EMISSIONS INVENTORY QUESTIONNAIRE (EIQ)

SUPPLEMENTAL WORKSHEET INSTRUCTIONS

2002

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TABLE OF CONTENTS
SUPPLEMENTAL WORKSHEETS

Instructions for Form 2.0C, Control Device Information

Instructions for Form 2.0L, Landfill Information

Instructions for Form 2.0S, Stack Information

Instructions for Form 2.T, Hazardous Air Pollutant Worksheet

Instructions for Form 2.0Z, Ozone Season Information

Instructions for Form 2.1, Fuel Combustion Worksheet

Instructions for Form 2.2, Incinerator Worksheet

Instructions for Form 2.3, VOC Process Mass-Balance Worksheet

Instructions for Form 2.4, Petroleum Liquid Loading Worksheet

Instructions for Form 2.5, Organic Liquid Storage - Fixed Roof Tank

Instructions for Form 2.5L, General Liquid Storage Tank Information

Instructions for Form 2.6, Organic Liquid Storage - Floating Roof Tank

Instructions for Form 2.7, Haul Road Fugitive Emissions Worksheet

Instructions for Form 2.8, Storage Pile Worksheet

Instructions for Form 2.9, Stack Test/Continuous Emission Monitoring Worksheet Information

INSTRUCTIONS

FORM 2.0C CONTROL DEVICE INFORMATION

This form should be used if a facility has more than two control devices operating at one emission point. If you are reporting different control efficiencies on Form 2.T for different Hazardous Air Pollutants (HAPs), you must fill out this form no matter the number of control devices operating at the emission point. When there are more than two control devices operating at the emission point, Form 2.0C will be used to describe the characteristics of control devices three, four, and beyond. Attached sheets may also be used in place of this form.

Complete **Facility Name**, **FIPS County Number**, **Plant Number** and **Year of Data**.
See Form 1.0 instructions, page 1.0-1.

The **Point Number**, **AIRS ID-Pt**, **SCC** **(Source Classification Code)**, and **Seg No.** will need to be the same as those indicated on the Form 2.0 that must accompany this form.

If you are reporting the same control efficiency for all HAP chemicals for a control device, list the % efficiency under **HAP(s)**. If a different control efficiency is used for different HAP chemicals, please list the specific chemical under **HAP Chemical Name**. For example:

> A facility is reports that control device CD1 has a control efficiency of 80% for Toluene, 60% for Xylenes and 70% for all other HAPs emitted at that emission point. In this case, there would be three separate entries on Form 2.0C for the same control device. Line 1 would list CD1, the device code, 80% under **HAP(s)**, and "Toluene" under **HAP Chemical Name**. The next line would list the same control device information, but would report the 60% for Xylene. The third line would have the same device information, but would list 70% control efficiency under **HAPs** and leave **HAP Chemical Name** blank, as multiple HAPs are being grouped together under the 70% efficiency.

INSTRUCTIONS
FORM 2.0L LANDFILL INFORMATION

This form should be used if a facility is a landfill or has a landfill on the premises.

Complete **Facility Name**, **County Number**, **Plant Number** and **Year of Data**.
See Form 1.0 instructions, Page 1.0-1.

The **Point Number**, **AIRS ID-Pt**, **SCC** and **Segment Number**, will be the same as those indicated on the Form 2.0 that must accompany this form.

Section 1 is for determining the New Source Performance Standard (NSPS) Classification. All landfills need to fill out this section of the worksheet.

Type of Landfill - put an "X" in the block that most accurately describes the landfill.

New - a new Municipal Solid Waste (MSW) landfill is a landfill for which construction, modification, or reconstruction commences on or after the date of May 30, 1991 or that began accepting waste on or after that date.

Existing - an existing MSW landfill is a landfill for which construction, reconstruction or modification was commenced before May 30, 1991, and has accepted waste anytime since November 8, 1987, or has additional design capacity available for future waste deposition. An existing MSW landfill may be active (currently accepting waste, or have additional capacity available to accept waste) or may be closed (no longer accepting waste nor having available capacity for future waste deposition). Closed landfills that have accepted waste after November 8, 1987 are considered existing landfills.

Closed - landfill has gone through closure with the Department of Natural Resources Solid Waste Management Program or the EPA.

Type of Control - put an "X" in the block that most accurately describes the control equipment present at the landfill. According to the NSPS standard the state plan has three options for the control of collected MSW landfill emissions by using control devices:

Flare - an open flare designed and operated in accordance with the parameters established in 40 CFR Part 60.18; or

Control System - a control system designed and operated to reduce NMOC by 98 weight percent; or

Enclosed Combustor -and enclosed combustor designed and operated to reduce the outlet NMOC concentration to 20 parts per million as hexane by volume, dry basis at 3 percent oxygen, or less.

Is the Landfill Accepting Waste? Put an "X" in the block that indicates whether the landfill is currently accepting waste. If the landfill is not currently accepting waste, put the date of the last waste acceptance in the block labeled **"If No, Date of last waste acceptance."**

Landfill Design Capacity - the maximum amount of waste (volume) that the landfill will be able to accept in Megagrams (Mg) or cubic meters (m^3).

If the maximum amount of waste is known in cubic yards, the following equation can

$$cubicmeters = (cubicyards)\left(0.76458\frac{m^3}{ydsup3}\right)$$

convert it to cubic meters:
If the maximum amount of waste is known in tons, the following equation can convert it

$$Megagrams = (Tons)\left(0.90718\frac{Mg}{Tons}\right)$$

to Megagrams:
Design Capacity Units - the units used in the reported Landfill Design Capacity. The units should be Mg or m^3.

Age of the Landfill - time since the initial refuse placement in years.

Example: If the landfill opened in March of 1992 and started accepting waste in June of 1992 and is currently still accepting waste, the age of the landfill for the 1996 emission year would be:

December 1996 - June 1992 = 4 years and 7 months = 4 +(7/12) = 4.583 years

Mass of solid waste in the landfill (Mg) - the amount of degradable solid waste that has been accepted into the landfill. The mass of nondegradable solid waste should be subtracted from the total mass of solid waste accepted into the landfill to calculate this value. For the emission year, this would be the mass of solid waste accepted into the landfill from the initial refuse placement until December 31 of the reporting year. This is the value that should also be reported on Form 2.0 as the throughput.

Nondegradable waste is any waste that does not decompose through chemical breakdown or microbiological activity. Examples are, but are not limited to, concrete,

municipal waste combustor ash, and metals.

Nonmethane Organic Compound Emission Rate (Mg/Yr) - this value can be calculated by one of the two following methods:

- The following equation should be used if the actual year-to-year solid waste acceptance rate is known.

$$M_{NMOC} = \sum_{i=1}^{n} 2kL\, M_i \left(e^{-ktsubi}\right)(CNMOC)(3.6_10^{-9})$$

Where:

M_{NMOC}	= Total NMOC emission rate from the landfill, Mg/yr
k	= methane generation rate constant, /yr = 0.05 /yr
L	= methane generation potential, m^3/Mg solid waste = 170 m^3/Mg
M_i	= mass of solid waste in the ith section, Mg
t_i	= age of the ith section, years
CNMOC	= concentration of NMOC, ppmv as hexane = 4000 ppmv hexane
3.6×10^{-9}	= conversion factor

Note: The values for k, L, and CNMOC in Section 1, in the absence of site-specific data, are 0.05/yr, 170 m^3/Mg, and 4000 ppmv as hexane, respectively.

Example: A landfill opened in January of 1987. The landfill contains three sections of waste that have opened on different dates throughout the years. Section 1 opened January 1, 1987, closed December 30, 1990, and contains 100,000 Mg of waste. Section 2 opened March 1, 1991, closed August 30, 1995 and contains 68,640 Mg of waste. Section 3 opened May 1, 1994, contains 87,500 Mg of waste and is currently still accepting waste. We want to know the NMOC emission rate from the landfill for the 1996 emission year.

M_{NMOC} = ? Mg/yr k = 0.05/yr L = 170 m3/Mg
M_1 = 100,000 Mg M_2 = 68,640 Mg M_3 = 87,500 Mg
t_1 = (December 30, 1996 - January 1, 1987) = 9.0 years
t_2 = (December 30, 1996 - March 1, 1991) = 5 +(10/12) = 5.833 years
t_3 = (December 30, 1996 - May 1, 1994) = 2 + (8/12) = 2.667 years

$$M_{NMOC} = \sum_{i=1}^{n} 2kL\, M_i \left(e^{-kt_i}\right)(CNMOC)(3.6_10^{-9}) = 2kL(CNMOC)(3.6_10^{-9}) \sum_{i=1}^{n} M_i \left(e^{-kt_i}\right)$$

$$M_{NMOC} = 2(0.05/yr)\left(170\frac{m^3}{Mg}\right)(4000ppmvhexane)(3.6_10^{-9})\sum_{i=1}^{n} M_i\left(e^{-kt_i}\right)$$

CNMOC = 4000 ppmv hexane

$$M_{NMOC} = (2.448_10^{-4}/yr)\sum_{i=1}^{n} M_i\left(e^{-kt_i}\right) = (2.448_10^{-4}/yr)\left(M_1 e^{-kt_1} + M_2 e^{-kt_2} + M_3 e^{-kt_3}\right)$$

- The following equation should be used if the actual year-to-year solid waste acceptance

$$M_{NMOC} = 2LR\left(e^{-kc} - e^{-kt}\right)(CNMOC)(3.6_10^{-9})$$

$$M_{MNOC} = (2.448_10^{-4}/yr)\left[100{,}000Mg\, e^{-(0.05/yr)(9.0yr)} + 68{,}640\, e^{-(0.05)(5.833)} + 87{,}500\, e^{-(0.05)(2.667)}\right]$$

$$M_{NMOC} = (2.448_10^{-4}/yr)[63{,}762.815 + 51{,}276.136 + 76{,}576.389Mg]$$

$$M_{NMOC} = (2.448_10^{-4}/yr)[191615.34Mg] = 46.907Mg/yr$$

rate is unknown.

Where,

M_{NMOC}	= mass emission rate of NMOC, Mg/yr
L	= methane generation potential, m^3/Mg solid waste = 170 m^3/Mg
R	= average annual acceptance rate, Mg/yr. The mass of nondegradable solid waste may be subtracted from the average annual acceptance rate when calculating this value.
k	= methane generation rate constant, /yr = 0.05 /yr
c	= time since closure, years. For active landfills c= 0 and e^{-kc} =1.
t	= age of landfill, years
CNMOC	= concentration of NMOC, ppmv as hexane = 4000 ppmv hexane
3.6×10^{-9}	= conversion factor

Example: A landfill opened in January of 1987. The landfill contains 525,000 Mg of waste that it has collected over the years and is currently still accepting waste. We want to know the NMOC emission rate from the landfill for the 1996 emission year.

M_{NMOC} = ? Mg/yr k = 0.05/yr L = 170 m3/Mg
t = (December 30, 1996 - January 1, 1987) = 9.0 years
c = 0 CNMOC = 4000 ppmv hexane
R = 525,000 Mg/ 9 years = 58,333.333 Mg/yr

$$M_{NMOC} = 2LR\left(e^{-kc} - e^{-kt}\right)(CNMOC)(3.6_10^{-9})$$

$$M_{MNOC} = 2\left(170\frac{m^3}{Mg}\right)\left(58{,}333.333\frac{Mg}{yr}\right)\left(1 - e^{-(0.05/yr)(9.0yr)}\right)(4000ppmvhexane)(3.6_10^{-9})$$

$$M_{MNOC} = \left(19833330\frac{m^3}{yr}\right)(1 - 0.6376)(4000ppmvhexane)(3.6_10^{-9})$$

$$M_{MNOC} = 103.50\frac{Mg}{yr}$$

Section 2 is for deriving VOC and HAP emission factors.

Methane Generation Rate Constant - k - (/yr) - The methane generation rate constant is based upon the moisture in the landfill. The recommended value for k in MissourI, which should only be used for calculations in Section 2, is k =0.04 / yr.

Methane Generation Potential - L - (m^3/Mg) - The recommended value for L in Missouri, which should only be used for calculations in Secion 2, is L = 125 m^3/Mg.

Time since Landfill Closure - c - (yrs) - The amount of time since closure of the landfill in years. For active landfills c = 0. This should be calculated in the same manner as the age of the landfill.

Average Annual Refuse Acceptance Rate - R - (Mg/yr) - Site-specific landfill information is generally available for the average refuse acceptance rate. When refuse acceptance rate information is scant or unknown, R can be determined by dividing the refuse in place by the amount of time that the landfill was accepting waste. Nondegradable refuse should be subtracted from the mass of the acceptance rate to prevent overestimation of methane generation. The average annual acceptance rate should only be estimated by the above method when there is inadequate information available on the actual average acceptance rate.

Methane Generation Rate - QCH4 - (m^3/yr) - this value can be calculated by the following

$$QCH4 = LR\left(e^{-kc} - e^{-kt}\right)$$

equation:
Where:

QCH4	= Methane generation rate m^3/yr
L	= Methane generation potential m^3 CH_4/Mg refuse
R	= Average annual refuse acceptance rate during active life, Mg/yr
e	= Base log, unitless
k	= Methane generation rate constant, /yr
c	= Time since landfill closure
t	= Time since the initial refuse placement

Note: The values for k and L in Section 2 are 0.04 /yr and 125 m^3/Mg, respectively.

Total NMOC Concentration in Landfill gas - CNMOC - (ppmv as hexane) - If site-specific total NMOC concentration is available (as measured by EPA Reference Method 25C), it must be corrected for air infiltration into the collected landfill gas before it can be combined with the estimated landfill gas emissions to estimate total NMOC emissions. The total NMOC concentration is adjusted for air infiltration by assuming that CO_2 and CH_4 are the primary (100 percent) constituents of landfill gas, by the following equation:

$$\frac{C_{NMOC}(ppmvashexane)(1_10^6)}{C_{CO_2}(ppmv)+C_{CH_4}(ppmv)} = CNMOCppmvashexane$$

Where:

C_{NMOC}	= Total NMOC concentration (as measured) in landfill gas, ppmv as hexane
C_{CO2}	= CO2 concentration in landfill gas, ppmv
C_{CH4}	= CH4 concentration in landfill gas, ppmv
1×10^6	= Constant used to correct NMOC concentration to units of ppmv
CNMOC	= Total NMOC concentration adjusted for air infiltration in landfill gas, ppmv as hexane

Values for C_{CO2} and C_{CH4} can usually be found in the source test report for the particular landfill along with the total NMOC concentration data.

If site-specific information is not available, there are two values that can be used for CNMOC:

CNMOC = 2420 ppmv for landfills known to have co-disposal of MSW and commercial/industrial organic wastes, or

CNMOC = 595 ppmv for landfills known to contain only MSW or to have very little organic commercial/industrial wastes.

NMOC Emission Rate - QNMOC - (m^3/yr) - To estimate the total NMOC emissions, the

$$QNMOC = \frac{2QCH4(CNMOC)}{(1_10^6)}$$

following equation should be used:

Where:

QNMOC	= NMOC emission rate, m3/yr
QCH4	= CH_4 generation rate, m^3/yr
CNMOC	= Total NMOC concentration in landfill gas, ppmv as hexane
2	= Multiplication factor

Uncontrolled NMOC Mass Emissions - MNMOC - (lbs/yr) - the following equation can estimate the mass emissions per year of total NMOCs:

$$MNMOC = QNMOC\left[\frac{1050.2}{(273.15+T)}\right]\left(\frac{2.2046lbs}{1kg}\right)$$

Where:

MNMOC = NMOC (total) mass emissions (lbs/yr)
QNMOC = NMOC emission rate (m^3/yr)
T = Temperature of landfill gas (°C)
2.2046 = Conversion factor from kilograms to pounds

This equation assumes that the operating pressure of the system is approximately 1 atmosphere, and represents total NMOCs, based on the molecular weight of hexane. If the temperature of the landfill gas is not known, a temperature of 25°C is recommended.

Uncontrolled NMOC Emissions Reported as HAPs - HNMOC - (lbs/yr) - Uncontrolled emission concentrations of individual NMOCs along with some inorganic compounds are presented in Tables 2.4-1 from the AP-42. Table 2.4-2 from the AP-42 presents the corrected concentrations for benzene and toluene to use based on the site's co-disposal history. The uncontrolled individual NMOC emissions that are HAPs must be calculated for each specific chemical and reported on the Form 2.T. The following calculations provide the information that is necessary to fill out the Form 2.T.

$$QNMOC = \frac{2QCH4(CNMOC)}{(1_10^6)}$$

The following equations can estimate Individual NMOC emissions
Where:

QNMOC = NMOC emission rate of a specific chemical from Tables 2.4-1 or 2.4-2
QCH4 = Methane Generation rate, m^3/yr
CNMOC = NMOC concentration of a specific chemical from Tables 2.4-1 or 2.4-2 in landfill gas, ppmv
2 = Multiplication factor

The following equation can estimate the mass emissions per year of each individual landfill gas

compound:
Where:

INMOC = Individual NMOC mass emissions for a specific chemical from Tables 2.4-1 or 2.4-2
QNMOC = NMOC mass emission rate from the above equation
T = Temperature of landfill gas (°C)
2.2046 = Conversion Factor from kilograms to pounds

$$INMOC = QNMOC[INMOCFACTOR]$$

The above equation can be simplified to the following equation:
Where at 25°C:

$$INMOCFACTOR = \left[\frac{(Molecularweightofcompound)}{\left(8.205_10^{-5}\frac{m^3 - atm}{mol - K}\right)(1000g)(298.15)}\right]\left(\frac{2.2046lbs}{1kg}\right)$$

Values for the INMOC FACTOR at 25°C are supplied for each chemical in Tables A, B, or C. Table A lists the chemicals that are only HAPs. Table B lists the chemicals that are both HAPs and volatile organic compounds (VOCs). Table C lists the chemicals that are only VOCs.

The individual NMOC mass emissions need to be calculated for each of the HAPs listed in Tables 2.4-1 and 2.4-2. The HAPs that are VOCs need to be reported as VOCs and not as HAPs. Form 2.T needs to be filled out with the individual NMOC mass emissiouns of each HAP being reported as VOCs or HAPs. The chemicals that should be listed on Form 2.T as HAPs are in Table A. The chemicals that should be listed on Form 2.T as VOC are in Table B. The chemical that are only VOCs appear in Table C. (Note: the individual NMOC mass emissions of the chemicals in Table C do not need to be listed on any form) When all of these values are calculated, the uncontrolled NMOC emissions as HAPs can be obtained from the Form 2.T. The uncontrolled NMOC emissions as VOCs can be obtained by adding the VOC emissions from 2.T and those calculated from the chemicals on Table C.

Note: On Table B, benzene and toluene have three options; co-disposal, no co-disposal, or unknown. The NMOC mass emission needs to be calculated for only one of the three choices depending on which best describes the landfill.

HAP Emission Factor: this value can be calculated by dividing the uncontrolled NMOC

emissions reported as HAPs (lbs./yr.) on Form 2.T by the throughput (Mg).

VOC Emission Factor: this value can be calculated by first adding the uncontrolled NMOC emissions reported as VOCs (lbs./yr.) on Form 2.T and the uncontrolled emissions calculated from Table C (lbs./yr.). (note: The VOC mass emissions should be found this way instead of subtracting the uncontrolled NMOC emissions reported as HAPs from the uncontrolled NMOC mass emissions.) The total VOC emissions are then divided by the throughput (Mg).

CO Emission Factor: the INMOC FACTOR for carbon monoxide is provided beneath Table C so that the CO emission factor and mass emissions can be calculated and reported on Form 2.0. The CO emission factor could also be found using the AP-42.

LANDFILL EMISSIONS SPREADSHEET

Chemical	CAS #	molec. weight	Default Concentration (ppmv)	INMOC factor
(Part A) HAPS ONLY				
111 Trichloroethane	71556	133.41	0.48	12.02
Dichloromethane	75092	84.94	14.3	7.65
12 Dichloroethane	107062	98.96	0.41	8.92
Chloroform	67663	119.39	0.03	10.76
Chloromethane	748730	50.49	1.21	4.55
Perchloroethylene	127184	165.83	3.73	14.94
Mercury	20133	200.61	0.000292	18.08
(Part B) HAPS & VOC				
1122 Tetrachloroethane	79345	167.85	1.11	15.13
11 Dichloroethane	75343	98.97	2.35	8.92
11 Dichloroethylene	75354	96.94	0.2	8.74
12 Dichloropropane	78875	112.99	0.18	10.18
Acrylonitrile	107131	53.06	6.33	4.78
Carbon disulfide	75150	76.13	0.58	6.86
Carbon tetrachloride	56235	153.84	0.004	13.86
Carbonyl sulfide	463581	60.07	0.49	5.41
Chlorobenzene	108907	112.56	0.25	10.14
Chloroethane	75003	64.52	1.25	5.81
Dichlorobenzene	106467	147	0.21	13.25
Ethyl benzene	100414	106.16	4.61	9.57
Ethylene dibromide	106934	187.88	0.001	16.93
Hexane	110543	86.18	6.57	7.77
Vinyl chloride	75014	62.5	7.34	5.63
Methyl ethyl ketone	78933	72.11	7.09	6.5
Methyl isobutyl ketone	108101	100.16	1.87	9.03
Trichloroethylene	79016	131.4	2.82	11.84
Xylene	1330207	106.16	12.1	9.57
Benzene	71432	78.11	11.1	7.04
Toluene	108883	92.13	165	8.3
(Part C) VOC ONLY				
2 Propanol		60.11	50.1	5.42
Bromodichlormethane		163.83	3.13	14.77
Butane		58.12	5.03	5.24
Dimethyl sulfide		62.13	7.82	5.6
Ethanol		46.08	27.2	4.15
Fluorotrichloromethane		137.38	0.76	12.38
Pentane		72.15	3.29	6.5
Propane		44.09	11.1	3.97
Carbon Monoxide				2.52

Table 2.4-1. DEFAULT CONCENTRATIONS FOR LFG CONSTITUENTS[a]

(SCC 50100402, 503006[illegible])

Compound	Molecular Weight	Default Concentration (ppmv)	Emission Factor Rating
1,1,1-Trichloroethane (methyl chloroform)[a]	133.41	0.48	B
1,1,2,2-Tetrachloroethane[a]	167.85	1.11	C
1,1-Dichloroethane (ethylidene dichloride)[a]	98.97	2.35	B
1,1-Dichloroethene (vinylidene chloride)[a]	96.94	0.20	B
1,2-Dichloroethane (ethylene dichloride)[a]	98.96	0.41	B
1,2-Dichloropropane (propylene dichloride)[a]	112.99	0.18	D
2-Propanol (isopropyl alcohol)	60.11	50.1	E
Acetone	58.08	7.01	B
Acrylonitrile[a]	53.06	6.33	D
Bromodichloromethane	163.83	3.13	C
Butane	58.12	5.03	C
Carbon disulfide[a]	76.13	0.58	C
Carbon monoxide[b]	28.01	141	E
Carbon tetrachloride[a]	153.84	0.004	B
Carbonyl sulfide[a]	60.07	0.49	D
Chlorobenzene[a]	112.56	0.25	C
Chlorodifluoromethane	86.47	1.30	C
Chloroethane (ethyl chloride)[a]	64.52	1.25	B
Chloroform[a]	119.39	0.03	B
Chloromethane	50.49	1.21	B
Dichlorobenzene[c]	147	0.21	E
Dichlorodifluoromethane	120.91	15.7	A
Dichlorofluoromethane	102.92	2.62	D
Dichloromethane (methylene chloride)[a]	84.94	14.3	A
Dimethyl sulfide (methyl sulfide)	62.13	7.82	C
Ethane	30.07	889	C
Ethanol	46.08	27.2	E
Ethyl mercaptan (ethanethiol)	62.13	2.28	D
Ethylbenzene[a]	106.16	4.61	B
Ethylene dibromide	187.88	0.001	E
Fluorotrichloromethane	137.38	0.76	B
Hexane[a]	86.18	6.57	B
Hydrogen sulfide	34.08	35.5	B
Mercury (total)[a,d]	200.61	2.92×10^{-4}	E

Table 2.4-1. (Concluded)

Compound	Molecular Weight	Default Concentration (ppmv)	Emission Factor Rating
Methyl ethyl ketone[a]	72.11	7.09	A
Methyl isobutyl ketone[a]	100.16	1.87	B
Methyl mercaptan	48.11	2.49	C
Pentane	72.15	3.29	C
Perchloroethylene (tetrachloroethylene)[a]	165.83	3.73	B
Propane	44.09	11.1	B
t-1,2-dichloroethene	96.94	2.84	B
Trichloroethylene (trichloroethene)[a]	131.40	2.82	B
Vinyl chloride[a]	62.50	7.34	B
Xylenes[a]	106.16	12.1	B

NOTE: This is not an all-inclusive list of potential LFG constituents, only those for which test data were available at multiple sites. References 10-67. Source Classification Codes in parentheses.

[a] Hazardous Air Pollutants listed in Title III of the 1990 Clean Air Act Amendments.

[b] Carbon monoxide is not a typical constituent of LFG, but does exist in instances involving landfill (underground) combustion. Therefore, this default value should be used with caution. Of 18 sites where CO was measured, only 2 showed detectable levels of CO.

[c] Source tests did not indicate whether this compound was the para- or ortho- isomer. The para isomer is a Title III-listed HAP.

[d] No data were available to speciate total Hg into the elemental and organic forms.

Table 2.4-2. DEFAULT CONCENTRATIONS OF BENZENE, NMOC, AND TOLUENE BASED ON WASTE DISPOSAL HISTORY[a]

(SCC 50100402, 50300603)

Pollutant	Molecular Weight	Default Concentration (ppmv)	Emission Factor Rating
Benzene[b]	78.11		
Co-disposal		11.1	D
No or Unknown co-disposal		1.91	B
NMOC (as hexane)[c]	86.18		
Co-disposal		2420	D
No or Unknown co-disposal		595	B
Toluene[b]	92.13		
Co-disposal		165	D
No or Unknown co-disposal		39.3	A

[a] References 10-54. Source Classification Codes in parentheses.
[b] Hazardous Air Pollutants listed in Title III of the 1990 Clean Air Act Amendments.
[c] For NSPS/Emission Guideline compliance purposes, the default concentration for NMOC as specified in the final rule must be used. For purposes not associated with NSPS/Emission Guideline compliance, the default VOC content at co-disposal sites = 85 percent by weight (2,060 ppmv as hexane); at No or Unknown sites = 39 percent by weight 235 ppmv as hexane).