3]	1	
Other location - Outdoors / 34		1.0 [3]	1.0 [3]	1	
Not specified - Outdoors / 35		1.0 [3]	1.0 [3]	1	
Train/subway - In vehicle / 36		1.0 [3]	0.88 [2]	0.88	
Airplane - In vehicle / 37		0.0 [3]	0.88 [2]	0	

<sup>a</sup> Data Code: 1 = value obtained from literature; 2 = value obtained using grouping scheme; 3 = default value.

<sup>b</sup> The PROX factor is assumed to be the same for each source category for this pollutant.

<b>Pollutant: Polychlorinated biphenyls (#27)</b>	<b>ADD</b> <b>(<math>\mu\text{g}/\text{m}^3</math>)</b>	<b>PROX</b> <b>[Data Code] <sup>a, b</sup></b>	<b>PEN</b> <b>[Data Code] <sup>a</sup></b>	<b>MULT</b>	<b>Reference Sources</b>
Car - In vehicle / 1		1.0 [3]	0.88 [2]	0.88	
Bus - In vehicle / 2		1.0 [3]	0.88 [2]	0.88	
Truck - In vehicle / 3		1.0 [3]	0.88 [2]	0.88	
Other - In vehicle / 4		1.0 [3]	0.88 [2]	0.88	
Public garage - Indoors / 5		1.0 [3]	0.78 [2]	0.78	
Parking lot/garage - Outdoors / 6		1.0 [3]	1.0 [3]	1	
Near road - Outdoors / 7		1.0 [3]	1.0 [3]	1	
Motorcycle - Outdoors / 8		1.0 [3]	1.0 [3]	1	
Service station - Indoors / 9		1.0 [3]	0.78 [2]	0.78	
Service station - Outdoors / 10		1.0 [3]	1.0 [3]	1	
Residential garage - Indoors / 11		1.0 [3]	0.77 [2]	0.77	
Other repair shop - Indoors / 12		1.0 [3]	0.78 [2]	0.78	
Residence (no CO source) - Indoors/13		1.0 [3]	0.77 [2]	0.77	
Residence (gas stove) - Indoors / 14		1.0 [3]	0.77 [2]	0.77	
Residence (attached garage) - Indoors/15		1.0 [3]	0.77 [2]	0.77	
Residence (stove and garage)- Indoors/16		1.0 [3]	0.77 [2]	0.77	
Office - Indoors / 17		1.0 [3]	0.78 [2]	0.78	
Store - Indoors / 18		1.0 [3]	0.78 [2]	0.78	
Restaurant - Indoors / 19		1.0 [3]	0.78 [2]	0.78	
Manufacturing facility - Indoors / 20		1.0 [3]	0.78 [2]	0.78	
School - Indoors / 21		1.0 [3]	0.78 [2]	0.78	
Church- Indoors / 22		1.0 [3]	0.78 [2]	0.78	
Shopping mall - Indoors / 23		1.0 [3]	0.78 [2]	0.78	
Auditorium - Indoors / 24		1.0 [3]	0.78 [2]	0.78	
Health care facility - Indoors / 25		1.0 [3]	0.78 [2]	0.78	
Other public building - Indoors / 26		1.0 [3]	0.78 [2]	0.78	
Other location - Indoors / 27		1.0 [3]	0.78 [2]	0.78	
Not specified - Indoors / 28		1.0 [3]	0.78 [2]	0.78	
Construction site - Outdoors / 29		1.0 [3]	1.0 [3]	1	
Residential grounds - Outdoors / 30		1.0 [3]	1.0 [3]	1	
School grounds - Outdoors / 31		1.0 [3]	1.0 [3]	1	
Sports arena - Outdoors / 32		1.0 [3]	1.0 [3]	1	
Park/golf course - Outdoors / 33		1.0 [3]	1.0 [3]	1	
Other location - Outdoors / 34		1.0 [3]	1.0 [3]	1	
Not specified - Outdoors / 35		1.0 [3]	1.0 [3]	1	
Train/subway - In vehicle / 36		1.0 [3]	0.88 [2]	0.88	
Airplane - In vehicle / 37		0.0 [3]	0.88 [2]	0	

<sup>a</sup> Data Code: 1 = value obtained from literature; 2 = value obtained using grouping scheme; 3 = default value.

<sup>b</sup> The PROX factor is assumed to be the same for each source category for this pollutant.

<b>Pollutant: Propylene dichloride (1,2-dichloropropane) (#28)</b>	<b>ADD</b> <b>(<math>\mu\text{g}/\text{m}^3</math>)</b>	<b>PROX</b> <b>[Data Code] <sup>a, b</sup></b>	<b>PEN</b> <b>[Data Code] <sup>a</sup></b>	<b>MULT</b>	<b>Reference Sources</b>
<b>HAPEM ME / Number</b>					
Car - In vehicle / 1		1.0 [3]	0.88 [2]	0.88	
Bus - In vehicle / 2		1.0 [3]	0.88 [2]	0.88	
Truck - In vehicle / 3		1.0 [3]	0.88 [2]	0.88	
Other - In vehicle / 4		1.0 [3]	0.88 [2]	0.88	
Public garage - Indoors / 5		1.0 [3]	0.78 [2]	0.78	
Parking lot/garage - Outdoors / 6		1.0 [3]	1.0 [3]	1	
Near road - Outdoors / 7		1.0 [3]	1.0 [3]	1	
Motorcycle - Outdoors / 8		1.0 [3]	1.0 [3]	1	
Service station - Indoors / 9		1.0 [3]	0.78 [2]	0.78	
Service station - Outdoors / 10		1.0 [3]	1.0 [3]	1	
Residential garage - Indoors / 11		1.0 [3]	0.77 [2]	0.77	
Other repair shop - Indoors / 12		1.0 [3]	0.78 [2]	0.78	
Residence (no CO source) - Indoors/13		1.0 [3]	0.77 [2]	0.77	
Residence (gas stove) - Indoors / 14		1.0 [3]	0.77 [2]	0.77	
Residence (attached garage) - Indoors/15		1.0 [3]	0.77 [2]	0.77	
Residence (stove and garage)- Indoors/16		1.0 [3]	0.77 [2]	0.77	
Office - Indoors / 17		1.0 [3]	0.78 [2]	0.78	
Store - Indoors / 18		1.0 [3]	0.78 [2]	0.78	
Restaurant - Indoors / 19		1.0 [3]	0.78 [2]	0.78	
Manufacturing facility - Indoors / 20		1.0 [3]	0.78 [2]	0.78	
School - Indoors / 21		1.0 [3]	0.78 [2]	0.78	
Church- Indoors / 22		1.0 [3]	0.78 [2]	0.78	
Shopping mall - Indoors / 23		1.0 [3]	0.78 [2]	0.78	
Auditorium - Indoors / 24		1.0 [3]	0.78 [2]	0.78	
Health care facility - Indoors / 25		1.0 [3]	0.78 [2]	0.78	
Other public building - Indoors / 26		1.0 [3]	0.78 [2]	0.78	
Other location - Indoors / 27		1.0 [3]	0.78 [2]	0.78	
Not specified - Indoors / 28		1.0 [3]	0.78 [2]	0.78	
Construction site - Outdoors / 29		1.0 [3]	1.0 [3]	1	
Residential grounds - Outdoors / 30		1.0 [3]	1.0 [3]	1	
School grounds - Outdoors / 31		1.0 [3]	1.0 [3]	1	
Sports arena - Outdoors / 32		1.0 [3]	1.0 [3]	1	
Park/golf course - Outdoors / 33		1.0 [3]	1.0 [3]	1	
Other location - Outdoors / 34		1.0 [3]	1.0 [3]	1	
Not specified - Outdoors / 35		1.0 [3]	1.0 [3]	1	
Train/subway - In vehicle / 36		1.0 [3]	0.88 [2]	0.88	
Airplane - In vehicle / 37		0.0 [3]	0.88 [2]	0	

<sup>a</sup> Data Code: 1 = value obtained from literature; 2 = value obtained using grouping scheme; 3 = default value.

<sup>b</sup> The PROX factor is assumed to be the same for each source category for this pollutant.



<b>Pollutant: Quinoline (#29)</b>	<b>ADD</b> <b>(<math>\mu\text{g}/\text{m}^3</math>)</b>	<b>PROX</b> <b>[Data Code] <sup>a, b</sup></b>	<b>PEN</b> <b>[Data Code] <sup>a</sup></b>	<b>MULT</b>	<b>Reference Sources</b>
Car - In vehicle / 1		1.0 [3]	0.88 [2]	0.88	
Bus - In vehicle / 2		1.0 [3]	0.88 [2]	0.88	
Truck - In vehicle / 3		1.0 [3]	0.88 [2]	0.88	
Other - In vehicle / 4		1.0 [3]	0.88 [2]	0.88	
Public garage - Indoors / 5		1.0 [3]	0.81 [2]	0.81	
Parking lot/garage - Outdoors / 6		1.0 [3]	1.0 [3]	1	
Near road - Outdoors / 7		1.0 [3]	1.0 [3]	1	
Motorcycle - Outdoors / 8		1.0 [3]	1.0 [3]	1	
Service station - Indoors / 9		1.0 [3]	0.81 [2]	0.81	
Service station - Outdoors / 10		1.0 [3]	1.0 [3]	1	
Residential garage - Indoors / 11		1.0 [3]	0.72 [2]	0.72	
Other repair shop - Indoors / 12		1.0 [3]	0.81 [2]	0.81	
Residence (no CO source) - Indoors/13		1.0 [3]	0.72 [2]	0.72	
Residence (gas stove) - Indoors / 14		1.0 [3]	0.72 [2]	0.72	
Residence (attached garage) - Indoors/15		1.0 [3]	0.72 [2]	0.72	
Residence (stove and garage)- Indoors/16		1.0 [3]	0.72 [2]	0.72	
Office - Indoors / 17		1.0 [3]	0.81 [2]	0.81	
Store - Indoors / 18		1.0 [3]	0.81 [2]	0.81	
Restaurant - Indoors / 19		1.0 [3]	0.81 [2]	0.81	
Manufacturing facility - Indoors / 20		1.0 [3]	0.81 [2]	0.81	
School - Indoors / 21		1.0 [3]	0.81 [2]	0.81	
Church- Indoors / 22		1.0 [3]	0.81 [2]	0.81	
Shopping mall - Indoors / 23		1.0 [3]	0.81 [2]	0.81	
Auditorium - Indoors / 24		1.0 [3]	0.81 [2]	0.81	
Health care facility - Indoors / 25		1.0 [3]	0.81 [2]	0.81	
Other public building - Indoors / 26		1.0 [3]	0.81 [2]	0.81	
Other location - Indoors / 27		1.0 [3]	0.81 [2]	0.81	
Not specified - Indoors / 28		1.0 [3]	0.81 [2]	0.81	
Construction site - Outdoors / 29		1.0 [3]	1.0 [3]	1	
Residential grounds - Outdoors / 30		1.0 [3]	1.0 [3]	1	
School grounds - Outdoors / 31		1.0 [3]	1.0 [3]	1	
Sports arena - Outdoors / 32		1.0 [3]	1.0 [3]	1	
Park/golf course - Outdoors / 33		1.0 [3]	1.0 [3]	1	
Other location - Outdoors / 34		1.0 [3]	1.0 [3]	1	
Not specified - Outdoors / 35		1.0 [3]	1.0 [3]	1	
Train/subway - In vehicle / 36		1.0 [3]	0.88 [2]	0.88	
Airplane - In vehicle / 37		0.0 [3]	0.88 [2]	0	

<sup>a</sup> Data Code: 1 = value obtained from literature; 2 = value obtained using grouping scheme; 3 = default value.

<sup>b</sup> The PROX factor is assumed to be the same for each source category for this pollutant.

<b>Pollutant: Styrene (#30)</b>	<b>ADD</b> <b>(<math>\mu\text{g}/\text{m}^3</math>)</b>	<b>PROX</b> <b>[Data Code] <sup>a, b</sup></b>	<b>PEN</b> <b>[Data Code] <sup>a</sup></b>	<b>MULT</b>	<b>Reference</b> <b>Sources</b>
Car - In vehicle / 1		1.0 [3]	0.90 [2]	0.9	
Bus - In vehicle / 2		1.0 [3]	0.90 [2]	0.9	
Truck - In vehicle / 3		1.0 [3]	0.90 [2]	0.9	
Other - In vehicle / 4		1.0 [3]	0.90 [2]	0.9	
Public garage - Indoors / 5		1.0 [3]	0.80 [2]	0.8	
Parking lot/garage - Outdoors / 6		1.0 [3]	1.0 [3]	1	
Near road - Outdoors / 7		1.0 [3]	1.0 [3]	1	
Motorcycle - Outdoors / 8		1.0 [3]	1.0 [3]	1	
Service station - Indoors / 9		1.0 [3]	0.80 [2]	0.8	
Service station - Outdoors / 10		1.0 [3]	1.0 [3]	1	
Residential garage - Indoors / 11		1.0 [3]	0.81 [2]	0.81	
Other repair shop - Indoors / 12		1.0 [3]	0.80 [2]	0.8	
Residence (no CO source) - Indoors/13		1.0 [3]	0.95 [1]	0.95	MZ 38
Residence (gas stove) - Indoors / 14		1.0 [3]	0.81 [2]	0.81	
Residence (attached garage) - Indoors/15		1.0 [3]	0.81 [2]	0.81	
Residence (stove and garage)- Indoors/16		1.0 [3]	0.81 [2]	0.81	
Office - Indoors / 17		1.0 [3]	0.85 [1]	0.85	MZ 39
Store - Indoors / 18		1.0 [3]	0.80 [2]	0.8	
Restaurant - Indoors / 19		1.0 [3]	0.80 [2]	0.8	
Manufacturing facility - Indoors / 20		1.0 [3]	0.80 [2]	0.8	
School - Indoors / 21		1.0 [3]	0.80 [2]	0.8	
Church- Indoors / 22		1.0 [3]	0.80 [2]	0.8	
Shopping mall - Indoors / 23		1.0 [3]	0.80 [2]	0.8	
Auditorium - Indoors / 24		1.0 [3]	0.80 [2]	0.8	
Health care facility - Indoors / 25		1.0 [3]	0.80 [2]	0.8	
Other public building - Indoors / 26		1.0 [3]	0.80 [2]	0.8	
Other location - Indoors / 27		1.0 [3]	0.80 [2]	0.8	
Not specified - Indoors / 28		1.0 [3]	0.80 [2]	0.8	
Construction site - Outdoors / 29		1.0 [3]	1.0 [3]	1	
Residential grounds - Outdoors / 30		1.0 [3]	1.0 [3]	1	
School grounds - Outdoors / 31		1.0 [3]	1.0 [3]	1	
Sports arena - Outdoors / 32		1.0 [3]	1.0 [3]	1	
Park/golf course - Outdoors / 33		1.0 [3]	1.0 [3]	1	
Other location - Outdoors / 34		1.0 [3]	1.0 [3]	1	
Not specified - Outdoors / 35		1.0 [3]	1.0 [3]	1	
Train/subway - In vehicle / 36		1.0 [3]	0.90 [2]	0.9	
Airplane - In vehicle / 37		0.0 [3]	0.90 [2]	0	

<sup>a</sup> Data Code: 1 = value obtained from literature; 2 = value obtained using grouping scheme; 3 = default value.

<sup>b</sup> The PROX factor is assumed to be the same for each source category for this pollutant.

<b>Pollutant: 2,3,7,8-TCDD: (Lower and upper bound) (#31)</b>	<b>ADD</b> <b>(<math>\mu\text{g}/\text{m}^3</math>)</b>	<b>PROX</b> <b>[Data Code] <sup>a, b</sup></b>	<b>PEN</b> <b>[Data Code] <sup>a</sup></b>	<b>MULT</b>	<b>Reference Sources</b>
<b>HAPEM ME / Number</b>					
Car - In vehicle / 1		1.0 [3]	0.88 [2]	0.88	
Bus - In vehicle / 2		1.0 [3]	0.88 [2]	0.88	
Truck - In vehicle / 3		1.0 [3]	0.88 [2]	0.88	
Other - In vehicle / 4		1.0 [3]	0.88 [2]	0.88	
Public garage - Indoors / 5		1.0 [3]	0.81 [2]	0.81	
Parking lot/garage - Outdoors / 6		1.0 [3]	1.0 [3]	1	
Near road - Outdoors / 7		1.0 [3]	1.0 [3]	1	
Motorcycle - Outdoors / 8		1.0 [3]	1.0 [3]	1	
Service station - Indoors / 9		1.0 [3]	0.81 [2]	0.81	
Service station - Outdoors / 10		1.0 [3]	1.0 [3]	1	
Residential garage - Indoors / 11		1.0 [3]	0.72 [2]	0.72	
Other repair shop - Indoors / 12		1.0 [3]	0.81 [2]	0.81	
Residence (no CO source) - Indoors/13		1.0 [3]	0.72 [2]	0.72	
Residence (gas stove) - Indoors / 14		1.0 [3]	0.72 [2]	0.72	
Residence (attached garage) - Indoors/15		1.0 [3]	0.72 [2]	0.72	
Residence (stove and garage)- Indoors/16		1.0 [3]	0.72 [2]	0.72	
Office - Indoors / 17		1.0 [3]	0.81 [2]	0.81	
Store - Indoors / 18		1.0 [3]	0.81 [2]	0.81	
Restaurant - Indoors / 19		1.0 [3]	0.81 [2]	0.81	
Manufacturing facility - Indoors / 20		1.0 [3]	0.81 [2]	0.81	
School - Indoors / 21		1.0 [3]	0.81 [2]	0.81	
Church- Indoors / 22		1.0 [3]	0.81 [2]	0.81	
Shopping mall - Indoors / 23		1.0 [3]	0.81 [2]	0.81	
Auditorium - Indoors / 24		1.0 [3]	0.81 [2]	0.81	
Health care facility - Indoors / 25		1.0 [3]	0.81 [2]	0.81	
Other public building - Indoors / 26		1.0 [3]	0.81 [2]	0.81	
Other location - Indoors / 27		1.0 [3]	0.81 [2]	0.81	
Not specified - Indoors / 28		1.0 [3]	0.81 [2]	0.81	
Construction site - Outdoors / 29		1.0 [3]	1.0 [3]	1	
Residential grounds - Outdoors / 30		1.0 [3]	1.0 [3]	1	
School grounds - Outdoors / 31		1.0 [3]	1.0 [3]	1	
Sports arena - Outdoors / 32		1.0 [3]	1.0 [3]	1	
Park/golf course - Outdoors / 33		1.0 [3]	1.0 [3]	1	
Other location - Outdoors / 34		1.0 [3]	1.0 [3]	1	
Not specified - Outdoors / 35		1.0 [3]	1.0 [3]	1	
Train/subway - In vehicle / 36		1.0 [3]	0.88 [2]	0.88	
Airplane - In vehicle / 37		0.0 [3]	0.88 [2]	0	

<sup>a</sup> Data Code: 1 = value obtained from literature; 2 = value obtained using grouping scheme; 3 = default value.

<sup>b</sup> The PROX factor is assumed to be the same for each source category for this pollutant.

<b>Pollutant: 1,1,2,2-tetrachloroethane (#32)</b>	<b>ADD</b> <b>(<math>\mu\text{g}/\text{m}^3</math>)</b>	<b>PROX</b> <b>[Data Code] <sup>a, b</sup></b>	<b>PEN</b> <b>[Data Code] <sup>a</sup></b>	<b>MULT</b>	<b>Reference Sources</b>
Car - In vehicle / 1		1.0 [3]	0.88 [2]	0.88	
Bus - In vehicle / 2		1.0 [3]	0.88 [2]	0.88	
Truck - In vehicle / 3		1.0 [3]	0.88 [2]	0.88	
Other - In vehicle / 4		1.0 [3]	0.88 [2]	0.88	
Public garage - Indoors / 5		1.0 [3]	0.78 [2]	0.78	
Parking lot/garage - Outdoors / 6		1.0 [3]	1.0 [3]	1	
Near road - Outdoors / 7		1.0 [3]	1.0 [3]	1	
Motorcycle - Outdoors / 8		1.0 [3]	1.0 [3]	1	
Service station - Indoors / 9		1.0 [3]	0.78 [2]	0.78	
Service station - Outdoors / 10		1.0 [3]	1.0 [3]	1	
Residential garage - Indoors / 11		1.0 [3]	0.77 [2]	0.77	
Other repair shop - Indoors / 12		1.0 [3]	0.78 [2]	0.78	
Residence (no CO source) - Indoors/13		1.0 [3]	0.77 [2]	0.77	
Residence (gas stove) - Indoors / 14		1.0 [3]	0.77 [2]	0.77	
Residence (attached garage) - Indoors/15		1.0 [3]	0.77 [2]	0.77	
Residence (stove and garage)- Indoors/16		1.0 [3]	0.77 [2]	0.77	
Office - Indoors / 17		1.0 [3]	0.87 [1]	0.87	MZ 39
Store - Indoors / 18		1.0 [3]	0.78 [2]	0.78	
Restaurant - Indoors / 19		1.0 [3]	0.78 [2]	0.78	
Manufacturing facility - Indoors / 20		1.0 [3]	0.78 [2]	0.78	
School - Indoors / 21		1.0 [3]	0.78 [2]	0.78	
Church- Indoors / 22		1.0 [3]	0.78 [2]	0.78	
Shopping mall - Indoors / 23		1.0 [3]	0.78 [2]	0.78	
Auditorium - Indoors / 24		1.0 [3]	0.78 [2]	0.78	
Health care facility - Indoors / 25		1.0 [3]	0.78 [2]	0.78	
Other public building - Indoors / 26		1.0 [3]	0.78 [2]	0.78	
Other location - Indoors / 27		1.0 [3]	0.78 [2]	0.78	
Not specified - Indoors / 28		1.0 [3]	0.78 [2]	0.78	
Construction site - Outdoors / 29		1.0 [3]	1.0 [3]	1	
Residential grounds - Outdoors / 30		1.0 [3]	1.0 [3]	1	
School grounds - Outdoors / 31		1.0 [3]	1.0 [3]	1	
Sports arena - Outdoors / 32		1.0 [3]	1.0 [3]	1	
Park/golf course - Outdoors / 33		1.0 [3]	1.0 [3]	1	
Other location - Outdoors / 34		1.0 [3]	1.0 [3]	1	
Not specified - Outdoors / 35		1.0 [3]	1.0 [3]	1	
Train/subway - In vehicle / 36		1.0 [3]	0.88 [2]	0.88	
Airplane - In vehicle / 37		0.0 [3]	0.88 [2]	0	

<sup>a</sup> Data Code: 1 = value obtained from literature; 2 = value obtained using grouping scheme; 3 = default value.

<sup>b</sup> The PROX factor is assumed to be the same for each source category for this pollutant.

<b>Pollutant: Tetrachloroethylene (perchloroethylene) (#33)</b>	<b>ADD (<math>\mu\text{g}/\text{m}^3</math>)</b>	<b>PROX [Data Code] <sup>a, b</sup></b>	<b>PEN [Data Code] <sup>a</sup></b>	<b>MULT</b>	<b>Reference Sources</b>
Car - In vehicle / 1		1.0 [3]	0.88 [2]	0.88	
Bus - In vehicle / 2		1.0 [3]	0.88 [2]	0.88	
Truck - In vehicle / 3		1.0 [3]	0.88 [2]	0.88	
Other - In vehicle / 4		1.0 [3]	0.88 [2]	0.88	
Public garage - Indoors / 5		1.0 [3]	0.78 [2]	0.78	
Parking lot/garage - Outdoors / 6		1.0 [3]	1.0 [3]	1	
Near road - Outdoors / 7		1.0 [3]	1.0 [3]	1	
Motorcycle - Outdoors / 8		1.0 [3]	1.0 [3]	1	
Service station - Indoors / 9		1.0 [3]	0.78 [2]	0.78	
Service station - Outdoors / 10		1.0 [3]	1.0 [3]	1	
Residential garage - Indoors / 11		1.0 [3]	0.77 [2]	0.77	
Other repair shop - Indoors / 12		1.0 [3]	0.78 [2]	0.78	
Residence (no CO source) - Indoors/13		1.0 [3]	0.65 [1]	0.65	MZ 27
Residence (gas stove) - Indoors / 14		1.0 [3]	0.77 [2]	0.77	
Residence (attached garage) - Indoors/15		1.0 [3]	0.77 [2]	0.77	
Residence (stove and garage)- Indoors/16		1.0 [3]	0.77 [2]	0.77	
Office - Indoors / 17		1.0 [3]	0.78 [2]	0.78	
Store - Indoors / 18		1.0 [3]	0.78 [2]	0.78	
Restaurant - Indoors / 19		1.0 [3]	0.78 [2]	0.78	
Manufacturing facility - Indoors / 20		1.0 [3]	0.78 [2]	0.78	
School - Indoors / 21		1.0 [3]	0.65 [1]	0.65	MZ 1
Church- Indoors / 22		1.0 [3]	0.78 [2]	0.78	
Shopping mall - Indoors / 23		1.0 [3]	0.78 [2]	0.78	
Auditorium - Indoors / 24		1.0 [3]	0.78 [2]	0.78	
Health care facility - Indoors / 25		1.0 [3]	0.78 [2]	0.78	
Other public building - Indoors / 26		1.0 [3]	0.78 [2]	0.78	
Other location - Indoors / 27		1.0 [3]	0.9 <sup>c</sup> [1]	0.9	MZ 32
Not specified - Indoors / 28		1.0 [3]	0.78 [2]	0.78	
Construction site - Outdoors / 29		1.0 [3]	1.0 [3]	1	
Residential grounds - Outdoors / 30		1.0 [3]	1.0 [3]	1	
School grounds - Outdoors / 31		1.0 [3]	1.0 [3]	1	
Sports arena - Outdoors / 32		1.0 [3]	1.0 [3]	1	
Park/golf course - Outdoors / 33		1.0 [3]	1.0 [3]	1	
Other location - Outdoors / 34		1.0 [3]	1.0 [3]	1	
Not specified - Outdoors / 35		1.0 [3]	1.0 [3]	1	
Train/subway - In vehicle / 36		1.0 [3]	0.88 [2]	0.88	
Airplane - In vehicle / 37		0.0 [3]	0.88 [2]	0	

<sup>a</sup> Data Code: 1 = value obtained from literature; 2 = value obtained using grouping scheme; 3 = default value.

<sup>b</sup> The PROX factor is assumed to be the same for each source category for this pollutant.

<sup>c</sup> Museum

<b>Pollutant: Trichloroethylene (#34)</b>	<b>ADD</b> <b>(<math>\mu\text{g}/\text{m}^3</math>)</b>	<b>PROX</b> <b>[Data Code] <sup>a, b</sup></b>	<b>PEN</b> <b>[Data Code] <sup>a</sup></b>	<b>MULT</b>	<b>Reference Sources</b>
Car - In vehicle / 1		1.0 [3]	0.88 [2]	0.88	
Bus - In vehicle / 2		1.0 [3]	0.88 [2]	0.88	
Truck - In vehicle / 3		1.0 [3]	0.88 [2]	0.88	
Other - In vehicle / 4		1.0 [3]	0.88 [2]	0.88	
Public garage - Indoors / 5		1.0 [3]	0.78 [2]	0.78	
Parking lot/garage - Outdoors / 6		1.0 [3]	1.0 [3]	1	
Near road - Outdoors / 7		1.0 [3]	1.0 [3]	1	
Motorcycle - Outdoors / 8		1.0 [3]	1.0 [3]	1	
Service station - Indoors / 9		1.0 [3]	0.78 [2]	0.78	
Service station - Outdoors / 10		1.0 [3]	1.0 [3]	1	
Residential garage - Indoors / 11		1.0 [3]	0.77 [2]	0.77	
Other repair shop - Indoors / 12		1.0 [3]	0.78 [2]	0.78	
Residence (no CO source) - Indoors/13		1.0 [3]	0.9 [1]	0.9	MZ 27
Residence (gas stove) - Indoors / 14		1.0 [3]	0.77 [2]	0.77	
Residence (attached garage) - Indoors/15		1.0 [3]	0.77 [2]	0.77	
Residence (stove and garage)- Indoors/16		1.0 [3]	0.77 [2]	0.77	
Office - Indoors / 17		1.0 [3]	0.78 [2]	0.78	
Store - Indoors / 18		1.0 [3]	0.78 [2]	0.78	
Restaurant - Indoors / 19		1.0 [3]	0.78 [2]	0.78	
Manufacturing facility - Indoors / 20		1.0 [3]	0.78 [2]	0.78	
School - Indoors / 21		1.0 [3]	0.78 [2]	0.78	
Church- Indoors / 22		1.0 [3]	0.78 [2]	0.78	
Shopping mall - Indoors / 23		1.0 [3]	0.78 [2]	0.78	
Auditorium - Indoors / 24		1.0 [3]	0.78 [2]	0.78	
Health care facility - Indoors / 25		1.0 [3]	0.78 [2]	0.78	
Other public building - Indoors / 26		1.0 [3]	0.78 [2]	0.78	
Other location - Indoors / 27		1.0 [3]	0.78 [2]	0.78	
Not specified - Indoors / 28		1.0 [3]	0.78 [2]	0.78	
Construction site - Outdoors / 29		1.0 [3]	1.0 [3]	1	
Residential grounds - Outdoors / 30		1.0 [3]	1.0 [3]	1	
School grounds - Outdoors / 31		1.0 [3]	1.0 [3]	1	
Sports arena - Outdoors / 32		1.0 [3]	1.0 [3]	1	
Park/golf course - Outdoors / 33		1.0 [3]	1.0 [3]	1	
Other location - Outdoors / 34		1.0 [3]	1.0 [3]	1	
Not specified - Outdoors / 35		1.0 [3]	1.0 [3]	1	
Train/subway - In vehicle / 36		1.0 [3]	0.88 [2]	0.88	
Airplane - In vehicle / 37		0.0 [3]	0.88 [2]	0	

<sup>a</sup> Data Code: 1 = value obtained from literature; 2 = value obtained using grouping scheme; 3 = default value.

<sup>b</sup> The PROX factor is assumed to be the same for each source category for this pollutant.

<b>Pollutant: Vinyl chloride (#35)</b>	<b>ADD</b> <b>(<math>\mu\text{g}/\text{m}^3</math>)</b>	<b>PROX</b> <b>[Data Code] <sup>a, b</sup></b>	<b>PEN</b> <b>[Data Code] <sup>a</sup></b>	<b>MULT</b>	<b>Reference Sources</b>
Car - In vehicle / 1		1.0 [3]	0.88 [2]	0.88	
Bus - In vehicle / 2		1.0 [3]	0.88 [2]	0.88	
Truck - In vehicle / 3		1.0 [3]	0.88 [2]	0.88	
Other - In vehicle / 4		1.0 [3]	0.88 [2]	0.88	
Public garage - Indoors / 5		1.0 [3]	0.81 [2]	0.81	
Parking lot/garage - Outdoors / 6		1.0 [3]	1.0 [3]	1	
Near road - Outdoors / 7		1.0 [3]	1.0 [3]	1	
Motorcycle - Outdoors / 8		1.0 [3]	1.0 [3]	1	
Service station - Indoors / 9		1.0 [3]	0.81 [2]	0.81	
Service station - Outdoors / 10		1.0 [3]	1.0 [3]	1	
Residential garage - Indoors / 11		1.0 [3]	0.72 [2]	0.72	
Other repair shop - Indoors / 12		1.0 [3]	0.81 [2]	0.81	
Residence (no CO source) - Indoors/13		1.0 [3]	0.72 [2]	0.72	
Residence (gas stove) - Indoors / 14		1.0 [3]	0.72 [2]	0.72	
Residence (attached garage) - Indoors/15		1.0 [3]	0.72 [2]	0.72	
Residence (stove and garage)- Indoors/16		1.0 [3]	0.72 [2]	0.72	
Office - Indoors / 17		1.0 [3]	0.81 [2]	0.81	
Store - Indoors / 18		1.0 [3]	0.81 [2]	0.81	
Restaurant - Indoors / 19		1.0 [3]	0.81 [2]	0.81	
Manufacturing facility - Indoors / 20		1.0 [3]	0.81 [2]	0.81	
School - Indoors / 21		1.0 [3]	0.81 [2]	0.81	
Church- Indoors / 22		1.0 [3]	0.81 [2]	0.81	
Shopping mall - Indoors / 23		1.0 [3]	0.81 [2]	0.81	
Auditorium - Indoors / 24		1.0 [3]	0.81 [2]	0.81	
Health care facility - Indoors / 25		1.0 [3]	0.81 [2]	0.81	
Other public building - Indoors / 26		1.0 [3]	0.81 [2]	0.81	
Other location - Indoors / 27		1.0 [3]	0.81 [2]	0.81	
Not specified - Indoors / 28		1.0 [3]	0.81 [2]	0.81	
Construction site - Outdoors / 29		1.0 [3]	1.0 [3]	1	
Residential grounds - Outdoors / 30		1.0 [3]	1.0 [3]	1	
School grounds - Outdoors / 31		1.0 [3]	1.0 [3]	1	
Sports arena - Outdoors / 32		1.0 [3]	1.0 [3]	1	
Park/golf course - Outdoors / 33		1.0 [3]	1.0 [3]	1	
Other location - Outdoors / 34		1.0 [3]	1.0 [3]	1	
Not specified - Outdoors / 35		1.0 [3]	1.0 [3]	1	
Train/subway - In vehicle / 36		1.0 [3]	0.88 [2]	0.88	
Airplane - In vehicle / 37		0.0 [3]	0.88 [2]	0	

<sup>a</sup> Data Code: 1 = value obtained from literature; 2 = value obtained using grouping scheme; 3 = default value.

<sup>b</sup> The PROX factor is assumed to be the same for each source category for this pollutant.

<b>Pollutant: Ethylbenzene</b>	<b>ADD</b> <b>(<math>\mu\text{g}/\text{m}^3</math>)</b>	<b>PROX</b> <b>[Data Code] <sup>a, b</sup></b>	<b>PEN</b> <b>[Data Code] <sup>a</sup></b>	<b>MULT</b>	<b>Reference Sources</b>
Car - In vehicle / 1		1.0 [3]	0.8 [1]	0.8	MZ 28
Bus - In vehicle / 2		1.0 [3]	0.90 [2]	0.9	
Truck - In vehicle / 3		1.0 [3]	0.90 [2]	0.9	
Other - In vehicle / 4		1.0 [3]	0.90 [2]	0.9	
Public garage - Indoors / 5		1.0 [3]	0.79 [1]	0.79	RA 24
Parking lot/garage - Outdoors / 6		1.0 [3]	1.0 [3]	1	
Near road - Outdoors / 7		1.0 [3]	1.0 [3]	1	
Motorcycle - Outdoors / 8		1.0 [3]	1.0 [3]	1	
Service station - Indoors / 9		1.0 [3]	0.80 [2]	0.8	
Service station - Outdoors / 10		1.0 [3]	1.0 [3]	1	
Residential garage - Indoors / 11		1.0 [3]	0.81 [2]	0.81	
Other repair shop - Indoors / 12		1.0 [3]	0.80 [2]	0.8	
Residence (no CO source) - Indoors/13		1.0 [3]	0.85 [1]	0.85	MZ 27
Residence (gas stove) - Indoors / 14		1.0 [3]	0.81 [2]	0.81	
Residence (attached garage) - Indoors/15		1.0 [3]	0.81 [2]	0.81	
Residence (stove and garage)- Indoors/16		1.0 [3]	0.81 [2]	0.81	
Office - Indoors / 17		1.0 [3]	0.74 [1]	0.74	MZ 39
Store - Indoors / 18		1.0 [3]	0.80 [2]	0.8	
Restaurant - Indoors / 19		1.0 [3]	0.80 [2]	0.8	
Manufacturing facility - Indoors / 20		1.0 [3]	0.80 [2]	0.8	
School - Indoors / 21		1.0 [3]	0.80 [2]	0.8	
Church- Indoors / 22		1.0 [3]	0.80 [2]	0.8	
Shopping mall - Indoors / 23		1.0 [3]	0.80 [2]	0.8	
Auditorium - Indoors / 24		1.0 [3]	0.80 [2]	0.8	
Health care facility - Indoors / 25		1.0 [3]	0.80 [2]	0.8	
Other public building - Indoors / 26		1.0 [3]	0.80 [2]	0.8	
Other location - Indoors / 27		1.0 [3]	0.80 [2]	0.8	
Not specified - Indoors / 28		1.0 [3]	0.80 [2]	0.8	
Construction site - Outdoors / 29		1.0 [3]	1.0 [3]	1	
Residential grounds - Outdoors / 30		1.0 [3]	1.0 [3]	1	
School grounds - Outdoors / 31		1.0 [3]	1.0 [3]	1	
Sports arena - Outdoors / 32		1.0 [3]	1.0 [3]	1	
Park/golf course - Outdoors / 33		1.0 [3]	1.0 [3]	1	
Other location - Outdoors / 34		1.0 [3]	1.0 [3]	1	
Not specified - Outdoors / 35		1.0 [3]	1.0 [3]	1	
Train/subway - In vehicle / 36		1.0 [3]	0.90 [2]	0.9	
Airplane - In vehicle / 37		0.0 [3]	0.90 [2]	0	

<sup>a</sup> Data Code: 1 = value obtained from literature; 2 = value obtained using grouping scheme; 3 = default value.

<sup>b</sup> The PROX factor is assumed to be the same for each source category for this pollutant.



<b>Pollutant: <u>Hexane</u></b>	<b>ADD</b>	<b>PROX</b>	<b>PEN</b>	<b>MULT</b>	<b>Reference Sources</b>
<b>HAPEM ME / Number</b>	<b>(<math>\mu\text{g}/\text{m}^3</math>)</b>	<b>[Data Code] <sup>a, b</sup></b>	<b>[Data Code] <sup>a</sup></b>		
Car - In vehicle / 1		1.0 [3]	0.93 [1]	0.93	MZ 28
Bus - In vehicle / 2		1.0 [3]	0.90 [2]	0.9	
Truck - In vehicle / 3		1.0 [3]	0.90 [2]	0.9	
Other - In vehicle / 4		1.0 [3]	0.90 [2]	0.9	
Public garage - Indoors / 5		1.0 [3]	0.80 [2]	0.8	
Parking lot/garage - Outdoors / 6		1.0 [3]	1.0 [3]	1	
Near road - Outdoors / 7		1.0 [3]	1.0 [3]	1	
Motorcycle - Outdoors / 8		1.0 [3]	1.0 [3]	1	
Service station - Indoors / 9		1.0 [3]	0.80 [2]	0.8	
Service station - Outdoors / 10		1.0 [3]	1.0 [3]	1	
Residential garage - Indoors / 11		1.0 [3]	0.81 [2]	0.81	
Other repair shop - Indoors / 12		1.0 [3]	0.80 [2]	0.8	
Residence (no CO source) - Indoors/13		1.0 [3]	0.65 [1]	0.65	MZ 27
Residence (gas stove) - Indoors / 14		1.0 [3]	0.81 [2]	0.81	
Residence (attached garage) - Indoors/15		1.0 [3]	0.81 [2]	0.81	
Residence (stove and garage)- Indoors/16		1.0 [3]	0.81 [2]	0.81	
Office - Indoors / 17		1.0 [3]	0.80 [2]	0.8	
Store - Indoors / 18		1.0 [3]	0.80 [2]	0.8	
Restaurant - Indoors / 19		1.0 [3]	0.80 [2]	0.8	
Manufacturing facility - Indoors / 20		1.0 [3]	0.80 [2]	0.8	
School - Indoors / 21		1.0 [3]	0.80 [2]	0.8	
Church- Indoors / 22		1.0 [3]	0.80 [2]	0.8	
Shopping mall - Indoors / 23		1.0 [3]	0.80 [2]	0.8	
Auditorium - Indoors / 24		1.0 [3]	0.80 [2]	0.8	
Health care facility - Indoors / 25		1.0 [3]	0.80 [2]	0.8	
Other public building - Indoors / 26		1.0 [3]	0.80 [2]	0.8	
Other location - Indoors / 27		1.0 [3]	0.80 [2]	0.8	
Not specified - Indoors / 28		1.0 [3]	0.80 [2]	0.8	
Construction site - Outdoors / 29		1.0 [3]	1.0 [3]	1	
Residential grounds - Outdoors / 30		1.0 [3]	1.0 [3]	1	
School grounds - Outdoors / 31		1.0 [3]	1.0 [3]	1	
Sports arena - Outdoors / 32		1.0 [3]	1.0 [3]	1	
Park/golf course - Outdoors / 33		1.0 [3]	1.0 [3]	1	
Other location - Outdoors / 34		1.0 [3]	1.0 [3]	1	
Not specified - Outdoors / 35		1.0 [3]	1.0 [3]	1	
Train/subway - In vehicle / 36		1.0 [3]	0.90 [2]	0.9	
Airplane - In vehicle / 37		0.0 [3]	0.90 [2]	0	

<sup>a</sup> Data Code: 1 = value obtained from literature; 2 = value obtained using grouping scheme; 3 = default value.

<sup>b</sup> The PROX factor is assumed to be the same for each source category for this pollutant.

<b>Pollutant: <u>MTBE</u></b>	<b>ADD</b>	<b>PROX</b>	<b>PEN</b>	<b>MULT</b>	<b>Reference Sources</b>
<b>HAPEM ME / Number</b>	<b>(<math>\mu\text{g}/\text{m}^3</math>)</b>	<b>[Data Code] <sup>a, b</sup></b>	<b>[Data Code] <sup>a</sup></b>		
Car - In vehicle / 1		1.0 [3]		0	
Bus - In vehicle / 2		1.0 [3]	1.0 [1]	1	MZ 14
Truck - In vehicle / 3		1.0 [3]		0	
Other - In vehicle / 4		1.0 [3]		0	
Public garage - Indoors / 5		1.0 [3]		0	
Parking lot/garage - Outdoors / 6		1.0 [3]		0	
Near road - Outdoors / 7		1.0 [3]		0	
Motorcycle - Outdoors / 8		1.0 [3]		0	
Service station - Indoors / 9		1.0 [3]		0	
Service station - Outdoors / 10		1.0 [3]		0	
Residential garage - Indoors / 11		1.0 [3]		0	
Other repair shop - Indoors / 12		1.0 [3]		0	
Residence (no CO source) - Indoors/13		1.0 [3]		0	
Residence (gas stove) - Indoors / 14		1.0 [3]		0	
Residence (attached garage) - Indoors/15		1.0 [3]		0	
Residence (stove and garage)- Indoors/16		1.0 [3]		0	
Office - Indoors / 17		1.0 [3]		0	
Store - Indoors / 18		1.0 [3]		0	
Restaurant - Indoors / 19		1.0 [3]		0	
Manufacturing facility - Indoors / 20		1.0 [3]		0	
School - Indoors / 21		1.0 [3]		0	
Church- Indoors / 22		1.0 [3]		0	
Shopping mall - Indoors / 23		1.0 [3]		0	
Auditorium - Indoors / 24		1.0 [3]		0	
Health care facility - Indoors / 25		1.0 [3]		0	
Other public building - Indoors / 26		1.0 [3]		0	
Other location - Indoors / 27		1.0 [3]		0	
Not specified - Indoors / 28		1.0 [3]		0	
Construction site - Outdoors / 29		1.0 [3]		0	
Residential grounds - Outdoors / 30		1.0 [3]		0	
School grounds - Outdoors / 31		1.0 [3]		0	
Sports arena - Outdoors / 32		1.0 [3]		0	
Park/golf course - Outdoors / 33		1.0 [3]		0	
Other location - Outdoors / 34		1.0 [3]		0	
Not specified - Outdoors / 35		1.0 [3]		0	
Train/subway - In vehicle / 36		1.0 [3]		0	
Airplane - In vehicle / 37		0.0 [3]		0	

<sup>a</sup> Data Code: 1 = value obtained from literature; 2 = value obtained using grouping scheme; 3 = default value.

<sup>b</sup> The PROX factor is assumed to be the same for each source category for this pollutant.

<b>Pollutant: Toluene</b>	<b>ADD</b>	<b>PROX</b>	<b>PEN</b>	<b>MULT</b>	<b>Reference Sources</b>
<b>HAPEM ME / Number</b>	<b>(<math>\mu\text{g}/\text{m}^3</math>)</b>	<b>[Data Code] <sup>a, b</sup></b>	<b>[Data Code] <sup>a</sup></b>		
Car - In vehicle / 1		1.0 [3]	0.88 [1]	0.88	MZ 28
Bus - In vehicle / 2		1.0 [3]	0.88 [2]	0.88	
Truck - In vehicle / 3		1.0 [3]	0.88 [2]	0.88	
Other - In vehicle / 4		1.0 [3]	0.88 [2]	0.88	
Public garage - Indoors / 5		1.0 [3]	0.80 [1]	0.8	RA 24
Parking lot/garage - Outdoors / 6		1.0 [3]	1.0 [3]	1	
Near road - Outdoors / 7		1.0 [3]	1.0 [3]	1	
Motorcycle - Outdoors / 8		1.0 [3]	1.0 [3]	1	
Service station - Indoors / 9		1.0 [3]	0.81 [2]	0.81	
Service station - Outdoors / 10		1.0 [3]	1.0 [3]	1	
Residential garage - Indoors / 11		1.0 [3]	0.72 [2]	0.72	
Other repair shop - Indoors / 12		1.0 [3]	0.81 [2]	0.81	
Residence (no CO source) - Indoors/13		1.0 [3]	0.95 [1]	0.95	MZ 27
Residence (gas stove) - Indoors / 14		1.0 [3]	0.72 [2]	0.72	
Residence (attached garage) - Indoors/15		1.0 [3]	0.72 [2]	0.72	
Residence (stove and garage)- Indoors/16		1.0 [3]	0.72 [2]	0.72	
Office - Indoors / 17		1.0 [3]	0.82 [1]	0.82	MZ 39
Store - Indoors / 18		1.0 [3]	0.81 [2]	0.81	
Restaurant - Indoors / 19		1.0 [3]	0.81 [2]	0.81	
Manufacturing facility - Indoors / 20		1.0 [3]	0.81 [2]	0.81	
School - Indoors / 21		1.0 [3]	0.81 [2]	0.81	
Church- Indoors / 22		1.0 [3]	0.81 [2]	0.81	
Shopping mall - Indoors / 23		1.0 [3]	0.81 [2]	0.81	
Auditorium - Indoors / 24		1.0 [3]	0.81 [2]	0.81	
Health care facility - Indoors / 25		1.0 [3]	0.81 [2]	0.81	
Other public building - Indoors / 26		1.0 [3]	0.81 [2]	0.81	
Other location - Indoors / 27		1.0 [3]	0.81 [2]	0.81	
Not specified - Indoors / 28		1.0 [3]	0.81 [2]	0.81	
Construction site - Outdoors / 29		1.0 [3]	1.0 [3]	1	
Residential grounds - Outdoors / 30		1.0 [3]	1.0 [3]	1	
School grounds - Outdoors / 31		1.0 [3]	1.0 [3]	1	
Sports arena - Outdoors / 32		1.0 [3]	1.0 [3]	1	
Park/golf course - Outdoors / 33		1.0 [3]	1.0 [3]	1	
Other location - Outdoors / 34		1.0 [3]	1.0 [3]	1	
Not specified - Outdoors / 35		1.0 [3]	1.0 [3]	1	
Train/subway - In vehicle / 36		1.0 [3]	0.88 [2]	0.88	
Airplane - In vehicle / 37		0.0 [3]	0.88 [2]	0	

<sup>a</sup> Data Code: 1 = value obtained from literature; 2 = value obtained using grouping scheme; 3 = default value.

<sup>b</sup> The PROX factor is assumed to be the same for each source category for this pollutant.

<b>Pollutant: Xylenes</b>	<b>ADD</b> <b>(<math>\mu\text{g}/\text{m}^3</math>)</b>	<b>PROX</b> <b>[Data Code] <sup>a, b</sup></b>	<b>PEN</b> <b>[Data Code] <sup>a</sup></b>	<b>MULT</b>	<b>Reference Sources</b>
Car - In vehicle / 1		1.0 [3]	0.88 [1]	0.88	MZ 28
Bus - In vehicle / 2		1.0 [3]	0.90 [2]	0.9	
Truck - In vehicle / 3		1.0 [3]	0.90 [2]	0.9	
Other - In vehicle / 4		1.0 [3]	0.90 [2]	0.9	
Public garage - Indoors / 5		1.0 [3]	0.94 [1]	0.94	RA 24
Parking lot/garage - Outdoors / 6		1.0 [3]	1.0 [3]	1	
Near road - Outdoors / 7		1.0 [3]	1.0 [3]	1	
Motorcycle - Outdoors / 8		1.0 [3]	1.0 [3]	1	
Service station - Indoors / 9		1.0 [3]	0.80 [2]	0.8	
Service station - Outdoors / 10		1.0 [3]	1.0 [3]	1	
Residential garage - Indoors / 11		1.0 [3]	0.81 [2]	0.81	
Other repair shop - Indoors / 12		1.0 [3]	0.80 [2]	0.8	
Residence (no CO source) - Indoors/13		1.0 [3]	0.85 [1]	0.85	MZ 27
Residence (gas stove) - Indoors / 14		1.0 [3]	0.81 [2]	0.81	
Residence (attached garage) - Indoors/15		1.0 [3]	0.81 [2]	0.81	
Residence (stove and garage)- Indoors/16		1.0 [3]	0.81 [2]	0.81	
Office - Indoors / 17		1.0 [3]	0.74 [1]	0.74	MZ 39
Store - Indoors / 18		1.0 [3]	0.80 [2]	0.8	
Restaurant - Indoors / 19		1.0 [3]	0.80 [2]	0.8	
Manufacturing facility - Indoors / 20		1.0 [3]	0.80 [2]	0.8	
School - Indoors / 21		1.0 [3]	0.80 [2]	0.8	
Church- Indoors / 22		1.0 [3]	0.80 [2]	0.8	
Shopping mall - Indoors / 23		1.0 [3]	0.80 [2]	0.8	
Auditorium - Indoors / 24		1.0 [3]	0.80 [2]	0.8	
Health care facility - Indoors / 25		1.0 [3]	0.80 [2]	0.8	
Other public building - Indoors / 26		1.0 [3]	0.80 [2]	0.8	
Other location - Indoors / 27		1.0 [3]	1.0 <sup>c</sup> [1]	1	MZ 29
Not specified - Indoors / 28		1.0 [3]	0.80 [2]	0.8	
Construction site - Outdoors / 29		1.0 [3]	1.0 [3]	1	
Residential grounds - Outdoors / 30		1.0 [3]	1.0 [3]	1	
School grounds - Outdoors / 31		1.0 [3]	1.0 [3]	1	
Sports arena - Outdoors / 32		1.0 [3]	1.0 [3]	1	
Park/golf course - Outdoors / 33		1.0 [3]	1.0 [3]	1	
Other location - Outdoors / 34		1.0 [3]	1.0 [3]	1	
Not specified - Outdoors / 35		1.0 [3]	1.0 [3]	1	
Train/subway - In vehicle / 36		1.0 [3]	0.90 [2]	0.9	
Airplane - In vehicle / 37		0.0 [3]	0.90 [2]	0	

<sup>a</sup> Data Code: 1 = value obtained from literature; 2 = value obtained using grouping scheme; 3 = default value.

<sup>b</sup> The PROX factor is assumed to be the same for each source category for this pollutant.

<sup>c</sup> Telephone switching center

## **Appendix C**

### **Distributions and Equations Used in the Ventilation Rate Algorithm**

Each table in Appendix C is specific to parameter and gender (e.g.,  $NVO_{2max}$  values for males). The tables which list distributions include the following data items

Age: age of person in years  
Source: source of data (see Table C-1)  
Distr: distribution of data [normal, lognormal (LN), or uniform]  
Mean: arithmetic mean for normal distributions      SD: arithmetic standard deviation  
GM: geometric mean of lognormal distribution  
GSD: geometric standard deviation of lognormal distribution  
Lower bound: smallest value permitted  
Upper bound: largest value permitted  
Assumptions: special assumptions used in developing distribution parameters

The tables which provide equations for estimating RMR include the following data items

Age: age of person in years  
Source: source of data (see Table C-1)  
DV: dependent variable of regression equation  
IV: independent variable of regression equation  
Slope: slope of regression equation (estimate of “a” in Equation 9-17)  
Interc: intercept of regression equation (estimate of “b” in Equation 9-17)  
SE: standard error of regression residuals (estimate of  $\sigma_e$  in Equation 9-17)  
Assumptions: special assumptions used in developing equation parameters

The codes listed under “source” are informal identification codes developed by analysts. The following table relates these codes to tables provided in Section 9.

Table C-1. Explanation of Codes Listed Under “Source” in Appendix C Tables.

Code Listed in “Source” Column of Table in Appendix C	Referenced Table in This Report	Original Reference
1 and 2	NA	Values for ages 6 through 64 based on Figure 9-13 in Astrand and Rodahl (1977). Values for ages 0 through 5 and ages 65 through 74 obtained by extending curves tangentially.
3a	Table 9-9	Astrand (1960)
3b	Table 9-9	Mercier et al. (1991)
3c	Table 9-9	Katch and Park (1975)
3d	Table 9-9	Heil et al. (1995)
3g	Table 9-9	Rowland et al. (1987)
4	Table 9-8	Brainard and Burmaster (1992), Burmaster and Crouch (1997).
5	Table 9-10	Esmail, Bhambhani, and Brintnell (1995).
R47a - R47l	Table 9-11	Schofield (1985)

Males (last revised 6-11-98)							
Age	Source	NVO <sub>2max</sub> distribution					Assumptions
		Distr	Mean	SD	Lower	Upper	
0	1	Normal	44.0	5.2	33.7	54.3	2-yr-old mean, CV = 6.9/57.9
1	1	Normal	44.0	5.2	33.7	54.3	2-yr-old mean, CV = 6.9/57.9
2	1	Normal	44.0	5.2	33.7	54.3	CV = 6.9/57.9
3	1	Normal	46.0	5.5	35.3	56.7	CV = 6.9/57.9
4	1	Normal	48.0	5.7	36.8	59.2	CV = 6.9/57.9
5	1	Normal	50.0	6.0	38.3	61.7	CV = 6.9/57.9
6	1	Normal	52.0	6.2	39.9	64.1	CV = 6.9/57.9
7	1	Normal	54.0	6.4	41.4	66.6	CV = 6.9/57.9
8	1	Normal	56.0	6.7	42.9	69.1	CV = 6.9/57.9
9	3g	Normal	57.9	6.9	44.4	71.4	
10	3g	Normal	57.9	6.9	44.4	71.4	
11	3b	Normal	45.4	8.1	29.6	61.2	
12	3b	Normal	47.4	8.1	31.5	63.3	
13	3b	Normal	46.0	7.0	32.3	59.7	
14	3b	Normal	45.7	4.3	37.4	54.0	
15	3b	Normal	47.5	4.7	38.3	56.7	
16	1	Normal	55.0	5.4	44.4	65.6	CV = 4.69/47.5
17	1	Normal	53.0	5.2	42.7	63.3	
18	1	Normal	50.0	4.9	40.3	59.7	
19	1	Normal	50.0	4.9	40.3	59.7	
20	3a	Normal	58.6	4.5	49.8	67.4	
21	3c	Normal	54.5	7.6	39.6	69.4	
22	3c	Normal	54.5	7.6	39.6	69.4	
23	3c	Normal	54.5	7.6	39.6	69.4	
24	3c	Normal	54.5	7.6	39.6	69.4	
25	3c	Normal	54.5	7.6	39.6	69.4	
26	3c	Normal	54.5	7.6	39.6	69.4	
27	3c	Normal	54.5	7.6	39.6	69.4	
28	3a	Normal	58.6	4.5	49.8	67.4	
29	3a	Normal	58.6	4.5	49.8	67.4	
30	3a	Normal	39.8	7.3	25.5	54.1	
31	3a	Normal	39.8	7.3	25.5	54.1	
32	3a	Normal	39.8	7.3	25.5	54.1	
33	3a	Normal	39.8	7.3	25.5	54.1	
34	3a	Normal	39.8	7.3	25.5	54.1	
35	3a	Normal	39.8	7.3	25.5	54.1	
36	3a	Normal	39.8	7.3	25.5	54.1	
37	3a	Normal	39.8	7.3	25.5	54.1	
38	3a	Normal	39.8	7.3	25.5	54.1	
39	3a	Normal	39.8	7.3	25.5	54.1	
40	3a	Normal	39.2	5.5	28.4	50.0	
41	3a	Normal	39.2	5.5	28.4	50.0	
42	3a	Normal	39.2	5.5	28.4	50.0	
43	3a	Normal	39.2	5.5	28.4	50.0	
44	3a	Normal	39.2	5.5	28.4	50.0	
45	3a	Normal	39.2	5.5	28.4	50.0	
46	3a	Normal	39.2	5.5	28.4	50.0	
47	3a	Normal	39.2	5.5	28.4	50.0	
48	3a	Normal	39.2	5.5	28.4	50.0	



Age	Source	NVO <sub>2max</sub> distribution					Assumptions
		Distr	Mean	SD	Lower	Upper	
49	3a	Normal	39.2	5.5	28.4	50.0	
50	3a	Normal	33.1	4.9	23.5	42.7	
51	3a	Normal	33.1	4.9	23.5	42.7	
52	3a	Normal	33.1	4.9	23.5	42.7	
53	3a	Normal	33.1	4.9	23.5	42.7	
54	3a	Normal	33.1	4.9	23.5	42.7	
55	3a	Normal	33.1	4.9	23.5	42.7	
56	3a	Normal	33.1	4.9	23.5	42.7	
57	3a	Normal	33.1	4.9	23.5	42.7	
58	3a	Normal	33.1	4.9	23.5	42.7	
59	3a	Normal	33.1	4.9	23.5	42.7	
60	3a	Normal	31.4	5.3	21.0	41.8	
61	3a	Normal	31.4	5.3	21.0	41.8	
62	3a	Normal	31.4	5.3	21.0	41.8	
63	3a	Normal	31.4	5.3	21.0	41.8	
64	3a	Normal	31.4	5.3	21.0	41.8	
65	3a	Normal	31.4	5.3	21.0	41.8	
66	3a	Normal	31.4	5.3	21.0	41.8	
67	3a	Normal	31.4	5.3	21.0	41.8	
68	3a	Normal	31.4	5.3	21.0	41.8	
69	3a	Normal	31.4	5.3	21.0	41.8	
70	3d	Normal	27.2	5.7	16.1	38.3	
71	3d	Normal	27.2	5.7	16.1	38.3	
72	3d	Normal	27.2	5.7	16.1	38.3	
73	3d	Normal	27.2	5.7	16.1	38.3	
74	3d	Normal	27.2	5.7	16.1	38.3	
75	3d	Normal	27.2	5.7	16.1	38.3	
76	3d	Normal	27.2	5.7	16.1	38.3	
77	3d	Normal	27.2	5.7	16.1	38.3	
78	3d	Normal	27.2	5.7	16.1	38.3	
79	3d	Normal	27.2	5.7	16.1	38.3	
80	(3d)	Normal	27.2	5.7	16.1	38.3	Assumes data for age 70-79 applies
81	(3d)	Normal	27.2	5.7	16.1	38.3	Assumes data for age 70-79 applies
82	(3d)	Normal	27.2	5.7	16.1	38.3	Assumes data for age 70-79 applies
83	(3d)	Normal	27.2	5.7	16.1	38.3	Assumes data for age 70-79 applies
84	(3d)	Normal	27.2	5.7	16.1	38.3	Assumes data for age 70-79 applies
85	(3d)	Normal	27.2	5.7	16.1	38.3	Assumes data for age 70-79 applies
86	(3d)	Normal	27.2	5.7	16.1	38.3	Assumes data for age 70-79 applies
87	(3d)	Normal	27.2	5.7	16.1	38.3	Assumes data for age 70-79 applies
88	(3d)	Normal	27.2	5.7	16.1	38.3	Assumes data for age 70-79 applies
89	(3d)	Normal	27.2	5.7	16.1	38.3	Assumes data for age 70-79 applies
90	(3d)	Normal	27.2	5.7	16.1	38.3	Assumes data for age 70-79 applies
91	(3d)	Normal	27.2	5.7	16.1	38.3	Assumes data for age 70-79 applies
92	(3d)	Normal	27.2	5.7	16.1	38.3	Assumes data for age 70-79 applies
93	(3d)	Normal	27.2	5.7	16.1	38.3	Assumes data for age 70-79 applies
94	(3d)	Normal	27.2	5.7	16.1	38.3	Assumes data for age 70-79 applies
95	(3d)	Normal	27.2	5.7	16.1	38.3	Assumes data for age 70-79 applies
96	(3d)	Normal	27.2	5.7	16.1	38.3	Assumes data for age 70-79 applies
97	(3d)	Normal	27.2	5.7	16.1	38.3	Assumes data for age 70-79 applies
98	(3d)	Normal	27.2	5.7	16.1	38.3	Assumes data for age 70-79 applies

Age	Source	NVO <sub>2max</sub> distribution					Assumptions
		Distr	Mean	SD	Lower	Upper	
99	(3d)	Normal	27.2	5.7	16.1	38.3	Assumes data for age 70-79 applies
100	(3d)	Normal	27.2	5.7	16.1	38.3	Assumes data for age 70-79 applies

NVO<sub>2max</sub> - Females

Females (last revised 6-11-98)							
Age	Source	NVO <sub>2max</sub> distribution					Assumptions
		Distr	Mean	SD	Lower	Upper	
0	2	Normal	43.0	5.1	33.1	52.9	2-yr-old mean, CV = 4.7/39.9
1	2	Normal	43.0	5.1	33.1	52.9	2-yr-old mean, CV = 4.7/39.9
2	2	Normal	43.0	5.1	33.1	52.9	CV = 4.7/39.9
3	2	Normal	44.0	5.2	33.8	54.2	CV = 4.7/39.9
4	2	Normal	46.0	5.4	35.4	56.6	CV = 4.7/39.9
5	2	Normal	47.0	5.5	36.1	57.9	CV = 4.7/39.9
6	2	Normal	50.0	5.9	38.5	61.5	CV = 4.7/39.9
7	2	Normal	52.0	6.1	40.0	64.0	CV = 4.7/39.9
8	2	Normal	53.0	6.2	40.8	65.2	CV = 4.7/39.9
9	2	Normal	52.0	6.1	40.0	64.0	CV = 4.7/39.9
10	2	Normal	51.0	6.0	39.2	62.8	CV = 4.7/39.9
11	2	Normal	50.0	5.9	38.5	61.5	CV = 4.7/39.9
12	2	Normal	49.0	5.8	37.7	60.3	CV = 4.7/39.9
13	2	Normal	47.0	5.5	36.1	57.9	CV = 4.7/39.9
14	2	Normal	46.0	5.4	35.4	56.6	CV = 4.7/39.9
15	2	Normal	46.0	5.4	35.4	56.6	CV = 4.7/39.9
16	2	Normal	45.0	5.3	34.6	55.4	CV = 4.7/39.9
17	2	Normal	44.0	5.2	33.8	54.2	CV = 4.7/39.9
18	2	Normal	41.0	4.8	31.5	50.5	CV = 4.7/39.9
19	2	Normal	41.0	4.8	31.5	50.5	CV = 4.7/39.9
20	3a	Normal	39.9	4.7	30.7	49.1	
21	3a	Normal	39.9	4.7	30.7	49.1	
22	3a	Normal	39.9	4.7	30.7	49.1	
23	3a	Normal	39.9	4.7	30.7	49.1	
24	3a	Normal	39.9	4.7	30.7	49.1	
25	3a	Normal	39.9	4.7	30.7	49.1	
26	3a	Normal	39.9	4.7	30.7	49.1	
27	3a	Normal	39.9	4.7	30.7	49.1	
28	3a	Normal	39.9	4.7	30.7	49.1	
29	3a	Normal	39.9	4.7	30.7	49.1	
30	3a	Normal	37.3	5.2	27.1	47.5	
31	3a	Normal	37.3	5.2	27.1	47.5	
32	3a	Normal	37.3	5.2	27.1	47.5	
33	3a	Normal	37.3	5.2	27.1	47.5	
34	3a	Normal	37.3	5.2	27.1	47.5	
35	3a	Normal	37.3	5.2	27.1	47.5	
36	3a	Normal	37.3	5.2	27.1	47.5	
37	3a	Normal	37.3	5.2	27.1	47.5	
38	3a	Normal	37.3	5.2	27.1	47.5	
39	3a	Normal	37.3	5.2	27.1	47.5	
40	3a	Normal	32.5	2.7	27.2	37.8	
41	3a	Normal	32.5	2.7	27.2	37.8	
42	3a	Normal	32.5	2.7	27.2	37.8	
43	3a	Normal	32.5	2.7	27.2	37.8	
44	3a	Normal	32.5	2.7	27.2	37.8	
45	3a	Normal	32.5	2.7	27.2	37.8	
46	3a	Normal	32.5	2.7	27.2	37.8	
47	3a	Normal	32.5	2.7	27.2	37.8	

Age	Source	NVO <sub>2max</sub> distribution					Assumptions
		Distr	Mean	SD	Lower	Upper	
48	3a	Normal	32.5	2.7	27.2	37.8	
49	3a	Normal	32.5	2.7	27.2	37.8	
50	3a	Normal	28.4	2.7	23.1	33.7	
51	3a	Normal	28.4	2.7	23.1	33.7	
52	3a	Normal	28.4	2.7	23.1	33.7	
53	3a	Normal	28.4	2.7	23.1	33.7	
54	3a	Normal	28.4	2.7	23.1	33.7	
55	3a	Normal	28.4	2.7	23.1	33.7	
56	3a	Normal	28.4	2.7	23.1	33.7	
57	3a	Normal	28.4	2.7	23.1	33.7	
58	3a	Normal	28.4	2.7	23.1	33.7	
59	3a	Normal	28.4	2.7	23.1	33.7	
60	3a	Normal	30.7	8.0	15.1	46.3	
61	3a	Normal	30.7	8.0	15.1	46.3	
62	3a	Normal	30.7	8.0	15.1	46.3	
63	3a	Normal	30.7	8.0	15.1	46.3	
64	3a	Normal	30.7	8.0	15.1	46.3	
65	3a	Normal	30.7	8.0	15.1	46.3	
66	3d	Normal	30.7	8.0	15.1	46.3	
67	3d	Normal	30.7	8.0	15.1	46.3	
68	3d	Normal	30.7	8.0	15.1	46.3	
69	3d	Normal	30.7	8.0	15.1	46.3	
70	3d	Normal	27.2	5.7	16.1	38.3	
71	3d	Normal	27.2	5.7	16.1	38.3	
72	3d	Normal	27.2	5.7	16.1	38.3	
73	3d	Normal	27.2	5.7	16.1	38.3	
74	3d	Normal	27.2	5.7	16.1	38.3	
75	3d	Normal	27.2	5.7	16.1	38.3	
76	3d	Normal	27.2	5.7	16.1	38.3	
77	3d	Normal	27.2	5.7	16.1	38.3	
78	3d	Normal	27.2	5.7	16.1	38.3	
79	3d	Normal	27.2	5.7	16.1	38.3	Assumes data for age 70-79 applies
80	(3d)	Normal	27.2	5.7	16.1	38.3	Assumes data for age 70-79 applies
81	(3d)	Normal	27.2	5.7	16.1	38.3	Assumes data for age 70-79 applies
82	(3d)	Normal	27.2	5.7	16.1	38.3	Assumes data for age 70-79 applies
83	(3d)	Normal	27.2	5.7	16.1	38.3	Assumes data for age 70-79 applies
84	(3d)	Normal	27.2	5.7	16.1	38.3	Assumes data for age 70-79 applies
85	(3d)	Normal	27.2	5.7	16.1	38.3	Assumes data for age 70-79 applies
86	(3d)	Normal	27.2	5.7	16.1	38.3	Assumes data for age 70-79 applies
87	(3d)	Normal	27.2	5.7	16.1	38.3	Assumes data for age 70-79 applies
88	(3d)	Normal	27.2	5.7	16.1	38.3	Assumes data for age 70-79 applies
89	(3d)	Normal	27.2	5.7	16.1	38.3	Assumes data for age 70-79 applies
90	(3d)	Normal	27.2	5.7	16.1	38.3	Assumes data for age 70-79 applies
91	(3d)	Normal	27.2	5.7	16.1	38.3	Assumes data for age 70-79 applies
92	(3d)	Normal	27.2	5.7	16.1	38.3	Assumes data for age 70-79 applies
93	(3d)	Normal	27.2	5.7	16.1	38.3	Assumes data for age 70-79 applies
94	(3d)	Normal	27.2	5.7	16.1	38.3	Assumes data for age 70-79 applies
95	(3d)	Normal	27.2	5.7	16.1	38.3	Assumes data for age 70-79 applies
96	(3d)	Normal	27.2	5.7	16.1	38.3	Assumes data for age 70-79 applies
97	(3d)	Normal	27.2	5.7	16.1	38.3	Assumes data for age 70-79 applies
98	(3d)	Normal	27.2	5.7	16.1	38.3	Assumes data for age 70-79 applies

Age	Source	NVO <sub>2max</sub> distribution					Assumptions
		Distr	Mean	SD	Lower	Upper	
99	(3d)	Normal	27.2	5.7	16.1	38.3	Assumes data for age 70-79 applies
100	(3d)	Normal	27.2	5.7	16.1	38.3	Assumes data for age 70-79 applies

## Body Mass - Males

Males (last revised 6-11-98)							
Age	Source	Body mass distribution, kg					Assumptions
		Distr	GM	GSD	Lower	Upper	
0	4	LN	9.3	1.141	7.2	12.0	
1	4	LN	11.7	1.126	9.3	14.8	
2	4	LN	13.5	1.127	10.7	17.1	
3	4	LN	15.6	1.121	12.5	19.5	
4	4	LN	17.6	1.142	13.6	22.8	
5	4	LN	19.9	1.148	15.2	26.1	
6	4	LN	22.9	1.156	17.2	30.4	
7	4	LN	24.8	1.163	18.4	33.3	
8	4	LN	27.9	1.198	19.6	39.8	
9	4	LN	30.9	1.179	22.4	42.7	
10	4	LN	36.2	1.215	24.7	53.0	
11	4	LN	40.0	1.287	24.4	65.6	
12	4	LN	43.8	1.251	28.2	67.9	
13	4	LN	48.4	1.240	31.7	73.8	
14	4	LN	55.7	1.198	39.1	79.4	
15	4	LN	59.7	1.172	43.7	81.5	
16	4	LN	66.7	1.183	48.0	92.7	
17	4	LN	66.0	1.182	47.6	91.6	
18	4	LN	70.1	1.172	51.4	95.7	
19	4	LN	70.8	1.166	52.4	95.7	
20	4	LN	76.7	1.190	54.5	107.9	
21	4	LN	76.7	1.190	54.5	107.9	
22	4	LN	76.7	1.190	54.5	107.9	
23	4	LN	76.7	1.190	54.5	107.9	
24	4	LN	76.7	1.190	54.5	107.9	
25	4	LN	76.7	1.190	54.5	107.9	
26	4	LN	76.7	1.190	54.5	107.9	
27	4	LN	76.7	1.190	54.5	107.9	
28	4	LN	76.7	1.190	54.5	107.9	
29	4	LN	76.7	1.190	54.5	107.9	
30	4	LN	76.7	1.190	54.5	107.9	
31	4	LN	76.7	1.190	54.5	107.9	
32	4	LN	76.7	1.190	54.5	107.9	
33	4	LN	76.7	1.190	54.5	107.9	
34	4	LN	76.7	1.190	54.5	107.9	
35	4	LN	76.7	1.190	54.5	107.9	
36	4	LN	76.7	1.190	54.5	107.9	
37	4	LN	76.7	1.190	54.5	107.9	
38	4	LN	76.7	1.190	54.5	107.9	
39	4	LN	76.7	1.190	54.5	107.9	
40	4	LN	76.7	1.190	54.5	107.9	
41	4	LN	76.7	1.190	54.5	107.9	
42	4	LN	76.7	1.190	54.5	107.9	
43	4	LN	76.7	1.190	54.5	107.9	
44	4	LN	76.7	1.190	54.5	107.9	
45	4	LN	76.7	1.190	54.5	107.9	
46	4	LN	76.7	1.190	54.5	107.9	
47	4	LN	76.7	1.190	54.5	107.9	
48	4	LN	76.7	1.190	54.5	107.9	

Age	Source	Body mass distribution, kg					Assumptions
		Distr	GM	GSD	Lower	Upper	
49	4	LN	76.7	1.190	54.5	107.9	
50	4	LN	76.7	1.190	54.5	107.9	
51	4	LN	76.7	1.190	54.5	107.9	
52	4	LN	76.7	1.190	54.5	107.9	
53	4	LN	76.7	1.190	54.5	107.9	
54	4	LN	76.7	1.190	54.5	107.9	
55	4	LN	76.7	1.190	54.5	107.9	
56	4	LN	76.7	1.190	54.5	107.9	
57	4	LN	76.7	1.190	54.5	107.9	
58	4	LN	76.7	1.190	54.5	107.9	
59	4	LN	76.7	1.190	54.5	107.9	
60	4	LN	76.7	1.190	54.5	107.9	
61	4	LN	76.7	1.190	54.5	107.9	
62	4	LN	76.7	1.190	54.5	107.9	
63	4	LN	76.7	1.190	54.5	107.9	
64	4	LN	76.7	1.190	54.5	107.9	
65	4	LN	76.7	1.190	54.5	107.9	
66	4	LN	76.7	1.190	54.5	107.9	
67	4	LN	76.7	1.190	54.5	107.9	
68	4	LN	76.7	1.190	54.5	107.9	
69	4	LN	76.7	1.190	54.5	107.9	
70	4	LN	76.7	1.190	54.5	107.9	
71	4	LN	76.7	1.190	54.5	107.9	
72	4	LN	76.7	1.190	54.5	107.9	
73	4	LN	76.7	1.190	54.5	107.9	
74	4	LN	76.7	1.190	54.5	107.9	
75	4	LN	76.7	1.190	54.5	107.9	
76	4	LN	76.7	1.190	54.5	107.9	
77	4	LN	76.7	1.190	54.5	107.9	
78	4	LN	76.7	1.190	54.5	107.9	
79	4	LN	76.7	1.190	54.5	107.9	
80	4	LN	76.7	1.190	54.5	107.9	
81	4	LN	76.7	1.190	54.5	107.9	
82	4	LN	76.7	1.190	54.5	107.9	
83	4	LN	76.7	1.190	54.5	107.9	
84	4	LN	76.7	1.190	54.5	107.9	
85	4	LN	76.7	1.190	54.5	107.9	
86	4	LN	76.7	1.190	54.5	107.9	
87	4	LN	76.7	1.190	54.5	107.9	
88	4	LN	76.7	1.190	54.5	107.9	
89	4	LN	76.7	1.190	54.5	107.9	
90	4	LN	76.7	1.190	54.5	107.9	
91	4	LN	76.7	1.190	54.5	107.9	
92	4	LN	76.7	1.190	54.5	107.9	
93	4	LN	76.7	1.190	54.5	107.9	
94	4	LN	76.7	1.190	54.5	107.9	
95	4	LN	76.7	1.190	54.5	107.9	
96	4	LN	76.7	1.190	54.5	107.9	
97	4	LN	76.7	1.190	54.5	107.9	
98	4	LN	76.7	1.190	54.5	107.9	
99	4	LN	76.7	1.190	54.5	107.9	

Age	Source	Body mass distribution, kg					Assumptions
		Distr	GM	GSD	Lower	Upper	
100	4	LN	76.7	1.190	54.5	107.9	



Body Mass - Females

Females (last revised 6-11-98)							
Age	Source	Body mass distribution, kg					Assumptions
		Distr	GM	GSD	Lower	Upper	
0	4	LN	8.7	1.156	6.5	11.6	
1	4	LN	10.8	1.137	8.4	13.9	
2	4	LN	12.9	1.119	10.3	16.1	
3	4	LN	14.7	1.147	11.2	19.2	
4	4	LN	16.9	1.142	13.0	21.9	
5	4	LN	19.7	1.177	14.3	27.1	
6	4	LN	22.2	1.190	15.8	31.2	
7	4	LN	24.3	1.190	17.3	34.2	
8	4	LN	27.4	1.169	20.2	37.2	
9	4	LN	31.8	1.239	20.9	48.4	
10	4	LN	35.5	1.220	24.0	52.4	
11	4	LN	40.9	1.254	26.2	63.7	
12	4	LN	45.6	1.237	30.1	69.2	
13	4	LN	50.4	1.241	33.0	77.0	
14	4	LN	54.1	1.206	37.5	78.1	
15	4	LN	54.6	1.169	40.2	74.1	
16	4	LN	58.0	1.182	41.8	80.5	
17	4	LN	59.1	1.179	42.8	81.6	
18	4	LN	58.6	1.158	44.0	78.1	
19	4	LN	60.3	1.161	45.0	80.8	
20	4	LN	64.7	1.220	43.8	95.5	
21	4	LN	64.7	1.220	43.8	95.5	
22	4	LN	64.7	1.220	43.8	95.5	
23	4	LN	64.7	1.220	43.8	95.5	
24	4	LN	64.7	1.220	43.8	95.5	
25	4	LN	64.7	1.220	43.8	95.5	
26	4	LN	64.7	1.220	43.8	95.5	
27	4	LN	64.7	1.220	43.8	95.5	
28	4	LN	64.7	1.220	43.8	95.5	
29	4	LN	64.7	1.220	43.8	95.5	
30	4	LN	64.7	1.220	43.8	95.5	
31	4	LN	64.7	1.220	43.8	95.5	
32	4	LN	64.7	1.220	43.8	95.5	
33	4	LN	64.7	1.220	43.8	95.5	
34	4	LN	64.7	1.220	43.8	95.5	
35	4	LN	64.7	1.220	43.8	95.5	
36	4	LN	64.7	1.220	43.8	95.5	
37	4	LN	64.7	1.220	43.8	95.5	
38	4	LN	64.7	1.220	43.8	95.5	
39	4	LN	64.7	1.220	43.8	95.5	
40	4	LN	64.7	1.220	43.8	95.5	

Age	Source	Body mass distribution, kg					Assumptions
		Distr	GM	GSD	Lower	Upper	
41	4	LN	64.7	1.220	43.8	95.5	
42	4	LN	64.7	1.220	43.8	95.5	
43	4	LN	64.7	1.220	43.8	95.5	
44	4	LN	64.7	1.220	43.8	95.5	
45	4	LN	64.7	1.220	43.8	95.5	
46	4	LN	64.7	1.220	43.8	95.5	
47	4	LN	64.7	1.220	43.8	95.5	
48	4	LN	64.7	1.220	43.8	95.5	
49	4	LN	64.7	1.220	43.8	95.5	
50	4	LN	64.7	1.220	43.8	95.5	
51	4	LN	64.7	1.220	43.8	95.5	
52	4	LN	64.7	1.220	43.8	95.5	
53	4	LN	64.7	1.220	43.8	95.5	
54	4	LN	64.7	1.220	43.8	95.5	
55	4	LN	64.7	1.220	43.8	95.5	
56	4	LN	64.7	1.220	43.8	95.5	
57	4	LN	64.7	1.220	43.8	95.5	
58	4	LN	64.7	1.220	43.8	95.5	
59	4	LN	64.7	1.220	43.8	95.5	
60	4	LN	64.7	1.220	43.8	95.5	
61	4	LN	64.7	1.220	43.8	95.5	
62	4	LN	64.7	1.220	43.8	95.5	
63	4	LN	64.7	1.220	43.8	95.5	
64	4	LN	64.7	1.220	43.8	95.5	
65	4	LN	64.7	1.220	43.8	95.5	
66	4	LN	64.7	1.220	43.8	95.5	
67	4	LN	64.7	1.220	43.8	95.5	
68	4	LN	64.7	1.220	43.8	95.5	
69	4	LN	64.7	1.220	43.8	95.5	
70	4	LN	64.7	1.220	43.8	95.5	
71	4	LN	64.7	1.220	43.8	95.5	
72	4	LN	64.7	1.220	43.8	95.5	
73	4	LN	64.7	1.220	43.8	95.5	
74	4	LN	64.7	1.220	43.8	95.5	
75	4	LN	64.7	1.220	43.8	95.5	
76	4	LN	64.7	1.220	43.8	95.5	
77	4	LN	64.7	1.220	43.8	95.5	
78	4	LN	64.7	1.220	43.8	95.5	
79	4	LN	64.7	1.220	43.8	95.5	
80	4	LN	64.7	1.220	43.8	95.5	
81	4	LN	64.7	1.220	43.8	95.5	
82	4	LN	64.7	1.220	43.8	95.5	
83	4	LN	64.7	1.220	43.8	95.5	

Age	Source	Body mass distribution, kg					Assumptions
		Distr	GM	GSD	Lower	Upper	
84	4	LN	64.7	1.220	43.8	95.5	
85	4	LN	64.7	1.220	43.8	95.5	
86	4	LN	64.7	1.220	43.8	95.5	
87	4	LN	64.7	1.220	43.8	95.5	
88	4	LN	64.7	1.220	43.8	95.5	
89	4	LN	64.7	1.220	43.8	95.5	
90	4	LN	64.7	1.220	43.8	95.5	
91	4	LN	64.7	1.220	43.8	95.5	
92	4	LN	64.7	1.220	43.8	95.5	
93	4	LN	64.7	1.220	43.8	95.5	
94	4	LN	64.7	1.220	43.8	95.5	
95	4	LN	64.7	1.220	43.8	95.5	
96	4	LN	64.7	1.220	43.8	95.5	
97	4	LN	64.7	1.220	43.8	95.5	
98	4	LN	64.7	1.220	43.8	95.5	
99	4	LN	64.7	1.220	43.8	95.5	
100	4	LN	64.7	1.220	43.8	95.5	

ECF - Males

Males (last revised 6-11-98)					
Age	Source	ECF			Assumptions
		Distr	Lower	Upper	
0	5	Uniform	0.20	0.21	
1	5	Uniform	0.20	0.21	
2	5	Uniform	0.20	0.21	
3	5	Uniform	0.20	0.21	
4	5	Uniform	0.20	0.21	
5	5	Uniform	0.20	0.21	
6	5	Uniform	0.20	0.21	
7	5	Uniform	0.20	0.21	
8	5	Uniform	0.20	0.21	
9	5	Uniform	0.20	0.21	
10	5	Uniform	0.20	0.21	
11	5	Uniform	0.20	0.21	
12	5	Uniform	0.20	0.21	
13	5	Uniform	0.20	0.21	
14	5	Uniform	0.20	0.21	
15	5	Uniform	0.20	0.21	
16	5	Uniform	0.20	0.21	
17	5	Uniform	0.20	0.21	
18	5	Uniform	0.20	0.21	
19	5	Uniform	0.20	0.21	
20	5	Uniform	0.20	0.21	
21	5	Uniform	0.20	0.21	
22	5	Uniform	0.20	0.21	
23	5	Uniform	0.20	0.21	
24	5	Uniform	0.20	0.21	
25	5	Uniform	0.20	0.21	
26	5	Uniform	0.20	0.21	
27	5	Uniform	0.20	0.21	
28	5	Uniform	0.20	0.21	
29	5	Uniform	0.20	0.21	
30	5	Uniform	0.20	0.21	
31	5	Uniform	0.20	0.21	
32	5	Uniform	0.20	0.21	
33	5	Uniform	0.20	0.21	
34	5	Uniform	0.20	0.21	
35	5	Uniform	0.20	0.21	
36	5	Uniform	0.20	0.21	
37	5	Uniform	0.20	0.21	
38	5	Uniform	0.20	0.21	
39	5	Uniform	0.20	0.21	
40	5	Uniform	0.20	0.21	

Age	Source	ECF			Assumptions
		Distr	Lower	Upper	
41	5	Uniform	0.20	0.21	
42	5	Uniform	0.20	0.21	
43	5	Uniform	0.20	0.21	
44	5	Uniform	0.20	0.21	
45	5	Uniform	0.20	0.21	
46	5	Uniform	0.20	0.21	
47	5	Uniform	0.20	0.21	
48	5	Uniform	0.20	0.21	
49	5	Uniform	0.20	0.21	
50	5	Uniform	0.20	0.21	
51	5	Uniform	0.20	0.21	
52	5	Uniform	0.20	0.21	
53	5	Uniform	0.20	0.21	
54	5	Uniform	0.20	0.21	
55	5	Uniform	0.20	0.21	
56	5	Uniform	0.20	0.21	
57	5	Uniform	0.20	0.21	
58	5	Uniform	0.20	0.21	
59	5	Uniform	0.20	0.21	
60	5	Uniform	0.20	0.21	
61	5	Uniform	0.20	0.21	
62	5	Uniform	0.20	0.21	
63	5	Uniform	0.20	0.21	
64	5	Uniform	0.20	0.21	
65	5	Uniform	0.20	0.21	
66	5	Uniform	0.20	0.21	
67	5	Uniform	0.20	0.21	
68	5	Uniform	0.20	0.21	
69	5	Uniform	0.20	0.21	
70	5	Uniform	0.20	0.21	
71	5	Uniform	0.20	0.21	
72	5	Uniform	0.20	0.21	
73	5	Uniform	0.20	0.21	
74	5	Uniform	0.20	0.21	
75	5	Uniform	0.20	0.21	
76	5	Uniform	0.20	0.21	
77	5	Uniform	0.20	0.21	
78	5	Uniform	0.20	0.21	
79	5	Uniform	0.20	0.21	
80	5	Uniform	0.20	0.21	
81	5	Uniform	0.20	0.21	
82	5	Uniform	0.20	0.21	
83	5	Uniform	0.20	0.21	

Age	Source	ECF			Assumptions
		Distr	Lower	Upper	
84	5	Uniform	0.20	0.21	
85	5	Uniform	0.20	0.21	
86	5	Uniform	0.20	0.21	
87	5	Uniform	0.20	0.21	
88	5	Uniform	0.20	0.21	
89	5	Uniform	0.20	0.21	
90	5	Uniform	0.20	0.21	
91	5	Uniform	0.20	0.21	
92	5	Uniform	0.20	0.21	
93	5	Uniform	0.20	0.21	
94	5	Uniform	0.20	0.21	
95	5	Uniform	0.20	0.21	
96	5	Uniform	0.20	0.21	
97	5	Uniform	0.20	0.21	
98	5	Uniform	0.20	0.21	
99	5	Uniform	0.20	0.21	
100	5	Uniform	0.20	0.21	

ECF - Females

Females (last revised 6-11-98)					
Age	Source	ECF			Assumptions
		Distr	Lower	Upper	
0	5	Uniform	0.20	0.21	
1	5	Uniform	0.20	0.21	
2	5	Uniform	0.20	0.21	
3	5	Uniform	0.20	0.21	
4	5	Uniform	0.20	0.21	
5	5	Uniform	0.20	0.21	
6	5	Uniform	0.20	0.21	
7	5	Uniform	0.20	0.21	
8	5	Uniform	0.20	0.21	
9	5	Uniform	0.20	0.21	
10	5	Uniform	0.20	0.21	
11	5	Uniform	0.20	0.21	
12	5	Uniform	0.20	0.21	
13	5	Uniform	0.20	0.21	
14	5	Uniform	0.20	0.21	
15	5	Uniform	0.20	0.21	
16	5	Uniform	0.20	0.21	
17	5	Uniform	0.20	0.21	
18	5	Uniform	0.20	0.21	
19	5	Uniform	0.20	0.21	
20	5	Uniform	0.20	0.21	
21	5	Uniform	0.20	0.21	
22	5	Uniform	0.20	0.21	
23	5	Uniform	0.20	0.21	
24	5	Uniform	0.20	0.21	
25	5	Uniform	0.20	0.21	
26	5	Uniform	0.20	0.21	
27	5	Uniform	0.20	0.21	
28	5	Uniform	0.20	0.21	
29	5	Uniform	0.20	0.21	
30	5	Uniform	0.20	0.21	
31	5	Uniform	0.20	0.21	
32	5	Uniform	0.20	0.21	
33	5	Uniform	0.20	0.21	
34	5	Uniform	0.20	0.21	
35	5	Uniform	0.20	0.21	
36	5	Uniform	0.20	0.21	
37	5	Uniform	0.20	0.21	
38	5	Uniform	0.20	0.21	
39	5	Uniform	0.20	0.21	
40	5	Uniform	0.20	0.21	

Age	Source	ECF			Assumptions
		Distr	Lower	Upper	
41	5	Uniform	0.20	0.21	
42	5	Uniform	0.20	0.21	
43	5	Uniform	0.20	0.21	
44	5	Uniform	0.20	0.21	
45	5	Uniform	0.20	0.21	
46	5	Uniform	0.20	0.21	
47	5	Uniform	0.20	0.21	
48	5	Uniform	0.20	0.21	
49	5	Uniform	0.20	0.21	
50	5	Uniform	0.20	0.21	
51	5	Uniform	0.20	0.21	
52	5	Uniform	0.20	0.21	
53	5	Uniform	0.20	0.21	
54	5	Uniform	0.20	0.21	
55	5	Uniform	0.20	0.21	
56	5	Uniform	0.20	0.21	
57	5	Uniform	0.20	0.21	
58	5	Uniform	0.20	0.21	
59	5	Uniform	0.20	0.21	
60	5	Uniform	0.20	0.21	
61	5	Uniform	0.20	0.21	
62	5	Uniform	0.20	0.21	
63	5	Uniform	0.20	0.21	
64	5	Uniform	0.20	0.21	
65	5	Uniform	0.20	0.21	
66	5	Uniform	0.20	0.21	
67	5	Uniform	0.20	0.21	
68	5	Uniform	0.20	0.21	
69	5	Uniform	0.20	0.21	
70	5	Uniform	0.20	0.21	
71	5	Uniform	0.20	0.21	
72	5	Uniform	0.20	0.21	
73	5	Uniform	0.20	0.21	
74	5	Uniform	0.20	0.21	
75	5	Uniform	0.20	0.21	
76	5	Uniform	0.20	0.21	
77	5	Uniform	0.20	0.21	
78	5	Uniform	0.20	0.21	
79	5	Uniform	0.20	0.21	
80	5	Uniform	0.20	0.21	
81	5	Uniform	0.20	0.21	
82	5	Uniform	0.20	0.21	
83	5	Uniform	0.20	0.21	



Age	Source	ECF			Assumptions
		Distr	Lower	Upper	
84	5	Uniform	0.20	0.21	
85	5	Uniform	0.20	0.21	
86	5	Uniform	0.20	0.21	
87	5	Uniform	0.20	0.21	
88	5	Uniform	0.20	0.21	
89	5	Uniform	0.20	0.21	
90	5	Uniform	0.20	0.21	
91	5	Uniform	0.20	0.21	
92	5	Uniform	0.20	0.21	
93	5	Uniform	0.20	0.21	
94	5	Uniform	0.20	0.21	
95	5	Uniform	0.20	0.21	
96	5	Uniform	0.20	0.21	
97	5	Uniform	0.20	0.21	
98	5	Uniform	0.20	0.21	
99	5	Uniform	0.20	0.21	
100	5	Uniform	0.20	0.21	

## RMR - Males

Males (last revised 6-11-98)									
Age	Source	Regression equation						Estimate for median weight	Assumptions
		DV	IV	Slope	Interc	SE	Units		
0	R47g	BMR	BM	0.244	-0.127	0.290	MJ/day	2.1	equation for age = 1 yr applies
1	R47g	BMR	BM	0.244	-0.127	0.290	MJ/day	2.7	
2	R47g	BMR	BM	0.244	-0.127	0.280	MJ/day	3.2	
3	R47h	BMR	BM	0.095	2.110	0.280	MJ/day	3.6	
4	R47h	BMR	BM	0.095	2.110	0.280	MJ/day	3.8	
5	R47h	BMR	BM	0.095	2.110	0.280	MJ/day	4.0	
6	R47h	BMR	BM	0.095	2.110	0.280	MJ/day	4.3	
7	R47h	BMR	BM	0.095	2.110	0.280	MJ/day	4.5	
8	R47h	BMR	BM	0.095	2.110	0.280	MJ/day	4.8	
9	R47h	BMR	BM	0.095	2.110	0.280	MJ/day	5.0	
10	R47i	BMR	BM	0.074	2.754	0.440	MJ/day	5.4	
11	R47i	BMR	BM	0.074	2.754	0.440	MJ/day	5.7	
12	R47i	BMR	BM	0.074	2.754	0.440	MJ/day	6.0	
13	R47i	BMR	BM	0.074	2.754	0.440	MJ/day	6.3	
14	R47i	BMR	BM	0.074	2.754	0.440	MJ/day	6.9	
15	R47i	BMR	BM	0.074	2.754	0.440	MJ/day	7.2	
16	R47i	BMR	BM	0.074	2.754	0.440	MJ/day	7.7	
17	R47i	BMR	BM	0.074	2.754	0.440	MJ/day	7.6	
18	R47j	BMR	BM	0.063	2.896	0.640	MJ/day	7.3	
19	R47j	BMR	BM	0.063	2.896	0.640	MJ/day	7.4	
20	R47j	BMR	BM	0.063	2.896	0.640	MJ/day	7.7	
21	R47j	BMR	BM	0.063	2.896	0.640	MJ/day	7.7	
22	R47j	BMR	BM	0.063	2.896	0.640	MJ/day	7.7	
23	R47j	BMR	BM	0.063	2.896	0.640	MJ/day	7.7	
24	R47j	BMR	BM	0.063	2.896	0.640	MJ/day	7.7	
25	R47j	BMR	BM	0.063	2.896	0.640	MJ/day	7.7	
26	R47j	BMR	BM	0.063	2.896	0.640	MJ/day	7.7	
27	R47j	BMR	BM	0.063	2.896	0.640	MJ/day	7.7	
28	R47j	BMR	BM	0.063	2.896	0.640	MJ/day	7.7	
29	R47j	BMR	BM	0.063	2.896	0.640	MJ/day	7.7	
30	R47k	BMR	BM	0.048	3.653	0.700	MJ/day	7.3	
31	R47k	BMR	BM	0.048	3.653	0.700	MJ/day	7.3	
32	R47k	BMR	BM	0.048	3.653	0.700	MJ/day	7.3	
33	R47k	BMR	BM	0.048	3.653	0.700	MJ/day	7.3	
34	R47k	BMR	BM	0.048	3.653	0.700	MJ/day	7.3	
35	R47k	BMR	BM	0.048	3.653	0.700	MJ/day	7.3	
36	R47k	BMR	BM	0.048	3.653	0.700	MJ/day	7.3	
37	R47k	BMR	BM	0.048	3.653	0.700	MJ/day	7.3	
38	R47k	BMR	BM	0.048	3.653	0.700	MJ/day	7.3	
39	R47k	BMR	BM	0.048	3.653	0.700	MJ/day	7.3	

Age	Source	Regression equation						Estimate for median weight	Assumptions
		DV	IV	Slope	Interc	SE	Units		
40	R47k	BMR	BM	0.048	3.653	0.700	MJ/day	7.3	
41	R47k	BMR	BM	0.048	3.653	0.700	MJ/day	7.3	
42	R47k	BMR	BM	0.048	3.653	0.700	MJ/day	7.3	
43	R47k	BMR	BM	0.048	3.653	0.700	MJ/day	7.3	
44	R47k	BMR	BM	0.048	3.653	0.700	MJ/day	7.3	
45	R47k	BMR	BM	0.048	3.653	0.700	MJ/day	7.3	
46	R47k	BMR	BM	0.048	3.653	0.700	MJ/day	7.3	
47	R47k	BMR	BM	0.048	3.653	0.700	MJ/day	7.3	
48	R47k	BMR	BM	0.048	3.653	0.700	MJ/day	7.3	
49	R47k	BMR	BM	0.048	3.653	0.700	MJ/day	7.3	
50	R47k	BMR	BM	0.048	3.653	0.700	MJ/day	7.3	
51	R47k	BMR	BM	0.048	3.653	0.700	MJ/day	7.3	
52	R47k	BMR	BM	0.048	3.653	0.700	MJ/day	7.3	
53	R47k	BMR	BM	0.048	3.653	0.700	MJ/day	7.3	
54	R47k	BMR	BM	0.048	3.653	0.700	MJ/day	7.3	
55	R47k	BMR	BM	0.048	3.653	0.700	MJ/day	7.3	
56	R47k	BMR	BM	0.048	3.653	0.700	MJ/day	7.3	
57	R47k	BMR	BM	0.048	3.653	0.700	MJ/day	7.3	
58	R47k	BMR	BM	0.048	3.653	0.700	MJ/day	7.3	
59	R47k	BMR	BM	0.048	3.653	0.700	MJ/day	7.3	
60	R47k	BMR	BM	0.048	3.653	0.700	MJ/day	7.3	
61	R47k	BMR	BM	0.048	3.653	0.700	MJ/day	7.3	
62	R47k	BMR	BM	0.048	3.653	0.700	MJ/day	7.3	
63	R47k	BMR	BM	0.048	3.653	0.700	MJ/day	7.3	
64	R47k	BMR	BM	0.048	3.653	0.700	MJ/day	7.3	
65	R47k	BMR	BM	0.048	3.653	0.700	MJ/day	7.3	
66	R47k	BMR	BM	0.048	3.653	0.700	MJ/day	7.3	
67	R47k	BMR	BM	0.048	3.653	0.700	MJ/day	7.3	
68	R47k	BMR	BM	0.048	3.653	0.700	MJ/day	7.3	
69	R47k	BMR	BM	0.048	3.653	0.700	MJ/day	7.3	
70	R47k	BMR	BM	0.048	3.653	0.700	MJ/day	7.3	
71	R47l	BMR	BM	0.049	2.459	0.690	MJ/day	6.2	
72	R47l	BMR	BM	0.049	2.459	0.690	MJ/day	6.2	
73	R47l	BMR	BM	0.049	2.459	0.690	MJ/day	6.2	
74	R47l	BMR	BM	0.049	2.459	0.690	MJ/day	6.2	
75	R47l	BMR	BM	0.049	2.459	0.690	MJ/day	6.2	
76	R47l	BMR	BM	0.049	2.459	0.690	MJ/day	6.2	
77	R47l	BMR	BM	0.049	2.459	0.690	MJ/day	6.2	
78	R47l	BMR	BM	0.049	2.459	0.690	MJ/day	6.2	
79	R47l	BMR	BM	0.049	2.459	0.690	MJ/day	6.2	
80	R47l	BMR	BM	0.049	2.459	0.690	MJ/day	6.2	
81	R47l	BMR	BM	0.049	2.459	0.690	MJ/day	6.2	

Age	Source	Regression equation						Estimate for median weight	Assumptions
		DV	IV	Slope	Interc	SE	Units		
82	R471	BMR	BM	0.049	2.459	0.690	MJ/day	6.2	
83	R471	BMR	BM	0.049	2.459	0.690	MJ/day	6.2	
84	R471	BMR	BM	0.049	2.459	0.690	MJ/day	6.2	
85	R471	BMR	BM	0.049	2.459	0.690	MJ/day	6.2	
86	R471	BMR	BM	0.049	2.459	0.690	MJ/day	6.2	
87	R471	BMR	BM	0.049	2.459	0.690	MJ/day	6.2	
88	R471	BMR	BM	0.049	2.459	0.690	MJ/day	6.2	
89	R471	BMR	BM	0.049	2.459	0.690	MJ/day	6.2	
90	R471	BMR	BM	0.049	2.459	0.690	MJ/day	6.2	
91	R471	BMR	BM	0.049	2.459	0.690	MJ/day	6.2	
92	R471	BMR	BM	0.049	2.459	0.690	MJ/day	6.2	
93	R471	BMR	BM	0.049	2.459	0.690	MJ/day	6.2	
94	R471	BMR	BM	0.049	2.459	0.690	MJ/day	6.2	
95	R471	BMR	BM	0.049	2.459	0.690	MJ/day	6.2	
96	R471	BMR	BM	0.049	2.459	0.690	MJ/day	6.2	
97	R471	BMR	BM	0.049	2.459	0.690	MJ/day	6.2	
98	R471	BMR	BM	0.049	2.459	0.690	MJ/day	6.2	
99	R471	BMR	BM	0.049	2.459	0.690	MJ/day	6.2	
100	R471	BMR	BM	0.049	2.459	0.690	MJ/day	6.2	

RMR - Females

Females (last revised 6-11-98)									
Age	Source	Regression equation						Estimate for median weight	Assumptions
		DV	IV	Slope	Interc	SE	Units		
0	R47a	BMR	BM	0.244	-0.130	0.250	MJ/day	2.0	
1	R47a	BMR	BM	0.244	-0.130	0.250	MJ/day	2.5	
2	R47a	BMR	BM	0.244	-0.130	0.250	MJ/day	3.0	
3	R47b	BMR	BM	0.085	2.033	0.290	MJ/day	3.3	
4	R47b	BMR	BM	0.085	2.033	0.290	MJ/day	3.5	
5	R47b	BMR	BM	0.085	2.033	0.290	MJ/day	3.7	
6	R47b	BMR	BM	0.085	2.033	0.290	MJ/day	3.9	
7	R47b	BMR	BM	0.085	2.033	0.290	MJ/day	4.1	
8	R47b	BMR	BM	0.085	2.033	0.290	MJ/day	4.4	
9	R47b	BMR	BM	0.085	2.033	0.290	MJ/day	4.7	
10	R47c	BMR	BM	0.056	2.898	0.470	MJ/day	4.9	
11	R47c	BMR	BM	0.056	2.898	0.470	MJ/day	5.2	
12	R47c	BMR	BM	0.056	2.898	0.470	MJ/day	5.5	
13	R47c	BMR	BM	0.056	2.898	0.470	MJ/day	5.7	
14	R47c	BMR	BM	0.056	2.898	0.470	MJ/day	5.9	
15	R47c	BMR	BM	0.056	2.898	0.470	MJ/day	6.0	
16	R47c	BMR	BM	0.056	2.898	0.470	MJ/day	6.1	
17	R47c	BMR	BM	0.056	2.898	0.470	MJ/day	6.2	
18	R47d	BMR	BM	0.062	2.036	0.500	MJ/day	5.7	
19	R47d	BMR	BM	0.062	2.036	0.500	MJ/day	5.8	
20	R47d	BMR	BM	0.062	2.036	0.500	MJ/day	6.0	
21	R47d	BMR	BM	0.062	2.036	0.500	MJ/day	6.0	
22	R47d	BMR	BM	0.062	2.036	0.500	MJ/day	6.0	
23	R47d	BMR	BM	0.062	2.036	0.500	MJ/day	6.0	
24	R47d	BMR	BM	0.062	2.036	0.500	MJ/day	6.0	
25	R47d	BMR	BM	0.062	2.036	0.500	MJ/day	6.0	
26	R47d	BMR	BM	0.062	2.036	0.500	MJ/day	6.0	
27	R47d	BMR	BM	0.062	2.036	0.500	MJ/day	6.0	
28	R47d	BMR	BM	0.062	2.036	0.500	MJ/day	6.0	
29	R47d	BMR	BM	0.062	2.036	0.500	MJ/day	6.0	
30	R47e	BMR	BM	0.034	3.538	0.470	MJ/day	5.7	
31	R47e	BMR	BM	0.034	3.538	0.470	MJ/day	5.7	
32	R47e	BMR	BM	0.034	3.538	0.470	MJ/day	5.7	
33	R47e	BMR	BM	0.034	3.538	0.470	MJ/day	5.7	
34	R47e	BMR	BM	0.034	3.538	0.470	MJ/day	5.7	
35	R47e	BMR	BM	0.034	3.538	0.470	MJ/day	5.7	
36	R47e	BMR	BM	0.034	3.538	0.470	MJ/day	5.7	
37	R47e	BMR	BM	0.034	3.538	0.470	MJ/day	5.7	
38	R47e	BMR	BM	0.034	3.538	0.470	MJ/day	5.7	
39	R47e	BMR	BM	0.034	3.538	0.470	MJ/day	5.7	

Age	Source	Regression equation						Estimate for median weight	Assumptions
		DV	IV	Slope	Interc	SE	Units		
40	R47e	BMR	BM	0.034	3.538	0.470	MJ/day	5.7	
41	R47e	BMR	BM	0.034	3.538	0.470	MJ/day	5.7	
42	R47e	BMR	BM	0.034	3.538	0.470	MJ/day	5.7	
43	R47e	BMR	BM	0.034	3.538	0.470	MJ/day	5.7	
44	R47e	BMR	BM	0.034	3.538	0.470	MJ/day	5.7	
45	R47e	BMR	BM	0.034	3.538	0.470	MJ/day	5.7	
46	R47e	BMR	BM	0.034	3.538	0.470	MJ/day	5.7	
47	R47e	BMR	BM	0.034	3.538	0.470	MJ/day	5.7	
48	R47e	BMR	BM	0.034	3.538	0.470	MJ/day	5.7	
49	R47e	BMR	BM	0.034	3.538	0.470	MJ/day	5.7	
50	R47e	BMR	BM	0.034	3.538	0.470	MJ/day	5.7	
51	R47e	BMR	BM	0.034	3.538	0.470	MJ/day	5.7	
52	R47e	BMR	BM	0.034	3.538	0.470	MJ/day	5.7	
53	R47e	BMR	BM	0.034	3.538	0.470	MJ/day	5.7	
54	R47e	BMR	BM	0.034	3.538	0.470	MJ/day	5.7	
55	R47e	BMR	BM	0.034	3.538	0.470	MJ/day	5.7	
56	R47e	BMR	BM	0.034	3.538	0.470	MJ/day	5.7	
57	R47e	BMR	BM	0.034	3.538	0.470	MJ/day	5.7	
58	R47e	BMR	BM	0.034	3.538	0.470	MJ/day	5.7	
59	R47e	BMR	BM	0.034	3.538	0.470	MJ/day	5.7	
60	R47e	BMR	BM	0.038	2.755	0.450	MJ/day	5.2	
61	R47f	BMR	BM	0.038	2.755	0.450	MJ/day	5.2	
62	R47f	BMR	BM	0.038	2.755	0.450	MJ/day	5.2	
63	R47f	BMR	BM	0.038	2.755	0.450	MJ/day	5.2	
64	R47f	BMR	BM	0.038	2.755	0.450	MJ/day	5.2	
65	R47f	BMR	BM	0.038	2.755	0.450	MJ/day	5.2	
66	R47f	BMR	BM	0.038	2.755	0.450	MJ/day	5.2	
67	R47f	BMR	BM	0.038	2.755	0.450	MJ/day	5.2	
68	R47f	BMR	BM	0.038	2.755	0.450	MJ/day	5.2	
69	R47f	BMR	BM	0.038	2.755	0.450	MJ/day	5.2	
70	R47f	BMR	BM	0.038	2.755	0.450	MJ/day	5.2	
71	R47f	BMR	BM	0.038	2.755	0.450	MJ/day	5.2	
72	R47f	BMR	BM	0.038	2.755	0.450	MJ/day	5.2	
73	R47f	BMR	BM	0.038	2.755	0.450	MJ/day	5.2	
74	R47f	BMR	BM	0.038	2.755	0.450	MJ/day	5.2	
75	R47f	BMR	BM	0.038	2.755	0.450	MJ/day	5.2	
76	R47f	BMR	BM	0.038	2.755	0.450	MJ/day	5.2	
77	R47f	BMR	BM	0.038	2.755	0.450	MJ/day	5.2	
78	R47f	BMR	BM	0.038	2.755	0.450	MJ/day	5.2	
79	R47f	BMR	BM	0.038	2.755	0.450	MJ/day	5.2	
80	R47f	BMR	BM	0.038	2.755	0.450	MJ/day	5.2	
81	R47f	BMR	BM	0.038	2.755	0.450	MJ/day	5.2	

Age	Source	Regression equation						Estimate for median weight	Assumptions
		DV	IV	Slope	Interc	SE	Units		
82	R47f	BMR	BM	0.038	2.755	0.450	MJ/day	5.2	
83	R47f	BMR	BM	0.038	2.755	0.450	MJ/day	5.2	
84	R47f	BMR	BM	0.038	2.755	0.450	MJ/day	5.2	
85	R47f	BMR	BM	0.038	2.755	0.450	MJ/day	5.2	
86	R47f	BMR	BM	0.038	2.755	0.450	MJ/day	5.2	
87	R47f	BMR	BM	0.038	2.755	0.450	MJ/day	5.2	
88	R47f	BMR	BM	0.038	2.755	0.450	MJ/day	5.2	
89	R47f	BMR	BM	0.038	2.755	0.450	MJ/day	5.2	
90	R47f	BMR	BM	0.038	2.755	0.450	MJ/day	5.2	
91	R47f	BMR	BM	0.038	2.755	0.450	MJ/day	5.2	
92	R47f	BMR	BM	0.038	2.755	0.450	MJ/day	5.2	
93	R47f	BMR	BM	0.038	2.755	0.450	MJ/day	5.2	
94	R47f	BMR	BM	0.038	2.755	0.450	MJ/day	5.2	
95	R47f	BMR	BM	0.038	2.755	0.450	MJ/day	5.2	
96	R47f	BMR	BM	0.038	2.755	0.450	MJ/day	5.2	
97	R47f	BMR	BM	0.038	2.755	0.450	MJ/day	5.2	
98	R47f	BMR	BM	0.038	2.755	0.450	MJ/day	5.2	
99	R47f	BMR	BM	0.038	2.755	0.450	MJ/day	5.2	
100	R47f	BMR	BM	0.038	2.755	0.450	MJ/day	5.2	

