

# Assessing Comparability of Atmospheric PCDD, PCDF and Coplanar PCB Data from North American Ambient Air Monitoring Networks

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## LIST OF ABBREVIATIONS

AQRD	Air Quality Research Division
CAA	Clean Air Act
CEC	Commission for Environmental Cooperation
Cenica	National Center for Environmental Research and Training ( <i>Centro Nacional de Investigación y Capacitación Ambiental</i> )
Co-PCBs	Coplanar polychlorinated biphenyls
DCM	Dichloromethane
DF	Dioxins, furans and coplanar PCBs
EC	Environment Canada
ECB	Environmental Chemistry Branch
EI	Electron impact
EPA	Environmental Protection Agency
GC	Gas chromatography
GC/MS	Gas chromatograph/mass spectrometer
GFF	Glass fiber filter
HRGC/HRMS	High resolution gas chromatograph/high resolution mass spectrometer
HPLC	High performance liquid chromatography
INE	National Institute of Ecology ( <i>Instituto Nacional de Ecología</i> )
LCS	Laboratory Control Sample
LOQ	Limit of Quantification
MDAMN	Mexican Dioxin Air Monitoring Network
MDL	Method detection limit
MS	Mass spectrometry
NAPS	National Air Pollution Surveillance
NARAP	North American Regional Action Plan
NDAMN	National Dioxin Air Monitoring Network
NIP	National Implementation Plan
OCDD	Octachlorodibenzo- <i>p</i> -dioxin
OCDF	Octachlorodibenzofuran
PAHs	Polycyclic aromatic hydrocarbons

PCBs	Polychlorinated biphenyls
PCDDs	Polychlorinated dibenzo- <i>p</i> -dioxins
PCDD/Fs	Polychlorinated dibenzo- <i>p</i> -dioxins and dibenzofurans
PCDFs	Polychlorinated dibenzofurans
PFK	Perfluorokerosene
POPs	Persistent organic pollutants
PUF	Polyurethane foam
QA/QC	Quality assurance/quality control
QAPP	Quality Assurance Project Plan
QFF	Quartz fiber filter
RF	Response factor
RPD	Relative Percent Difference
RSD	Relative standard deviation
SIM	Selected ion monitoring
SOP	Standard Operating Procedure
SMOC	Sound Management of Chemicals
S/N	Signal-to-noise ratio
TCDDs	Tetrachlorodibenzo- <i>p</i> -dioxins
TCDFs	Tetrachlorodibenzofurans
TEFs	Toxic equivalency factors
TEQ	Toxic equivalent
WHO	World Health Organization



## **TIMELINE OF THE NORTH AMERICAN DIOXIN AIR MONITORING NETWORKS**

- 1963 US Clean Air Act (CAA) was passed.
- 1970 National Air Pollutants Surveillance (NAPS) was established.
- 1971 Canada–Ontario Agreement was signed.
- 1972 Canada–US Great Lakes Water Quality Agreement (GLWQA) was signed.
- 1988 Canadian Environmental Protection Act (CEPA) was passed.
- 1989 NAPS launched dioxin air monitoring.
- 1990 US Clean Air Act Amendments were passed, targeting toxic air pollution.
- 1997 National Dioxin Air Monitoring Network (NDAMN) was established.
- 1999 Canadian Environmental Protection Act (CEPA) was revised.
- 2001 North American Regional Action Plan (NARAP) was established, including as a top priority the determination of regional levels of PCDD/Fs in ambient air.
- 2003 The preliminary design of the Mexican Dioxin Air Monitoring Network (MDAMN) was elaborated.
- 2007 The final design of MDAMN was elaborated, and the sampling strategy was set up.
- 2008 MDAMN launched dioxin air monitoring.
- 2011 The North American Strategy for Catalyzing Cooperation on Dioxins, Furans and Hexachlorobenzene was established.

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## **ABSTRACT**

This report compares for the first time the history, sampling strategy and results of the Canadian National Air Pollution Surveillance (NAPS) and the US National Dioxin Air Monitoring Network (NDAMN) for polychlorinated dioxin and furan (PCDD/Fs) concentrations for the periods 1989–2009, and 1999–2002, respectively, for co-planar polychlorinated biphenyl ethers (Co-PCBs) for the periods 2005–2009 and 1999–2002, respectively, and data from the Mexican dioxin air monitoring network (MDAMN) from 2008 through 2012.

## **EXECUTIVE SUMMARY**

During the design of the North American Regional Action Plan (NARAP) on Dioxins, Furans and Hexachlorobenzene in 2001 and the creation of its Task Force for Dioxins and Furans, a regional assessment of atmospheric dioxin concentrations had been envisioned, encompassing the collection of comparable monitoring data in North America. The Canadian National Air Pollution Surveillance (NAPS) and the US National Dioxin Air Monitoring Network (NDAMN) had been operating since the 1990s and, with the launching of the Mexican dioxin air monitoring network (MDAMN) in 2008, this vision started being realized. Currently, NAPS and NDAMN have provided data for polychlorinated dioxin and furan (PCDD/Fs) concentrations for the periods 1989–2009, and 1999–2002, respectively. Corresponding data for co-planar polychlorinated biphenyl ethers (Co-PCBs) exist for the periods 2005–2009 and 1999–2002, respectively. MDAMN has reported data from 2008 to 2012, with measurements ongoing.

The objective of this report is to carry out for the first time a comparison of the three networks' history, sampling strategy and results. Major parts of this report were adopted literally or by analogy from a previous effort to compare the Canadian and the US monitoring results (CEC 2010, internal document). As well, specific information for Mexico has been included and the results section has been completely re-written.

From the Canadian monitoring results, a decreasing trend in atmospheric dioxin concentrations was detected over the past two decades. This demonstrates the effectiveness of the dioxin control actions that have been taken in Canada, also reflected in the trends reported by consecutive emission inventories. Available data from NDAMN and MDAMN are still too scarce to identify potential time trends. However, the four-year period of overlapping measurement data in Canada and the US show comparable levels of PCDD/Fs and Co-PCBs at rural sites. Concentrations at Mexican rural sites were lower by a factor of about 10 than the corresponding Canadian measurements. At urban locations, in contrast, the Mexican monitoring sites report values about an order of magnitude higher than sites in Canada, resembling the conditions in Canada about two decades ago. Current and future regulatory actions carried out in Mexico according to the National Implementation Plan of 2007 might lead to similar reductions in atmospheric dioxin concentrations as have been observed in Canada. The compositions of PCDD/Fs and Co-PCBs were similar throughout the different locations within NAPS and NDAMN. In Mexico, the composition was more strongly influenced by furans, in particular at urban sites. This might indicate the presence of emission sources that are specific to Mexico.

To ensure the sustainability of the North American dioxin air monitoring efforts and provide high quality data also in the future, the currently operating sampling sites need to be reinforced by continuous training and auditing, and the financial resources for operational costs must be granted. In particular, long-term air monitoring data from NDAMN and MDAMN is needed. The likely relations between urban sources and remote receptor sites need to be investigated by modeling studies. Furthermore, an expansion of the monitoring to regions in Central and South America would be desirable, which may be based on local initiatives with the collaboration of the North American Strategy for Catalyzing Cooperation (the former NARAP) on Dioxins, Furans and Hexachlorobenzenes.

## **1. Introduction to the North American Dioxin Air Monitoring Networks**

Polychlorinated dibenzo-*p*-dioxins (PCDDs) and polychlorinated dibenzofurans (PCDFs) are a family of more than 200 similarly structured chemical compounds, often known collectively as dioxins. Although PCDDs and PCDFs can form as a result of certain natural processes, such as volcanoes and forest fires, the major dioxin emissions source in North America is waste combustion. They are also produced in chlorine-based pulp and paper bleaching, certain types of processing and manufacturing, including the manufacture of some pesticides, and other industrial processes. Polychlorinated biphenyls (PCBs) are a class of 209 congeners with one to ten chlorine atoms attached to the biphenyl rings. The coplanar PCB congeners have a fairly rigid structure with the two phenyl rings in the same plane, a similar structure to PCDD/Fs. All these compounds are persistent, bioaccumulative and toxic substances and have potential to undergo long-range transport. In May 2001, over 100 countries signed the Stockholm Convention on persistent organic pollutants (POPs), in which PCDDs, PCDFs, and PCBs are designated as three of the “dirty dozen” POPs singled out for global action.

The North American Task Force on Dioxins, Furans and Hexachlorobenzene was established in 2000, by the Sound Management of Chemicals (SMOC) Working Group of the North American Commission for Environmental Cooperation (CEC). The mandate of the Task Force was to develop and implement a North American Regional Action Plan (NARAP) on Dioxins, Furans and Hexachlorobenzene toward effective management of these chemicals in North America. Canada and the United States have collected ambient air data of polychlorinated dibenzo-*p*-dioxins (PCDDs), polychlorinated dibenzofurans (PCDFs), and dioxin-like coplanar polychlorinated biphenyls (Co-PCBs) through their respective air monitoring networks, National Air Pollution Surveillance (NAPS) and National Dioxin Air Monitoring Network (NDAMN) since the 1990s. In 2008, the Mexican Dioxin Air Monitoring Network (MDAMN) launched operation with the support of Canada and the United States. A validated dataset of MDAMN’s first three years of operation was made available in April 2011. In 2013, the measurements are ongoing.

The goal of this project is to undertake a comparability assessment to establish a regionally comparable and compatible dataset of information regarding atmospheric levels of dioxins and dioxin-like compounds in North America. In addition, this report summarizes long-term time trends and spatial distribution of PCDD, PCDF and Co-PCB concentrations in the Canadian and US atmosphere, comparing to them the first three years of data collected in Mexico.

## **2. History, design and operation**

In this chapter, the three North American dioxin air monitoring networks are characterized regarding their particular histories, objectives, distributions of sampling sites, methodologies of sampling collection and analysis, as well as their quality assurance and control measures (Sections 2.1 to 2.3). Section 2.4 gives a comparative overview of the networks.

## 2.1 National Air Pollution Surveillance

### 2.1.1 History of the Network

In Canada, the National Air Pollution Surveillance (NAPS) network was established jointly in 1969 by the federal, provincial, territorial and municipal governments. Environment Canada's Air Quality Research Division (AQRD) plays a major role in collecting and assessing ambient air quality data across the country. Originally, the NAPS network program concentrated on monitoring criteria pollutants. The Analysis and Air Quality Section of the AQRD has been developing new techniques to measure potentially toxic air contaminants. With assistance from NAPS network agencies, these improved techniques have been used to monitor volatile and semi-volatile organics, including PCDDs, PCDFs and dioxin-like Co-PCBs.

The purposes of the monitoring effort are: (1) to support Canadian Environmental Protection Act (CEPA) priority substances assessments by providing information on exposures of the Canadian population to ambient atmospheric concentrations of toxic substances; (2) to provide data on trends in atmospheric concentrations of toxics and thus measure the success of initiatives carried out under the Toxic Substances Management Policy and under the Canada-Ontario Agreement respecting the Great Lakes basin ecosystem; (3) to characterize potentially toxic components of fine particulate matter; (4) to identify and characterize major sources of toxic substances and determine the importance of long-range transport versus domestic releases in terms of measured ambient concentrations; and (5) to provide improved information on the fate, transport and deposition of toxic substances.

### 2.1.2 Sampling Sites

NAPS began operation in 1989 with two sampling sites (Walpole Island, and Windsor as part of the Detroit Incinerator Monitoring program. Over time, additional sampling locations were established, some of which operated only for a limited number of years. In 1995, a maximum of 23 simultaneously operating sites was reached. Until 2012, when the NAPS program discontinued monitoring PCDD/Fs, samples had been obtained at a total of 43 different sites, classified into rural, suburban, and urban locations (Table 1, Figure 1 and Figure 2, and photos in Section 6.1).

Table 1. NAPS site locations and classifications

<b>Site No.</b>	<b>Name</b>	<b>Latitude (°N)</b>	<b>Longitude(°W)</b>	<b>Operational</b>	<b>Classification</b>
1	St. John's, NL	47.56	52.71	1999-2002	Urban
2	Corner Brook, NL	48.95	57.95	2005-2011	Urban
3	Charlottetown, PEI	46.24	63.13	1995	Urban
4	Halifax, NS	44.65	63.57	1995	Urban
5	Kejimkujik, NS	44.44	65.21	1994-2009	Rural
6	Saint John, NB	45.31	66.01	1994-2011	Suburban
7	St. Andrews, NB	45.05	67.07	1994-2001	Rural
8	Montréal, QC	45.52	73.56	1992-2008	Urban
9	Montréal, QC	45.65	73.57	1999-2011	Urban
10	Montréal, QC	45.54	73.57	2008-2011	Urban
11	Jonquière, QC	48.43	71.19	1991-2011	Urban
12	Windsor, ON	42.31	83.04	1989-1995	Urban
13	Windsor, ON	42.29	83.07	1990-2011	Urban
14	Toronto, ON	43.62	79.52	1998-2000	Urban
15	Toronto, ON	43.67	79.45	1991-2004	Urban
16	Toronto, ON	43.66	79.40	2000-2011	Urban
17	Toronto, ON	43.62	79.52	2001-2008	Urban
18	Toronto, ON	43.61	79.52	2009-2011	Urban
19	Hamilton, ON	43.26	79.86	1991-2011	Urban
20	Hamilton, ON	43.48	79.92	1999-2002	Urban
21	Hamilton, ON	43.25	79.75	1999-2002	Urban
22	Walpole Island, ON	42.54	82.41	1989-1995	Rural
23	Simcoe, ON	42.85	80.27	1996-2011	Rural
24	Egbert, ON	44.23	79.78	1998-2010	Rural
25	Point Petre, ON	43.86	77.15	1996-2011	Rural
26	Burnt Island, ON	42.70	82.95	2003-2011	Rural
27	Winnipeg, MB	49.90	97.15	1995-2011	Urban
28	Prince Albert, SK	53.20	105.75	1995	Urban
29	Estevan, SK	49.14	103.00	1994-1996	Rural
30	Edmonton, AB	53.55	113.37	1994-2011	Suburban
31	Edmonton, AB	53.54	113.50	1995	Urban
32	Edmonton, AB	53.49	113.46	2006-2011	Urban
33	Calgary, AB	51.05	114.08	2006-2011	Urban
34	Fort Saskatchewan, AB	53.71	113.22	1994-1995	Suburban

35	Fort McMurray, AB	56.73	111.39	1995	Urban
36	Vancouver, BC	49.28	122.97	1996-1998	Suburban
37	Vancouver, BC	49.28	122.85	1996	Suburban
38	Vancouver, BC	49.26	123.16	1996	Urban
39	Victoria, BC	48.43	123.36	1995	Urban
40	Vancouver, BC	49.16	121.94	1995	Suburban
41	Pitt Meadows, BC	49.21	122.71	1994-1995	Rural
42	Trail, BC	49.10	117.70	1994-1995	Suburban
43	Powell River, BC	49.88	124.52	1996-1998	Urban

Figure 1. Locations of NAPS sampling sites (Eastern Canada)

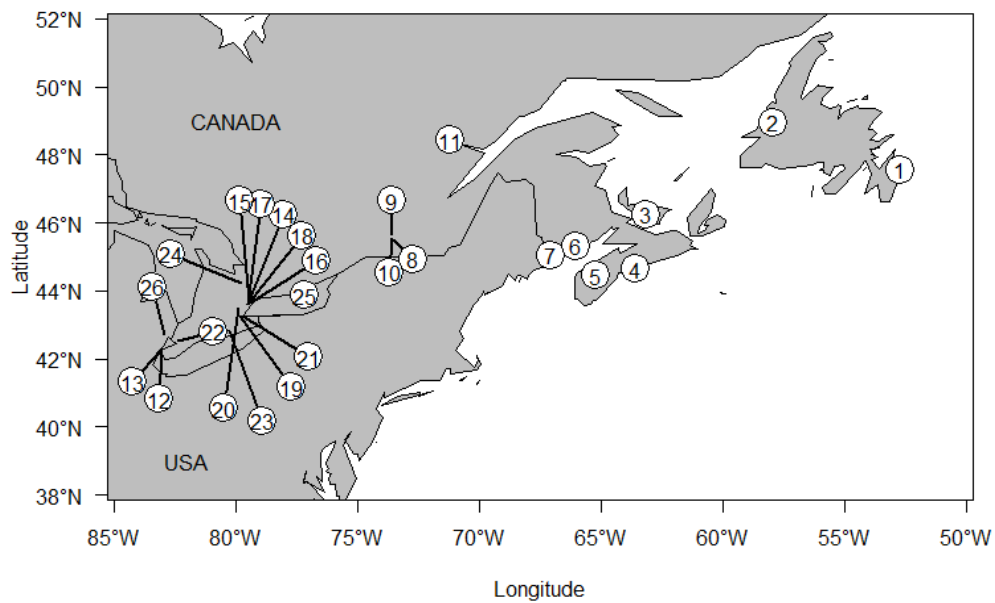
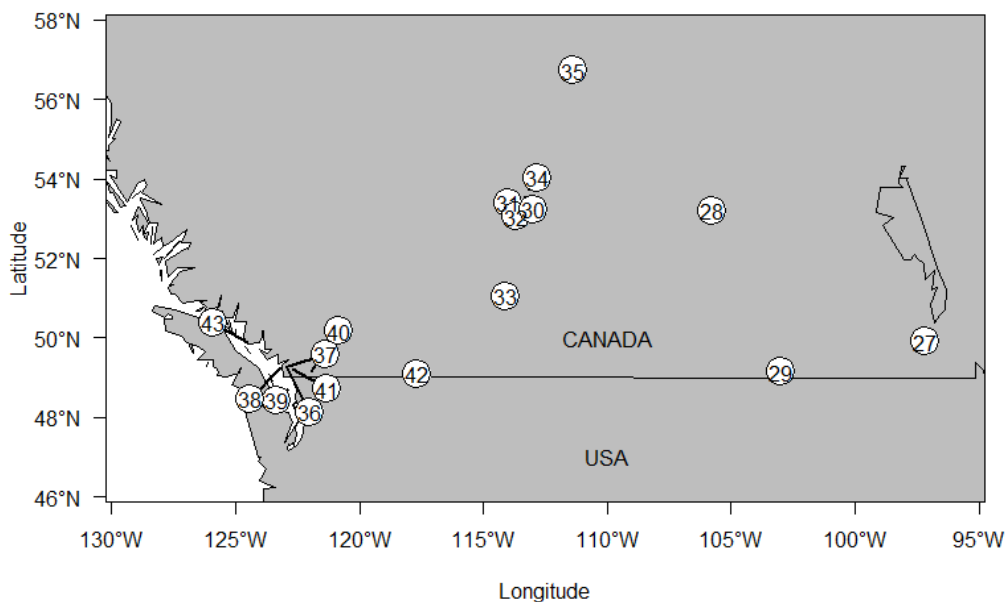




Figure 2. Locations of NAPS sampling sites (Western Canada)



### 2.1.3 Sampling and Analysis Strategies

#### 2.1.3.1 Sample Collection

In the period from 1989 to 2009, between one and 28 (typically around six) samples were collected annually at NAPS, in the end totaling 2201 samples. The vast majority were collected over 24-hour sampling periods (midnight to midnight) with a typical sample volume of 600–800 m<sup>3</sup>, although some 48-hour sampling was carried out at the Windsor area sites in 1990 and 1991 and at Powell River.

A filter-sorbent sampling system was used to collect particle- and gas-phase PCDD/Fs and PCBs, as illustrated in Figure 3. The sampling system was based on a high-volume sampler but was modified by NAPS staff to include a dry gas meter or a rotary vane meter that would record total sample volume. The sampler was equipped a 20 x 25 cm Pallflex Teflon-coated glass fiber filter (GFF) and polyurethane foam (PUF) sorbent placed in a sorbent cartridge with a 7.5-cm diameter and a bed depth of 15 cm (two 7.5-cm deep PUF plugs).

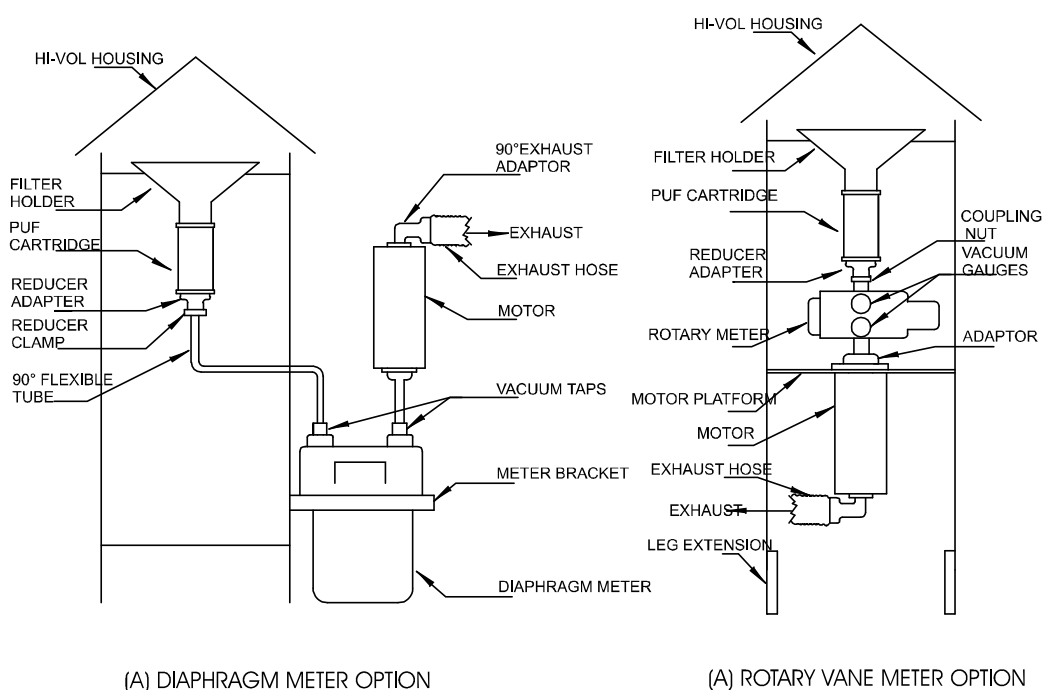
Filters were used directly as received from the manufacturer. Previously, PUF plugs were Soxhlet extracted for 16 to 20 hours, using methanol followed by cyclohexane. In the past eight years, the PUFs were extracted with acetone and hexane, using an Accelerated Solvent Extraction (ASE) system. The extracted plugs were then air-dried in a fume-hood or vacuum oven and later inserted into the cartridge assembly before shipment to the field.

In the field, the filters and cartridges were mounted and the samplers were leak-checked before each sampling event. Typically the samplers were set to automatically collect a 24-h sample on

the prescribed sampling day. Filters and cartridges were normally installed one to six days before sampling and removed from one to six days after sampling.

Following sampling, filters and foams were sent by courier to the AQRD-Ottawa laboratory where they were sealed and placed in a freezer until extraction. Data sheets corresponding with each sample were received, giving total sample volume, gas meter vacuum, sample and station IDs, date and elapsed time.

Figure 3. Environment Canada PCDD/F and PCB sampler assembly



### 2.1.3.2 Sample Analysis

Each sample was spiked with 2–4 ng of the nine  $^{13}\text{C}$ -labeled 2, 3, 7, 8-substituted PCDD/Fs and 8  $\mu\text{g}$  of each of the twelve  $^{13}\text{C}$ -labeled dioxin-like PCBs. The sample was extracted for 16–20 hours with toluene. The raw extract was split into two fractions: one half was used for PCDD/F cleanup/analysis and the other half was used for dioxin-like PCB cleanup/analysis.

#### i) PCDD/F Analysis

The filter and PUFs were extracted together in order to measure the total (particle- and gas-phase) PCDD/Fs of each sample. The filter was folded in four and placed at the bottom of a large, clean Soxhlet extraction chamber, followed by the PUFs. The sample was spiked with 1–2 ng of nine  $^{13}\text{C}$ -labeled 2, 3, 7, 8-substituted PCDD/F congeners. The sample was then extracted

for 16–20 h using toluene. The sample extract was filtered through anhydrous sodium sulphate, concentrated to ~2 mL, exchanged to hexane, and re-concentrated to ~2 mL. The concentrated extract was cleaned by passing through a column packed with acid-coated, base-coated and silver nitrate-coated silica to eliminate easily oxidized organics and sulphurous compounds, and then through a second column containing basic alumina to isolate PCDD/Fs from potential interferences. The extract was then concentrated just to dryness under a gentle stream of nitrogen and re-dissolved in 20  $\mu\text{L}$  of a recovery standard solution containing 50  $\text{pg } \mu\text{L}^{-1}$  of  $^{13}\text{C}$ -labeled 1, 2, 3, 4-TCDD and  $^{13}\text{C}$ -labeled 1, 2, 3, 7, 8, 9-HxCDD. Final extracts were analyzed by a high resolution gas chromatograph/high resolution mass spectrometer (HRGC/HRMS) operated in electron impact (EI) and selected ion monitoring (SIM) modes. The analytical conditions of the HRGC/HRMS are given in Table 2.

Table 2. HRGC/HRMS conditions used for PCDD/F analysis by NAPS

Instrument	Waters Ultima HRGC/HRMS
Column	DB-5 (or equivalent), (60 m length $\times$ 0.25 mm i.d., 0.25 $\mu\text{m}$ film thickness)
Ionization mode	EI (28–40 eV)
Acquisition mode	SIM
Resolution	5,000–10,000
Injection	2 $\mu\text{L}$ , split/splitless or on-column
Oven temperature program	100 $^{\circ}\text{C}$ (split/splitless) or 70 $^{\circ}\text{C}$ (on-column) for 1 min, 40 $^{\circ}\text{C}/\text{min}$ to 200 $^{\circ}\text{C}$ , 3 $^{\circ}\text{C}/\text{min}$ to 235 $^{\circ}\text{C}$ and hold for 10 min, then 8 $^{\circ}\text{C}/\text{min}$ to 310 $^{\circ}\text{C}$ and hold for 15 min

The internal standard method was used to quantify PCDD/F congeners based on the use of average relative response factor (RF) over the calibration range represented by the standard solutions. For native standards, the relative RF was the ratio of the analyte response factor to the response factor of the corresponding labeled surrogate. Using these relative RFs, recovery corrected PCDD/F concentrations in samples were calculated directly. The relative RF of the surrogate response factor to the response factor of the corresponding recovery standard was used to calculate surrogate recoveries in samples. The method detection limits (MDLs) were obtained by replicate analysis of certified reference material (urban dust 1649). Based on a 1000  $\text{m}^3$  sample of air and a final volume of 20  $\mu\text{L}$ , the MDLs for PCDD/Fs ranged from 1 to 4  $\text{fg } \text{m}^{-3}$  per analyte.

## ii) Co-PCB Analysis

Prior to Soxhlet extraction, each sample was spiked with a surrogate solution. The sample extract was split and the PCB fraction was purified with a modified silica column. Next, the PCB extract was concentrated and filtered through a polytetrafluoroethylene (syringe filter (0.45  $\mu\text{m}$ )). The extract was then concentrated to 100  $\mu\text{L}$  and fractionated by high performance liquid chromatography (HPLC). An HPLC equipped with a COSMOSIL 5PYE reverse phase column (5  $\mu\text{m}$  particle size, 4.6 mm i.d.  $\times$  150 mm, Phenomenex) was used to separate toxic ortho-, mono-ortho- and di-ortho-substituted PCBs from non-ortho-chlorinated PCBs. The HPLC dioxin-like PCB fraction was concentrated to dryness and spiked with 20  $\mu\text{L}$  of the recovery standard solution (100

pg  $\mu\text{L}^{-1}$   $^{13}\text{C}$ -labeled PCB-101). The final purified extract was analyzed by GC/MS under the operating conditions shown in Table 3.

A six-point calibration was used to establish the linear dynamic range of the instrument. Internal standard method was used to quantify dioxin-like PCBs, based on the RFs of a midpoint calibration standard. For native standards, the relative RF was the ratio of the analyte response factor to the response factor of the corresponding labeled surrogate. Analyte concentrations were recovery corrected. The recovery standard,  $^{13}\text{C}$ -labeled PCB-101, was used to calculate surrogate recoveries in the sample.

Table 3. GC/MS conditions used for dioxin-like PCB analysis by NAPS

Instrument	Agilent GC/MS (6890N/5975)
Column	DB-XLB (30 m length $\times$ 0.25 mm i.d., 0.25 $\mu\text{m}$ film thickness)
Ionization mode	NCI
Acquisition mode	SIM
Injection	1 $\mu\text{L}$ , on-column
Oven temperature program	90 $^{\circ}\text{C}$ for 2 min, 15 $^{\circ}\text{C}/\text{min}$ to 105 $^{\circ}\text{C}$ , 5 $^{\circ}\text{C}/\text{min}$ to 275 $^{\circ}\text{C}$ , then 15 $^{\circ}\text{C}/\text{min}$ to 325 $^{\circ}\text{C}$ and hold for 8 min

#### 2.1.4 Quality Assurance/Quality Control

Quality assurance and quality control in the field included the collection of field blanks that were obtained at each site by mounting clean filters and foams in the sampler and leaving them for a time period typical of that of an active sample. Only octachlorodibenzo-*p*-dioxin (OCDD) was routinely detected in field blanks, with measured levels generally less than 60  $\text{fg m}^{-3}$  at urban sites and less than 20  $\text{fg m}^{-3}$  at rural sites. A separate study, with co-located samplers, had been carried out, and the overall precision of PCDD/F measurements was estimated to be 10–20% for concentrations above 5  $\text{fg m}^{-3}$ .

Quality assurance and quality control in the laboratory for both PCDD/Fs and Co-PCBs included calibration standards, labeled surrogates for recovery correction, method blanks and control samples. Levels of PCDD/F isomers in method blanks were below the method detection limit (1–4  $\text{fg m}^{-3}$ ). The detection limit for Co-PCBs ranged from 0.010 to 0.050 ng per sample. The surrogate recoveries of Co-PCBs in samples had to be within a range of 50–120%, and that of control samples within a range of 75–125% of the reference value.

Calibration curves for PCDD/Fs were constructed prior to sample analysis to confirm linearity between 0.25 and 100  $\text{pg } \mu\text{L}^{-1}$ . The established calibration curves were verified at least every 12 hours of operation by injecting a mid-level standard. As a check on accuracy, a reference material such as Wellington Standard EN 1948 was analyzed periodically.

The established calibration for Co-PCBs had to be verified by analyzing a mid-level calibration verification standard at least once every 10 samples injected and before and after each sequence. The following criteria had to be satisfied to confirm the presence of target analytes in the sample: (a) Response of the two characteristic ions must exceed the background noise level by a mini-

mum of 3:1. (b) The abundance ratio of the first confirmation ion ( $m/z$ ) must be within 40% of the corresponding ratios in the standard solution. (c) The peak maxima for each specific characteristic ion must be coincident within 3 sec. Sample analyte retention times must be within 3 sec of the retention time of the corresponding standard component

## 2.2 National Dioxin Air Monitoring Network

### 2.2.1 History of the Network

In June 1998, the US Environmental Protection Agency (EPA) established the National Dioxin Air Monitoring Network (NDAMN) to determine the temporal and geographical variability of atmospheric PCDDs, PCDFs and dioxin-like PCBs at rural, remote and urban areas of the United States.

The overall goal of NDAMN is to provide information that may link sources with human exposures to dioxin-like compounds. To achieve this goal, NDAMN is focused on three primary purposes: (1) to provide measurements of background atmospheric levels of dioxin-like compounds in different geographic regions of the United States; and (2) to determine atmospheric levels of dioxin-like compounds in agricultural areas where livestock, poultry, and animal feed crops are grown.

### 2.2.2 Sampling Sites

NDAMN started its operation in 1998 with nine sampling sites. This number increased over time until in 2004 a total of 34 sites were in operation at locations across the United States. These sites were classified for purposes of the monitoring network into remote, rural and urban locations (Table 4 and Figure 4).

Remote and rural locations were selected to meet specific criteria, including: (1) not impacted by nearby sources of dioxin-like compounds; (2) surrounded by land where animal feed predominantly grown; (3) representative of variable climate conditions in terms of temperature, humidity, and precipitation; and (4) located in different geographic regions (Riggs et al. 2003). Remote sites were selected further on the basis that they were relatively free of human habitation and greater than 100 km from likely dioxin sources (i.e., urban, suburban, industrial settings, etc.). Urban sites were located closer to smaller urban areas (with populations below 20,000), and in the case of Fort Cronkhite at several kilometers distance from the inhabited area of San Francisco (Lorber et al. 2013).

## 2.2.3 Sampling and Analysis Strategies

### 2.2.3.1 Sample Collection

Samples at NDAMN were collected quarterly between 1998 and 2004. In this manner, a total of 685 samples were gathered during 25 sampling moments (Lorber et al. 2013). Each sampling moment consisted of 20–24 days of active sampling over a 28-day period, on a weekly schedule of five or six days of continuous operation followed by one or two days of inactivity. In this manner approximately 6,000–8,000 m<sup>3</sup> of air were sampled.

Each station consists of a high volume PS-1 PUF sampler (Figure 5). The sampling medium has two components: a quartz fiber filter (QFF) to collect and retain particulate matter ( $\geq 0.1 \mu\text{m}$ ); and a PUF plug to collect and retain gaseous phase compounds.

Each week the QFF was harvested and a new one was placed in the sampler, yielding four QFFs per sampling moment. This was done to prevent saturation and clogging of the filter media with collected particles. Another benefit of changing the QFFs was the potential to reduce volatile loss of particle-bound dioxin. The PUF was collected once at the end of the sampling moment.

Samples were packaged with freezer packs and shipped overnight to the US EPA’s Environmental Chemistry Laboratory for analysis (Cleverly et al. 2000). All samples were verified to have arrived cold, inspected, logged in, and stored in a freezer until analyzed.

Table 4. NDAMN site locations and classifications

Site No.	Name	Latitude (°N)	Longitude (°W)	Classification
1	Penn Nursery, PA	40.78	77.62	Rural
3	Clinton Crops, NC	35.02	78.28	Rural
4	Everglades, FL	25.39	80.68	Rural
5	Lake Dubay, WI	44.66	89.65	Rural
6	Monmouth, IL	40.93	90.72	Rural
7	McNay, IA	40.96	93.39	Rural
8	Lake Scott, KS	38.67	100.92	Rural
9	Bixby, OK	36.14	96.26	Rural
9	Lake Keystone, OK	34.18	93.10	Rural
10	Arkadelphia, AR	42.88	73.16	Rural
11	Bennington, VT	42.11	77.54	Rural
12	Jasper, NY	39.02	76.95	Rural
13	Beltsville, MD	39.79	81.53	Urban
14	Caldwell, OH	39.53	84.72	Rural

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15	Oxford, OH	37.44	88.67	Rural
16	Dixon Springs, IL	30.55	84.60	Rural
17	Quincy, FL	30.37	89.62	Rural
18	Bay St. Louis, MS	27.43	97.30	Rural
19	Padre Island, TX	46.71	92.51	Rural
20	Fond Du Lac, MN	41.06	100.75	Rural
21	North Platte, NE	36.59	101.62	Rural
22	Goodwell, OK	29.30	103.18	Rural
23	Big Bend, TX	36.06	112.18	Remote
24	Grand Canyon, AZ	46.89	103.38	Remote
25	T. Roosevelt N.P., ND	43.46	113.55	Remote
26	Craters Moon, ID	32.01	109.39	Remote
27	Chiricahua, AZ	38.34	121.11	Remote
28	Rancho Seco, CA	44.63	123.19	Urban
29	Hyslop Farms, OR	48.08	124.63	Rural
30	Ozette Lake, WA	37.83	122.53	Remote
31	Fort Cronkhite, CA	44.62	124.04	Urban
32	Newport, OR	55.45	133.09	Urban
33	Craig, AK	62.32	150.31	Rural
34	Trapper Creek, AK	44.68	124.07	Remote
35	Yaquina Head, OR	40.78	77.62	Rural

2 mobile duplicate site

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Notes: Sites 9 and 29 were moved to another location within the sampling region in 2002 and 2004, respectively.

Source: US EPA 2013

Figure 4. Locations of NDAMN sampling sites

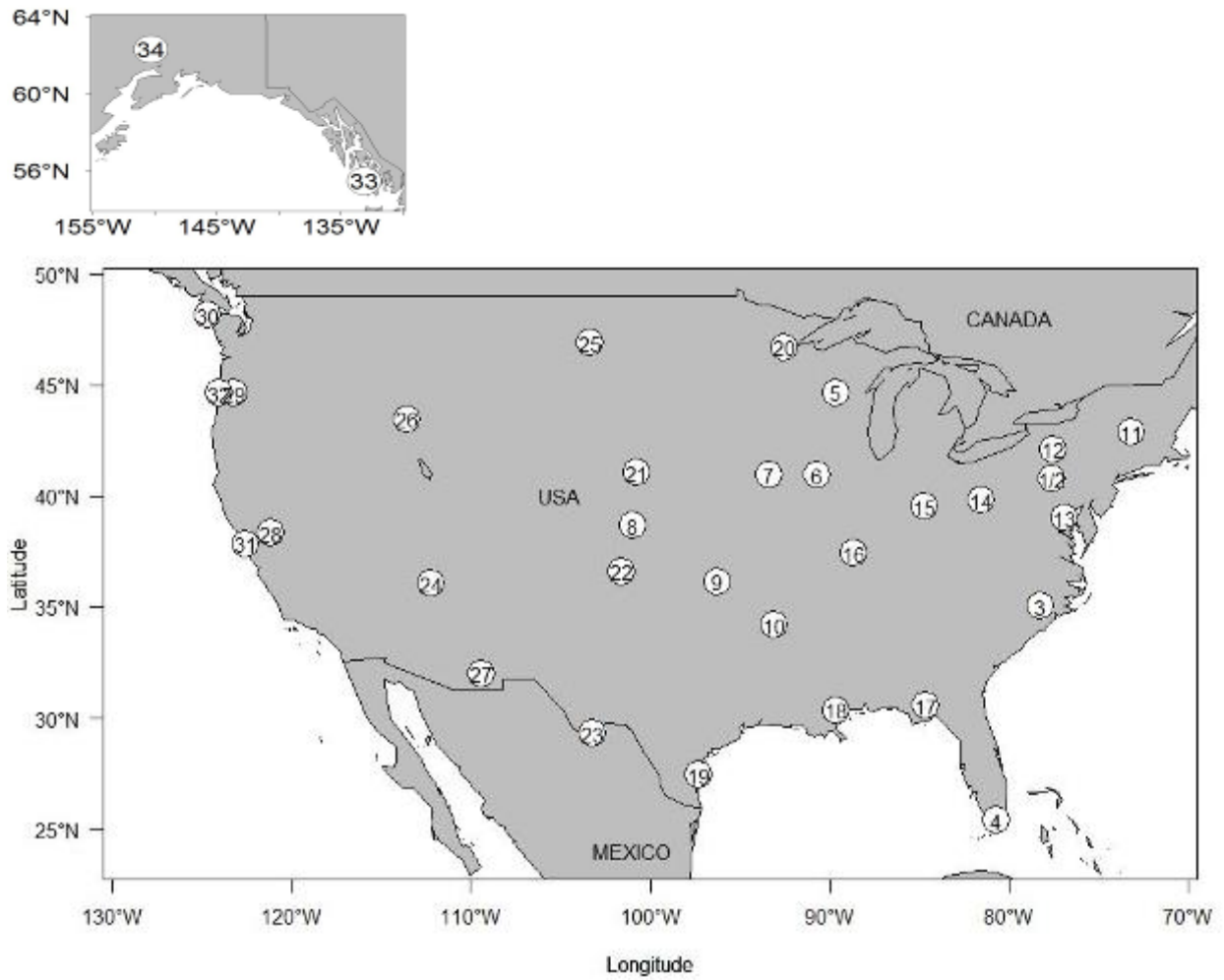
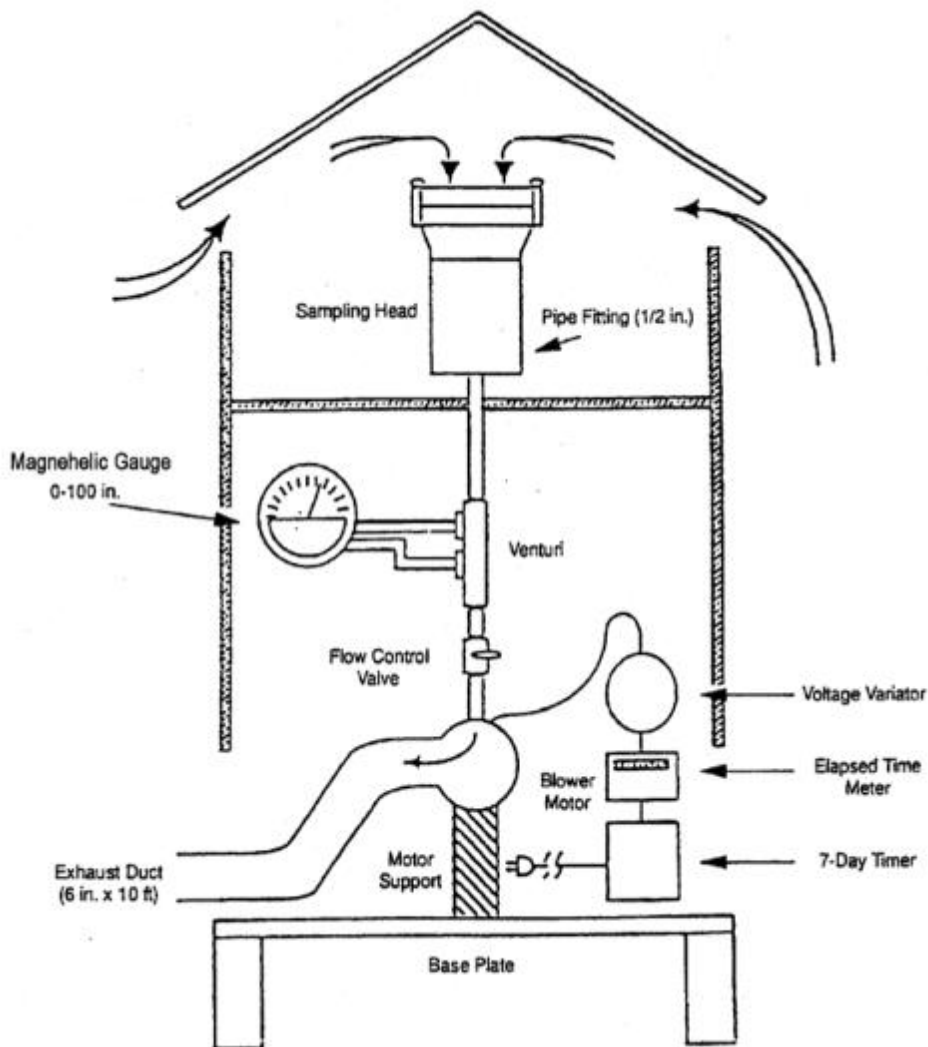




Figure 5. PS-1 PUF sampler for PCDD/F and Co-PCB



### 2.2.3.2 Sample Analysis

Samples were processed in analytical sets consisting of a group of 12: nine samples, one fortified laboratory control sample, and two method blanks. The QFFs from each individual field sample or field blank were combined with its corresponding PUF in a Soxhlet apparatus, spiked with the seventeen  $^{13}\text{C}$ -labeled 2, 3, 7, 8-substituted PCDD/Fs and seven  $^{13}\text{C}$ -labeled Co-PCBs (all twelve WHO Co-PCBs were analyzed after 2002) and extracted for 24 h with toluene. The volume was reduced to 50 mL and the solvent exchanged to hexane. The extracts were then stirred for 3 hours with 50 g of acidified silica and passed through acidified and basic silica gel. The volume was then reduced to less than 1 mL in a Zymark Turbovap II<sup>TM</sup> and fractionated on PX-21 graphitized carbon. The dioxin fraction was then further cleaned-up on neutral alumina prior to analysis. All reagents were prepared according to procedures detailed in EPA Method 1613 (US EPA 1994).

The analyses and QA/QC procedures and thresholds were consistent with those described in the method with several notable adjustments: (1) Standard calibration solutions were prepared at

lower concentrations. For the NDAMN, the lowest calibration standard contained 50 fg of TCDD and 5 pg  $\mu\text{L}^{-1}$  of  $^{13}\text{C}$ -labeled surrogates; Method 1613's lowest calibration standard contains 500 fg and 100 pg  $\mu\text{L}^{-1}$  of surrogates. The samples collected under NDAMN were spiked to deliver 5 pg  $\mu\text{L}^{-1}$  where Method 1613 delivers 100 pg  $\mu\text{L}^{-1}$  from the same 20  $\mu\text{L}$  final volume. The lower  $^{13}\text{C}$  surrogate fortification level allows for a more realistic approximation of the actual recovery of native analytes at the sub parts-per-trillion (ppt) level and better approximates the behavior of trace levels of natives during sample processing and analyses. (2) A DB-5MS column was used in place of the DB-5 specified by Method 1613. The DB-5MS has superior separation of the 2, 3, 7, 8-TCDD from the other tetra isomers and better resolves the 2, 3, 7, 8-substituted PCDD/Fs. (3) Method 1613 uses an AX21/Celite mixture of graphitized carbon where NDAMN used a mixture consisting of 0.5 g of BioSil A silica gel and 0.5 g of Amoco PX-21 carbon. (4) The eluting solvents and fractionation are also different. The column was conditioned with 10 mL of 50/50 benzene/dichloromethane (DCM), 10 mL toluene, and 5 mL hexane. The sample was added to the column in 0.5 mL hexane and following two 0.5 mL rinses. Fraction 1, containing most of the ortho-PCBs, was eluted with 4.5 mL of 25/75 DCM/hexane. Fraction 2, collected in one vessel, consisted of 5.5 mL of DCM and contained the mono-ortho-PCBs and 11.5 mL of benzene/DCM, which contained the non-ortho-PCBs. The column was then reversed and the PCDD/Fs were collected with 13 mL of toluene. Fractions were reduced to less than 10  $\mu\text{L}$  and solvent exchanged with hexane and stored in the freezer until analyzed.

All analyses were performed by HRGC/HRMS in accordance with EPA Method 1613. Table 5 shows the analytical conditions. Ambient atmospheric concentrations were determined for each sampling moment at each site, and then annual averages were calculated for each site.

#### 2.2.4 Quality Assurance/Quality Control

Quality assurance and quality control in the field was warranted by the Standard Operation Procedure (SOP) for ambient air sampling, developed by Battelle. QA/QC measures included the collection of field blanks, and the co-location of duplicate samplers. The precision of average concentrations was 9–56% for individual congeners (with a median of 20%) (Lorber et al. 2013a).

Quality assurance and quality control in the laboratory included calibration standards, labeled recovery surrogates, method blanks, matrix blanks, and laboratory control spikes. The analytical detection limits ranged from 0.5 pg for TCDD/Fs to 20 pg for OCDD/F, and from 1 pg (PCB-169) to 500 pg (PCB-118) for the individual dioxin-like PCBs. Recoveries of  $^{13}\text{C}$ -labeled analogs for the samples were between 30 and 150%.

Between four and six calibration standards with native analyte concentrations bracketing the expected analyte concentrations were analyzed prior to analyzing samples. The analyses of calibration standards permitted the RF to be determined as a function of concentration using linear regression. The RF for each native analyte at each concentration was calculated relative to its  $^{13}\text{C}$ -labeled analog. The relative standard deviation (RSD) for average RF for each of the native analytes had to be <20%. Similarly, the RF for each  $^{13}\text{C}$ -labeled recovery surrogate relative to the appropriate internal standard was also calculated. The RSD for the average RF for each  $^{13}\text{C}$ -labeled surrogate had to be <35%. The average RFs were used for subsequent quantifications. Prior to sample analysis, the linearity of the calibration curve was verified by analyzing calibra-

tion solution 2 (200 fg of TCDD) and calculating the RF as described previously. The percent difference between the new RF and the average had to be <20% for the native analytes and <35% for the  $^{13}\text{C}$ -labeled recovery surrogates. The mass chromatogram was also examined to ensure that all the 2, 3, 7, 8-substituted congeners were clearly separated. If the signal-to-noise ratio (S/N) values were  $\geq 10$ , the ion abundance ratios were  $\pm 15\%$  of the theoretical values, and the RF and isomer separations were within specified limits, then sample analyses proceeded. On the days that samples were analyzed, 10  $\mu\text{L}$  of the internal standard solution (20  $\text{pg } \mu\text{L}^{-1}$ ) was added to each sample, and the final volume was adjusted to 20  $\mu\text{L}$ . Native analyte concentrations were determined by isotope dilution. Peak areas from the characteristic ions for each native analyte and its  $^{13}\text{C}$ -labeled analog were used in conjunction with RFs from the internal calibration data to determine concentrations directly. Labeled surrogate recoveries were similarly calculated using an internal standard method. Peak identification criteria were as follows: S/N  $\geq 3.5$ ; the isotope ratio of the two characteristic ions for each congener class within 15% of the theoretical value; the peak maxima for the molecular cluster ions coincide within 2 s; and native analytes elute within  $\pm 3$  s of their corresponding  $^{13}\text{C}$ -labeled analogs. Method blanks were examined for the presence of interfering background. For PCDFs, an ion for the appropriate chlorinated diphenyl ether was monitored and the ion chromatogram was examined to ensure the absence of chlorinated diphenyl ether contamination.

Table 5. HRGC/HRMS conditions used for PCDD/F and Co-PCB analysis by NDAMN

Instrument	Hewlett Packard 6890 Series II HRGC/Kratos Concept or Micromass Ultraspec HRMS
Column	DB-5MS (60 m length $\times$ 0.32 mm i.d., 0.25 $\mu\text{m}$ film thickness)
Ionization mode	EI ( $\sim 35$ eV)
Acquisition mode	SIM
Resolution	$\geq 10,000$
Injection	2 $\mu\text{L}$ , splitless
Injector temperature	270 $^{\circ}\text{C}$
Interface temperature	275 $^{\circ}\text{C}$
Ion source temperature	250 $^{\circ}\text{C}$
Oven temperature program	Time 1: 1 min; rate 1: 5 $^{\circ}\text{C}/\text{min}$ ; time 2: 15 min; rate 2: 6 $^{\circ}\text{C}/\text{min}$ ; temperature 3: 295 $^{\circ}\text{C}$

## 2.3 Mexican Dioxin Air Monitoring Network

### 2.3.1 History of the Network

The Mexican Dioxin Air Monitoring Network (MDAMN) was established in 2007 in a joint effort between the governments of Mexico, Canada and the United States. It launched operation in early 2008 under the coordination and supervision of the Mexican National Institute for Ecology (INE) as part of the NARAP on Dioxins, Furans and Hexachlorobenzene, which then converted

into the North American Strategy for Catalyzing Cooperation on Dioxins, Furans and Hexachlorobenzene. Canada provided six out of the nine air samplers and technical training to Mexico, and the United States committed to analyzing samples in US EPA's Environmental Chemistry Laboratory. Mexico covered the operational costs for sampling through financial resources of INE and in collaboration with Mexican academic partner institutions. The related activities are documented in INE-UABC (2007), INE-Cinvestav (2008; 2009), INE-CIMAV (2010), Gamatek (2011) and INE-UAM (2012).

The objectives of the network are: (1) to generate the baseline information of dioxins and dioxin-like compounds in background ambient air for both the National Implementation Plan (NIP) of the Stockholm Convention as well as Regional Initiative; (2) to evaluate the risk for human and ecosystems due to the presence of these toxics; and (3) to assess the long-range transport behavior of these compounds.

The progress of MDAMN has been constantly reported by Mexico to the Task Force for Dioxins and Furans during their periodic meetings and conference calls (CEC 2012b). Furthermore, results have been communicated to the general public and the scientific community in the above-mentioned reports, in workshops organized by the Task Force (Cárdenas 2009; 2010; 2011), as well as in scientific fora (Márquez et al. 2007; Wöhrnschimmel et al. 2008a; 2008b; Cárdenas et al. 2010; 2011). Data of the first three years were made available in 2011 at the 31<sup>st</sup> International Symposium on Halogenated Persistent Organic Pollutants and later at the Task Force workshop in Mexico (Cárdenas et al. 2011).

### 2.3.2 Sampling Sites

MDAMN initiated sampling in 2008, with a total of nine sampling sites in different regions and ecosystems of the country (Table 6 and Figure 6). Seven of these sampling sites were originally selected for representing background or rural concentrations, and two sites were selected as urban reference sites. In 2011, MDAMN was reduced to two sampling sites, Celestún and Cofre de Perote, in order to continue monitoring the long-term trends in atmospheric dioxins and furans, to add to the already obtained baseline concentration data from these sites.

MDAMN sampling sites were defined by consensus of a Mexican expert group, coordinated by INE. The sampling locations were selected according to criteria adopted by US and Canadian dioxin air monitoring networks, including a minimum distance from direct emission sources. Potential impact on human health and ecosystems, and representativeness for regional and long-range atmospheric transport were also among the criteria for site selection (Wöhrnschimmel et al. 2008a).

The analysis also considered direct emission sources that are included in the emission inventories prepared by the US EPA and Environment Canada, and which were also part of the preliminary Mexican emission inventory of 2007. The potential impact on human health was divided into impacts from inhalation of dioxins and dioxin-like PCBs in ambient air, in particular in regions of high population density (such as Mexico City and Monterrey); and impacts via ingestion, as indicated by the production of cattle, pork, chicken and fish, and the potential atmospheric deposition on their feed (for example, in Cofre de Perote, Vaquerías and San Pedro Mártir). The potential impact on ecosystems was evaluated by the presence of vulnerable or fragile ecosystems,

the presence of endemic species and the uniqueness of the composition of flora and fauna (such as in San Pedro Mártir, Cofre de Perote, Celestún and Montes Azules). Atmospheric transport on local and regional levels was evaluated by surface winds and synoptic winds, using data from surface meteorological stations and results from the MM5 and NOAA Hysplit models. In particular, the San Pedro Mártir and Cofre de Perote sites are of high interest for analyzing long-rang atmospheric transport due to their high altitudes at the top of mountains (INE-UABC 2007).

After analyzing results and observations from the first three sampling moments it became evident that two sites, Coquimatlán and Montes Azules, among the seven non-urban locations were receiving interference from local sources of dioxin-like compounds. Around the perimeter of the Coquimatlán site, various emission sources were identified in a survey carried out in 2009 and 2010. The Montes Azules site is located in a region where forest fires (accidental and induced), as well as the intentional burning of agricultural waste, are common. Emissions in the Montes Azules area are considered characteristic of the whole Mesoamerican region and therefore the inclusion of this site is important for the national representativeness of the network. On the other hand, the site at Cofre de Perote, although located within a region of industrial activity, is not expected to be affected by regional emissions, given its high altitude, and is rather to be considered a site representative for global background concentrations (CEC 2012a).

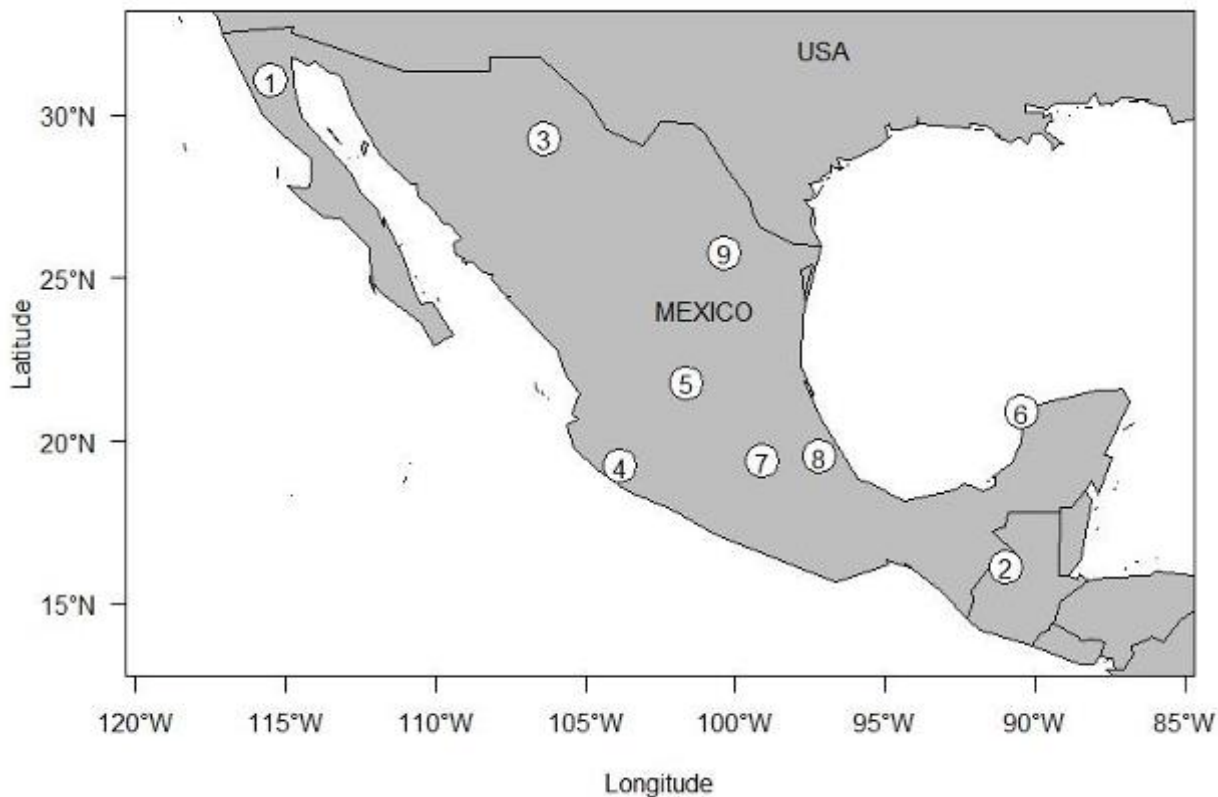
Table 6. MDAMN site locations and classifications

Site No.	Name	Latitude (°N)	Longitude (°W)	Altitude	Classification
1	San Pedro Mártir, B.C.	31.05	115.47	2830 m	Background
2	Montes Azules, Chis.	16.12	90.93	150 m	Rural
3	La Campana, Chih.	29.27	106.35	1559 m	Rural
4	Coquimatlán, Col.	19.22	103.80	370 m	Semi-rural
5	Vaquerías, Jal.	21.78	101.62	2100 m	Rural
6	Celestún, Yuc.	20.87	90.40	3 m	Semi-rural
7	Mexico City, D.F.	19.37	99.07	2240 m	Urban
8	Perote, Ver.	19.50	97.15	4231 m	Background
9	Monterrey, N.L. <sup>1</sup>	25.75	100.35	554 m	Urban

Source: Cárdenas et al. 2011

<sup>1</sup> Monterrey replaced Nuestra Señora in the State of Sinaloa as a sampling site after the second sampling moment, when it became evident that no lasting solution would be found to the unexpected problems with the electrical power supply at Nuestra Señora.

Figure 6. Locations of MDAMN sampling sites



### 2.3.3 Sampling and Analysis Strategies

#### 2.3.3.1 Sample Collection

Samples at MDAMN have been collected quarterly since 2008, with measurements ongoing. Up until July 2012, a total of 110 samples had been gathered, during 16 sampling moments. Samples were collected during four periods of six days each, starting at midnight, and with one day of inactivity after every period. In this manner, approximately 6,000–8,000 m<sup>3</sup> of air have been sampled.

The Model PS-1 sampling system (Figure 5) was used, together with a quartz-fiber filter (QFF), for the particulate fraction and a polyurethane foam (PUF) sorbent trap for the gaseous fraction. A venturi tube flowmeter with magnehelic gauge was used to control the sampling flow rate.

In the field, the filters and cartridges were mounted normally the day before the scheduled sampling. Each week the QFF was harvested and a new QFF was placed in the sampler, yielding four QFFs per sampling moment. This was done to prevent saturation and clogging of the filter media with collected particles and to reduce potential losses of particle-bound dioxin by volati-

lization. The PUF was collected once at the end of the sampling moment, typically the day after the end of sampling.

Clean sampling media were sent under cooled condition via courier from US EPA's Environmental Chemistry Branch (ECB) laboratory in Mississippi to INE's National Center for Environmental Research and Training (Cenica) offices in Mexico City. After verification of the received sampling media and exchanging the freezer packs, those were distributed by courier to the sampling sites in Mexico. After each sampling moment, all samples were sent back to Cenica offices under the same conditions, verified, repacked, and shipped to US EPA along with the corresponding documentation.

#### *2.3.3.2 Sample Analysis*

The analyses of the air samples were performed by US EPA-ECB at Stennis Space Center, Mississippi. The methodology and quality assurance for sample analysis are delineated in US EPA Methods 1613 and TO-9A, and ECB's standard operation procedure for the extraction and isolation of PCCD/Fs and Co-planar PCBs from NDAMN air samples, as described in Section 2.2.3.2.

#### 2.3.4 Quality Assurance/Quality Control

Quality assurance and quality control in the field was warranted by the provisions included in the Standard Operating Procedure (SOP) manual for ambient air sampling. The original version of this SOP was developed by Battelle for the US National Dioxin Air Monitoring Network. It was adapted by Cenica staff, including its internal quality assurance procedures, and considers the special characteristics of MDAMN. A Spanish version was distributed among the sampler operators before the first sampling moment, and revised and updated in 2011 (INE 2008, 2011).

The measures for quality assurance and control previous to each sampling moment included a leak-check of samplers and a calibration of sampling flows. Ambient pressure and temperature were taken down. Further, during each handling of the samples, a field blank was applied. Also at the end of the sampling moment, a calibration of the sampler was carried out. The chain of custody that was signed by the operator accompanied the samples when sent back under cooled conditions to Cenica. Sampler motors and charcoals were changed according to a previously established schedule. No co-located samples were taken in MDAMN.

Quality assurance during analysis was carried out according to the Quality Assurance Project Plan (QAPP) (US EPA-INE 2008), quantifying the precision, accuracy, and sensitivity of the monitoring data.

For determining laboratory precision, laboratory control samples (LCS) were fortified at three to five times the limit of quantification (LOQ) and the relative percent difference (RPD) of LCS replicates was determined. An RPD of 25% was established as the maximum tolerable deviation.

Accuracy was warranted by the use of internal calibration standards, method and field blanks, and the verification of fortified laboratory control samples (LCS). At least three (in most cases, six) calibration standards with native analyte concentrations bracketing the expected analyte concentrations were analyzed prior to analyzing samples. The calibration standard solutions also

contained the  $^{13}\text{C}$ -labeled recovery standards and the two  $^{13}\text{C}$ -labeled internal standards. The standards were purchased as solutions from Cambridge Isotope Laboratories and/or Wellington Laboratories, Inc., with certification to their purity, concentration, and authenticity. One field blank (both PUF and QFF) was collected with each sampling, and one method blank was analyzed in each set of 10 samples. Samples were background-subtracted if the particular congener level in the blanks was 10% or more of levels in the samples. If amounts for specific congeners in the individual field blanks contained greater than 30% of that found in the samples, the sample results were designated as QA failures. Sampling PUFs were fortified with  $^{13}\text{C}$ -labeled PCB 81 and 1, 2, 3, 4-TCDF, and one fortified LCS was analyzed with each set of samples. The accuracy of the fortified native analytes had to agree within 25% of the expected concentrations for 94% of the native analytes. The LCS was also used to control the calibration curve at the beginning of each workday. The recoveries of the  $^{13}\text{C}$ -labeled surrogates had to be between 25 and 150%.

Sensitivity was analyzed by means of fortified samples, field blanks, method blanks, and the LOQ. The LOQ for the tetra-dioxins/furans was defined as 50 femtograms, for the penta-, hexa-, and hepta-chlorinated dioxins and furans 100 fg, and for the octa-chlorinated dioxins and furans, 1 pg.

## **2.4 Comparative Overview**

Table 7 through Table 11 summarize key aspects of the information presented in Sections 2.1 to 2.3 on the three North American dioxin air monitoring networks: network design and operation, sampling methods, and analytic methods (both general and specific to PCDD/Fs and Co-PCBs).



Table 7. Network design and operation of the three North American dioxin air monitoring networks

	NAPS	NDAMN	MDAMN
<b>Established</b>	1969	1998	2007
<b>Objectives</b>			
Determine background levels of dioxins in air		✓	(✓)
Determine levels over agricultural areas	(✓)	✓	(✓)
Determine baseline for NIP / Stockholm Convention			✓
Characterize population exposure	✓	(✓)	✓
Characterize risk for ecosystems			✓
Evaluate long-term trends	✓		(✓)
Characterize particulate matter	✓		
Identify emission sources	✓		
Characterize long-range transport	✓		✓
Evaluate fate, transport, deposition	✓		
<b>Sampling sites (number and definition)</b>	43	34	9
Urban	27; based on land-use information	4; close to urban areas	2; within big urban areas
Suburban / semi-rural	7; based on land-use information	0	2; rural, with urban influence
Rural	9; based on land-use information	23; areas with crops and livestock	3; production of cattle, pork, chicken, fish
Remote	0	7; relatively free of human habitation and greater than 100 km from likely dioxin sources	2; site at high altitude without human settlements
<b>Data availability</b>	1989–2009	1999–2004	2008–2012
<b>Operational status</b>	discontinued in 2012 for PCDD/Fs and Co-PCBs (ongoing for PAHs)	discontinued in 2004	ongoing

Note: (✓) = objective derived from design, not explicitly stated as objective of the network.

Table 8. Sampling methods in the three North American dioxin air monitoring networks

	NAPS	NDAMN	MDAMN
<b>Method</b>			
Sampler	Hi-Vol	Tisch Environmental® TE1000 PUF (PS-1 sam- pler)	Tisch Environmental® TE1000 PUF (PS-1 sam- pler)
Sampling media	1 x GFF + 1 x PUF	4 x QFF + 1 x PUF	4 x QFF + 1 x PUF
Sampling volume	600–800 m <sup>3</sup>	6000–8000 m <sup>3</sup>	6000–8000 m <sup>3</sup>
Sampling duration	24 hours	20-24 days	24 days
Sampling frequency	1–28 (typically 6) times per year	3–6 times per year	4 times per year
<b>QA/QC</b>			
Field duplicates (co-located samplers)	✓	✓	none
Field blank	✓	✓	✓
Chain of custody	✓	✓	✓
Transport under cooled condi- tions		✓	✓
Criteria for invalidation in field	sample volume < 500 m <sup>3</sup> or > 1200 m <sup>3</sup> ; sample duration < 23 h or > 25 h	sample volume < 2000 m <sup>3</sup>	none

Table 9. Analytic methods (PCDD/Fs and Co-PCBs) in the three North American dioxin air monitoring networks

	NAPS	NDAMN	MDAMN
<b>Laboratory</b>	Environment Canada's Air Quality Research Division laboratories in Ottawa	EPA's Environmental Chemistry Branch laboratory, Mississippi	EPA's Environmental Chemistry Branch laboratory, Mississippi
<b>QA/QC</b>			
Blank subtraction		if blank level > 10% of sample level	if blank level > 10% of sample level
QA failure		if blank level > 30% of sample level	if blank level > 30% of sample level
Internal calibration standard	✓	✓	✓
Surrogate recovery standard	✓	✓	✓
Laboratory control spike	✓ (1/20)	✓ (1/12)	✓ (1/12)
Sample spike	<sup>13</sup> C	<sup>13</sup> C	<sup>13</sup> C
Criteria for sample invalidation in laboratory	Recovery outside of range 50-120%	N/A	amount of a congener in field blank > 30% of amount in sample
Potential laboratory contamination issues	none	N/A	N/A

Note: N/A = information not available. (n/m) = n from every m samples.

Table 10. Analytic methods (PCDD/Fs) in the three North American dioxin air monitoring networks

	NAPS	NDAMN	MDAMN
<b>Number of Congeners</b>	17	17	17
<b>Method</b>	HRGC/HRMS	HRGC/HRMS	HRGC/HRMS
<b>QA/QC</b>			
Initial calibration + verification	✓ (5 multi-point standards)	✓ (4-6 points)	✓ (3-6 points)
Precision	10-20% for conc. > 5 fg/m <sup>3</sup> (from co-located samplers)	<20% (from response factors) , 9-36% (from co-located samplers)	< 25% (from LSC replicates)
Method blank (laboratory blank)	✓ (1/ 10, only OCDD > MDL)	✓ (1/ 12)	✓ (1/12)
Matrix blank	none	✓	✓
MDL (per analyte)	0.3-4 pg	0.5-20 pg	0.5-20 pg
LOQ (per analyte)	1-10 pg	50 fg (TCDD/F), 100 fg (Pe-, Hx-, Hp-CDD/F), 1 pg (OCDD/F)	50 fg (TCDD/F), 100 fg (Pe-, Hx-, Hp-CDD/F), 1 pg (OCDD/F)
% of samples < MDL (per analyte)	0-52%	0-26%	0-23%

Note: N/A = information not available. (*n/m*) = *n* from every *m* samples; Hp-CDD = heptachlorodibenzo-*p*-dioxin; Hp-CDF = heptachlorodibenzofuran; Hx-CDD = hexachlorodibenzo-*p*-dioxin; Hx-CDF = hexachlorodibenzofuran; Pe-CDD = pentachlorodibenzo-*p*-dioxin.

Table 11. Analytic methods (Co-PCBs) in the three North American dioxin air monitoring networks

	NAPS	NDAMN	MDAMN
<b>number of congeners</b>	12	7 (12 after 2002)	12
<b>Method</b>	GC/MS	HRGC/HRMS	HRGC/HRMS
<b>QA/QC</b>			
Initial calibration + verification	✓ (6 points)	✓ (4-6 points)	✓ (3-6 points)
Precision	7-12% (from LSC replicates)	<20% (from response factors), 16-45% (from co-located samplers)	< 25% (from LSC replicates)
Method blank	✓ (1/10)	✓ (1/12)	✓ (1/12)
Matrix blank	none	✓	✓
MDL (per analyte)	0.3-3 pg	1-500 pg	1-500 pg
LOQ (per analyte)	1-10 pg	25-100 fg/uL	25-100 fg/uL
% of samples < MDL (per analyte)	0-22%	0-17%	0-23%

Note: N/A = information not available. ( $n/m$ ) =  $n$  from every  $m$  samples.

### 3. Monitoring Results

In this section, the monitoring results from the three North American dioxin air monitoring networks are compared. In particular, the variability of concentrations within each monitoring network will be discussed and a comparison of temporal trends and congener composition between the monitoring networks will be conducted. The data used in this analysis are provided in the tables found in section 7.2 of the Appendix. The full data set from the US monitoring network (NDAMN) is available on the website of the US EPA (US EPA 2013).

The toxic equivalent (TEQ) concentrations presented in this analysis are based on the human and mammalian toxic equivalency factors (TEFs) of dioxins and dioxin-like PCBs established by the World Health Organization (WHO) in 2005 (van den Berg et al. 2006). The shorthand for PCDD/F-derived TEQ is “TEQ<sub>PCDD/F</sub>” and for Co-PCB-derived TEQ is “TEQ<sub>Co-PCB</sub>”.

#### 3.1 Variability Within Each Monitoring Network

As described above, all North American dioxin air monitoring networks include different categories of sampling sites that can be grouped into background or remote sites, rural sites, semi-rural or suburban sites, and urban sites. A variability of PCDD/F and Co-PCB concentrations among these site categories was anticipated already during the design of each network. In this section, the resulting variability in the monitoring data is shown for each network in terms of summed

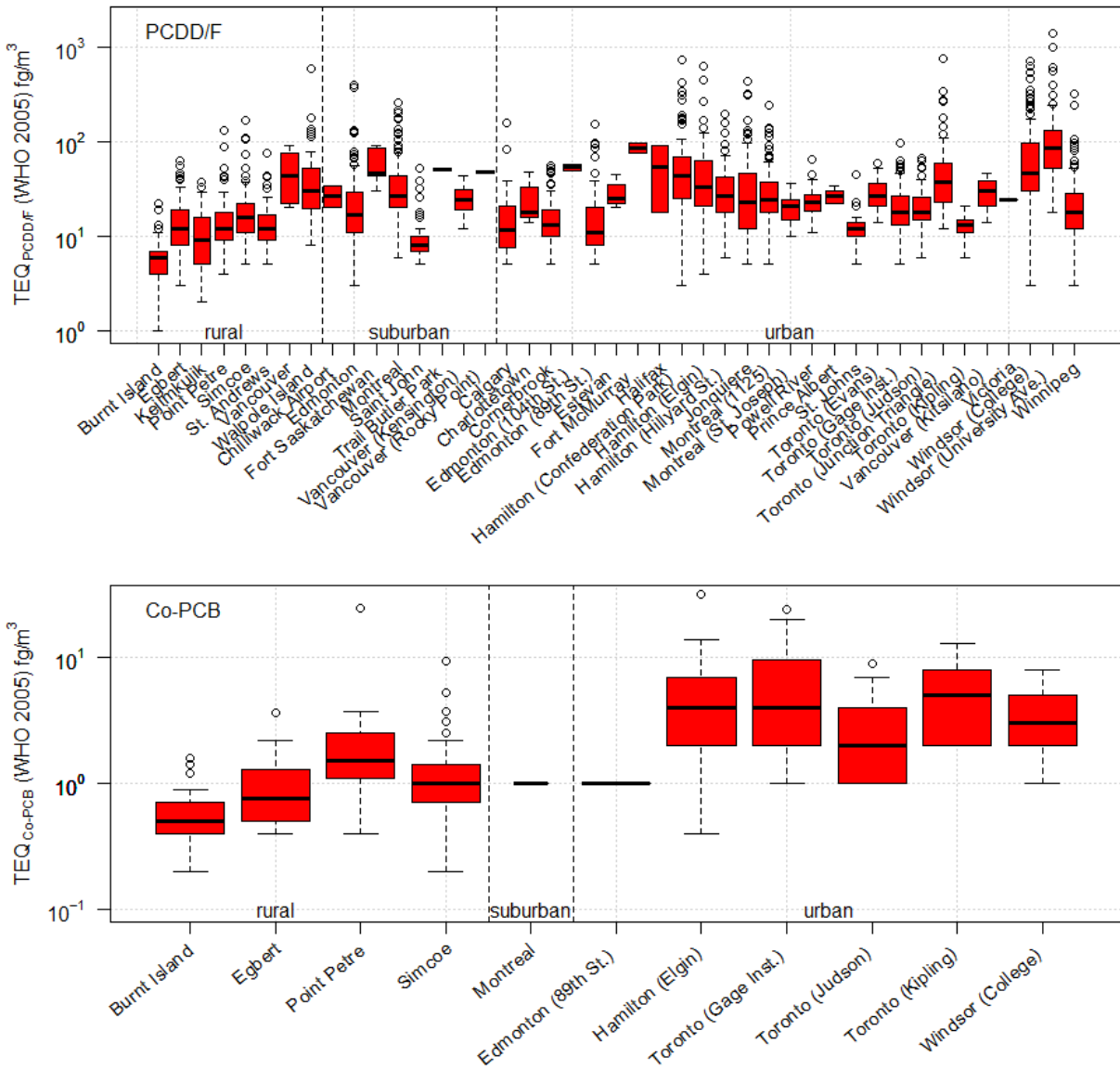
TEQ values and also of relative congener composition (profiles). Individual profiles from measurements with high concentrations will be contrasted to average profiles.

### 3.1.1 NAPS

TEQ concentrations measured by the NAPS network show significant variability among monitoring sites (Figure 7).  $TEQ_{PCDD/F}$  concentrations range from 1 to 1419  $fg\ m^{-3}$ , and  $TEQ_{Co-PCB}$  concentrations from 0.2 to 24.6  $fg\ m^{-3}$ . Concentrations at urban sites report in general higher concentrations than most of the rural sites. Mean dioxin levels in air were related to the proximity to urban sources. Areas with higher annual mean atmospheric levels of PCDD/Fs appear to correspond to areas of higher population density, and, conversely, areas of low mean PCDD/Fs are observed to be in areas of low population density (Figure 4 in Cleverly et al. 2007). Atmospheric transport from urban areas is believed to be the major cause also of the observed Co-PCB air pollution in the rural regions (Buehler et al. 2001; Hafner and Hites 2003; Cleverly et al. 2007).

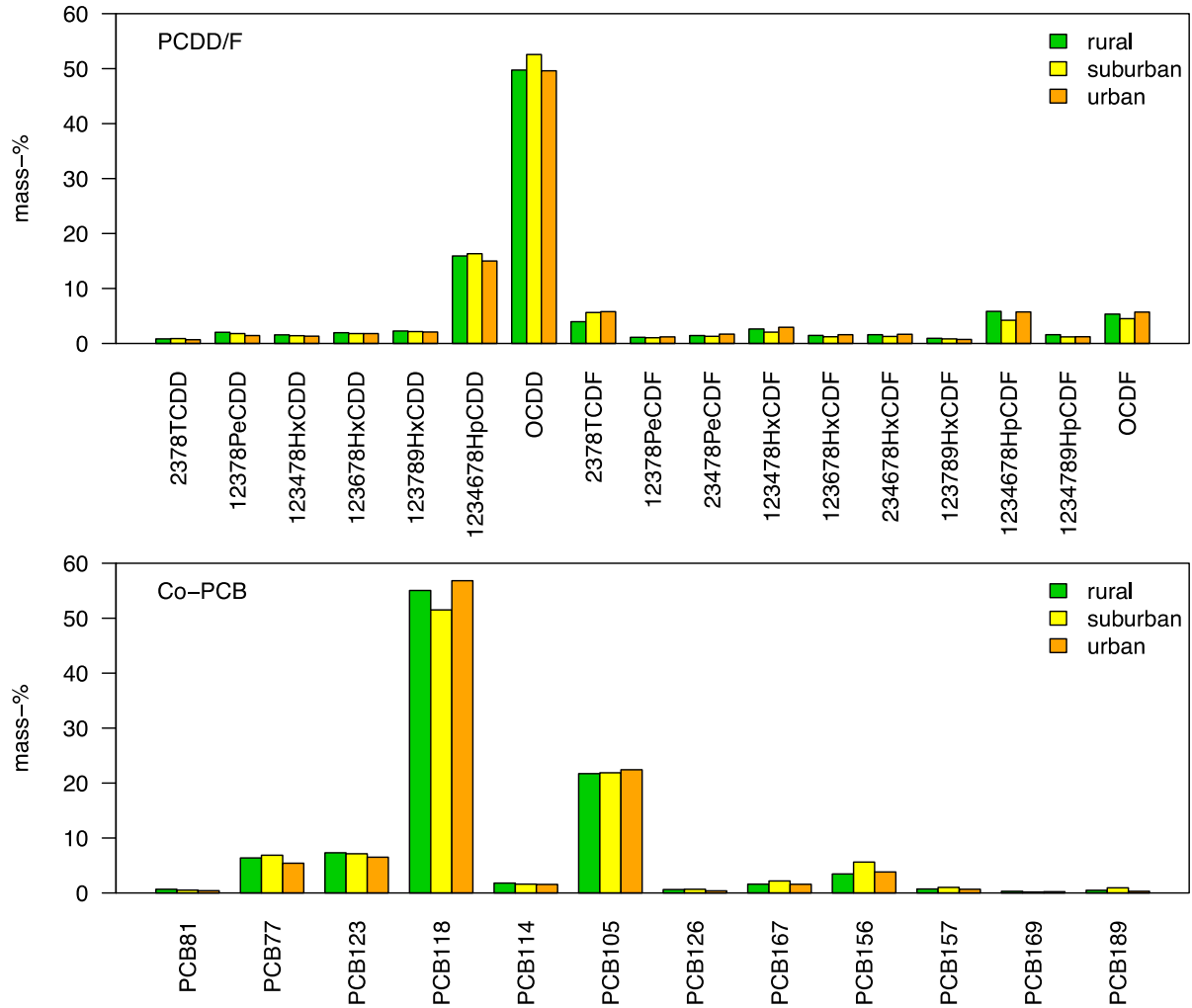
The congener compositions do not differ strongly between the site categories (see Figure 8). The PCDD/F profile is dominated by hepta- and octa-chlorinated dioxins, while within the Co-PCB profile, PCB-118 and PCB-105 are prominent. Figure 9 contrasts samples from two case-studies, Windsor/University Ave. and Walpole Island, that were outstanding due to their high TEQ concentrations. Their profiles are characterized by a lower contribution of OCDD and an increased contribution of furans, which might indicate the impact of a particular, local emission source.

Figure 7. TEQPCDD/F and TEQCo-PCB atmospheric concentrations (fg m<sup>-3</sup>) at all NAPS monitoring sites during 1989–2009



Source: Data from Environment Canada 2011

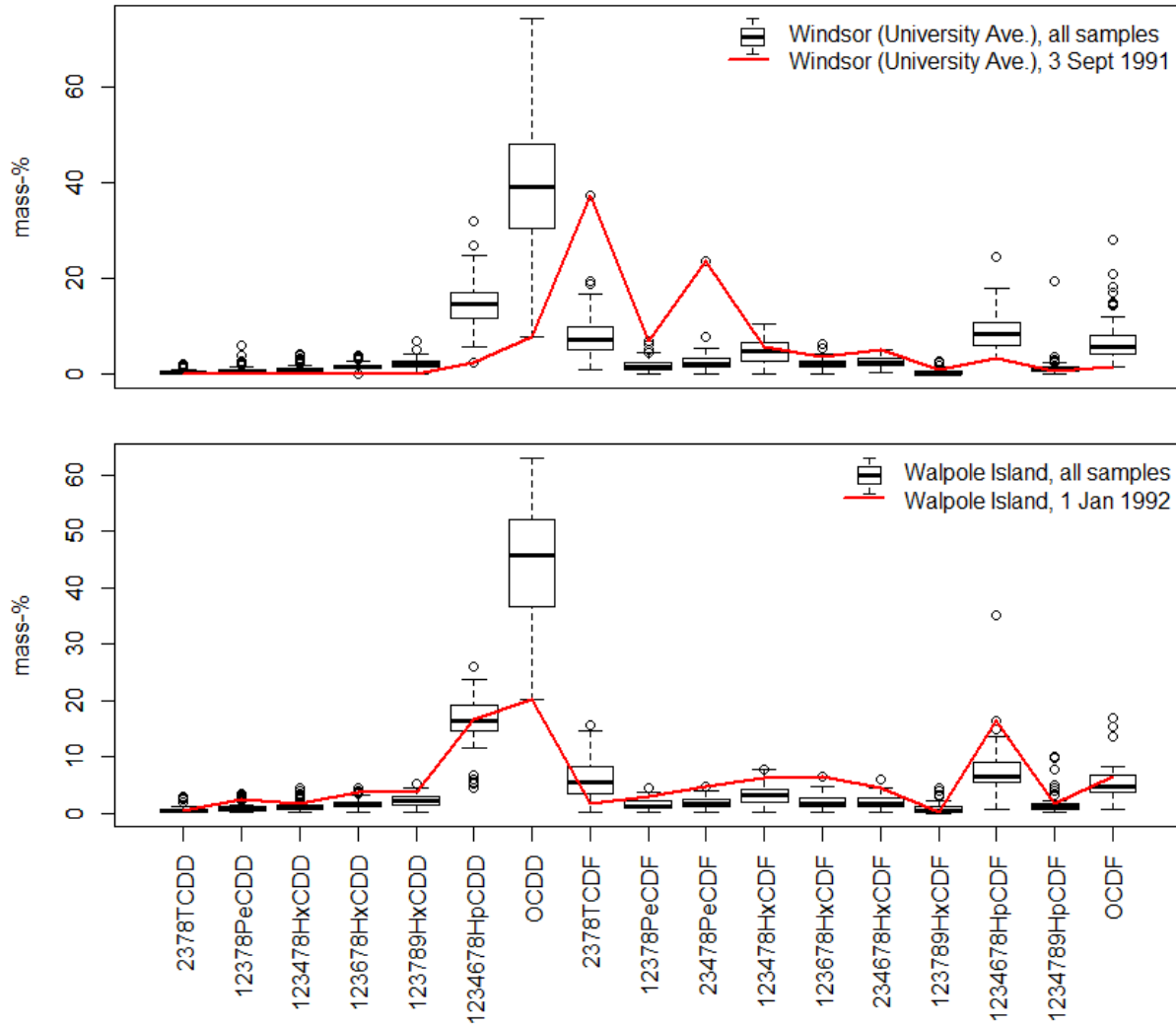
Figure 8. Average PCDD/F congener profiles in air, percent of total PCDD/Fs, at NAPS rural, suburban and urban sites during 1989–2009



Source: Data from Environment Canada 2011



Figure 9. Comparison of profiles from high-concentration measurements against typical profiles at two NAPS sampling sites



Source: Data from Environment Canada 2011

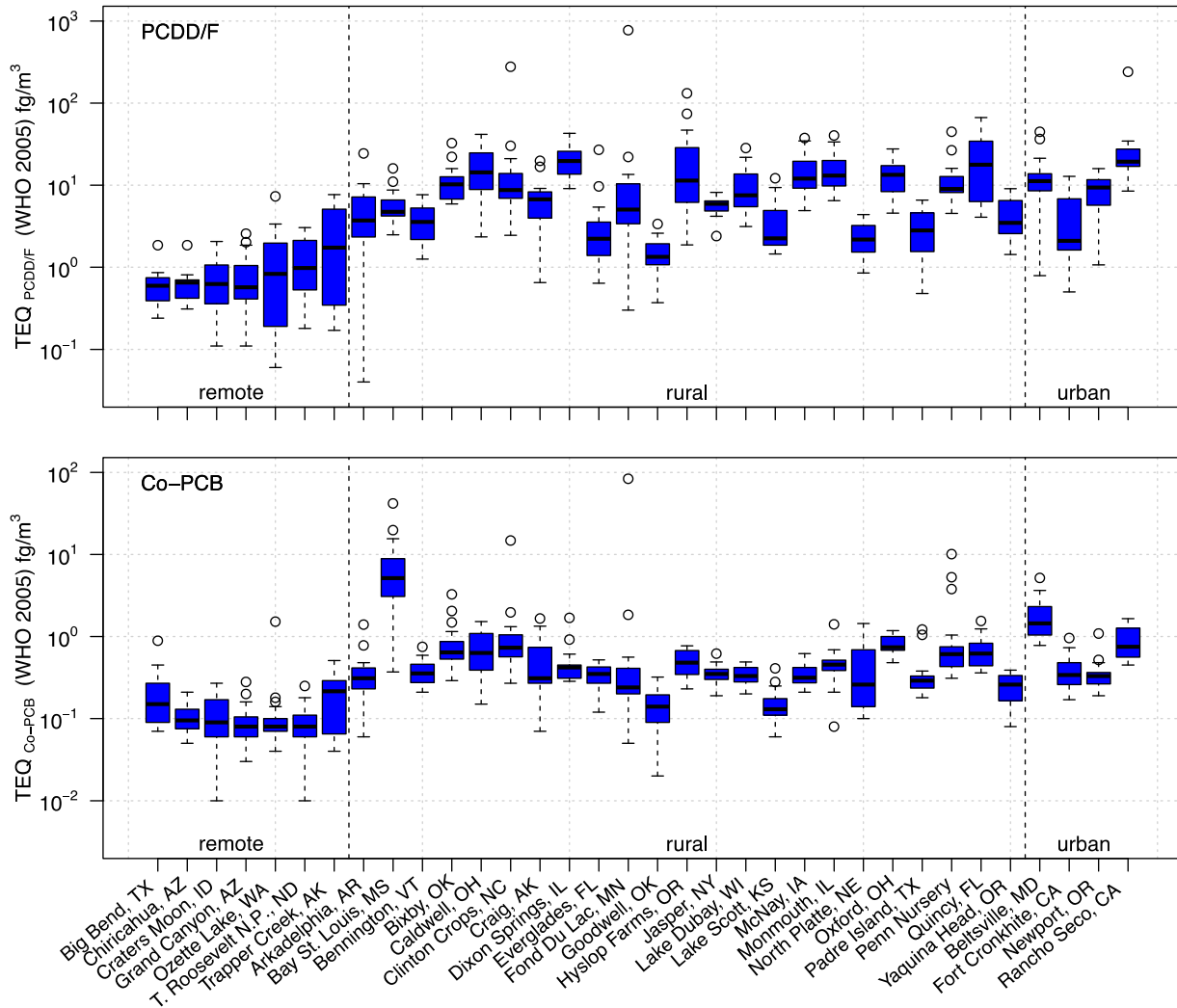
### 3.1.2 NDAMN

Average TEQ concentrations measured by the NDAMN network show significant variability among monitoring sites (Figure 10). No within-site variability could be determined with the currently available monitoring data. Average  $\text{TEQ}_{\text{PCDD/F}}$  concentrations range from 0.6 to 43.1  $\text{fg m}^{-3}$ , while average  $\text{TEQ}_{\text{Co-PCB}}$  concentrations range from 0.1 to 8.6  $\text{fg m}^{-3}$ . Concentrations at rural and urban sites report in general higher concentrations than most of the remote sites.

The congener compositions do not differ strongly between the site categories (Figure 11). The PCDD/F profile is dominated by hepta- and octa-chlorinated dioxins, while within the Co-PCB profile, PCB-118 and PCB-105 are prominent. Lorber et al. (2013) indicated that Riggs et al. (2003) discussed some anomalies from NDAMN in the sampling year 2000. One of the measurements discussed was for Moment #10 (mid-Jan through mid-Feb, 2000) from Site #20 (Fond Du Lac, Minnesota). That measurement was the single highest measurement in NDAMN (847  $\text{fg TEQ/m}^3$ ). With that sample, the overall site average is 47  $\text{fg TEQ/m}^3$ ; without it, the site average is much lower at 6.9  $\text{fg TEQ/m}^3$ . This is similar to the average concentration for rural sites of 13.9  $\text{fg TEQ/m}^3$ . Table 12 shows congener concentrations for this along with the three next-highest measurements, compared to the site average where each of the four measurements occurred. These site averages were calculated for all other moments not including the high moment. The TEQ concentrations for these four high moments (and their site number in parentheses) were: 857 (20), 292 (3), 241 (28), and 133 (29)  $\text{fg TEQ/m}^3$ . For Sites 3 and 20, the concentrations of all congeners and homologue groups in the anomalous reading were elevated over their site averages, from 10 times higher to over 100 times higher. The only pattern for these two sites is that everything appears elevated in the high moments. Not including these two high moments, the average congener concentrations of the remaining samples in both sites 3 and 20 are very similar to overall NDAMN congener averages.

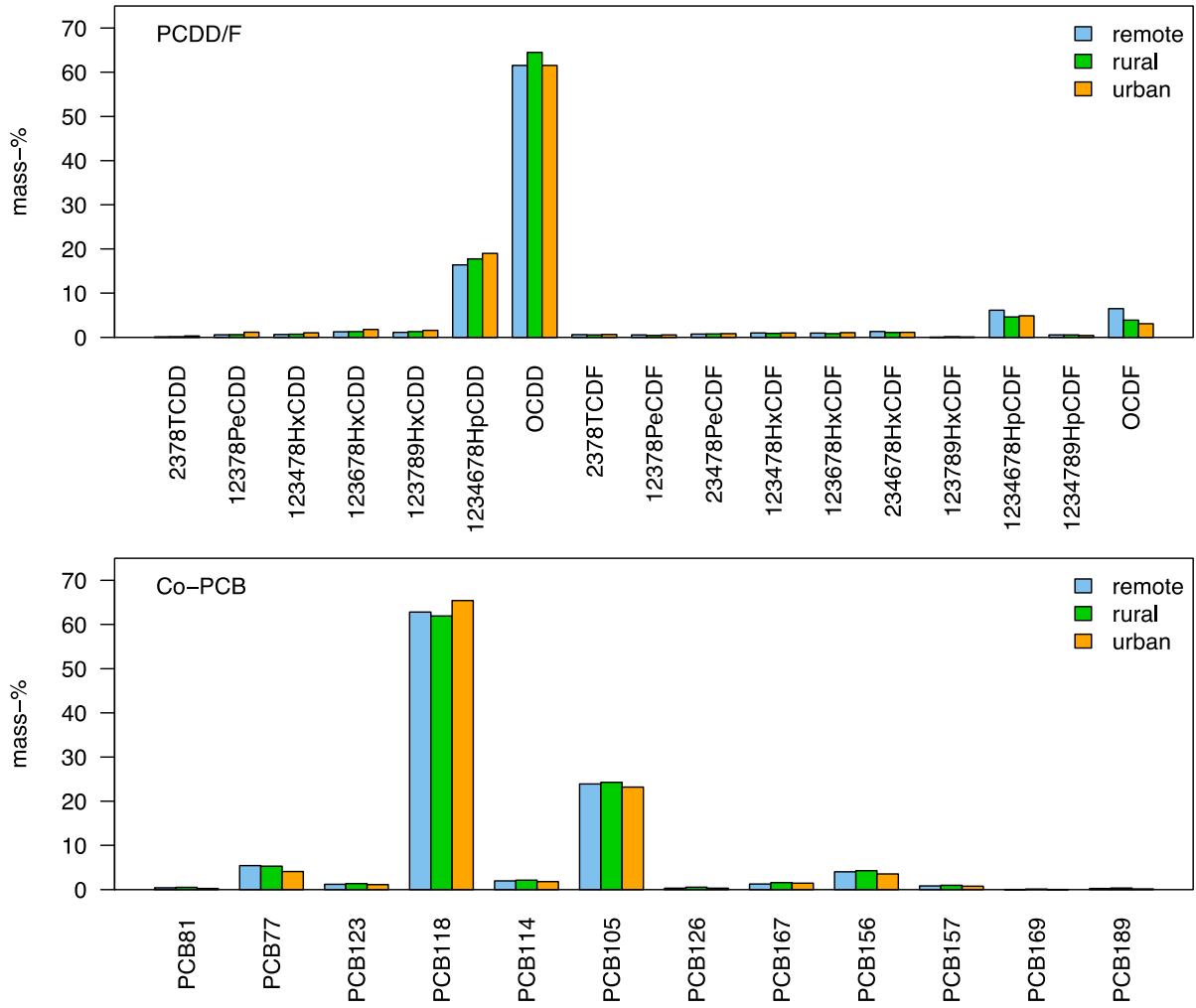
For Sites 28 and 29, a very different picture emerges. Here it is only the PCDD congeners and PCDD homologue group concentrations that are 10 to more than 100 times higher than the site average. For the PCDF congeners, furan homologues, and PCBs, the concentrations are only slightly elevated and even less than the site average. Furthermore, the site averages of PCDDs (congeners and homologues) in Sites 28 and 29 are also generally higher, by about a factor of 2, than site averages for Sites 3 and 20. Meanwhile, PCDF and dl-PCB congeners/homologue group averages are all about the same for all four sites.

Figure 10. TEQ<sub>PCDD/F</sub> and TEQ<sub>Co-PCB</sub> atmospheric concentrations (fg m<sup>-3</sup>) at all NDAMN monitoring sites during 1999–2004



Source: Data from US EPA 2013

Figure 11. Average PCDD/F congener profiles in air, percent of total PCDD/Fs, at NDAMN remote, rural and urban sites during 1999–2004



Source: Data from US EPA 2013

Table 12. Comparison of the Four Highest Individual Concentrations Measured with the Site Average Where That Concentration was Measured (for each site, date given as month/year—1/2000—compared to the site average—AVG; all concentrations in fg/m<sup>3</sup>)

Congener	Site #20, WI		Site #3, NC		Site #29, OR		Site #28, CA	
	1/2000	AVG	11/2001	AVG	12/2000	AVG	8/2001	AVG
2,3,7,8-TCDD	5.6	0.3	6.3	0.5	22.6	1.2	7.0	2.1
1,2,3,7,8-PeCDD	55.9	1.8	42.5	2.8	68.3	8.5	86.5	9.7
1,2,3,4,7,8-HxCDD	118.9	2.9	57.6	3.4	55.8	13.6	209.0	8.2
1,2,3,6,7,8-HxCDD	191.4	4.4	125.0	6.0	100.6	22.5	257.0	14.1
1,2,3,7,8,9-HxCDD	98.4	4.9	105.5	5.6	99.3	22.2	304.9	13.8
1,2,3,4,6,7,8-HpCDD	1,336.8	73.6	860.7	69.8	1,046.5	321.6	5,487.4	180.7
OCDD	2,892.5	297.4	1,185.3	235.0	2,627.0	914.0	23,953.0	582.3
2,3,7,8-TCDF	249.0	2.0	48.1	3.2	2.1	1.9	2.5	2.0
1,2,3,7,8-PeCDF	361.3	1.7	95.2	3.5	2.6	1.8	5.5	1.8
2,3,4,7,8-PeCDF	738.0	3.0	213.3	6.6	5.0	3.4	7.4	3.0
1,2,3,4,7,8-HxCDF	1,055.9	3.6	330.4	7.9	6.7	3.9	13.8	3.8
1,2,3,6,7,8-HxCDF	786.7	3.0	256.4	7.3	4.8	3.6	14.2	3.7
2,3,4,6,7,8-HxCDF	1,030.5	3.9	386.5	10.2	5.8	4.5	12.9	4.6
1,2,3,7,8,9-HxCDF	596.9	0.8	43.9	1.6	1.7	0.6	2.7	0.3
1,2,3,4,6,7,8-HpCDF	4,498.2	16.1	1,532.3	39.3	37.8	20.0	74.0	21.5
1,2,3,4,7,8,9-HpCDF	644.4	2.2	193.1	4.6	3.5	2.5	28.8	2.1
OCDF	3,721.4	12.7	815.8	29.1	24.4	20.5	85.4	16.8
Total TCDF	6,299.9	61.0	2,749.3	132.9	91.9	63.2	110.3	65.7
Total TCDD	327.9	13.9	1,732.2	32.7	441.1	27.2	120.5	20.4
Total PeCDF	7,619.2	36.6	2,557.0	91.9	63.8	41.5	118.8	55.1
Total PeCDD	1,153.5	22.7	2,962.4	51.9	968.2	97.7	643.1	57.3
Total HxCDF	6,467.3	34.0	2,363.8	89.3	96.2	53.2	130.2	66.9
Total HxCDD	2,235.0	63.7	3,293.2	100.1	1,819.5	333.1	2,758.2	164.7
Total HpCDF	5,735.3	26.0	2,224.8	58.0	103.2	41.3	164.0	40.8
Total HpCDD	2,907.2	166.0	2,302.0	171.1	2,997.1	799.6	10,974.8	392.1

Table 13. (cont.)

Congener	Site #20, WI		Site #3, NC		Site #29, OR		Site #28, CA	
	1/2000	AVG	11/2001	AVG	12/2000	AVG	8/2001	AVG
PCB 77	452.9	27.0	357.0	91.8	65.8	52.6	58.0	93.2
PCB 81							3.8	3.0
PCB 105	702.7	124.3	3,017.0	447.1	618.1	513.1	238.1	580.3
PCB 114							21.2	29.7
PCB 118	967.7	304.0	8,207.5	1,096.6	2,443.6	1,313.0	736.0	1,659.6
PCB 123						7.0	12.0	17.4
PCB 126	758.2	3.2	144.0	7.6	6.2	4.4	4.0	8.6
PCB 156	724.6	23.6	599.0	72.1	131.3	124.2	32.3	89.6
PCB 157	262.5	5.4	156.2	16.1	27.7	26.9	7.3	20.0
PCB 167					0.0	12.8	13.7	26.2
PCB 169	260.4	0.6	ND	1.4	0.3	0.4	0.4	0.5
PCB 189						1.0	1.9	2.0
WHO 05 TEQ DF	773.3	6.6	277.5	11.1	131.8	21.8	240.7	20.0
WHO 05 TEQ P	83.8	0.4	14.8	0.9	0.7	0.5	0.4	1.0
WHO 05 TEQ DFP	857.1	6.9	292.3	11.9	132.6	22.3	241.2	21.0

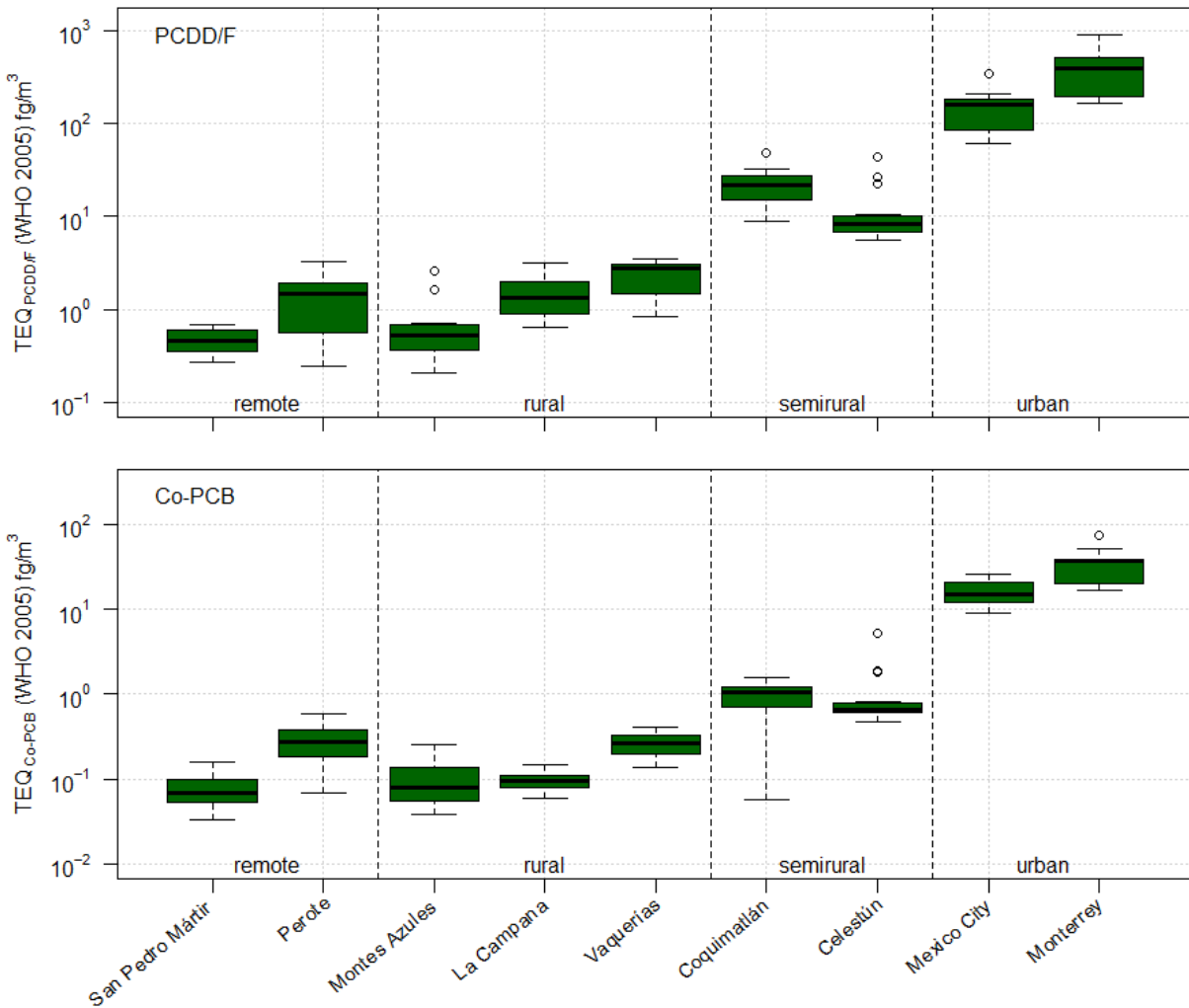
### 3.1.3 MDAMN

Total TEQ<sub>PCDD/F</sub> values were between 0.2 and 902 TEQ fg/m<sup>3</sup>, while total TEQ<sub>Co-PCB</sub> values were in the range from 0.03 to 76 TEQ fg/m<sup>3</sup> (see Figure 12). Highest concentrations were observed at the urban sites (Mexico City and Monterrey). Coquimatlán and Celestún, which are classified as semi-urban sites, showed intermediate concentrations. Finally, the rural and background sites had lowest levels of the respective TEQ values.

The congener compositions do not differ strongly between remote and rural sites (see Figure 13). Urban sites show a distinct pattern, with lower contributions of octa-chlorinated dioxins and

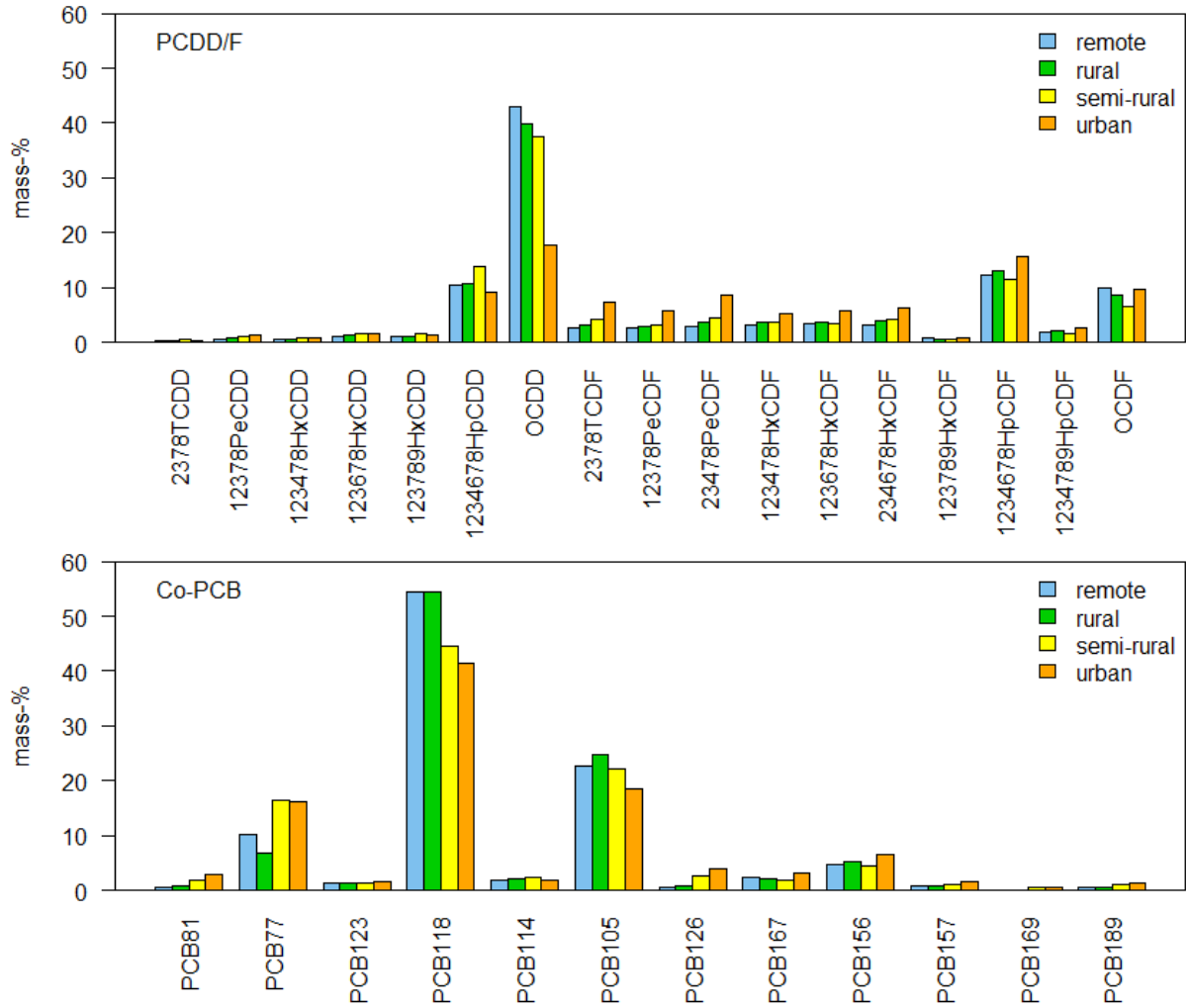
higher contributions of most of the furans. Both semi-rural and urban sites report lower contributions of PCB-118 and PCB-105, and higher contribution of PCB-77. This last PCB congener was not prominent at NAPS and NDAMN monitoring sites, which might indicate an emission source specific to Mexican urban areas. Figure 14 contrasts two case-study samples from Mexico City and Monterrey, respectively, that were outstanding due to their high TEQ concentrations. In both cases, the high-concentration samples showed a relatively low contribution of OCDD and higher contributions of higher chlorinated (Mexico City) or lower chlorinated (Monterrey) furans.

Figure 12. TEQ<sub>PCDD/F</sub> and TEQ<sub>Co-PCB</sub> atmospheric concentrations (fg m<sup>-3</sup>) at all MDAMN monitoring sites during 2008–2010 (2008–2012 for the sampling sites at Perote and Celestún)



Source: Data from Cárdenas et al. (in preparation)

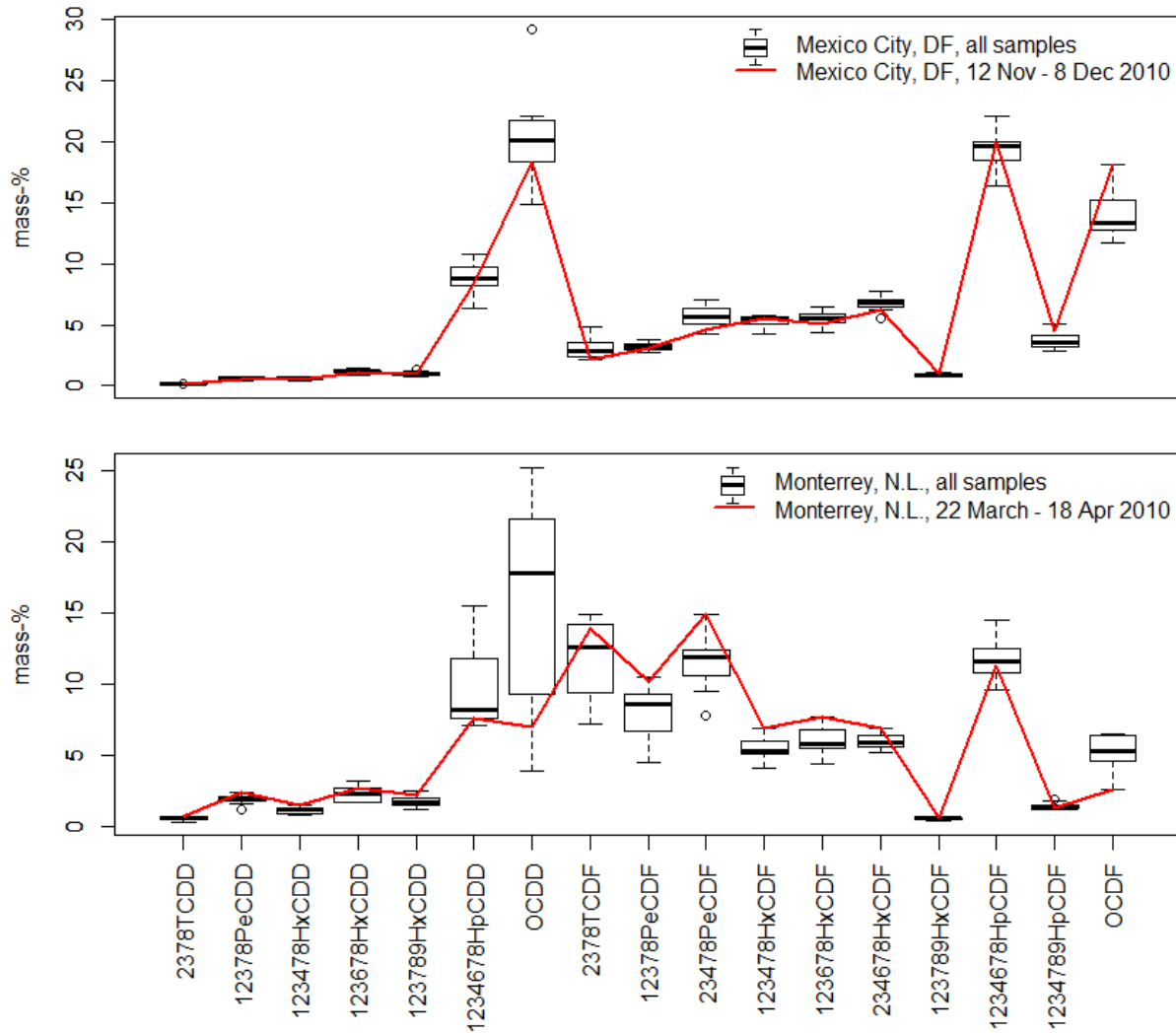
Figure 13. Average PCDD/F congener profiles in air, percent of total PCDD/Fs, at MDAMN background, rural, semi-rural and urban sites during 2008–2012



Source: Data from Cárdenas et al. (in preparation)



Figure 14. Comparison of profiles from high-concentration measurements against typical profiles at two MDAMN sampling sites



Source: Data from Cárdenas et al. (in preparation)

### 3.2 Data Comparison between Monitoring Networks

#### 3.2.1 Levels and Temporal Trends

The available data from NDAMN and MDAMN are still too limited to allow for a trend analysis (Figure 15). However, the reported levels can be interpreted in a temporal context when comparing results from all three North American networks.

The only measurements of the North American dioxin air monitoring networks that can be interpreted reasonably for underlying long-term trends are the PCDD/F samples obtained by NAPS over the last two decades. PCDD/F levels at rural (Figure 16), suburban (Figure 17) and urban sites (Figure 18) declined there after the early 1990s and during the first years of the 21st century. This decline can be attributed to control measures taken in Canada with respect to PCDD/F emission sources. After the year 2005, a clear trend is not evident.

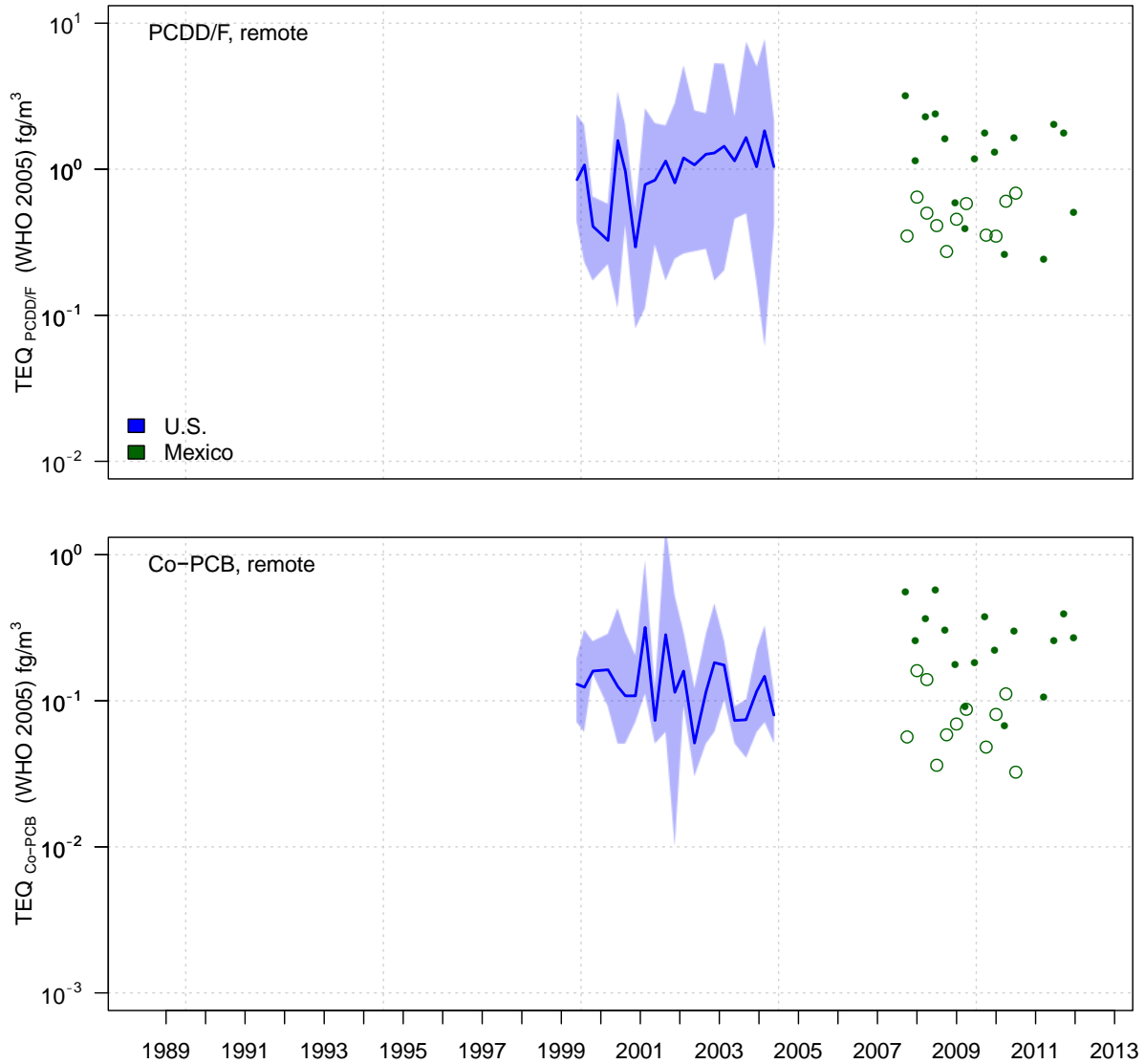
Concentrations at rural sites in Canada and the US are not significantly different in the period where data from both networks exist (Figure 16). Concentrations at Mexican rural sites, measured between 2008 and 2010, however, are lower by about one order of magnitude than the corresponding Canadian measurements. Concentrations at Mexican urban sites, in contrast, are higher by about a factor of 10 than urban sites in Canada (Figure 18), indicating much stronger source-to-receptor gradients in Mexico than in the other North American regions.

### 3.2.2 Composition

For an intercomparison of the relative compositions (or receptor profiles) at monitoring sites of the North American networks, the contribution of each congener to the total sampled mass is plotted. These profiles are shown on a logarithmic scale, since also minor components can be indicative for the presence of specific emission sources.

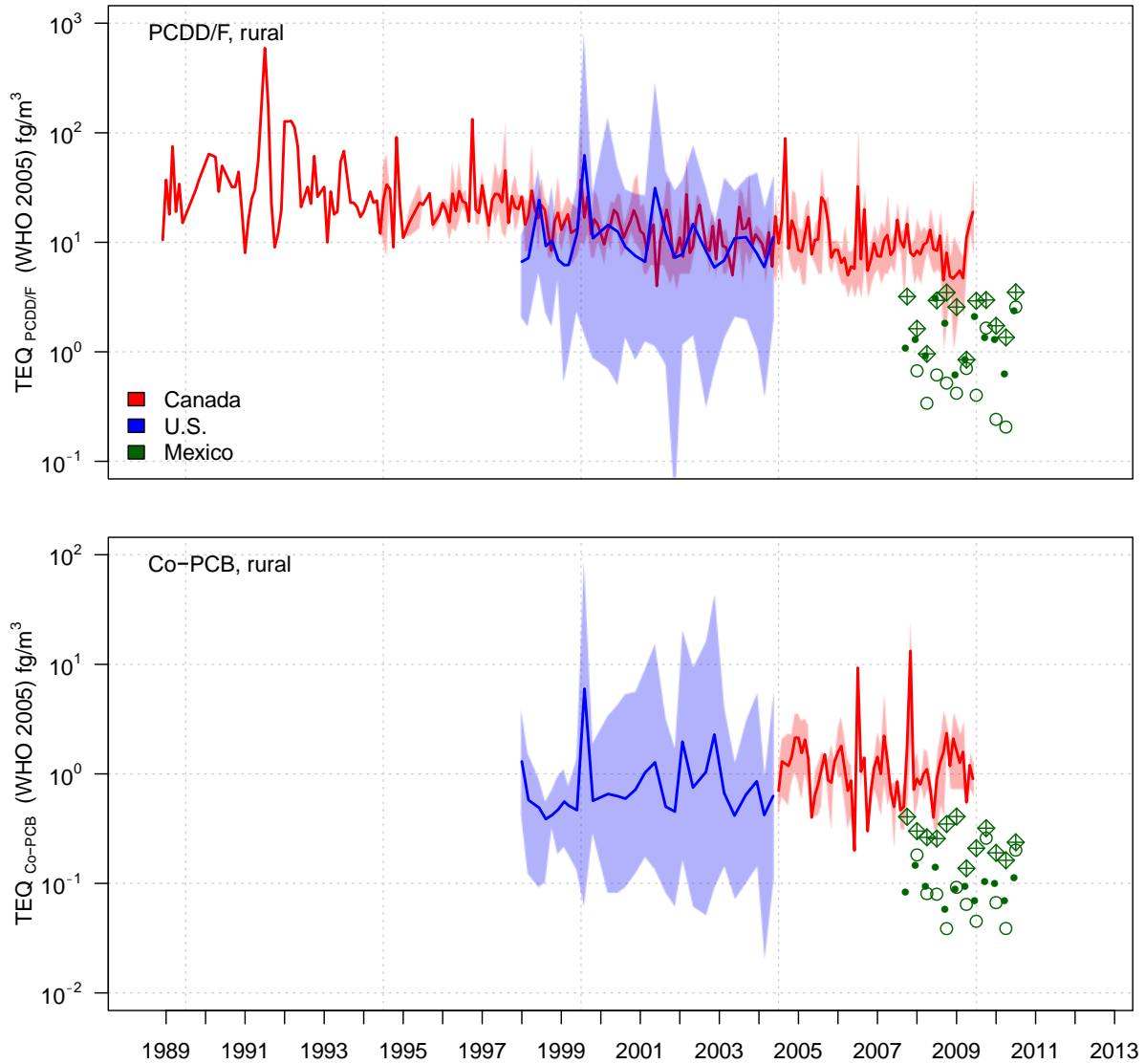
The compositions determined for the three monitoring networks at background, rural and suburban/semi-rural sites are similar in their major components (Figure 19 and Figure 20). Differences appear in minor components of the profile, in particular, furans, which play a more dominant role in the Mexican receptor profiles. For urban sites in Mexico, furans are even among the most important congeners, together with OCDD (Figure 19). In turn, OCDD is less prominent in the Mexican urban profile than in the Canadian congener composition. This might indicate the existence of an emission source unique to Mexico. Also, the urban Co-PCB profile is different in Mexico compared to Canada (Figure 20). PCBs 77, 126 and 167 are more prominent, and PCB123 is less dominant.

Figure 15. Time series of Co-PCB and PCDD/F concentrations at North American background monitoring sites



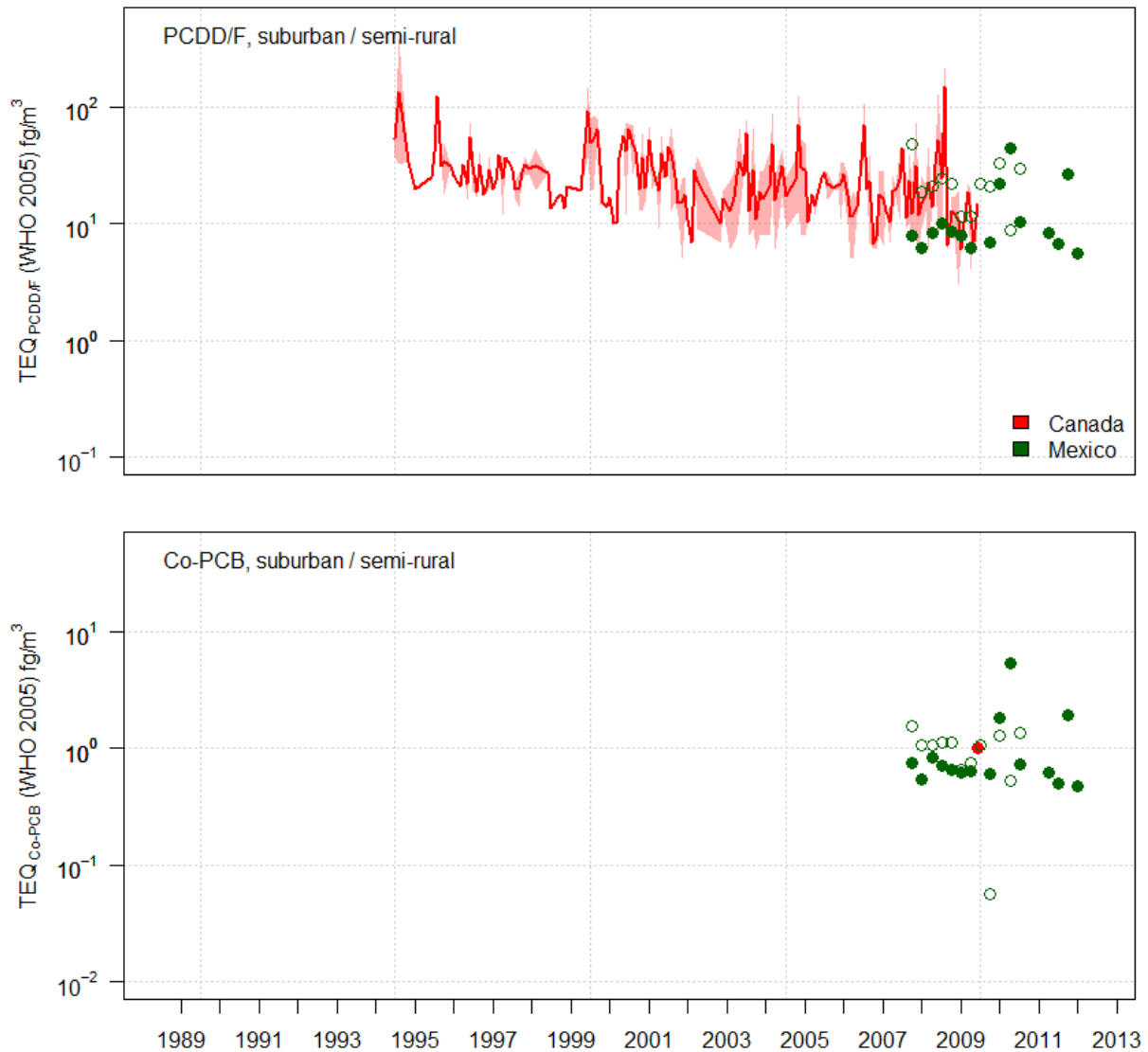
Note: For the US, average concentrations of the 8 remote sites are shown as a solid line and ranges in shading; for Mexico, the two remote sites are shown individually (solid circles: Perote; void circles: San Pedro Mártir). Source: Data from US EPA 2013 and Cárdenas et al. (in preparation).

Figure 16. Time series of Co-PCB and PCDD/F concentrations at North American rural monitoring sites



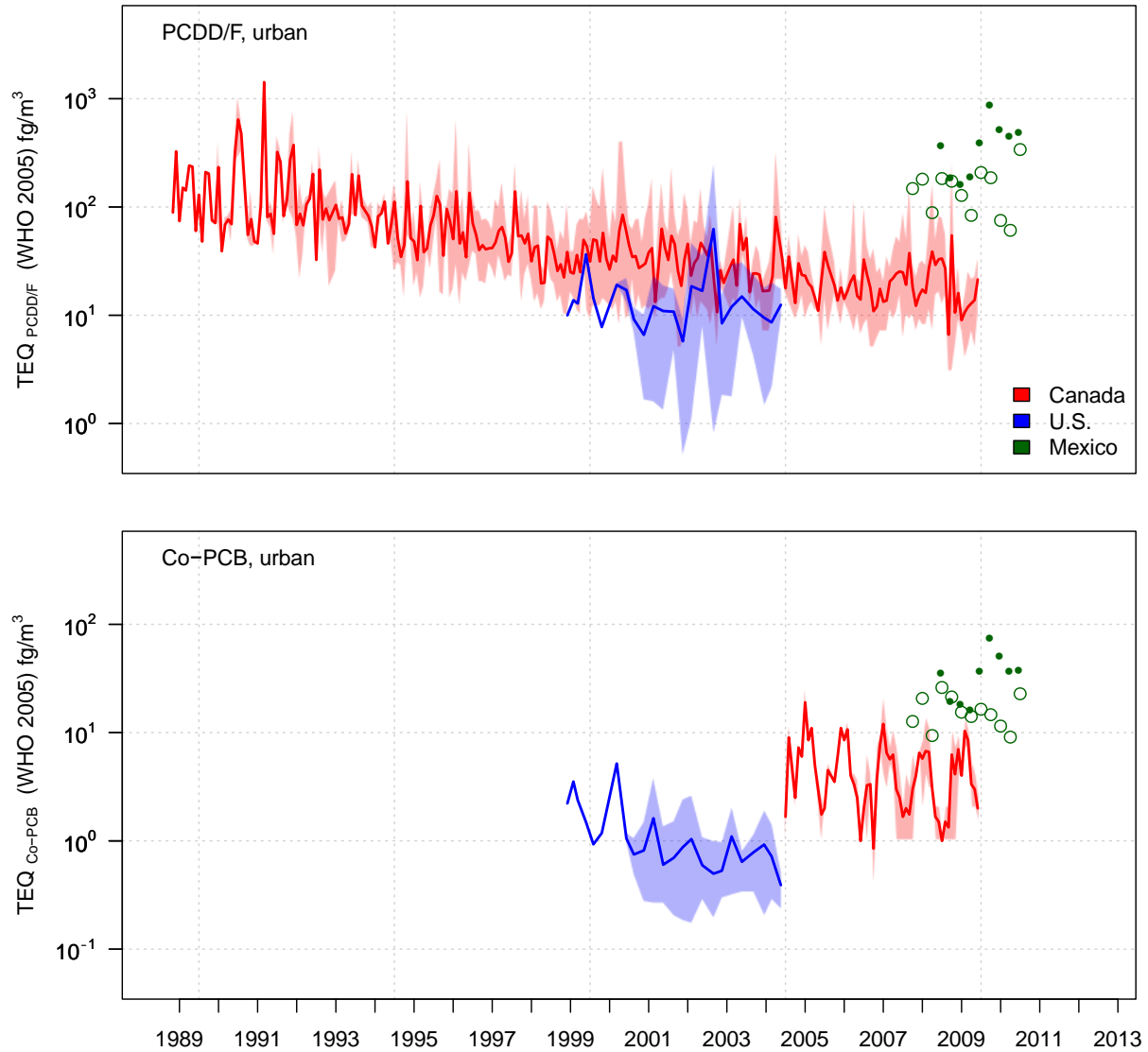
Note: For Canada and the US, average concentrations of the 8 and 22 rural sites, respectively, are shown as solid lines and the ranges in shading; for Mexico, the three rural sites are shown individually (solid circles: La Campana; void circles: Montes Azules; diamonds: Vaquerías). Source: Data from US EPA 2013, Environment Canada 2011, and Cardenas et al. (in preparation).

Figure 17. Time series of Co-PCB and PCDD/F concentrations at North American suburban and semirural monitoring sites



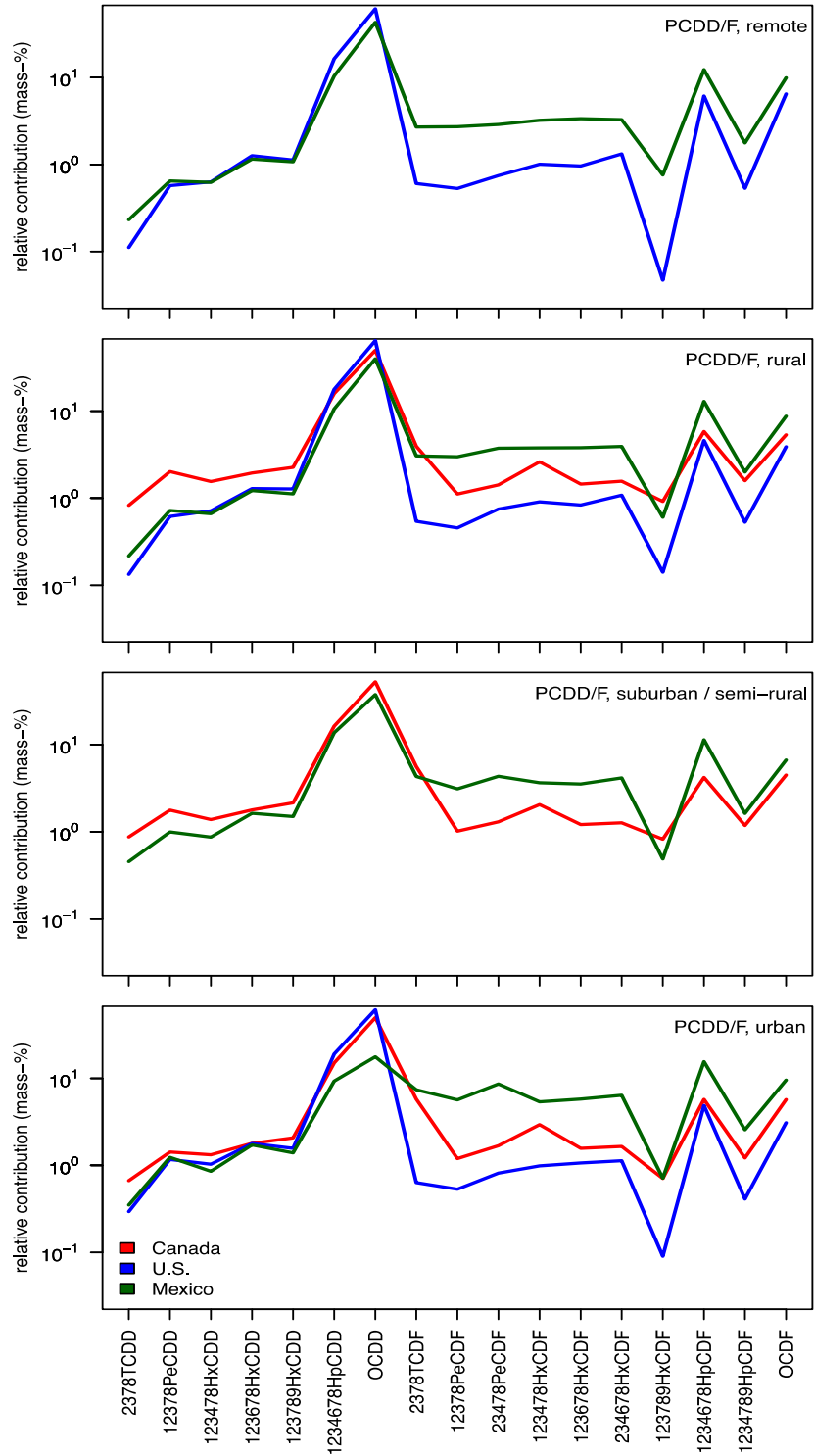
Note: For Canada, average concentrations are shown as a solid line and ranges are shaded for the 10 suburban sites; for Mexico, the two semirural sites are shown individually (solid circles: Celestún; void circles: Colima). Source: Data from Environment Canada 2011, Cárdenas et al. (in preparation).

Figure 18. Time series of Co-PCB and PCDD/F concentrations at North American urban monitoring sites



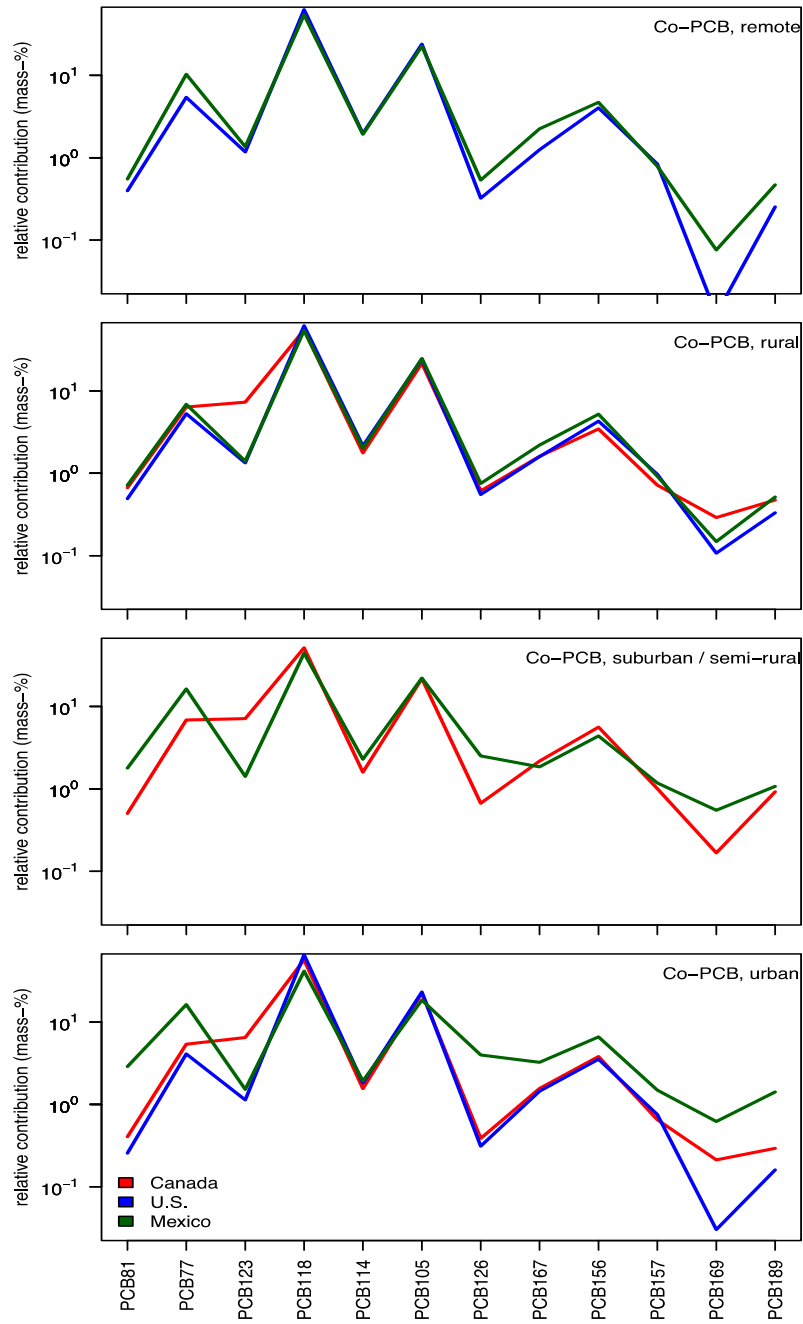
Note: For Canada and the US, average concentrations of the 29 and 4 rural sites, respectively, are shown as solid lines and ranges as shading; for Mexico, the two urban sites are shown individually (solid circles: Monterrey; void circles: Mexico City). Source: Data from US EPA 2013, Environment Canada 2011, and Cárdenas et al. (in preparation)

Figure 19. Average composition (receptor profiles) of PCDD/F concentrations at North American background monitoring sites



Source: Data from US EPA 2013, Environment Canada 2011, and Cárdenas et al. (in preparation)

Figure 20. Average composition (receptor profiles) of Co-PCB concentrations at North American background monitoring sites





Source: Data from US EPA 2013, Environment Canada 2011, and Cárdenas et al. (in preparation)

### **3.3 Comparison to Other Monitoring Networks**

Although the analysis presented in the previous sections was limited to the three North American dioxin air monitoring networks, NAPS, NDAMN and MDAMN, future complementary studies could include a more detailed comparison with other measurements that exist worldwide. For example, measurements carried out within the Californian Ambient Dioxin Air Monitoring Program (CADAMP) indicate that urban sites in California are similarly polluted with PCDD/Fs and Co-PCBs as sites in Canada (Mongar et al. 2003). Furthermore, monitoring data from other continents should be included for comparison.

## **4. Recommendations**

The following are suggestions to improve dioxin data comparability in North America:

- Continue measurements at comparable intervals at all three North American dioxin air monitoring networks.
- Continue collaboration and training among the operators of the North American dioxin air monitoring networks.
- Enhance QA/QC efforts to validate the integrity of air monitoring data, such as the introduction of duplicate samples.
- Within the two laboratories that have been carrying out analyses for the North American dioxin air monitoring networks, implement an interlaboratory comparison study to verify that the data are comparable.
- Develop a strategy to periodically assess the comparability of dioxin air monitoring data collected in the United States, Canada, and Mexico—for example, at annual expert meetings or in updates to the present work.
- Seek collaboration in Central America and the Caribbean to complement the current monitoring networks with additional monitoring data.

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## 6.1 Photos of Sampling Sites

### 6.1.1 NAPS

Figure A1. Sampling site at Egbert, ON



Figure A2. Sampling site at Burnt Island, ON



Figure A3. Sampling site at Point Petre, ON



#### 6.1.2 NDAMN

Currently, no photos from NDAMN are available.

### 6.1.3 MDAMN

The photographs in this section are compiled from INE-UABC 2007; INE-Cinvestav 2008, 2009; and Wöhrnschimmel and Cárdenas 2008.

Figure A4. Sampling site at San Pedro Mártir, Baja California



Figure A5 Sampling site at Montes Azules, Chis.



Figure A6. Sampling site at La Campana, Chih.



Figure A7. Sampling site at Coquimatlán, Col.



Figure A8. Sampling site at Monterrey, N.L.



Figure A9. Sampling site at Vaquerías, Jal.



Figure A10. Sampling site at Celestún, Yuc.



Figure A11. Sampling site at Cofre de Perote, Ver.





Figure A12. Sampling site at Mexico City



## 6.2 Dioxin Ambient Air Data Sets

### 6.2.1 NAPS

Table A1. Atmospheric concentrations of PCDD/Fs ( $\mu\text{g m}^{-3}$ ) at NAPS rural sites in 1989

Station Name	Walpole Island							
Sampling Period	1	2	3	4	5	6	7	8
Sampling Date	5/16/89	6/9/89	7/3/89	7/27/89	8/20/89	10/7/89	10/31/89	11/24/89
Sampling Volume (m3)	1581	1474	1517	1525	1500	1558	1477	2648
<b>PCDD/F Congeners</b>								
2,3,7,8-TCDD	<0.001	0.001	0.001	<0.001	<0.013	0.003	<0.002	<0.001
1,2,3,7,8-PeCDD	<0.001	<0.001	0.005	<0.001	0.017	0.006	0.009	<0.002
1,2,3,4,7,8-HxCDD	0.002	0.003	0.005	<0.002	0.014	0.010	<0.003	<0.002
1,2,3,6,7,8-HxCDD	0.004	0.005	0.010	<0.002	0.020	0.013	<0.003	<0.002
1,2,3,7,8,9-HxCDD	0.006	0.006	0.014	<0.002	0.033	0.026	<0.003	0.012
1,2,3,4,6,7,8-HpCDD	0.046	0.055	0.100	0.076	0.196	0.138	0.213	0.083
OCDD	0.145	0.157	0.311	0.264	0.471	0.327	0.860	0.322
2,3,7,8-TCDF	0.024	0.028	0.068	0.044	0.081	0.019	0.058	0.056
1,2,3,7,8-PeCDF	0.009	0.005	0.021	<0.001	0.032	0.003	0.012	0.006
2,3,4,7,8-PeCDF	<0.001	0.007	0.026	0.013	0.039	0.003	0.018	0.009
1,2,3,4,7,8-HxCDF	<0.001	0.017	0.053	0.032	0.075	0.007	0.052	<0.002
1,2,3,6,7,8-HxCDF	0.005	0.007	0.015	0.012	0.035	<0.001	<0.003	<0.002
2,3,4,6,7,8-HxCDF	0.006	0.006	0.033	<0.002	0.031	<0.001	0.014	<0.002
1,2,3,7,8,9-HxCDF	<0.001	<0.001	<0.001	<0.002	<0.002	<0.001	<0.003	<0.002
1,2,3,4,6,7,8-HpCDF	0.024	0.021	0.105	0.062	0.097	0.012	0.079	0.030
1,2,3,4,7,8,9-HpCDF	0.003	<0.001	0.009	0.003	0.011	0.001	0.007	<0.002
OCDF	0.020	0.017	0.057	0.020	0.045	0.013	0.068	0.020
<b>PCDD/F Homologues</b>								
TCDDs	0.013	0.009	0.011	0.014	0.034	0.015	0.021	0.000
PeCDDs	0.006	0.009	0.036	0.009	0.082	0.074	0.059	0.013
HxCDDs	0.073	0.079	0.124	0.078	0.236	0.220	0.138	0.046
HpCDDs	0.097	0.119	0.223	0.159	0.375	0.385	0.592	0.213
OCDD	0.145	0.157	0.311	0.264	0.471	0.327	0.860	0.322
TCDFs	0.073	0.095	0.136	0.135	0.370	0.067	0.236	0.163
PeCDFs	0.020	0.076	0.147	0.090	0.383	0.041	0.191	0.093
HxCDFs	0.057	0.078	0.190	0.107	0.357	0.026	0.187	0.000
HpCDFs	0.042	0.035	0.165	0.091	0.161	0.026	0.093	0.040
OCDF	0.020	0.017	0.057	0.020	0.045	0.013	0.068	0.020
<b>Total</b>								
$\Sigma$ PCDDs	0.335	0.374	0.704	0.524	1.198	1.023	1.671	0.594
$\Sigma$ PCDFs	0.211	0.301	0.696	0.443	1.316	0.173	0.774	0.317
$\Sigma$ PCDD/Fs	0.546	0.675	1.400	0.967	2.515	1.196	2.445	0.911
$\Sigma$ TEQ (PCDD/Fs)	0.008	0.013	0.037	0.018	0.075	0.019	0.034	0.015

Table A2. Atmospheric concentrations of PCDD/Fs ( $\mu\text{g m}^{-3}$ ) at NAPS rural sites in 1990

Station Name	Walpole Island						
Sampling Period	1	2	3	4	5	6	7
Sampling Date	3/24/90	4/17/90	7/22/90	8/15/90	10/2/90	10/26/90	12/12/90
Sampling Volume (m <sup>3</sup> )	1698	1536	1623	1517	1416	1271	577
<b>PCDD/F Congeners</b>							
2,3,7,8-TCDD	0.004	<0.002	<0.015	<0.016	<0.014	<0.005	<0.010
1,2,3,7,8-PeCDD	<0.001	0.010	<0.018	<0.016	<0.021	0.007	0.010
1,2,3,4,7,8-HxCDD	0.010	<0.003	<0.022	<0.023	<0.021	<0.005	<0.010
1,2,3,6,7,8-HxCDD	0.015	<0.003	<0.022	<0.023	<0.021	0.012	0.019
1,2,3,7,8,9-HxCDD	0.028	0.018	<0.022	<0.023	<0.021	<0.005	0.021
1,2,3,4,6,7,8-HpCDD	0.169	0.062	0.022	0.114	0.143	0.118	0.158
OCDD	0.435	0.727	0.094	0.348	0.433	0.294	0.411
2,3,7,8-TCDF	0.049	0.121	0.020	0.098	0.056	0.058	0.066
1,2,3,7,8-PeCDF	0.011	0.010	<0.012	<0.013	<0.014	0.012	<0.007
2,3,4,7,8-PeCDF	0.015	0.012	<0.012	0.026	0.010	0.016	0.024
1,2,3,4,7,8-HxCDF	0.031	0.038	<0.018	<0.020	<0.018	<0.005	0.035
1,2,3,6,7,8-HxCDF	0.014	0.009	<0.018	0.024	<0.018	<0.005	0.017
2,3,4,6,7,8-HxCDF	0.018	<0.003	<0.018	0.060	<0.018	0.016	<0.009
1,2,3,7,8,9-HxCDF	<0.001	<0.003	<0.018	<0.020	<0.018	<0.005	<0.009
1,2,3,4,6,7,8-HpCDF	0.051	0.062	0.034	0.119	0.083	<0.006	0.069
1,2,3,4,7,8,9-HpCDF	0.097	<0.003	<0.018	<0.026	<0.021	0.006	0.101
OCDF	0.036	0.072	0.049	0.082	0.050	0.020	0.035
<b>PCDD/F Homologues</b>							
TCDDs	0.021	0.212	<0.015	0.059	0.028	0.011	0.010
PeCDDs	0.074	0.189	<0.018	0.028	<0.021	0.017	0.023
HxCDDs	0.204	0.231	<0.022	0.071	0.036	0.090	0.102
HpCDDs	0.379	0.537	0.022	0.253	0.340	0.118	0.352
OCDD	0.435	0.727	0.094	0.348	0.433	0.294	0.411
TCDFs	0.156	0.284	0.025	0.355	0.251	0.229	0.220
PeCDFs	0.147	0.094	0.018	0.157	0.159	0.166	0.132
HxCDFs	0.128	0.072	0.025	0.244	0.080	0.131	0.101
HpCDFs	0.097	0.109	0.034	0.150	0.097	0.096	0.101
OCDF	0.036	0.072	0.049	0.082	0.050	0.020	0.035
<b>Total</b>							
∑ PCDDs	1.112	1.895	0.115	0.759	0.837	0.531	0.898
∑ PCDFs	0.564	0.632	0.150	0.988	0.637	0.643	0.588
∑ PCDD/Fs	1.676	2.527	0.265	1.747	1.473	1.174	1.486
∑ TEQ (PCDD/Fs)	0.030	0.037	0.055	0.073	0.060	0.029	0.050

Table A3. Atmospheric concentrations of PCDD/Fs ( $\mu\text{g m}^{-3}$ ) at NAPS rural sites in 1991

Station Name	Walpole Island										
Sampling Period	1	2	3	4	5	6	7	8	9	10	11
Sampling Date	2/23/91	3/19/91	4/12/91	5/6/91	5/30/91	6/23/91	7/17/91	9/9/91	9/27/91	10/21/91	11/14/91
Sampling Time (h)	48	48	48	48	48	48	48	48	48	48	48
Sampling Volume (m3)	723	790	810	689	801	802	691	747	714	720	754
<b>PCDD/F Congeners</b>											
2,3,7,8-TCDD	<0.006	<0.008	<0.006	<0.007	<0.004	<0.001	<0.003	<0.003	<0.003	0.009	<0.003
1,2,3,7,8-PeCDD	<0.010	<0.013	<0.006	0.010	<0.004	<0.001	<0.001	<0.004	<0.011	<0.006	0.009
1,2,3,4,7,8-HxCDD	<0.012	<0.010	<0.006	<0.010	<0.002	<0.001	<0.001	<0.007	<0.007	<0.011	<0.004
1,2,3,6,7,8-HxCDD	<0.012	<0.010	<0.006	0.017	0.008	0.007	0.006	<0.007	<0.007	0.025	0.041
1,2,3,7,8,9-HxCDD	<0.012	0.020	<0.006	<0.010	0.006	<0.001	0.005	<0.007	<0.007	0.022	0.030
1,2,3,4,6,7,8-HpCDD	0.047	0.154	0.064	0.097	0.047	0.059	0.071	0.080	0.097	0.222	0.492
OCDD	0.108	0.494	0.156	0.231	0.117	0.151	0.224	0.253	0.267	0.485	1.361
2,3,7,8-TCDF	0.044	0.057	0.043	0.080	0.032	0.016	0.030	0.029	0.045	0.074	0.053
1,2,3,7,8-PeCDF	<0.010	<0.008	<0.006	<0.010	0.008	0.005	0.009	0.027	<0.011	0.019	<0.005
2,3,4,7,8-PeCDF	<0.010	<0.008	0.007	0.022	0.012	0.005	<0.009	<0.013	<0.011	0.051	0.023
1,2,3,4,7,8-HxCDF	<0.010	<0.009	<0.007	<0.010	0.009	0.010	0.012	0.025	<0.011	0.050	0.036
1,2,3,6,7,8-HxCDF	0.012	<0.009	<0.007	0.022	0.009	<0.001	0.009	<0.013	<0.011	0.053	0.029
2,3,4,6,7,8-HxCDF	<0.010	0.011	0.006	0.020	0.007	0.004	<0.003	<0.013	<0.011	0.046	<0.009
1,2,3,7,8,9-HxCDF	<0.010	<0.009	<0.007	<0.010	<0.004	<0.001	<0.003	<0.013	<0.011	<0.022	<0.009
1,2,3,4,6,7,8-HpCDF	0.019	0.058	0.030	0.070	0.029	0.026	0.043	0.099	<0.011	0.168	0.155
1,2,3,4,7,8,9-HpCDF	<0.010	<0.010	<0.009	<0.012	0.006	0.005	0.006	<0.013	<0.011	0.019	<0.013
OCDF	<0.014	0.037	0.014	0.032	0.020	0.025	0.038	0.029	<0.014	0.051	0.103
<b>PCDD/F Homologues</b>											
TCDDs	0.006	0.014	<0.006	0.033	0.011	0.011	0.008	<0.003	<0.003	0.043	0.025
PeCDDs	<0.010	0.029	<0.006	0.017	0.015	<0.001	0.006	0.012	0.038	0.044	0.017
HxCDDs	0.058	0.132	0.049	0.078	0.036	0.042	0.042	<0.007	0.080	0.247	0.435
HpCDDs	0.104	0.359	0.152	0.228	0.106	0.123	0.152	0.197	0.186	0.504	1.105
OCDD	0.108	0.494	0.156	0.231	0.117	0.151	0.224	0.253	0.267	0.485	1.361
TCDFs	0.055	0.196	0.106	0.312	0.180	0.079	0.208	0.452	0.129	0.614	0.182
PeCDFs	0.014	0.051	0.035	0.225	0.079	0.039	0.120	0.088	<0.011	0.397	0.045
HxCDFs	0.037	0.053	0.022	0.178	0.065	0.027	0.062	0.060	<0.011	0.225	0.200
HpCDFs	0.019	0.086	0.030	0.104	0.052	0.046	0.074	0.150	<0.011	0.282	0.217
OCDF	<0.014	0.037	0.014	0.032	0.020	0.025	0.038	0.029	<0.014	0.051	0.103
<b>Total</b>											
$\Sigma$ PCDDs	0.275	1.028	0.357	0.588	0.286	0.327	0.433	0.462	0.571	1.324	2.943
$\Sigma$ PCDFs	0.126	0.423	0.206	0.852	0.396	0.216	0.502	0.780	0.129	1.569	0.748
$\Sigma$ PCDD/Fs	0.401	1.450	0.563	1.439	0.681	0.543	0.935	1.242	0.700	2.893	3.690
$\Sigma$ TEQ (PCDD/Fs)	0.032	0.039	0.025	0.044	0.020	0.008	0.016	0.025	0.030	0.065	0.047

Table A4. Atmospheric concentrations of PCDD/Fs ( $\mu\text{g m}^{-3}$ ) at NAPS rural sites in 1992

Station Name	Walpole Island														
Sampling Period	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
Sampling Date	1/1/92	1/25/92	2/18/92	3/13/92	4/12/92	5/6/92	5/30/92	6/23/92	7/17/92	8/10/92	9/3/92	9/27/92	10/21/92	11/14/92	12/8/92
Sampling Volume (m3)	713	713	707	729	875	812	802	802	703	817	764	782	846	810	876
<b>PCDD/F Congeners</b>															
2,3,7,8-TCDD	0.025	<0.008	<0.007	<0.003	<0.002	<0.002	0.001	<0.031	<0.028	<0.031	<0.033	<0.032	0.007	0.013	<0.001
1,2,3,7,8-PeCDD	0.194	0.076	<0.008	<0.003	<0.002	<0.002	0.004	<0.037	<0.043	<0.037	<0.039	<0.038	0.017	<0.001	0.004
1,2,3,4,7,8-HxCDD	0.139	<0.028	<0.008	<0.003	<0.002	<0.002	0.006	<0.050	<0.057	<0.049	<0.052	<0.038	0.014	0.017	0.005
1,2,3,6,7,8-HxCDD	0.296	<0.028	<0.008	0.003	0.002	0.002	0.007	<0.050	<0.057	<0.049	<0.052	<0.038	0.025	0.029	0.008
1,2,3,7,8,9-HxCDD	0.297	0.166	0.017	<0.003	0.003	0.007	0.015	<0.050	<0.057	<0.049	<0.052	<0.038	0.042	0.045	0.016
1,2,3,4,6,7,8-HpCDD	1.319	0.418	0.200	0.038	0.023	0.044	0.114	0.046	0.050	0.049	<0.052	0.113	0.212	0.216	0.146
OCDD	1.605	0.967	0.447	0.088	0.059	0.100	0.326	0.184	0.235	0.197	0.210	0.395	0.496	0.524	0.395
2,3,7,8-TCDF	0.129	0.039	0.024	0.012	0.011	0.016	0.029	0.095	0.137	0.039	0.051	0.026	0.092	0.206	0.030
1,2,3,7,8-PeCDF	0.243	0.067	0.020	0.003	0.002	0.002	0.006	<0.037	<0.043	<0.037	<0.039	<0.032	0.035	<0.001	0.006
2,3,4,7,8-PeCDF	0.372	0.091	<0.010	0.003	0.002	0.005	0.007	<0.037	<0.043	<0.037	<0.039	<0.032	0.045	<0.001	0.008
1,2,3,4,7,8-HxCDF	0.494	0.145	0.027	0.006	<0.002	0.015	0.026	<0.050	<0.043	<0.049	<0.052	<0.038	0.090	0.112	0.031
1,2,3,6,7,8-HxCDF	0.525	0.091	0.027	0.003	0.002	0.004	0.009	<0.050	<0.043	<0.049	<0.052	<0.038	0.041	0.058	0.007
2,3,4,6,7,8-HxCDF	0.359	<0.035	<0.013	<0.003	0.002	<0.002	0.010	<0.050	<0.043	<0.049	<0.052	<0.038	0.046	0.057	0.011
1,2,3,7,8,9-HxCDF	<0.017	<0.035	<0.013	<0.003	<0.002	<0.002	<0.002	<0.050	<0.043	<0.049	<0.052	<0.038	0.016	0.005	<0.006
1,2,3,4,6,7,8-HpCDF	1.300	0.255	0.113	0.008	0.009	0.018	0.051	0.076	0.075	0.024	0.030	0.031	0.125	0.127	0.051
1,2,3,4,7,8,9-HpCDF	0.136	0.243	0.023	<0.004	<0.003	<0.005	0.006	<0.050	<0.071	<0.049	<0.052	<0.026	0.021	0.017	0.011
OCDF	0.522	0.479	0.081	<0.007	<0.006	<0.006	0.031	<0.100	<0.085	<0.073	<0.079	<0.064	0.086	0.069	0.042
<b>PCDD/F Homologues</b>															
TCDDs	0.574	<0.008	0.017	<0.003	0.009	0.027	0.037	<0.031	<0.028	<0.031	<0.033	<0.032	0.116	0.239	0.019
PeCDDs	1.522	0.076	0.027	0.005	0.006	0.027	0.035	<0.037	<0.043	<0.037	<0.039	<0.038	0.182	0.280	0.062
HxCDDs	3.167	0.166	0.226	0.034	0.027	0.034	0.130	<0.050	<0.057	<0.049	<0.052	<0.038	0.304	0.357	0.123
HpCDDs	2.852	0.584	0.474	0.080	0.057	0.105	0.268	0.046	0.159	0.093	0.047	0.329	0.444	0.462	0.322
OCDD	1.605	0.967	0.447	0.088	0.059	0.100	0.326	0.184	0.235	0.197	0.210	0.395	0.496	0.524	0.395
TCDFs	2.881	0.083	0.181	0.070	0.071	0.108	0.242	0.552	0.686	0.098	0.086	0.061	0.658	1.573	0.180
PeCDFs	4.096	0.159	0.057	0.023	0.030	0.049	0.122	0.172	0.274	0.071	<0.039	<0.032	0.557	1.088	0.094
HxCDFs	4.361	0.236	0.166	0.018	0.010	0.049	0.104	<0.050	<0.043	<0.049	<0.052	<0.038	0.418	0.552	0.086
HpCDFs	2.171	0.543	0.171	0.010	0.011	0.027	0.089	0.076	0.075	0.024	0.030	0.031	0.223	0.229	0.104
OCDF	0.522	0.479	0.081	<0.007	<0.006	<0.006	0.031	<0.100	<0.085	<0.073	<0.079	<0.064	0.086	0.069	0.042
<b>Total</b>															
$\Sigma$ PCDDs	9.719	1.792	1.191	0.207	0.159	0.293	0.796	0.231	0.394	0.290	0.257	0.724	1.542	1.861	0.922
$\Sigma$ PCDFs	14.031	1.499	0.655	0.121	0.122	0.234	0.588	0.800	1.035	0.193	0.117	0.092	1.942	3.511	0.507
$\Sigma$ PCDD/Fs	23.751	3.291	1.847	0.328	0.281	0.527	1.384	1.031	1.429	0.484	0.373	0.816	3.484	5.371	1.428
$\Sigma$ TEQ (PCDD/Fs)	0.591	0.180	0.036	0.010	0.009	0.012	0.020	0.127	0.135	0.119	0.128	0.112	0.079	0.071	0.021

Table A5. Atmospheric concentrations of PCDD/Fs ( $\mu\text{g m}^{-3}$ ) at NAPS rural sites in 1993

Station Name	Walpole Island												
Sampling Period	1	2	3	4	5	6	7	8	9	10	11	12	13
Sampling Date	1/25/93	2/18/93	3/14/93	4/7/93	5/1/93	6/18/93	7/30/93	8/23/93	9/16/93	10/10/93	11/3/93	11/27/93	12/21/93
Sampling Volume (m3)	805	796	848	820	792	783	766	730	784	774	727	761	720
<b>PCDD/F Congeners</b>													
2,3,7,8-TCDD	<0.002	0.002	0.004	0.003	0.001	0.002	<0.001	<0.003	<0.001	<0.003	<0.001	<0.001	0.011
1,2,3,7,8-PeCDD	0.008	0.007	0.003	0.013	0.006	0.006	0.002	<0.005	<0.003	<0.005	0.005	0.012	0.025
1,2,3,4,7,8-HxCDD	0.006	0.004	0.005	0.015	0.019	0.005	0.003	<0.003	0.012	0.021	0.027	0.018	0.024
1,2,3,6,7,8-HxCDD	0.013	0.015	0.004	0.029	0.013	0.009	0.003	<0.003	0.005	0.019	0.014	0.035	0.029
1,2,3,7,8,9-HxCDD	0.030	0.019	0.009	0.061	0.020	0.015	0.005	<0.003	<0.003	0.017	<0.003	0.063	0.038
1,2,3,4,6,7,8-HpCDD	0.185	0.145	0.062	0.501	0.150	0.089	0.037	0.142	0.059	0.142	0.134	0.376	0.126
OCDD	0.520	0.382	0.266	1.251	0.189	0.144	0.132	0.216	0.226	0.450	0.479	0.864	0.349
2,3,7,8-TCDF	0.033	0.038	0.018	0.078	0.034	0.041	0.014	0.044	0.017	<0.003	0.020	0.054	0.025
1,2,3,7,8-PeCDF	0.007	0.008	0.003	0.020	0.010	0.021	0.003	0.016	<0.003	<0.005	0.010	0.021	0.021
2,3,4,7,8-PeCDF	0.015	0.014	0.003	0.019	0.008	0.014	0.004	0.018	0.005	<0.005	<0.001	0.021	0.022
1,2,3,4,7,8-HxCDF	0.029	0.035	0.008	0.082	0.017	0.045	0.011	0.047	0.008	0.017	0.020	0.059	0.038
1,2,3,6,7,8-HxCDF	0.009	0.013	0.003	0.020	0.011	0.027	0.005	<0.003	0.004	<0.006	<0.003	0.025	0.028
2,3,4,6,7,8-HxCDF	0.013	0.018	0.003	0.035	0.012	0.023	0.005	0.020	0.007	<0.006	0.007	0.026	0.025
1,2,3,7,8,9-HxCDF	<0.006	<0.005	<0.001	<0.001	0.009	<0.003	<0.001	<0.003	0.003	<0.006	<0.003	0.003	0.021
1,2,3,4,6,7,8-HpCDF	0.032	0.052	0.015	0.122	0.032	0.085	0.014	0.083	0.031	0.380	0.029	0.095	0.047
1,2,3,4,7,8,9-HpCDF	<0.006	0.012	0.005	0.012	0.007	0.009	<0.001	<0.005	<0.004	<0.003	0.010	0.011	0.018
OCDF	0.027	0.039	0.031	0.092	0.039	0.035	0.009	<0.011	<0.006	<0.013	<0.007	0.062	0.063
<b>PCDD/F Homologues</b>													
TCDDs	0.033	0.040	0.012	0.070	0.038	0.057	0.026	<0.003	<0.001	0.007	0.017	0.088	0.028
PeCDDs	0.106	0.085	0.021	0.182	0.049	0.090	0.029	0.045	0.026	0.102	0.049	0.204	0.075
HxCDDs	0.195	0.132	0.063	0.445	0.139	0.146	0.062	0.116	0.072	0.207	0.165	0.536	0.199
HpCDDs	0.437	0.302	0.139	1.105	0.313	0.213	0.089	0.268	0.176	0.499	0.458	0.772	0.251
OCDD	0.520	0.382	0.266	1.251	0.189	0.144	0.132	0.216	0.226	0.450	0.479	0.864	0.349
TCDFs	0.130	0.144	0.097	0.335	0.208	0.281	0.073	0.142	0.068	0.035	0.081	0.380	0.101
PeCDFs	0.122	0.143	0.041	0.302	0.104	0.253	0.050	0.134	0.047	0.045	0.070	0.271	0.090
HxCDFs	0.103	0.136	0.033	0.290	0.101	0.262	0.052	0.123	0.041	0.040	0.063	0.268	0.147
HpCDFs	0.068	0.113	0.029	0.240	0.065	0.144	0.025	0.083	0.072	0.118	0.071	0.159	0.079
OCDF	0.027	0.039	0.031	0.092	0.039	0.035	0.009	<0.011	<0.006	<0.013	<0.007	0.062	0.063
<b>Total</b>													
$\Sigma$ PCDDs	1.292	0.942	0.501	3.052	0.728	0.651	0.338	0.646	0.500	1.264	1.168	2.464	0.902
$\Sigma$ PCDFs	0.450	0.575	0.232	1.259	0.518	0.976	0.210	0.482	0.229	0.238	0.285	1.139	0.481
$\Sigma$ PCDD/Fs	1.742	1.517	0.733	4.311	1.246	1.626	0.548	1.128	0.729	1.502	1.453	3.603	1.383
$\Sigma$ TEQ (PCDD/Fs)	0.032	0.030	0.015	0.061	0.026	0.032	0.010	0.029	0.012	0.024	0.019	0.054	0.068

Table A6. Atmospheric concentrations of PCDD/Fs ( $\text{pg m}^{-3}$ ) at NAPS rural sites in 1994

Station Name	Kejimikujik	Vancouver	St. Andrews	Walpole Island									
Sampling Period	1	1	1	1	2	3	4	5	6	7	8	9	10
Sampling Date	12/28/94	12/16/94	12/28/94	3/15/94	4/8/94	5/14/94	6/7/94	7/1/94	9/11/94	10/5/94	10/29/94	11/22/94	12/16/94
Sampling Volume (m3)	703	763	782	780	719	759	793	670	750	750	762	734	746
<b>PCDD/F Congeners</b>													
2,3,7,8-TCDD	<0.003	<0.003	<0.003	<0.001	<0.003	<0.003	<0.001	<0.003	<0.003	<0.001	<0.001	<0.001	<0.001
1,2,3,7,8-PeCDD	<0.003	<0.003	<0.003	0.006	0.006	0.005	0.003	<0.004	0.008	<0.003	0.006	0.004	0.010
1,2,3,4,7,8-HxCDD	<0.004	<0.008	<0.004	0.008	0.008	0.007	0.004	0.004	0.019	0.008	0.006	0.004	0.014
1,2,3,6,7,8-HxCDD	0.009	0.019	<0.004	0.012	0.014	0.013	0.005	0.010	0.024	0.013	0.010	0.008	0.028
1,2,3,7,8,9-HxCDD	<0.004	0.031	<0.004	0.019	0.018	0.025	0.008	0.015	0.024	0.020	0.019	<0.003	0.042
1,2,3,4,6,7,8-HpCDD	0.070	0.274	0.022	0.126	0.122	0.152	0.054	0.109	0.165	0.108	0.178	0.067	0.307
OCDD	0.151	0.672	0.090	0.417	0.341	0.446	0.166	0.377	0.299	0.295	0.486	0.191	0.667
2,3,7,8-TCDF	0.013	0.051	0.009	0.018	0.024	0.018	0.032	0.019	<0.003	0.032	0.025	0.009	0.064
1,2,3,7,8-PeCDF	0.003	0.005	<0.001	0.008	0.010	0.008	0.011	<0.003	0.009	0.008	0.006	0.004	0.018
2,3,4,7,8-PeCDF	0.005	0.006	0.002	0.008	0.010	0.007	0.013	<0.003	0.011	0.013	0.009	0.004	0.027
1,2,3,4,7,8-HxCDF	0.010	0.015	0.004	0.024	<0.003	<0.004	<0.003	0.016	0.028	0.032	0.027	0.009	0.052
1,2,3,6,7,8-HxCDF	0.005	<0.005	<0.001	0.012	0.014	0.009	0.014	0.006	0.011	0.011	0.010	0.004	0.020
2,3,4,6,7,8-HxCDF	0.007	<0.005	0.002	0.012	0.011	0.011	0.015	0.010	0.015	0.013	0.014	0.006	0.028
1,2,3,7,8,9-HxCDF	<0.003	<0.005	<0.001	<0.004	<0.003	<0.004	<0.003	<0.003	<0.004	0.005	<0.002	<0.001	<0.003
1,2,3,4,6,7,8-HpCDF	0.024	0.024	0.008	0.047	0.044	0.048	0.054	0.028	0.043	0.045	0.055	0.017	0.092
1,2,3,4,7,8,9-HpCDF	<0.003	<0.01	<0.004	0.005	0.006	0.005	0.005	0.007	0.009	0.007	0.006	0.004	0.009
OCDF	0.019	0.013	0.006	0.041	0.057	0.037	0.034	0.124	0.044	0.045	0.039	0.016	0.073
<b>PCDD/F Homologues</b>													
TCDDs	<0.003	0.009	<0.003	0.029	0.024	0.017	0.030	0.040	0.072	0.029	0.017	0.005	0.036
PeCDDs	0.007	0.047	<0.003	0.050	0.065	0.053	0.043	0.042	0.164	0.064	0.051	0.023	0.108
HxCDDs	0.065	0.225	0.014	0.167	0.156	0.157	0.077	0.130	0.304	0.153	0.166	0.066	0.351
HpCDDs	0.148	0.601	0.044	0.283	0.268	0.368	0.119	0.230	0.367	0.229	0.405	0.147	0.727
OCDD	0.151	0.672	0.090	0.417	0.341	0.446	0.166	0.377	0.299	0.295	0.486	0.191	0.667
TCDFs	0.033	0.189	0.021	0.130	0.161	0.146	0.223	0.275	0.188	0.291	0.221	0.052	0.350
PeCDFs	0.030	0.055	0.012	0.088	0.107	0.083	0.151	0.146	0.124	0.175	0.134	0.031	0.286
HxCDFs	0.042	0.039	0.012	0.114	0.133	0.067	0.142	0.079	0.097	0.132	0.119	0.033	0.241
HpCDFs	0.042	0.024	0.008	0.083	0.074	0.026	0.088	0.057	0.075	0.087	0.095	0.031	0.165
OCDF	0.019	0.013	0.006	0.041	0.057	0.037	0.034	0.124	0.044	0.045	0.039	0.016	0.073
<b>Total</b>													
$\Sigma$ PCDDs	0.371	1.553	0.148	0.947	0.852	1.040	0.436	0.819	1.205	0.771	1.126	0.431	1.889
$\Sigma$ PCDFs	0.165	0.321	0.059	0.457	0.533	0.360	0.639	0.682	0.528	0.730	0.609	0.162	1.116
$\Sigma$ PCDD/Fs	0.536	1.874	0.207	1.403	1.385	1.400	1.075	1.501	1.733	1.501	1.735	0.593	3.005
$\Sigma$ TEQ (PCDD/Fs)	0.014	0.025	0.010	0.023	0.023	0.021	0.017	0.019	0.029	0.023	0.024	0.012	0.049

Table A7. Atmospheric concentrations of PCDD/Fs ( $\mu\text{g m}^{-3}$ ) at NAPS rural sites in 1995

Station Name	Kejimikujik					Vancouver			St. Andrews		Walpole Island		
Sampling Period	1	2	3	4	5	1	2	3	1	2	1	2	3
Sampling Date	4/3/95	5/21/95	7/8/95	8/26/95	11/17/95	2/8/95	5/15/95	8/19/95	2/14/95	11/17/95	2/14/95	2/26/95	3/10/95
Sampling Volume (m3)	590	619	616	662	685	737	545	651	674	964	772	682	778
<b>PCDD/F Congeners</b>													
2,3,7,8-TCDD	<0.002	<0.006	<0.003	<0.003	<0.009	0.005	<0.037	<0.003	<0.001	<0.004	0.003	0.007	0.004
1,2,3,7,8-PeCDD	<0.003	<0.006	<0.004	<0.004	<0.012	0.016	<0.022	<0.006	<0.001	<0.003	0.006	0.007	0.006
1,2,3,4,7,8-HxCDD	<0.003	<0.010	<0.005	<0.006	<0.012	<0.008	<0.037	<0.012	<0.006	<0.006	0.007	0.003	0.007
1,2,3,6,7,8-HxCDD	<0.003	<0.010	<0.005	<0.006	<0.012	0.045	<0.037	<0.012	<0.006	<0.006	0.012	0.008	0.013
1,2,3,7,8,9-HxCDD	<0.003	<0.010	<0.005	<0.006	<0.012	0.041	<0.037	<0.012	<0.006	<0.006	0.017	0.013	0.019
1,2,3,4,6,7,8-HpCDD	0.021	<0.016	0.009	0.005	0.040	0.278	<0.055	0.057	0.035	0.036	0.122	0.101	0.145
OCDD	0.062	0.072	0.027	0.044	0.128	0.561	0.639	0.159	0.090	0.089	0.244	0.286	0.347
2,3,7,8-TCDF	0.008	0.010	0.007	0.007	<0.009	0.085	0.066	0.027	0.010	0.008	0.054	0.101	0.056
1,2,3,7,8-PeCDF	<0.002	<0.006	<0.002	<0.002	<0.010	0.017	<0.018	<0.004	<0.001	<0.002	0.010	0.006	0.006
2,3,4,7,8-PeCDF	<0.002	<0.006	<0.002	<0.002	<0.010	0.029	<0.018	<0.004	0.002	0.003	0.015	0.007	0.007
1,2,3,4,7,8-HxCDF	<0.003	<0.008	<0.003	<0.003	<0.009	0.049	<0.018	<0.006	0.006	0.006	0.036	0.019	0.013
1,2,3,6,7,8-HxCDF	<0.003	<0.008	<0.003	<0.003	<0.009	0.022	<0.018	<0.006	<0.001	0.002	0.013	0.008	0.005
2,3,4,6,7,8-HxCDF	<0.003	<0.008	<0.003	<0.003	<0.009	0.024	<0.018	<0.006	<0.001	<0.002	0.021	0.008	0.008
1,2,3,7,8,9-HxCDF	<0.003	<0.008	<0.003	<0.003	<0.009	<0.005	<0.018	<0.006	<0.001	<0.002	<0.002	<0.003	<0.003
1,2,3,4,6,7,8-HpCDF	0.003	0.007	0.004	<0.002	0.016	0.078	<0.029	0.029	0.011	0.022	0.056	0.036	0.022
1,2,3,4,7,8,9-HpCDF	<0.003	<0.006	<0.003	<0.002	<0.009	0.023	<0.029	<0.006	<0.003	<0.005	0.009	0.004	<0.003
OCDF	<0.005	<0.029	<0.008	<0.007	0.016	0.023	<0.047	0.052	0.007	0.021	0.050	0.035	0.021
<b>PCDD/F Homologues</b>													
TCDDs	<0.002	<0.006	<0.003	<0.003	<0.009	0.094	<0.037	<0.003	0.002	<0.004	0.079	0.015	0.017
PeCDDs	<0.003	<0.006	<0.004	<0.004	<0.012	0.180	<0.022	<0.006	<0.001	<0.003	0.101	0.031	0.058
HxCDDs	<0.003	<0.010	<0.005	<0.006	<0.012	0.459	0.089	0.026	0.024	<0.006	0.198	0.100	0.173
HpCDDs	0.040	<0.016	0.019	0.010	0.117	0.559	0.312	0.105	0.079	0.063	0.263	0.220	0.375
OCDD	0.062	0.072	0.027	0.044	0.128	0.561	0.639	0.159	0.090	0.089	0.244	0.286	0.347
TCDFs	0.012	0.019	0.017	0.011	<0.009	0.325	0.066	0.043	0.024	0.043	0.198	0.245	0.164
PeCDFs	<0.002	<0.006	0.012	0.005	<0.010	0.318	0.034	0.015	0.018	0.040	0.194	0.080	0.076
HxCDFs	<0.003	0.008	0.008	<0.003	0.010	0.287	0.051	0.009	0.014	0.025	0.156	0.069	0.057
HpCDFs	0.003	0.015	0.004	<0.002	0.016	0.206	<0.029	0.040	0.011	0.030	0.108	0.068	0.044
OCDF	<0.005	<0.029	<0.008	<0.007	0.016	0.023	<0.047	0.052	0.007	0.021	0.050	0.035	0.021
<b>Total</b>													
$\Sigma$ PCDDs	0.101	0.072	0.046	0.054	0.245	1.854	1.040	0.290	0.195	0.151	0.884	0.652	0.969
$\Sigma$ PCDFs	0.015	0.043	0.041	0.015	0.042	1.158	0.151	0.159	0.074	0.158	0.706	0.496	0.362
$\Sigma$ PCDD/Fs	0.117	0.114	0.087	0.069	0.287	3.012	1.191	0.449	0.269	0.310	1.590	1.148	1.331
$\Sigma$ TEQ (PCDD/Fs)	0.009	0.023	0.011	0.011	0.033	0.062	0.091	0.020	0.007	0.013	0.032	0.034	0.027



Table A8. Atmospheric concentrations of PCDD/Fs (pg m<sup>-3</sup>) at NAPS rural sites in 1996

Station Name	Kejimkujik											Point Petre					
	1	2	3	4	5	6	7	8	9	10	11	1	2	3	4	5	6
Sampling Period	1/4/96	2/21/96	4/9/96	5/27/96	6/20/96	8/7/96	8/31/96	9/24/96	10/18/96	12/5/96	12/29/96	8/31/96	9/24/96	10/18/96	11/11/96	12/5/96	12/29/96
Sampling Volume (m3)	806	656	667	612	540	548	572	733	668	470	510	879	988	953	812	536	593
<b>PCDD/F Congeners</b>																	
2,3,7,8-TCDD	<0.007	<0.009	<0.004	<0.007	<0.004	<0.007	<0.007	<0.008	<0.006	<0.004	<0.008	<0.005	0.009	<0.004	<0.003	<0.004	<0.003
1,2,3,7,8-PeCDD	<0.007	<0.009	<0.006	<0.007	<0.010	<0.007	<0.004	<0.005	<0.006	<0.004	<0.008	<0.007	0.018	<0.008	<0.004	0.010	<0.005
1,2,3,4,7,8-HxCDD	<0.010	<0.009	<0.010	<0.005	<0.007	<0.006	<0.007	<0.008	<0.006	<0.009	<0.016	<0.007	0.024	<0.008	<0.007	<0.007	<0.006
1,2,3,6,7,8-HxCDD	<0.010	<0.009	<0.010	<0.005	<0.007	<0.006	<0.007	<0.008	<0.006	<0.009	<0.016	<0.007	0.014	<0.008	<0.007	<0.007	0.011
1,2,3,7,8,9-HxCDD	<0.010	<0.009	<0.010	<0.005	<0.007	<0.006	<0.007	<0.008	<0.006	<0.009	<0.016	0.008	0.037	<0.008	0.009	<0.007	0.016
1,2,3,4,6,7,8-HpCDD	0.034	<0.013	0.013	0.018	0.018	0.016	0.018	<0.011	0.020	0.025	0.054	0.044	0.088	0.057	0.060	0.088	0.187
OCDD	0.069	0.044	0.040	0.045	0.045	0.033	0.039	0.056	0.068	0.151	0.122	0.119	0.252	0.177	0.157	0.278	0.622
2,3,7,8-TCDF	0.005	<0.005	0.005	0.006	<0.006	0.007	0.006	<0.005	0.007	<0.004	<0.004	0.016	0.018	0.016	0.009	0.022	0.019
1,2,3,7,8-PeCDF	<0.005	<0.009	<0.004	<0.005	<0.004	<0.004	<0.004	<0.005	<0.006	<0.004	<0.007	0.003	0.023	<0.005	<0.003	0.005	<0.005
2,3,4,7,8-PeCDF	<0.005	<0.009	0.007	0.013	0.017	0.018	<0.004	<0.005	<0.006	<0.004	<0.007	0.006	0.016	0.008	0.006	0.020	0.016
1,2,3,4,7,8-HxCDF	<0.005	<0.009	<0.003	<0.003	<0.006	<0.004	<0.004	<0.005	<0.006	<0.004	<0.008	0.012	0.030	0.008	0.006	0.016	0.012
1,2,3,6,7,8-HxCDF	<0.005	<0.009	<0.003	<0.003	<0.006	<0.004	<0.004	<0.005	<0.006	<0.004	<0.008	0.006	0.022	0.005	0.002	0.006	0.005
2,3,4,6,7,8-HxCDF	<0.005	<0.009	<0.003	<0.003	<0.006	<0.004	<0.004	<0.005	<0.006	<0.004	<0.008	0.008	0.024	0.005	0.003	0.007	0.009
1,2,3,7,8,9-HxCDF	<0.005	<0.009	<0.003	<0.003	<0.006	<0.004	<0.004	<0.005	<0.006	<0.004	<0.008	<0.002	0.019	<0.004	<0.002	<0.004	<0.003
1,2,3,4,6,7,8-HpCDF	0.011	<0.009	0.005	<0.007	0.006	0.010	0.008	<0.008	0.008	0.006	<0.012	0.030	0.054	0.022	0.014	0.032	0.032
1,2,3,4,7,8,9-HpCDF	<0.010	<0.009	<0.004	<0.007	<0.004	<0.004	<0.005	<0.008	<0.008	<0.004	<0.012	0.008	0.036	<0.006	<0.002	0.007	<0.007
OCDF	0.023	<0.013	<0.009	<0.007	0.013	<0.007	0.010	<0.011	<0.021	0.008	<0.039	0.028	0.098	0.023	0.012	0.028	0.036
<b>PCDD/F Homologues</b>																	
TCDDs	<0.007	<0.009	<0.004	<0.007	<0.004	<0.007	<0.007	<0.008	<0.006	<0.004	<0.008	0.024	0.033	<0.004	0.006	0.004	0.018
PeCDDs	<0.007	<0.009	<0.006	<0.007	<0.010	<0.007	<0.004	<0.005	<0.006	<0.004	<0.008	0.010	0.059	<0.008	0.019	0.030	0.033
HxCDDs	<0.010	<0.009	<0.010	0.005	<0.007	0.011	0.011	<0.008	<0.006	<0.009	<0.016	0.020	0.108	0.035	0.057	0.061	0.119
HpCDDs	0.096	0.034	0.043	0.054	0.039	0.039	0.037	0.020	0.030	0.054	<0.016	0.080	0.152	0.108	0.144	0.175	0.375
OCDD	0.069	0.044	0.040	0.045	0.045	0.033	0.039	0.056	0.068	0.151	0.122	0.119	0.252	0.177	0.157	0.278	0.622
TCDFs	<0.005	<0.005	0.007	0.006	<0.006	0.018	0.006	<0.005	<0.006	0.006	<0.004	0.102	0.072	0.071	0.032	0.117	0.134
PeCDFs	<0.005	<0.009	<0.004	<0.005	0.006	0.028	0.015	<0.005	<0.006	<0.004	0.007	0.021	0.078	0.027	0.017	0.051	0.040
HxCDFs	<0.005	<0.009	<0.003	<0.003	<0.006	0.026	0.013	<0.005	<0.006	<0.004	<0.008	0.056	0.139	0.031	0.025	0.059	0.058
HpCDFs	0.011	<0.009	0.005	<0.007	0.006	0.015	0.008	<0.008	0.008	0.006	<0.012	0.046	0.105	0.033	0.021	0.060	0.057
OCDF	0.023	<0.013	<0.009	<0.007	0.013	<0.007	0.010	<0.011	<0.021	0.008	<0.039	0.028	0.098	0.023	0.012	0.028	0.036
<b>Total</b>																	
∑ PCDDs	0.165	0.078	0.082	0.104	0.084	0.083	0.087	0.075	0.098	0.206	0.122	0.254	0.604	0.319	0.383	0.548	1.166
∑ PCDFs	0.034	0.000	0.012	0.006	0.024	0.088	0.052	0.000	0.008	0.020	0.007	0.252	0.493	0.185	0.107	0.314	0.325
∑ PCDD/Fs	0.199	0.078	0.094	0.110	0.109	0.171	0.139	0.075	0.106	0.225	0.129	0.506	1.097	0.504	0.490	0.862	1.491
∑ TEQ (PCDD/Fs)	0.022	0.028	0.017	0.021	0.024	0.024	0.017	0.020	0.019	0.015	0.027	0.021	0.053	0.023	0.014	0.029	0.024

Table A8. Atmospheric concentrations of PCDD/Fs ( $\mu\text{g m}^{-3}$ ) at NAPS rural sites in 1996 (continued)

Station Name	Simcoe					St. Andrews										
	1	2	3	4	5	1	2	3	4	5	6	7	8	9	10	11
Sampling Period																
Sampling Date	8/31/96	9/24/96	10/18/96	11/11/96	12/5/96	4/9/96	5/25/96	6/20/96	7/14/96	8/5/96	8/30/96	9/24/96	10/18/96	11/11/96	12/5/96	12/29/96
Sampling Volume (m3)	926	1024	957	856	929	964	907	882	897	891	1076	1002	905	934	873	671
<b>PCDD/F Congeners</b>																
2,3,7,8-TCDD	<0.002	<0.004	<0.008	<0.002	<0.002	<0.004	<0.002	<0.005	<0.004	<0.004	<0.002	0.002	<0.004	<0.003	<0.005	<0.003
1,2,3,7,8-PeCDD	<0.004	<0.008	<0.008	<0.009	0.021	<0.003	<0.006	<0.007	0.010	<0.005	<0.004	<0.006	<0.004	<0.004	<0.007	<0.006
1,2,3,4,7,8-HxCDD	<0.006	0.011	<0.008	<0.009	0.019	<0.004	<0.004	<0.007	<0.008	<0.004	<0.006	<0.006	<0.004	<0.004	<0.006	<0.009
1,2,3,6,7,8-HxCDD	<0.006	0.008	0.011	<0.009	0.043	<0.004	<0.004	<0.007	<0.008	<0.004	<0.006	<0.006	<0.004	<0.004	<0.006	<0.009
1,2,3,7,8,9-HxCDD	<0.006	0.016	<0.008	<0.009	0.066	<0.004	<0.004	<0.007	0.008	<0.004	<0.006	<0.006	<0.004	<0.004	<0.006	<0.009
1,2,3,4,6,7,8-HpCDD	0.021	0.063	0.107	0.070	0.485	0.015	0.015	0.095	0.017	0.014	0.012	0.013	0.017	0.024	0.023	0.027
OCDD	0.065	0.145	0.361	0.247	0.989	0.047	0.053	1.059	0.048	0.044	0.026	0.032	0.031	0.079	0.054	0.103
2,3,7,8-TCDF	0.014	0.013	0.026	0.021	0.033	0.007	0.004	<0.005	0.007	0.005	0.003	0.006	<0.004	0.004	0.011	0.008
1,2,3,7,8-PeCDF	<0.002	0.006	<0.006	0.004	0.007	<0.003	<0.003	<0.005	0.009	<0.005	<0.004	0.002	<0.004	<0.003	0.002	<0.003
2,3,4,7,8-PeCDF	<0.002	0.006	<0.006	0.013	0.013	0.007	0.012	<0.005	0.010	<0.005	<0.004	<0.002	<0.004	0.005	0.010	<0.003
1,2,3,4,7,8-HxCDF	0.011	0.022	0.016	0.021	0.020	<0.002	<0.003	0.005	0.007	<0.004	<0.004	0.006	<0.004	0.003	0.010	0.004
1,2,3,6,7,8-HxCDF	0.006	0.009	<0.006	0.007	0.009	<0.002	<0.003	<0.005	0.006	<0.004	<0.004	0.002	<0.004	<0.002	0.005	<0.003
2,3,4,6,7,8-HxCDF	<0.004	0.012	0.007	0.007	0.011	<0.002	<0.003	<0.005	0.008	<0.004	<0.004	0.004	<0.004	<0.002	0.006	<0.003
1,2,3,7,8,9-HxCDF	<0.004	0.005	<0.006	<0.005	<0.004	<0.002	<0.003	<0.005	0.009	<0.004	<0.004	<0.002	<0.004	<0.002	<0.003	<0.003
1,2,3,4,6,7,8-HpCDF	0.013	0.042	0.049	0.026	0.043	0.005	0.005	0.019	0.008	<0.006	0.004	0.013	0.006	0.009	0.025	0.011
1,2,3,4,7,8,9-HpCDF	<0.006	0.018	<0.011	<0.007	<0.005	<0.003	<0.003	<0.005	0.008	<0.006	<0.004	<0.006	<0.006	<0.004	0.006	<0.003
OCDF	<0.013	0.047	0.059	0.020	0.031	<0.004	<0.007	0.034	0.019	<0.009	<0.006	0.012	<0.011	0.010	0.022	0.011
<b>PCDD/F Homologues</b>																
TCDDs	0.012	0.019	<0.008	<0.002	0.033	<0.004	<0.002	<0.005	<0.004	<0.004	<0.002	0.018	<0.004	<0.003	0.006	<0.003
PeCDDs	0.009	0.029	<0.008	<0.009	0.189	0.003	<0.006	<0.007	0.010	<0.005	<0.004	0.008	<0.004	<0.004	0.007	<0.006
HxCDDs	0.032	0.071	0.024	0.051	0.510	0.012	0.008	<0.007	0.008	<0.004	<0.006	<0.006	0.009	0.011	0.028	0.009
HpCDDs	0.046	0.124	0.221	0.131	1.001	0.028	0.032	0.182	0.023	0.033	0.018	0.026	0.027	0.053	0.052	0.058
OCDD	0.065	0.145	0.361	0.247	0.989	0.047	0.053	1.059	0.048	0.044	0.026	0.032	0.031	0.079	0.054	0.103
TCDFs	0.053	0.082	0.044	0.102	0.239	0.011	0.004	<0.005	0.009	0.008	0.007	0.021	<0.004	0.008	0.055	0.029
PeCDFs	0.049	0.030	0.042	0.073	0.102	0.005	<0.003	<0.005	0.012	<0.005	<0.004	0.006	<0.004	0.004	0.030	0.007
HxCDFs	0.058	0.088	0.050	0.060	0.116	0.003	<0.003	<0.005	0.024	0.004	<0.004	0.021	<0.004	0.006	0.027	0.009
HpCDFs	0.013	0.089	0.081	0.044	0.107	0.005	0.005	0.045	0.016	<0.006	0.004	0.013	0.006	0.009	0.041	0.016
OCDF	<0.013	0.047	0.059	0.020	0.031	<0.004	<0.007	0.034	0.019	<0.009	<0.006	0.012	<0.011	0.010	0.022	0.011
<b>Total</b>																
∑ PCDDs	0.164	0.388	0.606	0.429	2.722	0.090	0.093	1.241	0.089	0.077	0.044	0.084	0.067	0.142	0.147	0.170
∑ PCDFs	0.173	0.335	0.276	0.299	0.596	0.024	0.009	0.080	0.081	0.012	0.011	0.073	0.006	0.036	0.174	0.072
∑ PCDD/Fs	0.337	0.723	0.882	0.728	3.319	0.114	0.102	1.321	0.170	0.089	0.055	0.157	0.073	0.178	0.321	0.242
∑ TEQ (PCDD/Fs)	0.013	0.025	0.029	0.026	0.053	0.012	0.015	0.019	0.024	0.015	0.010	0.013	0.013	0.011	0.020	0.015

Table A9. Atmospheric concentrations of PCDD/Fs ( $\text{pg m}^{-3}$ ) at NAPS rural sites in 1997

Station Name	Kejimikujik													
Sampling Period	1	2	3	4	5	6	7	8	9	10	11	12	13	14
Sampling Date	1/22/97	2/15/97	3/11/97	4/16/97	5/10/97	6/3/97	7/9/97	8/2/97	8/26/97	9/19/97	10/13/97	11/6/97	11/30/97	12/24/97
Sampling Volume (m3)	451	676	644	575	625	622	543	593	634	603	703	746	693	764
<b>PCDD/F Congeners</b>														
2,3,7,8-TCDD	<0.009	<0.003	<0.003	<0.007	<0.010	<0.006	<0.004	<0.007	<0.006	<0.007	<0.004	<0.005	<0.003	<0.003
1,2,3,7,8-PeCDD	<0.009	<0.006	<0.006	<0.007	<0.010	<0.006	0.009	<0.007	<0.006	<0.010	<0.006	<0.005	0.008	0.004
1,2,3,4,7,8-HxCDD	<0.013	<0.009	<0.009	<0.010	<0.006	<0.008	<0.011	<0.010	<0.009	<0.010	<0.006	<0.008	0.010	<0.005
1,2,3,6,7,8-HxCDD	<0.013	<0.009	<0.009	<0.010	<0.006	<0.008	<0.011	<0.010	<0.009	<0.010	<0.006	<0.008	0.008	<0.005
1,2,3,7,8,9-HxCDD	<0.013	<0.009	<0.009	<0.010	<0.006	<0.008	<0.011	<0.010	<0.009	<0.010	<0.006	<0.008	0.008	<0.005
1,2,3,4,6,7,8-HpCDD	0.022	0.018	0.012	0.019	0.015	0.015	0.040	0.017	<0.009	<0.017	0.012	0.016	0.018	0.007
OCDD	0.105	0.044	0.034	0.108	0.051	0.053	0.413	0.058	0.020	0.026	0.035	0.040	0.064	0.021
2,3,7,8-TCDF	<0.004	<0.003	<0.004	<0.005	<0.006	<0.006	<0.004	<0.003	<0.003	<0.003	<0.003	0.004	0.004	0.007
1,2,3,7,8-PeCDF	<0.009	<0.005	<0.004	<0.003	<0.006	<0.003	<0.007	<0.003	<0.003	<0.005	<0.003	<0.004	0.004	0.003
2,3,4,7,8-PeCDF	<0.009	<0.005	<0.004	<0.003	<0.006	<0.003	<0.007	<0.003	<0.003	<0.005	<0.003	<0.004	0.004	0.003
1,2,3,4,7,8-HxCDF	<0.009	<0.003	<0.006	0.003	<0.004	<0.006	<0.007	<0.007	<0.003	<0.003	<0.006	0.005	0.009	0.004
1,2,3,6,7,8-HxCDF	<0.009	<0.003	<0.006	<0.003	<0.004	<0.006	<0.007	<0.007	<0.003	<0.003	<0.006	0.003	0.006	0.003
2,3,4,6,7,8-HxCDF	<0.009	<0.003	<0.006	<0.003	<0.004	<0.006	<0.007	<0.007	<0.003	<0.003	<0.006	<0.003	0.007	<0.003
1,2,3,7,8,9-HxCDF	<0.009	<0.003	<0.006	<0.003	<0.004	<0.006	<0.007	<0.007	<0.003	<0.003	<0.006	<0.003	0.010	<0.003
1,2,3,4,6,7,8-HpCDF	<0.013	<0.006	<0.006	<0.007	<0.010	<0.006	0.015	0.011	0.006	<0.010	0.008	0.013	0.012	0.008
1,2,3,4,7,8,9-HpCDF	<0.013	<0.006	<0.006	<0.007	<0.010	<0.006	<0.011	<0.010	<0.006	<0.010	<0.008	0.005	0.018	<0.005
OCDF	<0.044	<0.024	<0.009	0.008	0.022	<0.013	<0.022	0.016	<0.009	<0.013	0.009	0.012	0.031	0.007
<b>PCDD/F Homologues</b>														
TCDDs	<0.009	<0.003	<0.003	<0.007	<0.010	<0.006	<0.004	<0.007	<0.006	<0.007	<0.004	<0.005	<0.003	<0.003
PeCDDs	<0.009	<0.006	<0.006	<0.007	<0.010	<0.006	0.009	<0.007	<0.006	<0.010	<0.006	<0.005	0.008	0.004
HxCDDs	<0.013	<0.009	<0.009	<0.010	<0.006	<0.008	<0.011	<0.010	<0.009	<0.010	<0.006	<0.008	0.025	<0.005
HpCDDs	<0.018	<0.012	0.012	0.045	0.024	0.015	0.077	0.028	<0.009	<0.017	0.020	0.031	0.031	0.012
OCDD	0.105	0.044	0.034	0.108	0.051	0.053	0.413	0.058	0.020	0.026	0.035	0.040	0.064	0.021
TCDFs	<0.004	<0.003	<0.004	<0.005	<0.006	<0.006	<0.004	<0.003	<0.003	0.005	0.003	0.004	0.013	0.023
PeCDFs	<0.009	<0.005	<0.004	<0.003	<0.006	<0.003	<0.007	0.007	<0.003	<0.005	0.004	<0.004	0.008	0.013
HxCDFs	<0.009	0.004	<0.006	0.003	<0.004	<0.006	0.032	0.022	0.005	0.018	<0.006	0.013	0.036	0.013
HpCDFs	<0.013	<0.006	<0.006	<0.007	<0.010	<0.006	0.015	0.011	0.006	<0.010	0.008	0.018	0.030	0.008
OCDF	<0.044	<0.024	<0.009	0.008	0.022	<0.013	<0.022	0.016	<0.009	<0.013	0.009	0.012	0.031	0.007
<b>Total</b>														
$\Sigma$ PCDDs	0.105	0.044	0.046	0.152	0.076	0.067	0.499	0.086	0.020	0.026	0.056	0.071	0.127	0.038
$\Sigma$ PCDFs	0.000	0.004	0.000	0.012	0.022	0.000	0.046	0.057	0.011	0.023	0.024	0.047	0.118	0.063
$\Sigma$ PCDD/Fs	0.105	0.049	0.046	0.164	0.098	0.067	0.545	0.143	0.031	0.049	0.080	0.118	0.245	0.101
$\Sigma$ TEQ (PCDD/Fs)	0.029	0.015	0.017	0.020	0.026	0.020	0.023	0.021	0.017	0.024	0.016	0.016	0.019	0.012

Table A9. Atmospheric concentrations of PCDD/Fs ( $\mu\text{g m}^{-3}$ ) at NAPS rural sites in 1997 (continued)

Station Name	Point Petre												
Sampling Period	1	2	3	4	5	6	7	8	9	10	11	12	13
Sampling Date	2/15/97	3/11/97	4/4/97	4/28/97	5/22/97	5/22/97	8/2/97	8/26/97	9/19/97	10/13/97	11/3/97	11/30/97	12/24/97
Sampling Volume (m3)	899	1004	959	892	1031	947	910	1007	889	882	1	959	968
<b>PCDD/F Congeners</b>													
2,3,7,8-TCDD	<0.004	<0.004	0.005	<0.004	<0.006	<0.004	<0.003	<0.002	<0.002	<0.003	<0.003	<0.004	<0.003
1,2,3,7,8-PeCDD	0.007	<0.006	0.038	0.009	0.005	<0.004	0.009	<0.006	<0.005	0.006	<0.004	<0.008	0.007
1,2,3,4,7,8-HxCDD	0.006	<0.006	0.041	<0.007	<0.006	<0.003	<0.007	<0.004	<0.007	<0.006	<0.006	<0.01	0.005
1,2,3,6,7,8-HxCDD	0.009	<0.006	0.068	<0.007	<0.006	0.003	0.015	<0.004	<0.007	0.006	<0.006	<0.01	0.012
1,2,3,7,8,9-HxCDD	0.016	<0.006	0.115	0.007	<0.006	0.004	0.012	<0.004	<0.007	<0.006	0.008	<0.01	0.022
1,2,3,4,6,7,8-HpCDD	0.091	0.033	0.648	0.043	0.015	0.033	0.213	0.027	0.052	0.078	0.022	0.114	0.177
OCDD	0.338	0.092	1.325	0.105	0.046	0.117	0.613	0.076	0.157	0.288	0.042	0.277	0.529
2,3,7,8-TCDF	0.036	0.007	0.231	0.009	0.003	0.003	0.026	0.015	0.034	0.027	0.011	0.027	0.014
1,2,3,7,8-PeCDF	0.009	<0.004	0.080	0.005	<0.003	<0.002	<0.005	<0.002	0.007	<0.003	<0.003	<0.004	<0.003
2,3,4,7,8-PeCDF	0.013	<0.004	0.078	0.005	<0.003	<0.002	0.008	<0.002	0.011	0.009	<0.003	0.010	0.005
1,2,3,4,7,8-HxCDF	0.023	0.006	0.048	0.004	<0.004	0.004	0.023	0.014	0.018	0.020	0.008	0.023	0.013
1,2,3,6,7,8-HxCDF	0.010	<0.003	0.028	0.004	<0.004	<0.004	0.009	0.006	0.009	0.009	0.005	0.011	0.005
2,3,4,6,7,8-HxCDF	0.015	<0.003	0.024	0.005	<0.004	<0.004	0.011	0.006	0.014	0.010	0.006	0.009	0.008
1,2,3,7,8,9-HxCDF	<0.007	<0.003	<0.003	0.003	<0.004	<0.004	<0.005	<0.006	<0.005	<0.005	<0.004	<0.006	<0.004
1,2,3,4,6,7,8-HpCDF	0.042	0.010	0.045	0.013	<0.004	<0.004	0.044	0.024	0.029	0.035	0.014	0.047	0.026
1,2,3,4,7,8,9-HpCDF	0.009	<0.006	0.007	0.008	<0.004	<0.004	<0.009	0.007	<0.005	<0.005	0.008	<0.006	<0.005
OCDF	0.053	<0.024	0.030	0.025	0.007	0.006	0.038	0.024	0.023	0.033	0.026	0.026	0.018
<b>PCDD/F Homologues</b>													
TCDDs	0.031	<0.004	0.042	<0.004	<0.006	<0.004	0.006	<0.002	0.009	0.020	<0.003	0.027	0.017
PeCDDs	0.067	<0.006	0.211	<0.007	0.005	<0.004	0.050	0.010	0.031	0.020	<0.004	0.043	0.048
HxCDDs	0.106	0.010	0.651	0.022	<0.006	0.022	0.165	0.024	0.065	0.067	0.024	0.143	0.165
HpCDDs	0.209	0.077	1.294	0.086	0.023	0.071	0.418	0.051	0.101	0.159	0.022	0.234	0.357
OCDD	0.338	0.092	1.325	0.105	0.046	0.117	0.613	0.076	0.157	0.288	0.042	0.277	0.529
TCDFs	0.243	0.032	1.271	0.039	0.011	0.022	0.129	0.067	0.207	0.134	0.020	0.060	0.040
PeCDFs	0.127	0.012	0.664	0.024	<0.003	<0.002	0.051	0.025	0.096	0.063	0.006	0.058	0.043
HxCDFs	0.107	0.010	0.200	0.028	<0.004	0.010	0.096	0.050	0.078	0.084	0.025	0.084	0.091
HpCDFs	0.125	0.010	0.083	0.013	<0.004	<0.004	0.051	0.032	0.038	0.055	0.022	0.051	0.044
OCDF	0.053	<0.024	0.030	0.025	0.007	0.006	0.038	0.024	0.023	0.033	0.026	0.026	0.018
<b>Total</b>													
$\Sigma$ PCDDs	0.751	0.178	3.523	0.213	0.074	0.209	1.251	0.161	0.363	0.554	0.088	0.724	1.116
$\Sigma$ PCDFs	0.655	0.064	2.249	0.130	0.018	0.038	0.365	0.197	0.443	0.369	0.099	0.280	0.237
$\Sigma$ PCDD/Fs	1.406	0.242	5.771	0.343	0.092	0.248	1.616	0.358	0.806	0.923	0.187	1.004	1.353
$\Sigma$ TEQ (PCDD/Fs)	0.029	0.016	0.133	0.020	0.015	0.013	0.028	0.015	0.022	0.022	0.014	0.027	0.022

Table A9. Atmospheric concentrations of PCDD/Fs (pg m<sup>-3</sup>) at NAPS rural sites in 1997 (continued)

Station Name	Simcoe													St. Andrews							
Sampling Period	1	2	3	4	5	6	7	8	9	10	11	12	13	1	2	3	4	5	6	7	8
Sampling Date	1/22/97	2/15/97	3/11/97	4/16/97	5/10/97	6/3/97	8/2/97	8/26/97	9/19/97	10/13/97	11/6/97	11/30/97	12/24/97	1/3/97	2/15/97	3/11/97	5/10/97	6/3/97	7/9/97	8/26/97	12/24/97
Sampling Volume (m3)	963	990	1041	1029	983	983	940	1011	1020	1073	1102	1100	1115	1009	993	1018	1013	1004	941	906	1083
<b>PCDD/F Congeners</b>																					
2,3,7,8-TCDD	<0.002	<0.004	<0.003	<0.002	<0.003	<0.003	<0.003	<0.004	<0.002	<0.002	<0.003	<0.004	<0.002	<0.003	<0.004	<0.004	<0.004	<0.008	<0.021	<0.002	<0.002
1,2,3,7,8-PeCDD	<0.004	<0.004	<0.006	0.010	<0.004	<0.004	0.005	<0.006	0.007	<0.006	0.011	0.008	0.012	<0.004	<0.006	<0.004	0.004	<0.010	<0.013	<0.003	0.007
1,2,3,4,7,8-HxCDD	<0.006	0.006	<0.006	0.009	<0.003	<0.004	<0.004	<0.004	<0.006	0.011	0.016	0.012	0.013	<0.006	<0.008	<0.004	0.004	<0.010	<0.013	<0.004	<0.006
1,2,3,6,7,8-HxCDD	<0.006	0.013	<0.006	0.015	<0.003	0.006	<0.004	<0.004	0.014	0.015	0.024	0.017	0.020	<0.006	<0.008	<0.004	0.006	<0.010	<0.013	<0.004	<0.006
1,2,3,7,8,9-HxCDD	<0.006	0.011	<0.006	0.033	<0.003	0.009	0.009	<0.004	0.020	0.029	0.042	0.034	0.046	<0.006	<0.008	<0.004	0.006	<0.010	<0.013	<0.004	<0.006
1,2,3,4,6,7,8-HpCDD	0.106	0.181	0.055	0.234	0.047	0.063	0.071	0.063	0.111	0.167	0.216	0.173	0.189	0.038	<0.012	0.015	0.058	0.008	0.014	0.008	0.025
OCDD	0.337	0.515	0.136	0.816	0.109	0.162	0.298	0.203	0.295	0.536	0.531	0.398	0.409	0.128	<0.016	0.042	0.192	0.039	0.093	0.031	0.115
2,3,7,8-TCDF	0.030	0.021	0.011	0.025	0.007	0.014	0.014	0.003	0.036	0.035	0.050	0.034	0.039	0.024	<0.004	0.004	0.010	<0.008	<0.009	0.011	0.008
1,2,3,7,8-PeCDF	0.006	0.004	0.003	0.006	<0.002	<0.003	<0.002	<0.004	0.008	0.007	0.013	0.006	0.011	0.009	<0.004	0.002	0.002	<0.004	<0.004	0.002	0.003
2,3,4,7,8-PeCDF	0.009	0.008	0.004	0.011	<0.002	0.004	0.005	<0.004	0.015	0.014	0.025	0.016	0.017	0.017	<0.004	0.002	0.004	<0.004	<0.004	0.003	0.003
1,2,3,4,7,8-HxCDF	0.032	0.015	0.017	0.023	0.006	0.008	0.009	0.009	0.038	0.033	0.073	0.032	0.046	0.034	<0.008	0.004	0.007	<0.008	<0.006	0.004	0.008
1,2,3,6,7,8-HxCDF	0.008	0.008	0.005	0.012	<0.002	0.003	0.005	<0.004	0.014	0.015	0.028	0.014	0.017	0.019	<0.008	0.003	0.003	<0.008	<0.006	0.002	0.003
2,3,4,6,7,8-HxCDF	0.016	0.010	0.007	0.018	0.003	0.005	0.006	0.005	0.022	0.020	0.039	0.021	0.031	0.018	<0.008	0.003	0.004	<0.008	<0.006	0.002	0.005
1,2,3,7,8,9-HxCDF	<0.004	<0.004	<0.004	0.003	<0.002	<0.003	<0.004	<0.004	<0.004	<0.004	<0.005	<0.004	<0.005	<0.004	<0.008	0.003	<0.003	<0.008	<0.006	<0.002	<0.003
1,2,3,4,6,7,8-HpCDF	0.062	0.042	0.021	0.060	0.012	0.017	0.025	0.034	0.027	0.059	0.132	0.055	0.073	0.063	<0.012	0.007	0.011	<0.008	<0.009	0.007	0.013
1,2,3,4,7,8,9-HpCDF	0.012	<0.008	<0.008	0.011	<0.003	<0.004	0.004	0.006	0.028	0.010	0.017	0.008	0.017	0.013	<0.012	<0.003	<0.004	<0.008	<0.009	<0.004	<0.005
OCDF	0.064	0.050	<0.015	0.053	0.010	0.015	0.023	0.029	0.039	0.045	0.108	0.038	0.050	0.047	<0.016	0.013	0.005	<0.008	0.037	<0.006	0.014
<b>PCDD/F Homologues</b>																					
TCDDs	0.027	0.058	0.009	0.032	0.009	<0.003	<0.003	<0.004	0.027	0.020	0.045	0.033	0.037	0.019	<0.004	<0.004	<0.004	<0.008	<0.021	0.003	0.004
PeCDDs	0.017	0.013	<0.006	0.046	<0.004	0.037	0.042	0.029	0.103	0.066	0.136	0.089	0.099	0.012	<0.006	<0.004	0.009	<0.010	0.037	<0.003	0.007
HxCDDs	0.108	0.103	0.053	0.226	0.028	0.052	0.045	0.022	0.171	0.228	0.322	0.244	0.286	0.033	<0.008	<0.004	0.058	<0.010	<0.013	0.013	0.024
HpCDDs	0.239	0.338	0.109	0.558	0.096	0.138	0.150	0.130	0.243	0.368	0.477	0.373	0.401	0.097	<0.012	0.025	0.139	0.012	0.024	0.018	0.055
OCDD	0.337	0.515	0.136	0.816	0.109	0.162	0.298	0.203	0.295	0.536	0.531	0.398	0.409	0.128	<0.016	0.042	0.192	0.039	0.093	0.031	0.115
TCDFs	0.181	0.103	0.070	0.179	0.037	0.100	0.160	0.006	0.192	0.226	0.281	0.177	0.187	0.175	<0.004	0.009	0.047	<0.008	<0.009	0.074	0.050
PeCDFs	0.099	0.018	0.030	0.121	0.019	0.040	0.083	0.006	0.137	0.141	0.224	0.127	0.166	0.171	<0.004	0.006	0.016	0.006	<0.004	0.019	0.030
HxCDFs	0.079	0.063	0.047	0.115	0.021	0.039	0.063	0.027	0.149	0.122	0.267	0.122	0.149	0.149	<0.008	0.017	0.023	<0.008	<0.006	0.011	0.033
HpCDFs	0.105	0.052	0.021	0.095	0.017	0.024	0.049	0.060	0.062	0.094	0.204	0.082	0.125	0.107	<0.012	0.010	0.011	<0.008	<0.009	0.007	0.025
OCDF	0.064	0.050	<0.015	0.053	0.010	0.015	0.023	0.029	0.039	0.045	0.108	0.038	0.050	0.047	<0.016	0.013	0.005	<0.008	0.037	<0.006	0.014
<b>Total</b>																					
∑ PCDDs	0.729	1.028	0.307	1.678	0.242	0.389	0.535	0.383	0.839	1.219	1.510	1.136	1.231	0.288	0.000	0.067	0.399	0.051	0.154	0.065	0.205
∑ PCDFs	0.529	0.284	0.168	0.563	0.103	0.218	0.377	0.126	0.579	0.629	1.083	0.546	0.676	0.648	0.000	0.056	0.102	0.006	0.037	0.110	0.153
∑ PCDD/Fs	1.258	1.312	0.475	2.240	0.345	0.607	0.912	0.509	1.418	1.848	2.593	1.682	1.907	0.936	0.000	0.123	0.501	0.057	0.191	0.175	0.358
∑ TEQ (PCDD/Fs)	0.022	0.022	0.017	0.033	0.012	0.014	0.016	0.016	0.031	0.031	0.053	0.036	0.044	0.025	0.018	0.012	0.014	0.026	0.043	0.009	0.015

Table A10. Atmospheric concentrations of PCDD/Fs ( $\mu\text{g m}^{-3}$ ) at NAPS rural sites in 1998

Station Name	Kejimikujik												Egbert					
	1	2	3	4	5	6	7	8	9	10	11	12	1	2	3	4	5	6
Sampling Period	2/10/98	3/18/98	4/11/98	5/5/98	7/4/98	7/28/98	8/21/98	9/14/98	10/8/98	11/1/98	11/25/98	12/19/98	8/21/98	9/14/98	10/8/98	11/1/98	11/25/98	12/19/98
Sampling Volume (m3)	751	773	773	755	728	730	771	758	721	760	745	757	802	920	836	1124	917	944
<b>PCDD/F Congeners</b>																		
2,3,7,8-TCDD	<0.005	<0.003	<0.005	<0.003	<0.005	<0.005	<0.005	<0.005	<0.008	<0.005	<0.005	<0.008	<0.005	<0.007	<0.005	<0.004	<0.002	<0.002
1,2,3,7,8-PeCDD	<0.011	<0.005	<0.013	<0.005	<0.011	0.007	<0.008	<0.011	<0.008	<0.008	<0.008	<0.016	<0.007	<0.007	0.007	<0.005	0.003	0.003
1,2,3,4,7,8-HxCDD	<0.008	<0.005	<0.012	<0.005	<0.014	<0.003	<0.010	<0.011	<0.011	<0.011	<0.008	<0.016	<0.007	0.005	0.011	<0.005	0.002	0.003
1,2,3,6,7,8-HxCDD	<0.008	<0.005	<0.012	<0.005	<0.014	0.003	<0.010	<0.011	<0.011	<0.011	<0.008	<0.016	<0.007	0.009	0.011	<0.005	0.005	0.008
1,2,3,7,8,9-HxCDD	<0.008	<0.005	<0.012	<0.005	<0.014	<0.003	<0.010	<0.011	<0.011	<0.011	<0.008	<0.016	<0.007	0.007	0.018	<0.005	0.014	0.015
1,2,3,4,6,7,8-HpCDD	0.027	0.022	0.026	0.008	0.011	0.011	<0.008	<0.011	<0.011	0.009	<0.005	0.028	0.072	0.093	0.081	0.065	0.065	0.084
OCDD	0.089	0.070	0.097	0.016	0.060	0.027	0.059	0.030	0.035	0.033	0.036	0.114	0.263	0.243	0.266	0.215	0.178	0.259
2,3,7,8-TCDF	0.007	0.005	0.009	0.004	<0.005	0.004	<0.005	<0.003	<0.006	<0.005	<0.005	<0.005	0.012	0.016	0.009	0.021	0.011	0.006
1,2,3,7,8-PeCDF	0.007	<0.004	<0.008	<0.003	<0.005	<0.004	<0.005	<0.004	<0.006	<0.005	<0.003	<0.007	<0.002	<0.004	0.007	<0.004	<0.002	<0.002
2,3,4,7,8-PeCDF	<0.005	<0.004	<0.008	<0.003	<0.005	<0.004	<0.005	<0.004	<0.006	<0.005	<0.003	<0.007	<0.002	0.007	0.007	<0.004	0.004	0.003
1,2,3,4,7,8-HxCDF	0.008	0.006	0.007	<0.003	<0.007	<0.004	<0.008	<0.008	<0.006	<0.008	<0.005	<0.011	0.006	0.014	0.011	0.006	0.011	0.006
1,2,3,6,7,8-HxCDF	0.007	0.003	0.005	<0.003	<0.007	<0.004	<0.008	<0.008	<0.006	<0.008	<0.005	<0.011	<0.006	0.007	0.010	0.003	0.004	0.003
2,3,4,6,7,8-HxCDF	0.008	0.005	<0.005	<0.003	0.007	<0.004	<0.008	<0.008	<0.006	<0.008	<0.005	<0.011	<0.006	0.007	0.012	0.004	0.006	0.003
1,2,3,7,8,9-HxCDF	0.011	<0.003	<0.005	<0.003	0.007	<0.004	<0.008	<0.008	<0.006	<0.008	<0.005	<0.011	<0.006	<0.004	0.009	<0.003	<0.002	<0.002
1,2,3,4,6,7,8-HpCDF	0.022	0.014	0.017	0.006	<0.011	0.009	<0.010	<0.008	<0.008	<0.005	<0.008	<0.013	0.015	0.030	0.024	0.013	0.024	0.013
1,2,3,4,7,8,9-HpCDF	0.015	0.013	<0.016	<0.005	<0.011	<0.004	<0.010	<0.008	<0.008	<0.005	<0.008	<0.013	<0.010	<0.009	0.018	<0.004	0.004	<0.004
OCDF	0.054	0.021	<0.016	<0.011	0.023	<0.007	<0.010	<0.008	<0.011	<0.008	<0.008	<0.013	0.016	0.020	0.050	0.015	0.037	0.015
<b>PCDD/F Homologues</b>																		
TCDDs	<0.005	<0.003	<0.005	<0.003	<0.005	<0.005	<0.005	<0.005	<0.008	<0.005	<0.005	<0.008	<0.005	0.027	<0.005	0.022	0.014	0.010
PeCDDs	<0.011	<0.005	<0.013	<0.005	<0.011	0.007	<0.008	<0.011	<0.008	<0.008	<0.008	<0.016	<0.007	0.074	0.015	0.008	0.024	0.013
HxCDDs	0.012	0.011	0.012	<0.005	<0.014	0.008	<0.010	<0.011	<0.011	<0.011	<0.008	<0.016	0.019	0.114	0.105	0.037	0.079	0.096
HpCDDs	0.044	0.045	0.046	0.008	0.011	0.021	<0.008	<0.011	<0.011	0.009	<0.005	0.076	0.137	0.219	0.159	0.137	0.137	0.189
OCDD	0.089	0.070	0.097	0.016	0.060	0.027	0.059	0.030	0.035	0.033	0.036	0.114	0.263	0.243	0.266	0.215	0.178	0.259
TCDFs	0.007	0.008	0.009	0.010	<0.005	0.011	<0.005	<0.003	<0.006	<0.005	<0.005	<0.005	0.050	0.110	0.015	0.399	0.073	0.037
PeCDFs	0.007	0.005	<0.008	0.006	<0.005	0.021	<0.005	<0.004	<0.006	<0.005	<0.003	<0.007	0.029	0.062	0.028	0.047	0.047	0.011
HxCDFs	0.026	0.021	0.012	0.012	0.013	0.032	<0.008	<0.008	<0.006	<0.008	<0.005	<0.011	0.021	0.068	0.056	0.025	0.045	0.019
HpCDFs	0.038	0.026	0.017	0.006	<0.011	0.015	<0.010	<0.008	<0.008	<0.005	<0.008	<0.013	0.015	0.043	0.042	0.022	0.042	0.022
OCDF	0.054	0.021	<0.016	<0.011	0.023	<0.007	<0.010	<0.008	<0.011	<0.008	<0.008	<0.013	0.016	0.020	0.050	0.015	0.037	0.015
<b>Total</b>																		
∑ PCDDs	0.145	0.126	0.155	0.024	0.071	0.064	0.059	0.030	0.035	0.042	0.036	0.190	0.419	0.676	0.545	0.419	0.432	0.567
∑ PCDFs	0.131	0.081	0.038	0.033	0.036	0.079	0.000	0.000	0.000	0.000	0.000	0.000	0.132	0.303	0.190	0.508	0.244	0.104
∑ PCDD/Fs	0.276	0.207	0.193	0.057	0.107	0.143	0.059	0.030	0.035	0.042	0.036	0.190	0.551	0.979	0.735	0.927	0.676	0.671
∑ TEQ (PCDD/Fs)	0.025	0.014	0.028	0.012	0.026	0.016	0.022	0.024	0.025	0.022	0.019	0.037	0.019	0.025	0.025	0.016	0.013	0.012

Table A10. Atmospheric concentrations of PCDD/Fs ( $\text{pg m}^{-3}$ ) at NAPS rural sites in 1998 (continued)

Station Name	Point Petre												
Sampling Period	1	2	3	4	5	6	7	8	9	10	11	12	13
Sampling Date	1/17/98	2/10/98	3/6/98	3/30/98	4/23/98	5/17/98	6/10/98	7/28/98	8/21/98	9/14/98	10/8/98	11/25/98	12/19/98
Sampling Volume (m3)	954	930	987	937	960	913	884	896	849	953	928	1119	881
<b>PCDD/F Congeners</b>													
2,3,7,8-TCDD	<0.002	<0.004	<0.004	<0.006	<0.004	<0.002	<0.002	<0.003	<0.002	<0.002	<0.002	<0.002	<0.002
1,2,3,7,8-PeCDD	0.006	<0.006	<0.004	<0.006	0.011	<0.007	<0.007	<0.003	<0.008	<0.004	<0.003	0.006	<0.005
1,2,3,4,7,8-HxCDD	<0.006	0.009	<0.004	<0.006	0.020	0.005	<0.007	<0.003	<0.007	<0.004	<0.004	<0.005	0.002
1,2,3,6,7,8-HxCDD	0.008	0.012	<0.004	0.012	0.027	0.011	<0.007	<0.003	<0.007	<0.004	<0.004	0.007	<0.002
1,2,3,7,8,9-HxCDD	0.018	0.019	<0.004	0.020	0.035	0.014	<0.007	<0.003	<0.007	<0.004	<0.004	0.009	<0.002
1,2,3,4,6,7,8-HpCDD	0.102	0.122	0.036	0.112	0.257	0.114	0.049	0.015	0.019	0.053	<0.004	0.072	0.093
OCDD	0.313	0.328	0.064	0.243	0.560	0.344	0.222	0.083	0.074	0.217	0.131	0.203	0.291
2,3,7,8-TCDF	0.016	0.025	0.014	0.029	0.026	0.021	0.007	0.006	0.006	0.007	0.003	0.012	0.012
1,2,3,7,8-PeCDF	0.005	0.006	<0.004	<0.005	<0.006	0.004	<0.005	<0.003	<0.006	<0.004	<0.002	<0.003	0.002
2,3,4,7,8-PeCDF	0.007	0.013	<0.004	0.012	0.013	0.007	<0.005	<0.003	<0.006	<0.004	<0.002	0.004	<0.002
1,2,3,4,7,8-HxCDF	0.015	0.026	0.010	0.023	0.028	0.020	0.005	<0.003	<0.007	<0.004	<0.002	0.012	0.015
1,2,3,6,7,8-HxCDF	0.007	0.011	0.005	0.009	0.014	0.008	0.003	<0.003	<0.007	<0.004	<0.002	0.004	<0.002
2,3,4,6,7,8-HxCDF	0.009	0.016	<0.005	0.012	0.021	0.013	0.002	<0.003	<0.007	<0.004	<0.002	0.003	<0.002
1,2,3,7,8,9-HxCDF	<0.002	<0.004	<0.005	<0.006	<0.006	<0.005	<0.003	<0.003	<0.007	<0.004	<0.002	<0.002	<0.002
1,2,3,4,6,7,8-HpCDF	0.028	0.050	0.017	0.040	0.046	0.031	0.016	<0.006	0.015	0.018	0.004	0.023	0.030
1,2,3,4,7,8,9-HpCDF	<0.004	<0.006	<0.004	<0.009	0.014	<0.003	<0.005	<0.006	<0.006	<0.006	<0.002	<0.003	<0.005
OCDF	0.024	0.035	0.009	0.013	0.045	0.021	0.014	<0.004	0.017	0.016	0.008	0.018	0.030
<b>PCDD/F Homologues</b>													
TCDDs	0.010	0.019	<0.004	0.017	0.013	0.009	<0.002	<0.003	<0.002	0.005	0.021	0.020	0.005
PeCDDs	0.039	0.028	0.010	0.043	0.048	0.023	<0.007	<0.003	<0.008	<0.004	0.009	0.054	0.010
HxCDDs	0.122	0.171	0.057	0.140	0.293	0.112	0.028	<0.003	0.008	0.025	0.018	0.119	0.052
HpCDDs	0.227	0.265	0.074	0.197	0.512	0.239	0.107	0.035	0.037	0.113	0.074	0.160	0.207
OCDD	0.313	0.328	0.064	0.243	0.560	0.344	0.222	0.083	0.074	0.217	0.131	0.203	0.291
TCDFs	0.056	0.119	0.030	0.133	0.080	0.082	0.039	0.034	0.019	0.029	0.006	0.061	0.048
PeCDFs	0.047	0.078	0.013	0.079	0.055	0.068	0.011	0.010	0.010	0.016	0.005	0.018	0.024
HxCDFs	0.068	0.104	0.026	0.084	0.104	0.060	0.031	0.012	0.010	0.025	0.004	0.039	0.037
HpCDFs	0.050	0.073	0.017	0.054	0.083	0.043	0.016	<0.006	0.037	0.018	0.004	0.023	0.049
OCDF	0.024	0.035	0.009	0.013	0.045	0.021	0.014	<0.004	0.017	0.016	0.008	0.018	0.030
<b>Total</b>													
$\Sigma$ PCDDs	0.711	0.810	0.205	0.640	1.427	0.727	0.356	0.118	0.119	0.360	0.253	0.556	0.564
$\Sigma$ PCDFs	0.244	0.410	0.094	0.364	0.368	0.273	0.112	0.055	0.093	0.103	0.027	0.158	0.187
$\Sigma$ PCDD/Fs	0.955	1.220	0.299	1.004	1.795	1.000	0.468	0.173	0.212	0.463	0.280	0.714	0.751
$\Sigma$ TEQ (PCDD/Fs)	0.020	0.028	0.015	0.029	0.040	0.023	0.016	0.010	0.018	0.012	0.008	0.016	0.013

Table A10. Atmospheric concentrations of PCDD/Fs ( $\text{pg m}^{-3}$ ) at NAPS rural sites in 1998 (continued)

Station Name	Simcoe													St. Andrews												
	1	2	3	4	5	6	7	8	9	10	11	12	13	1	2	3	4	5	6	7	8	9	10	11	12	
Sampling Period																										
Sampling Date	1/17/98	2/10/98	3/18/98	4/11/98	5/5/98	6/10/98	7/28/98	8/21/98	9/14/98	10/8/98	11/1/98	11/25/98	12/19/98	1/17/98	2/10/98	3/18/98	4/11/98	5/5/98	6/10/98	7/28/98	8/21/98	9/14/98	10/8/98	11/25/98	12/19/98	
Sampling Volume (m3)	1138	1071	1073	1114	1016	1057	975	849	883	1033	1220	1055	1007	1066	1077	1031	989	981	982	961	994	1016	977	942	1013	
<b>PCDD/F Congeners</b>																										
2,3,7,8-TCDD	<0.004	0.004	<0.002	<0.002	<0.002	<0.002	<0.004	<0.004	<0.005	<0.004	<0.005	<0.002	<0.002	<0.002	<0.002	<0.002	<0.004	<0.004	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	
1,2,3,7,8-PeCDD	0.025	0.053	0.006	0.013	0.004	<0.006	0.006	<0.005	0.006	<0.004	<0.003	0.009	0.006	<0.004	<0.003	0.016	0.009	0.007	0.013	<0.003	<0.002	<0.002	<0.002	0.010	<0.003	<0.004
1,2,3,4,7,8-HxCDD	0.025	0.078	0.007	0.011	<0.004	0.003	<0.004	<0.009	<0.005	<0.004	<0.005	0.009	0.008	<0.006	<0.006	0.019	0.004	<0.004	0.013	<0.005	<0.004	<0.002	0.009	<0.003	<0.004	
1,2,3,6,7,8-HxCDD	0.045	0.124	0.012	0.019	0.004	0.003	0.006	<0.009	<0.005	0.004	0.008	0.018	0.015	<0.006	<0.006	0.026	0.007	<0.004	0.013	<0.005	<0.004	<0.002	0.010	<0.003	<0.004	
1,2,3,7,8,9-HxCDD	0.082	0.244	0.025	0.037	0.008	0.006	0.010	<0.009	<0.005	0.007	<0.005	0.024	0.023	<0.006	0.004	0.032	0.009	<0.004	0.042	<0.005	<0.004	<0.002	0.018	<0.003	<0.004	
1,2,3,4,6,7,8-HpCDD	0.500	1.852	0.152	0.229	0.046	0.048	0.070	0.037	0.053	0.067	0.094	0.182	0.188	0.009	0.021	0.066	0.020	0.013	0.150	0.007	0.008	0.015	0.048	0.049	0.068	
OCDD	1.323	4.592	0.543	0.980	0.174	0.156	0.229	0.155	0.213	0.191	0.267	0.463	0.545	0.023	0.055	0.171	0.108	0.038	0.268	0.047	0.030	0.069	0.135	0.138	0.413	
2,3,7,8-TCDF	0.064	0.099	0.017	0.009	0.015	0.011	0.025	0.016	0.022	0.009	0.021	0.019	0.012	0.004	0.008	0.010	0.005	0.009	0.005	<0.002	0.002	0.012	0.107	0.003	0.011	
1,2,3,7,8-PeCDF	0.012	0.024	0.004	0.002	0.004	0.003	0.004	<0.002	0.004	<0.002	0.005	0.004	<0.004	<0.002	<0.004	0.012	0.004	<0.004	<0.002	<0.002	<0.002	0.004	0.035	<0.002	<0.002	
2,3,4,7,8-PeCDF	0.021	0.038	0.006	0.003	0.006	0.005	0.010	<0.002	0.009	0.003	0.009	0.008	0.006	<0.002	0.004	0.013	0.005	0.004	<0.002	<0.002	<0.002	0.004	0.052	<0.002	0.005	
1,2,3,4,7,8-HxCDF	0.048	0.120	0.018	0.007	0.013	0.009	0.022	0.011	0.013	0.007	0.025	0.019	0.012	<0.003	0.007	0.026	0.006	0.006	0.003	<0.002	<0.002	0.009	0.165	0.003	0.012	
1,2,3,6,7,8-HxCDF	0.019	0.049	0.007	0.003	0.006	0.006	0.009	0.006	0.005	0.003	0.011	0.007	0.004	<0.003	0.004	0.021	0.003	0.005	0.002	<0.002	<0.002	0.004	0.072	<0.002	0.005	
2,3,4,6,7,8-HxCDF	0.030	0.056	0.010	0.004	0.006	0.006	0.013	0.007	0.007	0.005	0.016	0.012	0.005	<0.003	0.004	0.030	0.004	0.005	<0.002	<0.002	<0.002	0.003	0.052	<0.002	0.006	
1,2,3,7,8,9-HxCDF	0.005	0.007	<0.003	0.003	<0.002	<0.004	<0.004	<0.005	<0.003	<0.002	<0.002	<0.002	<0.004	<0.003	<0.004	0.024	0.005	0.003	<0.002	<0.002	<0.002	<0.002	0.005	<0.002	<0.002	
1,2,3,4,6,7,8-HpCDF	0.081	0.222	0.034	0.019	0.020	0.018	0.036	0.026	0.029	0.017	0.057	0.037	0.031	<0.006	0.012	0.043	0.008	0.007	0.008	0.003	0.004	0.010	0.232	0.005	0.021	
1,2,3,4,7,8,9-HpCDF	0.010	0.041	0.005	<0.003	0.004	0.007	<0.006	<0.009	<0.005	<0.004	0.009	0.005	0.005	<0.006	0.003	0.026	0.005	<0.006	<0.005	<0.002	<0.003	0.002	0.035	<0.002	<0.002	
OCDF	0.048	0.165	0.034	0.020	0.017	0.022	0.022	0.032	0.027	0.017	0.056	0.032	0.034	<0.011	0.012	0.051	0.017	0.008	0.015	<0.003	0.007	0.006	0.093	0.006	0.016	
<b>PCDD/F Homologues</b>																										
TCDDs	0.176	0.182	0.023	0.016	0.012	0.011	0.005	0.025	0.021	0.016	0.006	0.015	0.014	<0.002	<0.002	<0.002	<0.004	<0.004	0.003	<0.002	<0.002	0.011	0.052	<0.002	0.002	
PeCDDs	0.352	0.475	0.031	0.079	0.013	<0.006	0.035	0.022	0.022	0.005	0.017	0.059	0.041	<0.004	<0.003	<0.006	0.009	0.007	0.044	<0.003	<0.002	0.007	0.068	<0.003	0.009	
HxCDDs	0.730	2.034	0.181	0.305	0.054	0.055	0.100	0.014	0.043	0.070	0.095	0.214	0.199	<0.006	0.018	0.133	0.028	0.009	0.309	<0.005	<0.004	0.007	0.117	0.025	0.032	
HpCDDs	1.137	4.144	0.355	0.541	0.106	0.102	0.146	0.092	0.136	0.153	0.205	0.388	0.426	0.021	0.043	0.131	0.041	0.024	0.439	0.007	0.014	0.053	0.093	0.092	0.118	
OCDD	1.323	4.592	0.543	0.980	0.174	0.156	0.229	0.155	0.213	0.191	0.267	0.463	0.545	0.023	0.055	0.171	0.108	0.038	0.268	0.047	0.030	0.069	0.135	0.138	0.413	
TCDFs	0.363	0.658	0.124	0.060	0.139	0.086	0.124	0.114	0.183	0.052	0.183	0.126	0.088	0.004	0.027	0.021	0.007	0.022	0.022	0.012	0.008	0.083	0.698	0.003	0.057	
PeCDFs	0.244	0.476	0.069	0.033	0.060	0.035	0.091	0.054	0.096	0.016	0.145	0.093	0.035	0.003	0.019	0.041	0.012	0.004	<0.002	<0.002	0.006	0.046	0.623	0.005	0.046	
HxCDFs	0.205	0.582	0.077	0.046	0.058	0.038	0.083	0.056	0.069	0.036	0.144	0.095	0.048	<0.003	0.027	0.126	0.018	0.018	0.015	0.003	0.004	0.035	0.673	0.003	0.040	
HpCDFs	0.137	0.411	0.063	0.040	0.037	0.039	0.050	0.045	0.044	0.026	0.114	0.064	0.052	<0.006	0.022	0.083	0.016	0.007	0.014	0.003	0.004	0.016	0.379	0.008	0.029	
OCDF	0.048	0.165	0.034	0.020	0.017	0.022	0.022	0.032	0.027	0.017	0.056	0.032	0.034	<0.011	0.012	0.051	0.017	0.008	0.015	<0.003	0.007	0.006	0.093	0.006	0.016	
<b>Total</b>																										
∑ PCDDs	3.718	11.426	1.134	1.920	0.358	0.324	0.516	0.309	0.436	0.435	0.590	1.139	1.224	0.044	0.116	0.435	0.186	0.079	1.062	0.054	0.044	0.146	0.465	0.254	0.574	
∑ PCDFs	0.997	2.293	0.367	0.199	0.312	0.219	0.371	0.300	0.419	0.147	0.642	0.409	0.258	0.006	0.107	0.323	0.070	0.059	0.066	0.018	0.029	0.186	2.466	0.025	0.188	
∑ PCDD/Fs	4.715	13.719	1.501	2.119	0.670	0.543	0.887	0.609	0.855	0.582	1.232	1.548	1.482	0.050	0.223	0.758	0.256	0.138	1.128	0.072	0.073	0.332	2.931	0.279	0.762	
∑ TEQ (PCDD/Fs)	0.074	0.169	0.022	0.028	0.014	0.015	0.024	0.018	0.021	0.014	0.022	0.027	0.021	0.010	0.011	0.042	0.019	0.017	0.026	0.008	0.007	0.009	0.076	0.008	0.013	



Table A11. Atmospheric concentrations of PCDD/Fs (pg m<sup>-3</sup>) at NAPS rural sites in 1999

Station Name	Keijmkujik												Egbert												
	1	2	3	4	5	6	7	8	9	10	11	12	1	2	3	4	5	6	7	8	9	10	11	12	
Sampling Period	1	2	3	4	5	6	7	8	9	10	11	12	1	2	3	4	5	6	7	8	9	10	11	12	
Sampling Date	2/5/99	2/17/99	3/1/99	3/25/99	4/18/99	5/12/99	6/5/99	6/29/99	8/17/99	9/9/99	10/3/99	11/20/99	12/14/99	1/12/99	3/1/99	3/25/99	4/18/99	5/12/99	6/5/99	6/29/99	8/16/99	9/9/99	10/3/99	11/20/99	12/14/99
Sampling Volume (m3)	745	758	707	760	745	747	761	710	704	700	792	769	746	1009	1376	1042	1028	962	925	930	815.5	871.4	924.7	984.1	869
<b>PCDD/F Congeners</b>																									
2,3,7,8-TCDD	<0.009	<0.006	<0.006	<0.003	<0.003	<0.003	<0.005	<0.006	<0.008	<0.003	<0.003	<0.003	<0.003	<0.004	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.005	<0.005	<0.002	<0.002	<0.005
1,2,3,7,8-PeCDD	<0.005	<0.004	<0.004	<0.003	<0.007	<0.003	<0.005	<0.006	<0.006	0.005	<0.003	<0.003	<0.003	0.010	<0.002	<0.002	<0.002	<0.003	<0.002	0.004	0.007	<0.007	<0.002	0.006	<0.007
1,2,3,4,7,8-HxCDD	<0.011	<0.004	<0.006	<0.006	<0.011	<0.005	<0.011	<0.007	<0.006	<0.006	<0.003	<0.003	<0.003	0.006	<0.003	<0.002	<0.004	<0.004	0.003	<0.006	<0.007	<0.018	<0.002	0.005	<0.009
1,2,3,6,7,8-HxCDD	<0.011	<0.004	<0.006	<0.006	<0.011	<0.005	<0.011	<0.007	<0.006	<0.006	<0.003	<0.003	<0.003	0.011	<0.003	<0.002	<0.004	<0.004	0.005	<0.006	<0.007	<0.018	<0.002	0.007	<0.009
1,2,3,7,8,9-HxCDD	<0.011	<0.004	<0.006	<0.006	<0.011	<0.005	<0.011	<0.007	<0.006	<0.006	<0.003	<0.003	<0.003	0.019	<0.003	<0.002	<0.004	<0.004	0.007	<0.006	<0.007	<0.018	<0.002	0.012	0.010
1,2,3,4,6,7,8-HpCDD	0.013	<0.009	<0.014	0.017	0.024	0.006	0.010	0.017	0.016	0.013	0.011	0.009	0.024	0.105	0.024	0.010	0.035	0.024	0.049	0.018	0.057	0.030	0.014	0.104	0.072
OCDD	0.055	0.016	0.038	0.060	0.062	0.039	0.046	0.047	0.052	0.042	0.049	0.047	0.061	0.277	0.079	0.028	0.087	0.072	0.159	0.052	0.241	0.111	0.048	0.300	0.222
2,3,7,8-TCDF	<0.005	<0.006	<0.006	<0.003	<0.003	<0.005	<0.004	<0.006	<0.003	<0.003	<0.003	<0.003	<0.003	0.019	0.004	0.004	0.005	0.004	0.013	0.006	0.018	0.030	0.002	0.015	0.008
1,2,3,7,8-PeCDF	<0.003	<0.004	<0.004	<0.003	<0.003	<0.003	<0.005	<0.003	<0.004	<0.003	<0.003	<0.003	<0.003	0.005	<0.002	<0.002	<0.002	<0.002	<0.004	<0.002	<0.005	<0.007	<0.002	0.004	<0.006
2,3,4,7,8-PeCDF	<0.003	<0.004	<0.004	<0.003	<0.003	<0.003	<0.005	<0.003	<0.004	<0.003	<0.003	<0.003	<0.003	0.008	<0.002	<0.002	<0.002	<0.002	0.004	<0.002	0.007	<0.007	<0.002	0.006	<0.006
1,2,3,4,7,8-HxCDF	<0.004	<0.004	<0.006	<0.006	0.006	<0.004	<0.005	<0.006	<0.003	<0.004	<0.003	<0.003	<0.003	0.014	0.003	<0.002	0.002	0.005	0.010	<0.006	0.013	0.011	<0.002	0.014	0.005
1,2,3,6,7,8-HxCDF	<0.004	<0.004	<0.006	<0.006	<0.003	<0.004	<0.005	<0.006	<0.003	<0.004	<0.003	<0.003	<0.003	0.006	0.002	<0.002	<0.002	<0.002	0.004	<0.006	0.008	<0.011	<0.002	0.008	<0.005
2,3,4,6,7,8-HxCDF	<0.004	<0.004	<0.006	<0.006	<0.003	<0.004	<0.005	<0.006	<0.003	<0.004	<0.003	<0.003	<0.003	0.007	0.002	<0.002	<0.002	<0.002	0.005	<0.006	0.008	<0.011	<0.002	0.006	0.005
1,2,3,7,8,9-HxCDF	<0.004	<0.004	<0.006	<0.006	<0.003	<0.004	<0.005	<0.006	<0.003	<0.004	<0.003	<0.003	<0.003	<0.002	<0.002	<0.002	<0.002	<0.002	<0.006	<0.007	<0.011	<0.002	<0.002	<0.005	<0.005
1,2,3,4,6,7,8-HpCDF	0.006	<0.010	<0.009	<0.011	0.015	<0.008	<0.005	0.010	0.010	0.007	0.005	0.008	0.003	0.023	0.008	0.005	0.003	0.009	0.026	0.010	0.025	0.027	0.004	0.033	0.017
1,2,3,4,7,8,9-HpCDF	<0.004	<0.010	<0.009	<0.011	<0.008	<0.008	<0.005	<0.007	<0.005	<0.005	0.006	<0.004	<0.003	0.005	<0.002	<0.004	<0.002	<0.004	0.003	<0.010	<0.018	<0.004	0.004	<0.006	<0.006
OCDF	<0.005	<0.012	<0.017	<0.016	0.018	<0.009	<0.008	0.023	0.015	0.004	0.007	<0.007	<0.004	0.023	0.007	<0.004	0.007	0.005	0.023	0.008	0.025	0.016	0.004	0.024	0.018
<b>PCDD/F Homologues</b>																									
TCDDs	<0.009	<0.006	<0.006	<0.003	<0.003	<0.003	<0.005	<0.006	<0.008	<0.003	<0.003	<0.003	<0.003	0.025	<0.002	<0.002	<0.002	<0.002	0.017	<0.002	0.020	<0.005	<0.002	0.014	0.006
PeCDDs	<0.005	<0.004	0.004	<0.003	<0.007	<0.003	<0.005	<0.006	<0.006	<0.005	<0.003	<0.003	<0.003	0.065	<0.002	<0.002	<0.002	<0.003	0.006	0.004	0.030	<0.007	<0.002	0.019	<0.007
HxCDDs	<0.011	<0.004	<0.006	<0.006	<0.011	<0.005	<0.011	<0.007	<0.006	0.006	<0.003	<0.003	0.003	0.153	0.015	<0.002	0.029	0.008	0.049	<0.006	0.033	<0.018	0.005	0.119	0.058
HpCDDs	0.025	<0.009	<0.014	0.017	0.024	<0.008	0.010	0.017	0.022	0.018	0.018	0.015	0.043	0.235	0.054	0.018	0.072	0.048	0.102	0.018	0.121	0.030	0.024	0.235	0.153
OCDD	0.055	0.016	0.038	0.060	0.062	0.039	0.046	0.047	0.052	0.042	0.049	0.047	0.061	0.277	0.079	0.028	0.087	0.072	0.159	0.052	0.241	0.111	0.048	0.300	0.222
TCDFs	<0.005	<0.006	<0.006	<0.003	<0.003	<0.005	<0.004	<0.006	0.003	0.003	<0.003	<0.003	<0.003	0.123	0.025	0.008	0.013	0.006	0.116	0.009	0.092	0.163	0.002	0.083	0.012
PeCDFs	<0.003	<0.004	<0.004	<0.003	0.008	<0.003	<0.005	0.024	0.007	0.007	<0.003	<0.003	<0.003	0.074	0.006	0.004	0.007	0.005	0.039	0.017	0.055	0.026	<0.002	0.056	0.009
HxCDFs	<0.004	<0.004	<0.006	<0.006	0.012	<0.004	0.007	0.029	0.025	0.030	0.006	0.008	<0.003	0.060	0.012	0.003	0.006	0.013	0.040	<0.006	0.052	0.031	<0.002	0.066	0.020
HpCDFs	<0.004	<0.01	<0.009	<0.011	0.015	<0.008	<0.005	0.010	0.016	0.013	0.011	0.011	0.003	0.038	0.010	0.005	0.004	0.009	0.012	0.030	0.025	<0.018	0.004	0.055	0.025
OCDF	<0.005	<0.012	<0.017	<0.016	0.018	<0.009	<0.008	0.023	0.015	0.004	0.007	<0.007	<0.004	0.023	0.007	<0.004	0.007	0.005	0.023	0.008	0.025	0.016	0.004	0.024	0.018
<b>Total</b>																									
∑ PCDDs	0.081	0.016	0.042	0.077	0.085	0.039	0.056	0.064	0.074	0.066	0.067	0.062	0.107	0.754	0.149	0.045	0.188	0.128	0.333	0.074	0.445	0.141	0.077	0.687	0.439
∑ PCDFs	0.000	0.000	0.000	0.000	0.052	0.000	0.007	0.086	0.066	0.057	0.024	0.019	0.003	0.319	0.060	0.020	0.037	0.038	0.231	0.064	0.249	0.236	0.010	0.284	0.084
∑ PCDD/Fs	0.081	0.016	0.042	0.077	0.137	0.039	0.063	0.150	0.140	0.123	0.091	0.081	0.110	1.073	0.209	0.065	0.225	0.166	0.564	0.138	0.694	0.377	0.087	0.971	0.523
∑ TEQ (PCDD/Fs)	0.021	0.015	0.016	0.012	0.017	0.011	0.018	0.018	0.019	0.013	0.010	0.010	0.010	0.026	0.007	0.007	0.008	0.009	0.011	0.012	0.023	0.028	0.006	0.018	0.021

Table A11. Atmospheric concentrations of PCDD/Fs (pg m<sup>-3</sup>) at NAPS rural sites in 1999 (continued)

Station Name	Point Petre												Simcoe												
	1	2	3	4	5	6	7	8	9	10	11	12	13	1	2	3	4	5	6	7	8	9	10	11	12
Sampling Period	1/12/99	2/5/99	3/1/99	3/25/99	4/18/99	5/12/99	6/11/99	6/29/99	8/16/99	9/9/99	10/3/99	11/20/99	12/14/99	1/12/99	3/1/99	3/25/99	4/18/99	5/12/99	6/5/99	6/29/99	8/16/99	9/9/99	10/3/99	11/20/99	12/14/99
Sampling Volume (m3)	998	948	841	941	824	918	794	864	856	833	895	843	923	1042	1054	1077	1038	1030	920	937	842	862	965	1029	935
<b>PCDD/F Congeners</b>																									
2,3,7,8-TCDD	<0.002	<0.002	<0.002	<0.002	<0.007	<0.007	<0.002	<0.005	<0.005	<0.004	<0.003	<0.002	<0.002	<0.002	<0.002	<0.002	<0.004	<0.002	<0.002	<0.004	<0.005	<0.003	<0.004	<0.004	<0.002
1,2,3,7,8-PeCDD	0.007	0.011	<0.002	<0.002	<0.002	<0.004	<0.005	<0.005	<0.005	<0.008	<0.004	<0.005	0.005	0.007	<0.002	<0.002	<0.006	0.004	0.015	<0.002	0.007	<0.005	0.007	<0.006	<0.003
1,2,3,4,7,8-HxCDD	0.006	0.014	<0.003	<0.004	<0.007	<0.005	<0.007	<0.007	<0.008	<0.006	<0.004	<0.005	<0.005	0.006	<0.004	<0.003	<0.007	<0.004	0.013	<0.006	<0.006	<0.009	0.007	<0.006	0.003
1,2,3,6,7,8-HxCDD	0.010	0.023	<0.003	<0.004	<0.007	<0.005	0.008	<0.007	<0.008	<0.006	<0.004	0.007	<0.005	0.010	<0.004	<0.003	<0.007	<0.004	0.023	<0.006	<0.006	<0.009	0.009	<0.006	0.006
1,2,3,7,8,9-HxCDD	0.014	0.033	0.008	<0.004	<0.007	<0.005	<0.007	<0.007	<0.008	<0.006	<0.004	0.006	<0.005	0.020	<0.004	<0.003	0.008	<0.004	0.043	<0.006	<0.006	<0.009	0.024	0.009	0.009
1,2,3,4,6,7,8-HpCDD	0.085	0.253	0.051	0.031	0.057	0.033	0.094	0.025	0.033	0.036	0.029	0.091	0.048	0.108	0.026	0.020	0.052	0.033	0.244	0.051	0.045	0.038	0.201	0.097	0.061
OCDD	0.256	0.570	0.174	0.077	0.141	0.079	0.363	0.100	0.157	0.139	0.066	0.274	0.173	0.344	0.085	0.063	0.147	0.093	0.579	0.144	0.260	0.119	0.569	0.278	0.145
2,3,7,8-TCDF	0.011	0.003	0.007	0.003	0.007	<0.006	0.007	0.003	0.007	0.010	0.004	0.014	0.005	0.018	0.006	0.006	0.012	0.031	0.014	0.013	0.007	0.010	0.005	0.017	0.008
1,2,3,7,8-PeCDF	0.002	<0.003	0.003	<0.002	<0.002	<0.003	<0.002	<0.002	<0.003	<0.003	<0.002	<0.002	<0.002	0.004	<0.002	<0.002	<0.002	0.005	0.006	<0.002	<0.003	<0.005	<0.004	0.004	<0.003
2,3,4,7,8-PeCDF	0.004	<0.003	<0.002	<0.002	<0.002	<0.003	<0.002	<0.002	<0.003	<0.003	<0.002	0.004	<0.002	0.007	<0.002	<0.002	<0.002	0.008	0.010	<0.002	<0.003	<0.005	<0.004	0.004	<0.003
1,2,3,4,7,8-HxCDF	0.010	<0.003	0.008	<0.002	<0.007	<0.005	0.005	0.006	0.005	0.006	<0.003	0.013	0.007	0.015	0.007	0.004	0.007	0.019	0.025	0.009	0.004	0.008	<0.006	0.013	0.009
1,2,3,6,7,8-HxCDF	0.004	<0.003	0.003	<0.002	<0.007	<0.005	<0.003	<0.002	<0.004	<0.004	<0.003	<0.005	<0.003	0.005	0.003	<0.002	<0.003	0.008	0.016	<0.003	<0.003	<0.006	<0.006	0.006	0.004
2,3,4,6,7,8-HxCDF	0.005	<0.003	0.003	<0.002	<0.007	<0.005	<0.003	0.002	<0.004	<0.004	<0.003	0.009	<0.003	0.008	0.002	<0.002	<0.003	0.011	0.014	<0.003	<0.003	<0.006	<0.006	0.005	0.006
1,2,3,7,8,9-HxCDF	<0.002	<0.003	<0.003	<0.002	<0.007	<0.005	<0.003	<0.002	<0.004	<0.004	<0.003	<0.005	<0.003	<0.002	<0.002	<0.002	<0.003	<0.002	<0.002	<0.003	<0.003	<0.006	<0.006	<0.004	<0.003
1,2,3,4,6,7,8-HpCDF	0.016	0.010	0.015	0.006	0.014	<0.011	0.016	0.013	0.012	0.014	0.006	0.032	0.017	<0.028	0.009	<0.004	0.017	0.025	0.064	0.018	0.010	0.022	0.011	0.025	0.015
1,2,3,4,7,8,9-HpCDF	<0.002	<0.006	<0.003	<0.005	<0.006	<0.011	<0.007	<0.003	<0.006	<0.003	<0.003	<0.002	<0.002	<0.004	<0.003	<0.004	<0.005	<0.004	0.013	<0.006	<0.004	<0.009	<0.008	<0.006	0.004
OCDF	0.017	0.011	0.024	<0.006	0.011	0.012	0.015	0.015	0.028	0.015	0.008	0.031	0.016	0.024	0.018	<0.004	0.013	0.015	0.057	0.017	0.015	0.013	0.016	0.026	0.023
<b>PCDD/F Homologues</b>																									
TCDDs	0.006	<0.002	<0.002	<0.002	<0.007	<0.007	<0.002	<0.005	<0.005	<0.004	0.003	0.009	0.004	0.018	0.004	<0.002	0.037	0.052	0.016	0.004	<0.005	<0.003	0.004	0.013	0.004
PeCDDs	0.038	0.049	<0.002	<0.002	0.005	<0.004	<0.005	<0.005	<0.005	<0.008	<0.004	<0.005	0.005	0.035	<0.002	<0.002	0.029	0.047	0.108	<0.002	0.007	<0.005	0.017	0.012	0.011
HxCDDs	0.095	0.238	0.031	0.036	0.021	0.011	0.049	0.011	0.023	0.016	0.018	0.082	0.021	0.123	0.017	0.016	0.051	0.066	0.457	0.036	0.047	0.025	0.204	0.089	0.056
HpCDDs	0.186	0.526	0.117	0.074	0.136	0.058	0.210	0.046	0.067	0.069	0.051	0.187	0.094	0.255	0.055	0.046	0.114	0.074	0.820	0.136	0.107	0.077	0.440	0.196	0.128
OCDD	0.256	0.570	0.174	0.077	0.141	0.079	0.363	0.100	0.157	0.139	0.066	0.274	0.173	0.344	0.085	0.063	0.147	0.093	0.579	0.144	0.260	0.119	0.569	0.278	0.145
TCDFs	0.063	0.006	0.021	0.020	0.030	<0.006	0.035	0.044	0.026	0.056	0.004	0.058	0.013	0.113	0.023	0.014	0.044	0.201	0.111	0.092	0.015	0.039	0.009	0.071	0.015
PeCDFs	0.046	<0.003	0.018	0.009	0.004	<0.003	0.020	0.012	0.010	0.014	0.003	0.030	0.010	0.065	0.009	0.004	0.017	0.099	0.144	0.049	0.010	0.020	<0.004	0.033	<0.003
HxCDFs	0.039	<0.003	0.027	0.003	0.014	<0.005	0.021	0.027	0.012	0.013	0.003	0.040	0.003	0.066	0.021	0.010	0.016	0.080	0.186	0.043	0.020	0.036	0.009	0.049	0.027
HpCDFs	0.031	0.022	0.018	0.006	0.014	<0.011	0.023	0.013	0.013	0.019	0.007	0.041	0.021	0.051	0.013	<0.004	0.026	0.034	0.127	0.029	0.010	0.022	0.019	0.032	0.027
OCDF	0.017	0.011	0.024	<0.006	0.011	0.012	0.015	0.015	0.028	0.015	0.008	0.031	0.016	0.024	0.018	<0.004	0.013	0.015	0.057	0.017	0.015	0.013	0.016	0.026	0.023
<b>Total</b>																									
∑ PCDDs	0.580	1.383	0.321	0.187	0.304	0.147	0.622	0.157	0.247	0.224	0.138	0.552	0.297	0.775	0.161	0.126	0.378	0.331	1.980	0.320	0.421	0.221	1.234	0.588	0.344
∑ PCDFs	0.196	0.038	0.108	0.039	0.072	0.012	0.114	0.112	0.089	0.117	0.025	0.200	0.063	0.318	0.083	0.027	0.116	0.429	0.625	0.230	0.070	0.130	0.053	0.211	0.092
∑ PCDD/Fs	0.776	1.421	0.429	0.226	0.376	0.159	0.736	0.269	0.336	0.341	0.163	0.752	0.360	1.093	0.244	0.153	0.494	0.760	2.605	0.550	0.491	0.351	1.287	0.799	0.436
∑ TEQ (PCDD/Fs)	0.018	0.025	0.009	0.007	0.016	0.017	0.013	0.015	0.016	0.018	0.011	0.016	0.012	0.021	0.008	0.007	0.016	0.018	0.039	0.012	0.017	0.017	0.022	0.019	0.012

Table A11. Atmospheric concentrations of PCDD/Fs ( $\text{pg m}^{-3}$ ) at NAPS rural sites in 1999 (continued)

Station Name	St. Andrews												
Sampling Period	1	2	3	4	5	6	7	8	9	10	11	12	13
Sampling Date	1/12/99	2/5/99	3/1/99	3/25/99	4/18/99	5/12/99	6/5/99	6/29/99	8/16/99	9/9/99	10/3/99	11/20/99	12/14/99
Sampling Volume (m3)	1064	1013	962	982	962	1002	976	926	895	853	961	990	965
<b>PCDD/F Congeners</b>													
2,3,7,8-TCDD	<0.004	<0.004	<0.004	<0.003	<0.002	<0.015	<0.004	<0.002	<0.009	<0.002	<0.002	<0.002	<0.002
1,2,3,7,8-PeCDD	<0.006	<0.004	<0.006	<0.002	<0.002	<0.009	<0.003	<0.002	<0.005	<0.005	<0.004	<0.002	<0.002
1,2,3,4,7,8-HxCDD	<0.008	<0.004	<0.005	<0.004	0.006	<0.008	<0.005	<0.004	<0.003	<0.005	<0.005	<0.004	<0.002
1,2,3,6,7,8-HxCDD	<0.008	<0.004	<0.005	<0.004	0.012	<0.008	<0.005	<0.004	<0.003	<0.005	<0.005	<0.004	<0.002
1,2,3,7,8,9-HxCDD	<0.008	<0.004	0.014	<0.004	0.019	<0.008	<0.005	<0.004	<0.003	<0.005	<0.005	<0.004	<0.002
1,2,3,4,6,7,8-HpCDD	0.045	0.022	0.031	0.009	0.153	0.030	0.011	<0.007	<0.005	<0.003	0.017	0.005	0.012
OCDD	0.096	0.066	0.055	0.026	0.359	0.058	0.036	0.023	0.031	0.023	0.057	0.028	0.050
2,3,7,8-TCDF	0.018	0.005	0.025	<0.003	0.003	<0.002	<0.004	<0.002	<0.005	<0.002	0.011	<0.002	0.003
1,2,3,7,8-PeCDF	0.006	<0.003	<0.003	<0.002	<0.002	<0.005	<0.003	<0.002	<0.002	<0.004	<0.003	<0.002	<0.002
2,3,4,7,8-PeCDF	0.008	<0.003	0.006	<0.002	<0.002	<0.005	<0.003	<0.002	<0.002	<0.004	0.003	<0.002	<0.002
1,2,3,4,7,8-HxCDF	0.014	0.006	0.015	<0.004	0.002	<0.008	<0.005	<0.004	<0.003	<0.003	0.009	<0.004	<0.002
1,2,3,6,7,8-HxCDF	0.007	<0.004	0.006	<0.004	<0.002	<0.008	<0.005	<0.004	<0.003	<0.003	0.003	<0.004	<0.002
2,3,4,6,7,8-HxCDF	0.005	<0.004	0.007	<0.004	<0.002	<0.008	<0.005	<0.004	<0.003	<0.003	0.004	<0.004	<0.002
1,2,3,7,8,9-HxCDF	<0.003	<0.004	<0.005	<0.004	<0.002	<0.008	<0.005	<0.004	<0.003	<0.003	<0.002	<0.004	<0.002
1,2,3,4,6,7,8-HpCDF	0.017	0.014	0.021	<0.008	0.011	<0.008	<0.005	<0.009	<0.010	<0.005	0.015	<0.008	0.006
1,2,3,4,7,8,9-HpCDF	<0.011	<0.008	<0.009	<0.008	<0.005	<0.008	<0.005	<0.009	<0.010	<0.005	<0.003	<0.008	<0.003
OCDF	0.012	0.018	<0.010	<0.008	0.016	<0.006	0.012	0.006	<0.005	<0.005	0.012	<0.004	<0.004
<b>PCDD/F Homologues</b>													
TCDDs	0.023	<0.004	0.047	<0.003	<0.002	<0.015	<0.004	<0.002	<0.009	<0.002	0.011	<0.002	<0.002
PeCDDs	0.020	<0.004	0.036	<0.002	0.004	<0.009	<0.003	<0.002	<0.005	<0.005	0.010	<0.002	<0.002
HxCDDs	0.026	0.009	0.074	<0.004	0.124	0.068	<0.005	<0.004	<0.003	<0.005	0.017	<0.004	<0.002
HpCDDs	0.082	0.034	0.052	0.016	0.357	0.082	0.018	<0.007	<0.005	<0.003	0.037	0.005	0.024
OCDD	0.096	0.066	0.055	0.026	0.359	0.058	0.036	0.023	0.031	0.023	0.057	0.028	0.050
TCDFs	0.113	0.010	0.101	<0.003	0.005	<0.002	<0.004	<0.002	<0.005	<0.002	0.081	<0.002	0.003
PeCDFs	0.069	0.006	0.041	<0.002	0.005	<0.005	<0.003	<0.002	<0.002	<0.004	0.028	<0.002	<0.002
HxCDFs	0.049	0.013	0.052	<0.004	0.013	<0.008	<0.005	<0.004	<0.003	<0.003	0.032	<0.004	0.006
HpCDFs	0.017	0.014	0.021	<0.008	0.022	<0.008	<0.005	<0.009	<0.010	<0.005	0.024	<0.008	0.006
OCDF	0.012	0.018	<0.01	<0.008	0.016	<0.006	0.012	0.006	<0.005	<0.005	0.012	<0.004	<0.004
<b>Total</b>													
$\Sigma$ PCDDs	0.246	0.109	0.264	0.042	0.845	0.208	0.054	0.023	0.031	0.023	0.132	0.033	0.074
$\Sigma$ PCDFs	0.260	0.061	0.215	0.000	0.060	0.000	0.012	0.006	0.000	0.000	0.177	0.000	0.015
$\Sigma$ PCDD/Fs	0.506	0.170	0.479	0.042	0.905	0.208	0.066	0.029	0.031	0.023	0.309	0.033	0.089
$\Sigma$ TEQ (PCDD/Fs)	0.020	0.013	0.021	0.009	0.011	0.032	0.012	0.008	0.018	0.011	0.012	0.008	0.007

Table A12. Atmospheric concentrations of PCDD/Fs ( $\text{pg m}^{-3}$ ) at NAPS rural sites in 2000

Station Name	Keijmkujuk												Egbert									
	1	2	3	4	5	6	7	8	9	10	11	12	1	2	3	4	5	6	7	8	9	10
Sampling Period	1/7/00	1/31/00	2/24/00	3/19/00	4/12/00	5/6/00	5/30/00	6/23/00	8/10/00	9/3/00	9/27/00	11/14/00	1/31/00	2/24/00	4/12/00	5/6/00	5/30/00	6/23/00	8/10/00	9/3/00	9/27/00	12/8/00
Sampling Volume (m3)	743	729	739	788	705	713	734	708	719	532	878	905	1004	953	957	852	891	901	923	861	906	1070
<b>PCDD/F Congeners</b>																						
2,3,7,8-TCDD	<0.003	<0.003	<0.004	<0.01	<0.003	<0.003	<0.003	<0.006	<0.003	<0.004	<0.002	<0.004	<0.002	<0.004	<0.005	<0.003	<0.003	<0.003	<0.002	<0.004	<0.002	
1,2,3,7,8-PeCDD	<0.003	<0.003	<0.005	<0.003	<0.003	<0.004	<0.003	<0.006	<0.003	<0.004	<0.002	0.005	0.007	0.010	<0.004	<0.005	0.004	<0.003	<0.003	<0.003	<0.003	
1,2,3,4,7,8-HxCDD	<0.003	<0.003	<0.004	<0.004	<0.006	<0.006	<0.005	<0.006	<0.006	<0.008	<0.005	<0.007	0.004	0.008	<0.006	<0.005	0.003	<0.003	<0.003	<0.005	0.008	
1,2,3,6,7,8-HxCDD	<0.003	<0.003	<0.004	<0.004	<0.006	<0.006	<0.005	<0.006	<0.006	<0.008	<0.005	<0.007	0.008	0.016	<0.006	<0.005	0.004	<0.003	<0.003	<0.005	<0.004	
1,2,3,7,8,9-HxCDD	<0.003	<0.003	<0.004	<0.004	<0.006	<0.006	<0.005	<0.006	<0.006	<0.008	<0.005	<0.007	0.015	0.029	<0.006	0.006	0.004	<0.003	<0.003	<0.005	<0.004	
1,2,3,4,6,7,8-HpCDD	0.022	0.017	0.024	0.007	0.008	0.009	0.007	<0.008	<0.008	<0.011	<0.007	<0.007	0.102	0.177	0.021	0.055	0.032	0.025	0.029	0.086	0.048	
OCDD	0.068	0.054	0.076	0.020	0.022	0.026	0.021	0.013	<0.014	0.015	<0.009	0.019	0.272	0.523	0.052	0.195	0.127	0.099	0.051	0.221	0.112	
2,3,7,8-TCDF	<0.003	0.003	0.003	<0.01	<0.003	<0.003	<0.003	<0.003	<0.003	<0.004	<0.002	<0.004	0.015	0.044	<0.002	0.010	0.012	0.021	0.003	0.014	0.006	
1,2,3,7,8-PeCDF	<0.003	<0.003	<0.004	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.004	<0.002	<0.004	0.004	0.010	<0.002	0.003	<0.003	0.004	<0.002	0.003	<0.003	
2,3,4,7,8-PeCDF	<0.003	<0.003	<0.004	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.004	<0.002	<0.004	0.004	0.019	<0.002	<0.003	0.005	0.007	<0.002	0.004	0.009	
1,2,3,4,7,8-HxCDF	<0.003	<0.003	<0.004	<0.004	<0.003	<0.003	<0.003	<0.003	<0.006	<0.008	<0.004	<0.004	0.012	0.047	<0.002	0.008	0.009	0.005	<0.003	0.009	0.004	
1,2,3,6,7,8-HxCDF	<0.003	<0.003	<0.004	<0.004	<0.003	<0.003	<0.003	<0.003	<0.006	<0.008	<0.004	<0.004	0.005	0.020	<0.002	0.003	0.005	0.004	<0.003	<0.005	<0.004	
2,3,4,6,7,8-HxCDF	<0.003	<0.003	<0.004	<0.004	<0.003	<0.003	<0.003	<0.003	<0.006	<0.008	<0.004	<0.004	0.006	0.029	<0.002	0.004	0.004	<0.003	<0.003	<0.005	<0.004	
1,2,3,7,8,9-HxCDF	<0.003	<0.003	<0.004	<0.004	<0.003	<0.003	<0.003	<0.003	<0.006	<0.008	<0.004	<0.004	0.043	<0.003	<0.002	<0.003	<0.003	<0.003	<0.003	<0.005	<0.004	
1,2,3,4,6,7,8-HpCDF	0.009	0.009	0.010	0.005	0.005	0.006	0.003	<0.008	<0.008	<0.011	<0.007	<0.007	0.024	0.092	0.005	0.015	0.019	0.008	0.009	0.020	0.014	
1,2,3,4,7,8,9-HpCDF	<0.003	<0.003	<0.004	<0.004	<0.003	<0.003	<0.003	<0.008	<0.008	<0.011	<0.007	<0.007	<0.002	0.012	<0.002	<0.009	<0.004	<0.007	<0.005	<0.007	<0.005	
OCDF	0.008	0.007	0.009	<0.008	<0.003	0.012	<0.003	<0.008	<0.009	<0.011	<0.005	<0.009	0.021	0.081	<0.004	0.022	0.016	<0.006	0.004	0.013	0.013	
<b>PCDD/F Homologues</b>																						
TCDDs	<0.003	<0.003	<0.004	<0.010	<0.003	<0.003	<0.003	<0.006	<0.003	<0.004	<0.002	<0.004	0.003	0.040	<0.004	<0.005	0.003	<0.003	<0.003	<0.002	<0.004	
PeCDDs	<0.003	<0.003	<0.005	<0.003	<0.003	<0.004	<0.003	<0.006	<0.003	<0.004	<0.002	<0.004	0.018	0.069	<0.004	<0.005	0.004	<0.003	0.005	0.017	<0.003	
HxCDDs	0.018	0.007	0.005	<0.004	<0.006	<0.006	<0.005	<0.006	<0.006	<0.008	<0.005	<0.007	0.107	0.225	<0.006	0.035	0.022	0.010	<0.003	0.030	0.011	
HpCDDs	0.041	0.032	0.045	0.005	0.014	0.009	0.013	<0.008	<0.008	<0.011	<0.007	<0.007	0.225	0.419	0.047	0.111	0.064	0.044	0.058	0.172	0.082	
OCDD	0.068	0.054	0.076	0.020	0.022	0.026	0.021	0.013	<0.014	0.015	<0.009	0.019	0.272	0.523	0.052	0.195	0.127	0.099	0.051	0.221	0.112	
TCDFs	<0.003	0.003	0.008	<0.010	<0.003	<0.003	<0.003	0.004	<0.003	<0.004	<0.002	<0.004	0.070	0.292	<0.002	0.066	0.040	0.139	0.009	0.075	0.015	
PeCDFs	<0.003	0.005	0.004	<0.003	0.003	0.003	<0.003	<0.003	0.004	<0.004	<0.002	<0.004	0.030	0.225	<0.002	0.055	0.043	0.108	0.009	0.039	0.009	
HxCDFs	0.004	0.004	0.006	<0.004	0.005	0.003	0.005	0.010	0.013	<0.008	<0.004	<0.004	0.043	0.218	<0.002	0.041	0.035	0.027	0.007	0.026	0.011	
HpCDFs	0.013	0.009	0.011	<0.004	0.005	0.006	0.003	<0.008	<0.008	<0.011	<0.007	<0.007	0.037	0.162	0.005	0.024	0.027	0.008	0.009	0.020	0.014	
OCDF	0.008	0.007	0.009	<0.008	<0.003	0.012	<0.003	<0.008	<0.009	<0.011	<0.005	<0.009	0.021	0.081	<0.004	0.022	0.016	<0.006	0.004	0.013	0.013	
<b>Total</b>																						
∑ PCDDs	0.127	0.093	0.126	0.025	0.036	0.035	0.034	0.013	0.000	0.015	0.000	0.019	0.625	1.276	0.099	0.341	0.220	0.153	0.114	0.440	0.205	
∑ PCDFs	0.025	0.028	0.038	0.000	0.013	0.024	0.008	0.014	0.017	0.000	0.000	0.000	0.201	0.978	0.005	0.208	0.161	0.282	0.038	0.173	0.062	
∑ PCDD/Fs	0.152	0.121	0.164	0.025	0.049	0.059	0.042	0.027	0.017	0.015	0.000	0.019	0.826	2.254	0.104	0.549	0.381	0.435	0.152	0.613	0.267	
∑ TEQ (PCDD/Fs)	0.010	0.010	0.014	0.018	0.010	0.011	0.010	0.017	0.012	0.016	0.008	0.015	0.022	0.043	0.012	0.016	0.014	0.013	0.010	0.013	0.014	

Table A12. Atmospheric concentrations of PCDD/Fs (pg m<sup>-3</sup>) at NAPS rural sites in 2000 (continued)

Station Name	Point Petre												
Sampling Period	1	2	3	4	5	6	7	8	9	10	11	12	13
Sampling Date	1/7/00	1/31/00	2/24/00	3/19/00	4/12/00	5/6/00	5/30/00	6/23/00	8/10/00	9/3/00	9/27/00	11/14/00	12/8/00
Sampling Volume (m3)	829	926	896	828	865	838	843	891	925	828	792	872	924
<b>PCDD/F Congeners</b>													
2,3,7,8-TCDD	<0.004	<0.004	<0.003	<0.005	<0.002	<0.003	<0.003	<0.003	<0.002	<0.003	<0.005	<0.007	<0.002
1,2,3,7,8-PeCDD	0.006	0.007	<0.006	<0.005	0.004	<0.003	<0.003	<0.002	<0.002	<0.003	<0.005	<0.007	0.007
1,2,3,4,7,8-HxCDD	<0.006	<0.005	0.006	<0.005	<0.005	<0.005	<0.005	<0.003	<0.002	<0.006	<0.005	<0.007	0.003
1,2,3,6,7,8-HxCDD	<0.006	0.009	0.010	0.006	<0.005	<0.005	<0.005	<0.003	<0.002	<0.006	<0.005	0.007	0.009
1,2,3,7,8,9-HxCDD	0.012	0.016	0.013	0.008	<0.005	<0.005	<0.005	<0.003	<0.002	<0.006	<0.005	<0.007	0.010
1,2,3,4,6,7,8-HpCDD	0.084	0.099	0.104	0.046	0.029	0.084	0.058	0.013	0.013	0.043	0.055	0.061	0.057
OCDD	0.253	0.285	0.323	0.161	0.064	0.264	0.202	0.035	0.056	0.111	0.152	0.169	0.133
2,3,7,8-TCDF	0.009	0.016	0.020	0.011	0.006	0.024	0.007	0.003	<0.002	<0.003	0.019	0.010	0.007
1,2,3,7,8-PeCDF	<0.004	0.003	0.004	0.003	<0.002	0.006	<0.003	<0.002	<0.002	<0.003	<0.004	<0.005	0.003
2,3,4,7,8-PeCDF	<0.004	0.006	0.007	0.004	0.002	0.009	<0.003	<0.002	<0.002	<0.003	0.007	<0.005	0.004
1,2,3,4,7,8-HxCDF	0.008	0.014	0.025	0.009	0.005	0.024	<0.005	<0.003	<0.002	<0.006	0.029	0.006	0.013
1,2,3,6,7,8-HxCDF	<0.004	0.006	0.011	0.004	<0.002	0.007	<0.005	<0.003	<0.002	<0.006	0.010	<0.006	0.006
2,3,4,6,7,8-HxCDF	0.004	0.007	0.017	0.005	<0.002	<0.005	<0.005	<0.003	<0.002	<0.006	0.014	0.006	0.008
1,2,3,7,8,9-HxCDF	<0.004	<0.002	<0.003	<0.002	<0.002	<0.005	<0.005	<0.003	<0.002	<0.006	<0.005	<0.006	0.003
1,2,3,4,6,7,8-HpCDF	0.021	0.026	0.075	0.023	0.010	0.054	0.017	<0.007	<0.004	<0.007	0.050	0.014	0.036
1,2,3,4,7,8,9-HpCDF	<0.004	0.004	0.009	0.005	0.005	<0.007	<0.005	<0.007	<0.004	<0.007	<0.008	<0.007	0.006
OCDF	0.022	0.028	0.078	0.023	0.016	0.054	0.012	<0.004	<0.005	<0.008	0.039	0.019	0.039
<b>PCDD/F Homologues</b>													
TCDDs	0.004	0.019	0.022	<0.005	0.009	<0.003	<0.003	<0.003	<0.002	<0.003	<0.005	<0.007	<0.002
PeCDDs	0.006	0.032	0.020	<0.005	0.008	<0.003	<0.003	<0.002	<0.002	<0.003	<0.005	<0.007	0.011
HxCDDs	0.055	0.089	0.112	0.038	0.008	0.023	0.016	<0.003	0.009	0.017	<0.005	0.007	0.046
HpCDDs	0.181	0.220	0.222	0.099	0.055	0.152	0.109	0.013	0.013	0.043	0.129	0.129	0.111
OCDD	0.253	0.285	0.323	0.161	0.064	0.264	0.202	0.035	0.056	0.111	0.152	0.169	0.133
TCDFs	0.037	0.107	0.129	0.044	0.006	0.171	0.012	0.003	<0.002	<0.003	0.045	0.010	0.025
PeCDFs	0.027	0.049	0.085	0.026	0.012	0.082	0.011	<0.002	0.007	0.012	0.040	0.011	0.025
HxCDFs	0.028	0.052	0.102	0.037	0.007	0.059	0.012	<0.003	0.003	0.007	0.061	0.020	0.036
HpCDFs	0.038	0.043	0.128	0.040	0.018	0.054	0.017	<0.007	0.004	<0.007	0.050	0.014	0.052
OCDF	0.022	0.028	0.078	0.023	0.016	0.054	0.012	<0.004	<0.005	<0.008	0.039	0.019	0.039
<b>Total</b>													
∑ PCDDs	0.499	0.645	0.699	0.298	0.144	0.439	0.327	0.048	0.078	0.171	0.281	0.305	0.301
∑ PCDFs	0.152	0.279	0.522	0.170	0.059	0.420	0.064	0.003	0.014	0.019	0.235	0.074	0.177
∑ PCDD/Fs	0.651	0.924	1.221	0.468	0.203	0.859	0.391	0.051	0.092	0.190	0.516	0.379	0.478
∑ TEQ (PCDD/Fs)	0.018	0.022	0.024	0.017	0.010	0.018	0.012	0.008	0.006	0.012	0.023	0.022	0.017

Table A12. Atmospheric concentrations of PCDD/Fs (pg m<sup>-3</sup>) at NAPS rural sites in 2000 (continued)

Station Name	Simcoe													St. Andrews										
	1	2	3	4	5	6	7	8	9	10	11	12	13	1	2	3	4	5	6	7	8	9	10	11
Sampling Period																								
Sampling Date	1/7/00	1/31/00	2/24/00	3/19/00	4/12/00	5/6/00	5/30/00	6/23/00	7/17/00	8/10/00	9/27/00	11/14/00	12/8/00	1/7/00	1/31/00	2/24/00	3/19/00	4/12/00	5/6/00	5/30/00	6/23/00	8/10/00	9/3/00	12/8/00
Sampling Volume (m3)	1072	994	974	980	992	894	930	764	734	778	956	1004	1062	1026	1037	1126	1203	970	952	962	922	929	944	1097
<b>PCDD/F Congeners</b>																								
2,3,7,8-TCDD	0.003	<0.002	<0.003	<0.003	<0.002	<0.004	<0.003	<0.003	<0.004	<0.003	<0.002	<0.008	<0.003	<0.004	<0.002	<0.004	<0.002	<0.002	<0.002	<0.004	<0.004	<0.002	<0.003	<0.002
1,2,3,7,8-PeCDD	0.036	0.008	0.008	0.005	<0.002	<0.004	0.006	<0.003	<0.003	<0.004	0.005	<0.004	0.005	<0.004	0.003	<0.004	<0.002	<0.002	<0.002	<0.004	<0.004	<0.002	<0.003	0.007
1,2,3,4,7,8-HxCDD	0.059	0.006	0.008	0.005	<0.006	<0.004	0.007	<0.003	<0.005	<0.006	<0.002	<0.012	0.008	<0.003	<0.004	<0.004	<0.002	<0.004	<0.004	<0.005	<0.004	<0.004	<0.004	<0.003
1,2,3,6,7,8-HxCDD	0.115	0.010	0.016	0.009	<0.006	<0.004	0.010	<0.003	<0.005	<0.006	<0.002	<0.012	0.013	<0.003	<0.004	<0.004	<0.002	<0.004	<0.004	<0.005	<0.004	<0.004	<0.004	<0.003
1,2,3,7,8,9-HxCDD	0.210	0.019	0.029	0.014	<0.006	<0.004	0.014	<0.003	<0.005	<0.006	0.008	<0.012	0.021	<0.003	0.004	<0.004	<0.002	<0.004	<0.004	<0.005	<0.004	<0.004	<0.004	<0.003
1,2,3,4,6,7,8-HpCDD	2.087	0.138	0.197	0.095	0.041	0.090	0.054	0.105	0.022	0.052	0.064	0.079	0.135	0.014	0.037	0.023	0.008	0.007	0.008	<0.006	0.011	<0.006	<0.008	0.016
OCDD	5.194	0.447	0.546	0.270	0.112	0.434	0.157	0.367	0.101	0.146	0.237	0.185	0.357	0.053	0.103	0.086	0.034	0.029	0.022	0.020	0.047	<0.009	0.028	0.035
2,3,7,8-TCDF	0.015	0.015	0.040	0.010	0.007	0.049	0.026	<0.003	0.008	0.008	0.020	0.011	0.030	<0.002	0.005	0.005	0.003	<0.002	0.004	<0.002	0.004	<0.002	<0.003	0.005
1,2,3,7,8-PeCDF	0.004	0.002	0.009	<0.003	<0.002	0.013	0.005	<0.003	<0.003	<0.003	<0.002	<0.004	0.011	<0.003	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.003	<0.002
2,3,4,7,8-PeCDF	0.007	0.006	0.019	0.004	0.002	0.014	0.013	<0.003	<0.003	<0.003	0.004	<0.004	0.011	<0.003	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.003	0.002
1,2,3,4,7,8-HxCDF	0.019	0.011	0.035	0.011	0.006	0.045	0.022	<0.003	0.005	<0.003	0.009	0.006	0.032	<0.003	0.005	0.003	<0.002	<0.002	<0.002	<0.003	0.003	<0.004	<0.004	0.004
1,2,3,6,7,8-HxCDF	0.010	0.005	0.016	0.004	<0.002	0.013	0.010	<0.003	0.004	<0.003	0.004	<0.006	0.013	<0.003	0.002	<0.002	<0.002	<0.002	<0.002	<0.003	<0.002	<0.004	<0.004	<0.003
2,3,4,6,7,8-HxCDF	0.013	0.008	0.020	0.006	0.002	0.024	0.019	<0.003	<0.004	<0.003	0.006	<0.006	0.015	<0.003	0.003	0.003	<0.002	<0.002	<0.002	<0.003	<0.002	<0.004	<0.004	0.003
1,2,3,7,8,9-HxCDF	0.002	<0.002	<0.003	<0.002	<0.002	<0.004	<0.003	<0.003	<0.004	<0.003	<0.002	<0.006	0.003	<0.003	<0.002	<0.002	<0.002	<0.002	<0.002	<0.003	<0.002	<0.004	<0.004	<0.003
1,2,3,4,6,7,8-HpCDF	0.082	0.029	0.063	0.025	0.014	0.063	0.036	0.017	0.012	<0.006	0.016	0.019	0.061	0.007	0.012	0.014	0.005	<0.003	<0.004	<0.004	0.012	<0.006	<0.008	0.009
1,2,3,4,7,8,9-HpCDF	0.013	0.004	0.008	<0.004	<0.002	0.014	<0.004	<0.005	<0.008	<0.006	<0.004	<0.012	0.010	<0.003	<0.004	<0.004	<0.002	<0.003	<0.004	<0.004	<0.004	<0.006	<0.008	0.004
OCDF	0.102	0.039	0.045	0.031	0.011	0.064	0.023	0.010	0.013	0.010	0.021	0.010	0.069	0.005	0.012	0.021	0.006	<0.002	0.003	<0.008	0.017	<0.006	<0.006	0.010
<b>PCDD/F Homologues</b>																								
TCDDs	0.043	0.017	0.040	0.004	<0.002	0.027	0.017	<0.003	<0.004	<0.003	<0.002	0.004	0.023	<0.004	0.003	<0.004	<0.002	<0.002	<0.002	<0.004	<0.004	<0.002	<0.003	0.002
PeCDDs	0.328	0.046	0.056	0.024	<0.002	0.054	0.035	<0.003	<0.003	<0.004	0.010	<0.004	0.042	<0.004	0.003	<0.004	<0.002	<0.002	0.011	<0.004	<0.004	<0.002	<0.003	0.013
HxCDDs	1.267	0.140	0.222	0.109	0.031	0.095	0.114	0.057	<0.005	0.013	0.059	0.014	0.172	0.004	0.021	0.009	<0.002	<0.004	0.004	<0.005	<0.004	<0.004	<0.004	0.012
HpCDDs	3.917	0.303	0.417	0.209	0.087	0.199	0.113	0.215	0.022	0.082	0.156	0.145	0.273	0.032	0.079	0.055	0.014	0.019	0.015	<0.006	0.011	<0.006	<0.008	0.028
OCDD	5.194	0.447	0.546	0.270	0.112	0.434	0.157	0.367	0.101	0.146	0.237	0.185	0.357	0.053	0.103	0.086	0.034	0.029	0.022	0.020	0.047	<0.009	0.028	0.035
TCDFs	0.080	0.104	0.291	0.048	0.021	0.278	0.111	<0.003	0.022	0.014	0.089	0.024	0.127	<0.002	0.010	0.021	0.003	<0.002	0.004	<0.002	0.004	<0.002	<0.003	0.022
PeCDFs	0.085	0.061	0.197	0.029	0.011	0.225	0.094	<0.003	0.021	0.030	0.033	0.010	0.110	<0.003	0.012	0.005	0.003	<0.002	0.006	<0.002	<0.002	<0.002	<0.003	0.010
HxCDFs	0.159	0.054	0.162	0.041	0.019	0.198	0.079	<0.003	0.021	<0.003	0.035	0.006	0.120	<0.003	0.023	0.012	<0.002	<0.002	0.004	<0.003	0.005	<0.004	<0.004	0.016
HpCDFs	0.209	0.048	0.110	0.045	0.016	0.108	0.046	0.017	0.012	<0.006	0.016	0.019	0.111	0.007	0.020	0.018	0.005	<0.003	<0.004	<0.004	0.012	<0.006	<0.008	0.013
OCDF	0.102	0.039	0.045	0.031	0.011	0.064	0.023	0.010	0.013	0.010	0.021	0.010	0.069	0.005	0.012	0.021	0.006	<0.002	0.003	<0.008	0.017	<0.006	<0.006	0.010
<b>Total</b>																								
∑ PCDDs	10.749	0.953	1.281	0.616	0.230	0.809	0.436	0.639	0.123	0.241	0.462	0.348	0.867	0.089	0.209	0.150	0.048	0.048	0.052	0.020	0.058	0.000	0.028	0.090
∑ PCDFs	0.635	0.306	0.805	0.194	0.078	0.873	0.353	0.027	0.089	0.054	0.194	0.069	0.537	0.012	0.077	0.077	0.017	0.000	0.017	0.000	0.038	0.000	0.000	0.071
∑ PCDD/Fs	11.384	1.259	2.086	0.810	0.308	1.682	0.789	0.666	0.212	0.295	0.656	0.417	1.404	0.101	0.286	0.227	0.065	0.048	0.069	0.020	0.096	0.000	0.028	0.161
∑ TEQ (PCDD/Fs)	0.109	0.021	0.037	0.017	0.009	0.029	0.025	0.011	0.012	0.012	0.014	0.022	0.027	0.012	0.009	0.012	0.007	0.007	0.007	0.012	0.011	0.008	0.010	0.013

Table A13. Atmospheric concentrations of PCDD/Fs (pg m<sup>-3</sup>) at NAPS rural sites in 2001

Station Name	Kejimikujik											Egbert											
Sampling Period	1	2	3	4	5	6	7	8	9	10	11	12	1	2	3	4	5	6	7	8	9	10	11
Sampling Date	1/1/01	1/25/01	3/14/01	4/7/01	5/1/01	5/25/01	8/5/01	8/29/01	9/22/01	11/9/01	12/3/01	12/27/01	3/20/01	4/13/01	5/7/01	5/31/01	6/24/01	7/18/01	8/11/01	9/4/01	9/28/01	10/22/01	11/15/01
Sampling Volume (m3)	952	1111	826	939	830	935	874	893	854	962	1006	871	974	857	802	865	821	858	851	885	857	896	817
<b>PCDD/F Congeners</b>																							
2,3,7,8-TCDD	<0.002	<0.002	<0.003	<0.002	<0.004	<0.002	<0.005	<0.002	<0.001	<0.001	<0.001	<0.001	<0.002	<0.002	<0.005	<0.004	<0.002	0.000	0.000	<0.001	0.001	<0.001	<0.001
1,2,3,7,8-PeCDD	<0.002	0.004	<0.003	0.006	<0.004	<0.004	<0.005	0.004	0.004	0.004	0.003	0.004	0.007	0.005	0.006	0.007	0.004	0.004	0.003	0.003	0.008	0.007	0.007
1,2,3,4,7,8-HxCDD	<0.004	0.002	<0.005	<0.004	<0.005	<0.003	<0.005	<0.003	<0.002	<0.001	0.001	<0.002	<0.004	<0.004	<0.007	<0.008	<0.002	0.002	<0.002	<0.002	0.007	0.007	0.006
1,2,3,6,7,8-HxCDD	<0.004	0.004	<0.005	<0.004	<0.005	<0.003	<0.005	<0.003	<0.002	0.002	0.001	<0.002	0.013	<0.004	0.008	0.010	<0.002	0.002	<0.002	<0.002	0.014	0.011	0.008
1,2,3,7,8,9-HxCDD	<0.004	0.005	<0.005	<0.004	<0.005	<0.003	<0.005	<0.003	<0.002	0.003	<0.001	0.001	<0.018	<0.004	0.008	0.008	0.008	0.003	<0.002	0.002	0.021	0.019	0.008
1,2,3,4,6,7,8-HpCDD	0.009	0.050	<0.010	0.046	0.012	0.006	<0.007	0.015	0.007	0.014	0.022	0.024	0.129	0.013	0.091	0.051	0.072	0.026	0.010	0.014	0.173	0.109	0.130
OCDD	0.023	0.303	0.037	0.185	0.036	0.022	0.031	0.041	0.022	0.049	0.062	0.067	0.339	0.058	0.261	0.117	0.226	0.068	0.032	0.075	0.583	0.291	0.408
2,3,7,8-TCDF	<0.002	0.004	<0.003	0.005	<0.004	<0.002	<0.005	0.002	0.001	0.002	0.003	0.003	0.026	0.003	0.019	0.039	0.003	0.008	0.004	0.003	0.008	0.011	0.023
1,2,3,7,8-PeCDF	<0.002	0.002	<0.003	<0.002	<0.004	<0.002	<0.005	<0.002	<0.001	<0.001	<0.001	0.002	0.009	<0.002	<0.005	0.014	<0.002	0.002	<0.001	<0.001	0.002	0.003	0.004
2,3,4,7,8-PeCDF	<0.002	0.003	<0.003	<0.002	<0.004	<0.002	<0.005	<0.002	<0.001	<0.001	0.001	0.001	0.010	<0.002	0.006	0.019	<0.002	0.003	0.001	0.002	0.003	0.004	0.008
1,2,3,4,7,8-HxCDF	<0.002	0.006	<0.005	<0.002	<0.004	<0.002	<0.005	<0.003	<0.001	0.001	0.002	0.003	0.019	<0.005	0.019	0.078	<0.002	0.006	0.001	0.003	0.007	0.011	0.021
1,2,3,6,7,8-HxCDF	<0.002	0.003	<0.005	<0.002	<0.004	<0.002	<0.005	<0.003	<0.001	<0.001	0.001	0.001	0.007	<0.005	0.009	0.029	<0.002	0.003	0.001	0.002	0.004	0.004	0.008
2,3,4,6,7,8-HxCDF	<0.002	0.003	<0.005	<0.002	<0.004	<0.002	<0.005	<0.003	<0.001	<0.001	0.001	<0.001	0.012	<0.005	0.008	0.031	<0.002	0.003	<0.001	<0.001	0.002	0.007	0.013
1,2,3,7,8,9-HxCDF	<0.002	<0.002	<0.005	<0.002	<0.004	<0.002	<0.005	<0.003	<0.001	<0.001	<0.001	<0.001	<0.004	<0.005	<0.007	<0.008	<0.002	<0.001	<0.001	<0.001	0.000	<0.001	0.001
1,2,3,4,6,7,8-HpCDF	0.004	0.015	<0.010	0.009	0.011	0.003	<0.007	0.007	<0.002	<0.004	0.005	0.006	0.033	0.010	0.045	0.174	0.008	0.014	0.006	0.007	0.015	0.021	0.043
1,2,3,4,7,8,9-HpCDF	<0.003	0.004	<0.010	<0.004	<0.007	<0.003	<0.007	<0.004	<0.002	<0.004	<0.001	<0.001	<0.006	<0.004	<0.007	0.023	<0.002	0.002	<0.002	<0.001	<0.002	0.001	0.006
OCDF	<0.006	0.024	0.013	<0.006	<0.014	<0.004	<0.009	0.019	<0.003	<0.002	0.003	0.006	0.024	0.007	0.040	0.137	0.011	0.009	0.002	0.003	0.019	0.015	0.033
<b>PCDD/F Homologues</b>																							
TCDDs	<0.002	<0.002	<0.003	<0.002	<0.004	<0.002	<0.005	<0.002	<0.001	0.001	<0.001	0.001	0.019	<0.002	0.016	0.038	<0.002	0.012	0.003	0.002	0.016	0.020	0.037
PeCDDs	<0.002	0.009	<0.003	0.006	<0.004	<0.004	<0.005	0.004	0.004	0.004	0.005	0.010	0.028	0.005	0.006	0.071	0.004	0.013	0.007	0.007	0.059	0.062	0.050
HxCDDs	<0.004	0.044	<0.005	<0.004	<0.005	<0.003	0.011	<0.003	<0.002	0.011	0.014	0.024	0.110	<0.004	0.066	0.107	0.027	0.036	0.002	0.018	0.147	0.166	0.146
HpCDDs	0.009	0.130	<0.010	0.085	0.012	0.006	<0.007	0.015	0.007	0.026	0.041	0.048	0.298	0.026	0.200	0.103	0.156	0.048	0.017	0.029	0.293	0.223	0.275
OCDD	0.023	0.303	0.037	0.185	0.036	0.022	0.031	0.041	0.022	0.049	0.062	0.067	0.339	0.058	0.261	0.117	0.226	0.068	0.032	0.075	0.583	0.291	0.408
TCDFs	<0.002	0.006	<0.003	0.009	<0.004	<0.002	<0.005	0.002	0.008	0.009	0.008	0.016	0.102	0.003	0.053	0.204	0.006	0.062	0.026	0.014	0.055	0.072	0.154
PeCDFs	<0.002	0.012	<0.003	<0.002	<0.004	<0.002	<0.005	<0.002	0.006	0.001	0.003	0.011	0.068	<0.002	0.057	0.249	0.011	0.046	0.010	0.008	0.025	0.046	0.078
HxCDFs	<0.002	0.018	<0.005	<0.002	<0.004	0.002	<0.005	<0.003	0.002	0.003	0.006	0.008	0.067	<0.005	0.069	0.266	<0.002	0.036	0.007	0.011	0.028	0.048	0.092
HpCDFs	0.004	0.029	<0.010	0.009	0.011	0.003	<0.007	0.007	<0.002	<0.004	0.005	0.009	0.033	0.010	0.045	0.266	0.008	0.022	0.006	0.007	0.029	0.035	0.071
OCDF	<0.006	0.024	0.013	<0.006	<0.014	<0.004	<0.009	0.019	<0.003	<0.002	0.003	0.006	0.024	0.007	0.040	0.137	0.011	0.009	0.002	0.003	0.019	0.015	0.033
<b>Total</b>																							
∑ PCDDs	0.032	0.486	0.037	0.276	0.048	0.028	0.042	0.060	0.032	0.089	0.121	0.150	0.794	0.089	0.549	0.436	0.413	0.177	0.062	0.130	1.099	0.761	0.916
∑ PCDFs	0.004	0.089	0.013	0.018	0.011	0.005	0.000	0.028	0.016	0.014	0.025	0.050	0.294	0.020	0.264	1.122	0.036	0.176	0.052	0.043	0.156	0.216	0.428
∑ PCDD/Fs	0.036	0.575	0.050	0.294	0.059	0.033	0.042	0.088	0.049	0.103	0.146	0.200	1.088	0.109	0.813	1.558	0.449	0.353	0.113	0.173	1.255	0.977	1.344
∑ TEQ (PCDD/Fs)	0.007	0.011	0.011	0.012	0.013	0.009	0.016	0.009	0.006	0.006	0.004	0.006	0.024	0.011	0.023	0.041	0.010	0.008	0.005	0.006	0.018	0.017	0.021

Table A13. Atmospheric concentrations of PCDD/Fs (pg m<sup>-3</sup>) at NAPS rural sites in 2001 (continued)

Station Name	Point Petre											
Sampling Period	1	2	3	4	5	6	7	8	9	10	11	12
Sampling Date	2/24/01	3/20/01	4/13/01	5/31/01	6/24/01	5/7/01	7/18/01	8/17/01	9/4/01	9/28/01	10/22/01	11/15/01
Sampling Volume (m3)	670	726	698	774	733	822	759	779	672	763	845	748
<b>PCDD/F Congeners</b>												
2,3,7,8-TCDD	<0.006	<0.003	<0.003	<0.003	<0.005	0.001	<0.003	0.001	0.001	<0.001	<0.001	0.000
1,2,3,7,8-PeCDD	0.007	0.007	<0.003	<0.003	<0.008	0.004	<0.003	0.008	0.004	0.004	0.005	0.006
1,2,3,4,7,8-HxCDD	<0.006	<0.005	<0.006	<0.003	<0.008	0.003	<0.005	0.006	0.002	<0.003	0.002	0.005
1,2,3,6,7,8-HxCDD	0.007	<0.005	<0.006	<0.003	<0.008	0.005	<0.005	0.013	0.002	0.002	0.003	0.009
1,2,3,7,8,9-HxCDD	<0.006	0.006	<0.006	<0.003	<0.008	0.009	<0.005	0.019	<0.002	0.005	0.002	0.017
1,2,3,4,6,7,8-HpCDD	0.063	0.034	0.027	0.019	0.091	0.068	<0.011	0.145	0.027	0.023	0.036	0.144
OCDD	0.161	0.119	0.076	0.050	0.319	0.227	0.221	0.343	0.123	0.096	0.143	0.444
2,3,7,8-TCDF	<0.003	0.006	0.005	0.003	<0.003	0.011	<0.003	0.019	0.004	0.007	0.006	0.014
1,2,3,7,8-PeCDF	<0.003	0.003	<0.003	<0.003	<0.004	0.002	<0.003	0.003	0.001	0.001	0.001	0.003
2,3,4,7,8-PeCDF	<0.003	<0.003	<0.003	<0.003	<0.004	0.002	<0.003	0.005	0.002	0.004	0.003	0.006
1,2,3,4,7,8-HxCDF	0.005	0.008	<0.003	0.006	<0.005	0.006	<0.005	0.010	0.003	0.005	0.006	0.017
1,2,3,6,7,8-HxCDF	<0.003	0.004	<0.003	<0.003	<0.005	0.003	<0.005	0.006	0.001	0.003	0.002	0.008
2,3,4,6,7,8-HxCDF	0.003	0.007	<0.003	<0.003	<0.005	0.003	<0.005	0.004	<0.001	0.002	0.005	0.013
1,2,3,7,8,9-HxCDF	<0.003	<0.004	<0.003	<0.003	<0.005	<0.001	<0.005	<0.001	<0.001	<0.001	<0.001	0.001
1,2,3,4,6,7,8-HpCDF	0.013	0.021	0.014	0.007	0.019	0.014	0.014	0.039	0.010	0.011	0.013	0.044
1,2,3,4,7,8,9-HpCDF	<0.006	0.012	<0.007	<0.005	<0.005	0.002	<0.011	0.003	<0.002	<0.002	0.002	0.003
OCDF	0.019	0.061	0.021	0.010	0.031	0.009	<0.013	0.029	0.007	0.009	0.013	0.039
<b>PCDD/F Homologues</b>												
TCDDs	<0.006	<0.003	<0.003	<0.003	<0.005	0.009	<0.003	0.036	0.008	0.018	0.007	0.021
PeCDDs	0.015	0.012	0.004	<0.003	<0.008	0.024	<0.003	0.065	0.012	0.024	0.013	0.048
HxCDDs	0.044	0.026	<0.006	<0.003	0.031	0.092	<0.005	0.160	0.031	0.044	0.045	0.142
HpCDDs	0.137	0.057	0.046	0.034	0.177	0.148	0.022	0.269	0.054	0.043	0.069	0.324
OCDD	0.161	0.119	0.076	0.050	0.319	0.227	0.221	0.343	0.123	0.096	0.143	0.444
TCDFs	<0.003	0.006	0.010	0.003	0.004	0.047	0.010	0.138	0.039	0.058	0.046	0.095
PeCDFs	0.004	0.003	0.004	<0.003	0.005	0.023	0.044	0.098	0.019	0.018	0.022	0.065
HxCDFs	0.008	0.018	<0.003	0.006	<0.005	0.032	0.007	0.117	0.014	0.020	0.024	0.080
HpCDFs	0.022	0.031	0.014	0.011	0.019	0.025	0.003	0.068	0.010	0.011	0.021	0.069
OCDF	0.019	0.061	0.021	0.010	0.031	0.009	<0.013	0.029	0.007	0.009	0.013	0.039
<b>Total</b>												
∑ PCDDs	0.357	0.214	0.126	0.084	0.527	0.499	0.243	0.873	0.227	0.224	0.277	0.979
∑ PCDFs	0.053	0.119	0.049	0.030	0.059	0.136	0.064	0.449	0.089	0.116	0.126	0.348
∑ PCDD/Fs	0.410	0.333	0.175	0.114	0.586	0.634	0.307	1.322	0.316	0.340	0.402	1.327
∑ TEQ (PCDD/Fs)	0.018	0.016	0.011	0.010	0.020	0.010	0.010	0.021	0.007	0.009	0.010	0.019



Table A13. Atmospheric concentrations of PCDD/Fs (pg m<sup>-3</sup>) at NAPS rural sites in 2001 (continued)

Station Name	Simcoe													St. Andrews									
Sampling Period	1	2	3	4	5	6	7	8	9	10	11	12	13	1	2	3	4	5	6	7	8	9	10
Sampling Date	1/7/01	1/31/01	2/24/01	3/20/01	4/13/01	5/7/01	5/31/01	8/11/01	7/18/01	9/4/01	9/28/01	10/22/01	11/15/01	1/1/01	1/25/01	2/18/01	4/7/01	5/1/01	5/25/01	6/18/01	8/5/01	8/29/01	9/22/01
Sampling Volume (m3)	857	880	939	1015	907	963	901	756	831	828	901	912	981	1028	967	928	977	946	946	912	911	965	926
<b>PCDD/F Congeners</b>																							
2,3,7,8-TCDD	<0.002	<0.002	<0.002	<0.002	<0.004	<0.002	0.002	<0.003	0.003	<0.001	<0.001	0.001	0.001	<0.002	<0.002	<0.002	<0.004	0.002	<0.003	<0.002	<0.001	<0.001	0.001
1,2,3,7,8-PeCDD	0.008	0.004	0.004	0.009	<0.004	0.008	0.004	0.008	0.010	0.004	0.004	0.007	0.006	0.005	0.002	0.003	<0.004	0.022	<0.003	<0.002	0.003	0.003	0.009
1,2,3,4,7,8-HxCDD	0.012	<0.002	0.007	0.009	<0.007	0.005	<0.003	<0.004	0.008	<0.002	0.002	0.002	0.004	<0.002	<0.003	<0.004	<0.004	0.005	<0.004	<0.004	0.001	0.000	0.007
1,2,3,6,7,8-HxCDD	0.018	0.007	0.014	0.015	0.008	0.007	<0.003	<0.004	0.013	<0.002	0.003	0.008	0.006	<0.002	<0.003	<0.004	<0.004	0.006	<0.004	<0.004	0.001	0.001	0.012
1,2,3,7,8,9-HxCDD	0.029	0.010	0.017	0.017	0.008	0.006	<0.003	<0.004	0.015	<0.002	0.005	0.017	0.015	<0.002	<0.003	<0.004	<0.004	0.006	<0.004	<0.004	0.001	0.001	0.010
1,2,3,4,6,7,8-HpCDD	0.159	0.070	0.136	0.132	0.049	0.059	0.040	0.044	0.094	0.015	0.033	0.121	0.110	0.007	0.031	0.013	0.012	0.055	0.016	0.007	0.008	0.010	0.172
OCDD	0.431	0.201	0.351	0.273	0.139	0.212	0.118	0.605	0.187	0.081	0.119	0.539	0.384	0.037	0.085	0.031	0.035	0.152	0.055	0.016	0.033	0.033	0.543
2,3,7,8-TCDF	0.021	0.012	0.011	0.027	0.008	0.006	0.010	0.005	0.033	0.006	0.008	0.013	0.016	0.002	0.005	0.003	0.005	0.015	<0.003	0.002	0.004	0.003	0.012
1,2,3,7,8-PeCDF	0.004	0.003	<0.002	0.007	<0.003	0.003	0.004	<0.003	0.006	0.001	0.001	0.002	0.004	<0.002	<0.002	<0.002	<0.002	<0.003	<0.003	<0.004	0.001	0.001	0.001
2,3,4,7,8-PeCDF	0.007	0.005	<0.002	0.013	0.004	0.004	0.003	<0.003	0.011	0.002	0.003	0.006	0.007	<0.002	<0.002	<0.002	<0.002	0.006	<0.003	<0.004	0.001	0.001	0.002
1,2,3,4,7,8-HxCDF	0.019	0.010	0.007	0.031	0.011	0.010	0.016	<0.004	0.017	0.004	0.006	0.015	0.016	<0.002	0.005	<0.004	0.007	0.016	<0.003	<0.002	0.002	0.004	0.003
1,2,3,6,7,8-HxCDF	0.007	0.005	<0.004	0.012	0.007	0.005	0.008	<0.004	0.009	0.002	0.003	0.007	0.007	<0.002	<0.003	<0.004	<0.003	0.008	<0.003	<0.002	0.001	0.002	<0.001
2,3,4,6,7,8-HxCDF	0.011	0.008	<0.004	0.013	0.007	0.007	0.006	<0.004	0.012	0.002	0.003	0.008	0.010	<0.002	0.003	<0.004	<0.003	0.017	<0.003	<0.002	0.002	0.003	<0.001
1,2,3,7,8,9-HxCDF	<0.002	<0.002	<0.004	<0.004	<0.006	<0.002	<0.004	<0.004	<0.001	<0.001	<0.001	0.001	0.001	<0.002	<0.003	<0.004	<0.003	<0.003	<0.003	<0.002	0.001	<0.001	<0.001
1,2,3,4,6,7,8-HpCDF	0.035	0.020	0.017	0.064	0.021	0.015	0.031	0.012	0.031	0.009	0.017	0.039	0.036	<0.004	0.014	0.006	0.009	0.043	<0.006	<0.002	0.006	0.012	0.006
1,2,3,4,7,8,9-HpCDF	<0.004	0.006	<0.005	<0.004	<0.007	0.008	0.005	<0.004	0.007	<0.002	<0.001	0.004	0.006	<0.004	<0.003	<0.006	<0.006	<0.005	<0.006	<0.002	<0.001	0.001	<0.003
OCDF	0.028	0.040	0.026	0.038	0.022	0.051	0.029	0.019	0.019	0.003	0.015	0.038	0.031	<0.006	0.011	<0.01	<0.008	0.029	<0.009	<0.002	0.005	0.007	0.003
<b>PCDD/F Homologues</b>																							
TCDDs	0.005	0.005	<0.002	0.026	0.008	0.004	0.010	<0.003	0.074	0.010	0.012	0.026	0.020	0.002	<0.002	<0.002	<0.004	0.011	<0.003	0.002	0.002	0.002	0.015
PeCDDs	0.073	0.014	0.003	0.062	<0.004	0.012	0.008	0.008	0.147	0.016	0.026	0.033	0.052	0.009	0.002	0.003	0.005	0.008	<0.003	<0.002	0.003	0.005	0.026
HxCDDs	0.211	0.059	0.133	0.174	0.054	0.049	0.033	<0.004	0.276	0.022	0.046	0.127	0.121	0.005	0.026	<0.004	0.019	0.026	<0.004	0.004	0.010	0.015	0.166
HpCDDs	0.352	0.135	0.301	0.288	0.102	0.108	0.088	0.081	0.232	0.031	0.067	0.255	0.243	0.015	0.069	0.022	0.020	0.113	0.031	0.007	0.014	0.019	0.365
OCDD	0.431	0.201	0.351	0.273	0.139	0.212	0.118	0.605	0.187	0.081	0.119	0.539	0.384	0.037	0.085	0.031	0.035	0.152	0.055	0.016	0.033	0.033	0.543
TCDFs	0.074	0.048	0.035	0.135	0.026	0.026	0.031	0.010	0.194	0.045	0.046	0.096	0.120	0.002	0.010	<0.002	0.007	0.050	<0.003	0.002	0.023	0.021	0.039
PeCDFs	0.066	0.028	0.011	0.121	0.027	0.027	0.032	0.011	0.132	0.025	0.028	0.054	0.074	<0.002	0.011	<0.002	<0.002	0.036	<0.003	<0.004	0.011	0.012	0.018
HxCDFs	0.077	0.033	0.020	0.122	0.041	0.032	0.044	0.017	0.084	0.029	0.029	0.061	0.068	<0.002	0.012	<0.004	0.007	0.065	<0.003	0.003	0.013	0.014	0.014
HpCDFs	0.058	0.033	0.029	0.097	0.030	0.024	0.044	0.012	0.053	0.013	0.021	0.059	0.065	<0.004	0.014	0.006	0.009	0.055	<0.006	<0.002	0.006	0.016	0.006
OCDF	0.028	0.040	0.026	0.038	0.022	0.051	0.029	0.019	0.019	0.003	0.015	0.038	0.031	<0.006	0.011	<0.01	<0.008	0.029	<0.009	<0.002	0.005	0.007	0.003
<b>Total</b>																							
∑ PCDDs	1.072	0.414	0.788	0.823	0.303	0.385	0.257	0.694	0.915	0.160	0.270	0.980	0.820	0.068	0.182	0.056	0.079	0.310	0.086	0.029	0.061	0.075	1.114
∑ PCDFs	0.303	0.182	0.121	0.513	0.146	0.160	0.180	0.069	0.482	0.113	0.140	0.308	0.358	0.002	0.058	0.006	0.023	0.235	0.000	0.005	0.057	0.070	0.079
∑ PCDD/Fs	1.375	0.596	0.909	1.336	0.449	0.545	0.437	0.763	1.396	0.273	0.409	1.288	1.178	0.070	0.240	0.062	0.102	0.545	0.086	0.034	0.118	0.145	1.193
∑ TEQ (PCDD/Fs)	0.026	0.014	0.015	0.030	0.016	0.017	0.013	0.016	0.028	0.008	0.009	0.018	0.019	0.009	0.008	0.009	0.012	0.035	0.010	0.008	0.005	0.005	0.017

Table A14. Atmospheric concentrations of PCDD/Fs ( $\mu\text{g m}^{-3}$ ) at NAPS rural sites in 2002

Station Name	Kejimikujik										Simcoe											
Sampling Period	1	2	3	4	5	6	7	8	9	1	2	3	4	5	6	7	8	9	10	11	12	13
Sampling Date	1/20/02	3/9/02	4/2/02	4/26/02	5/20/02	6/13/02	7/31/02	8/24/02	9/17/02	1/8/02	2/25/02	3/21/02	4/14/02	5/8/02	6/1/02	6/25/02	7/19/02	8/12/02	9/5/02	9/29/02	10/23/02	12/10/02
Sampling Volume (m3)	926	893	931	993	831	891	597	630	652	925	979	982	954	1077	963	813	813	574	685	696	766	763
<b>PCDD/F Congeners</b>																						
2,3,7,8-TCDD	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	0.001	0.001	0.000	0.001	0.000	0.001	0.002	0.001	0.001	0.001	0.001	0.000	0.001
1,2,3,7,8-PeCDD	0.003	0.004	0.003	0.004	0.003	0.002	0.003	0.004	0.003	0.009	0.007	0.003	0.009	0.003	0.005	0.006	0.008	0.006	0.005	0.006	0.004	0.009
1,2,3,4,7,8-HxCDD	<0.002	0.001	<0.001	0.001	<0.001	<0.001	<0.001	<0.001	<0.001	0.005	0.006	<0.001	0.008	0.002	0.004	0.004	0.005	0.003	0.002	0.004	0.002	0.009
1,2,3,6,7,8-HxCDD	<0.002	0.000	<0.001	0.001	<0.001	<0.001	<0.001	0.001	0.001	0.008	0.010	0.001	0.013	0.003	0.006	0.008	0.008	0.004	0.003	0.010	0.005	0.014
1,2,3,7,8,9-HxCDD	<0.002	0.001	<0.001	0.001	<0.001	<0.001	<0.001	<0.001	<0.001	0.014	0.014	0.001	0.014	0.005	0.008	0.009	0.009	0.004	0.003	0.008	0.003	0.024
1,2,3,4,6,7,8-HpCDD	0.016	0.009	0.008	0.007	0.007	0.005	0.008	0.011	0.010	0.092	0.153	0.017	0.186	0.034	0.085	0.072	0.120	0.048	0.035	0.147	0.053	0.151
OCDD	0.052	0.022	0.024	0.021	0.024	0.017	0.026	0.050	0.035	0.271	0.588	0.090	0.400	0.102	0.247	0.210	0.309	0.150	0.131	0.529	0.145	0.414
2,3,7,8-TCDF	0.002	0.002	0.002	0.001	0.001	0.001	0.002	0.002	0.002	0.011	0.020	0.002	0.015	0.009	0.006	0.027	0.017	0.011	0.025	0.015	0.008	0.022
1,2,3,7,8-PeCDF	<0.001	<0.001	0.001	0.001	<0.001	<0.001	<0.001	<0.001	<0.001	0.003	0.004	0.001	0.003	0.002	0.001	0.007	0.003	0.002	0.004	0.003	0.002	0.004
2,3,4,7,8-PeCDF	<0.001	0.001	<0.001	0.002	<0.001	<0.001	<0.001	<0.001	<0.001	0.004	0.007	0.001	0.004	0.003	0.002	0.009	0.004	0.003	0.006	0.005	0.002	0.008
1,2,3,4,7,8-HxCDF	0.003	0.001	0.001	0.002	0.001	0.001	0.001	0.001	0.002	0.009	0.021	0.002	0.005	0.006	0.006	0.024	0.009	0.009	0.015	0.011	0.005	0.018
1,2,3,6,7,8-HxCDF	<0.001	0.001	0.001	0.001	<0.001	<0.001	0.001	0.000	0.001	0.004	0.009	0.001	0.004	0.003	0.002	0.011	0.004	0.004	0.005	0.005	0.002	0.009
2,3,4,6,7,8-HxCDF	0.001	0.001	<0.001	0.000	<0.001	<0.001	<0.001	<0.001	0.001	0.004	0.009	0.000	0.004	0.003	0.003	0.012	0.003	0.005	0.007	0.006	0.002	0.008
1,2,3,7,8,9-HxCDF	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	0.001	<0.001	<0.001	0.001	<0.001	0.000	0.001
1,2,3,4,6,7,8-HpCDF	0.007	0.005	0.003	0.002	0.004	0.003	0.004	0.004	0.008	0.018	0.047	0.005	0.019	0.012	0.015	0.038	0.017	0.019	0.025	0.024	0.008	0.035
1,2,3,4,7,8,9-HpCDF	<0.001	<0.001	<0.001	0.001	<0.001	<0.001	<0.001	<0.001	0.002	<0.001	0.005	0.001	0.001	0.001	0.001	0.005	0.001	0.002	0.002	0.003	0.001	0.005
OCDF	0.006	0.003	0.002	0.002	0.001	0.003	0.004	0.003	0.006	0.018	0.042	0.005	0.015	0.014	0.013	0.017	0.008	0.013	0.016	0.027	0.007	0.025
<b>PCDD/F Homologues</b>																						
TCDDs	0.002	0.004	<0.001	0.001	<0.001	<0.001	<0.001	<0.001	0.001	0.019	0.041	0.004	0.038	0.015	0.016	0.052	0.043	0.023	0.025	0.020	0.011	0.042
PeCDDs	0.006	0.007	0.003	0.004	0.003	0.002	0.004	0.004	0.005	0.052	0.072	0.007	0.066	0.024	0.033	0.059	0.072	0.032	0.045	0.044	0.029	0.085
HxCDDs	0.015	0.010	0.004	0.008	0.004	0.002	0.002	0.009	0.011	0.111	0.192	0.016	0.235	0.051	0.094	0.100	0.161	0.067	0.065	0.135	0.058	0.220
HpCDDs	0.033	0.016	0.014	0.012	0.015	0.008	0.013	0.018	0.016	0.184	0.337	0.032	0.366	0.070	0.169	0.145	0.257	0.101	0.070	0.289	0.094	0.320
OCDD	0.052	0.022	0.024	0.021	0.024	0.017	0.026	0.050	0.035	0.271	0.588	0.090	0.400	0.102	0.247	0.210	0.309	0.150	0.131	0.529	0.145	0.414
TCDFs	0.016	0.024	0.007	0.007	0.008	0.011	0.013	0.011	0.006	0.067	0.176	0.015	0.139	0.072	0.064	0.199	0.119	0.092	0.177	0.083	0.041	0.159
PeCDFs	0.006	0.006	0.003	0.005	0.003	0.001	0.004	0.005	0.003	0.045	0.109	0.009	0.067	0.038	0.033	0.124	0.082	0.049	0.105	0.056	0.024	0.099
HxCDFs	0.008	0.007	0.003	0.005	0.003	0.003	0.003	0.005	0.007	0.036	0.103	0.008	0.049	0.030	0.034	0.131	0.054	0.060	0.076	0.056	0.021	0.091
HpCDFs	0.007	0.006	0.003	0.003	0.004	0.003	0.004	0.006	0.012	0.027	0.076	0.008	0.032	0.018	0.027	0.061	0.027	0.030	0.038	0.043	0.014	0.058
OCDF	0.006	0.003	0.002	0.002	0.001	0.003	0.004	0.003	0.006	0.018	0.042	0.005	0.015	0.014	0.013	0.017	0.008	0.013	0.016	0.027	0.007	0.025
<b>Total</b>																						
∑ PCDDs	0.108	0.059	0.044	0.044	0.046	0.029	0.046	0.081	0.067	0.636	1.231	0.147	1.104	0.260	0.559	0.566	0.842	0.372	0.335	1.018	0.337	1.081
∑ PCDFs	0.042	0.047	0.019	0.022	0.020	0.020	0.028	0.029	0.034	0.192	0.504	0.044	0.301	0.170	0.170	0.532	0.290	0.244	0.411	0.265	0.107	0.432
∑ PCDD/Fs	0.150	0.105	0.063	0.067	0.065	0.049	0.075	0.110	0.100	0.829	1.736	0.191	1.405	0.431	0.729	1.098	1.131	0.616	0.747	1.283	0.444	1.513
∑ TEQ (PCDD/Fs)	0.006	0.005	0.004	0.005	0.004	0.003	0.005	0.005	0.005	0.018	0.022	0.005	0.019	0.008	0.011	0.021	0.017	0.012	0.014	0.016	0.009	0.026

Table A14. Atmospheric concentrations of PCDD/Fs (pg m<sup>-3</sup>) at NAPS rural sites in 2002 (continued)

Station Name	Egbert															
Sampling Period	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Sampling Date	1/2/02	1/26/02	2/19/02	3/15/02	4/8/02	5/2/02	5/26/02	6/19/02	7/13/02	8/6/02	8/30/02	9/23/02	10/17/02	11/10/02	12/4/02	12/28/02
Sampling Volume (m3)	877	852	863	850	849	784	799	856	1	776	990	1251	1131	844	1046	989
<b>PCDD/F Congeners</b>																
2,3,7,8-TCDD	<0.001	<0.001	0.003	0.001	0.002	<0.001	<0.002	0.000	<0.001	<0.001	0.002	0.000	0.000	0.000	0.001	0.001
1,2,3,7,8-PeCDD	0.004	0.007	0.017	0.006	0.009	0.004	0.004	0.004	0.002	0.003	0.018	0.003	0.003	0.004	0.005	0.007
1,2,3,4,7,8-HxCDD	0.002	0.009	0.016	0.005	0.013	0.002	0.003	0.001	<0.001	<0.001	0.037	0.002	0.001	0.002	0.003	0.009
1,2,3,6,7,8-HxCDD	0.004	0.012	0.024	0.008	0.017	0.004	0.003	0.002	<0.001	0.001	0.061	0.003	0.001	0.003	0.005	0.015
1,2,3,7,8,9-HxCDD	0.006	0.018	0.023	0.009	0.018	0.006	0.006	0.005	<0.001	<0.001	0.130	0.003	0.002	0.003	0.007	0.018
1,2,3,4,6,7,8-HpCDD	0.046	0.176	0.263	0.101	0.196	0.059	0.044	0.027	0.004	0.008	1.546	0.026	0.013	0.038	0.041	0.185
OCDD	0.150	0.557	0.553	0.277	0.533	0.200	0.130	0.103	0.017	0.028	4.566	0.075	0.035	0.136	0.098	0.519
2,3,7,8-TCDF	0.006	0.018	0.077	0.013	0.041	0.005	0.009	0.007	0.000	0.002	0.008	0.006	0.003	0.012	0.015	0.024
1,2,3,7,8-PeCDF	0.001	0.003	0.016	0.003	0.008	0.001	0.002	<0.001	<0.001	0.000	0.002	0.001	0.001	0.002	0.004	0.005
2,3,4,7,8-PeCDF	0.001	0.006	0.025	0.004	0.013	0.002	0.003	0.002	<0.001	0.000	0.003	0.002	0.001	0.003	0.006	0.009
1,2,3,4,7,8-HxCDF	0.004	0.016	0.055	0.016	0.033	0.004	0.003	0.006	<0.001	0.001	0.009	0.005	0.002	0.006	0.013	0.022
1,2,3,6,7,8-HxCDF	0.002	0.007	0.023	0.006	0.012	0.002	0.002	0.002	<0.001	0.000	0.004	0.002	0.001	0.002	0.006	0.009
2,3,4,6,7,8-HxCDF	0.001	0.007	0.025	0.007	0.016	0.001	0.002	0.003	<0.001	<0.001	0.003	0.002	0.001	0.002	0.005	0.010
1,2,3,7,8,9-HxCDF	<0.001	<0.001	0.002	<0.001	<0.003	<0.001	<0.001	<0.001	<0.001	<0.001	0.001	0.000	<0.001	<0.001	0.001	0.001
1,2,3,4,6,7,8-HpCDF	0.008	0.033	0.071	0.037	0.051	0.009	0.010	0.015	0.002	0.003	0.036	0.009	0.004	0.011	0.020	0.040
1,2,3,4,7,8,9-HpCDF	0.001	0.003	0.009	0.004	0.007	<0.005	<0.002	0.002	<0.001	<0.001	0.008	0.002	<0.001	0.001	0.005	0.006
OCDF	0.005	0.042	0.044	0.023	0.040	0.007	0.004	0.014	<0.001	0.001	0.057	0.006	0.002	0.008	0.022	0.024
<b>PCDD/F Homologues</b>																
TCDDs	0.013	0.047	0.099	0.033	0.052	<0.001	0.004	0.009	<0.001	0.002	0.059	0.012	0.010	0.024	0.026	0.042
PeCDDs	0.024	0.080	0.194	0.059	0.096	0.008	0.009	0.019	0.002	0.007	0.173	0.016	0.019	0.028	0.049	0.083
HxCDDs	0.061	0.204	0.404	0.143	0.277	<0.001	0.055	0.030	0.004	0.006	0.929	0.044	0.019	0.049	0.088	0.246
HpCDDs	0.100	0.372	0.552	0.214	0.414	0.138	0.092	0.051	0.008	0.014	2.961	0.053	0.024	0.077	0.083	0.382
OCDD	0.150	0.557	0.553	0.277	0.533	0.267	0.130	0.103	0.017	0.028	4.566	0.075	0.035	0.136	0.098	0.519
TCDFs	0.056	0.172	0.423	0.101	0.293	0.011	0.068	0.057	0.001	0.015	0.052	0.044	0.023	0.091	0.115	0.152
PeCDFs	0.022	0.090	0.315	0.062	0.171	0.004	0.032	0.032	0.000	0.005	0.043	0.019	0.013	0.034	0.075	0.092
HxCDFs	0.017	0.079	0.243	0.064	0.139	<0.001	0.022	0.032	0.001	0.004	0.057	0.023	0.008	0.028	0.071	0.100
HpCDFs	0.013	0.057	0.113	0.057	0.077	<0.005	0.015	0.021	0.003	0.004	0.083	0.015	0.006	0.017	0.038	0.067
OCDF	0.005	0.042	0.044	0.023	0.040	<0.012	0.004	0.014	<0.001	0.001	0.057	0.006	0.002	0.008	0.022	0.024
<b>Total</b>																
∑ PCDDs	0.348	1.260	1.801	0.726	1.372	0.412	0.290	0.211	0.031	0.056	8.687	0.200	0.106	0.314	0.344	1.272
∑ PCDFs	0.113	0.440	1.139	0.307	0.720	0.015	0.140	0.156	0.006	0.028	0.292	0.105	0.051	0.178	0.321	0.434
∑ PCDD/Fs	0.461	1.700	2.940	1.033	2.092	0.427	0.430	0.367	0.036	0.085	8.979	0.305	0.158	0.491	0.665	1.706
∑ TEQ (PCDD/Fs)	0.008	0.021	0.055	0.016	0.033	0.008	0.010	0.007	0.003	0.005	0.063	0.006	0.005	0.009	0.014	0.025

Table A14. Atmospheric concentrations of PCDD/Fs ( $\text{pg m}^{-3}$ ) at NAPS rural sites in 2002 (continued)

Station Name	Point Petre														
Sampling Period	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
Sampling Date	1/2/02	1/26/02	2/19/02	3/15/02	4/8/02	5/2/02	5/26/02	6/19/02	7/13/02	8/6/02	9/23/02	10/17/02	11/10/02	12/4/02	12/28/02
Sampling Volume (m3)	702	704	855	780	861	731	800	898	654	737	721	627	773	689	628
<b>PCDD/F Congeners</b>															
2,3,7,8-TCDD	<0.001	0.001	0.001	<0.001	0.001	<0.001	<0.001	<0.001	0.001	<0.001	<0.001	<0.001	0.001	<0.001	0.001
1,2,3,7,8-PeCDD	0.004	0.006	0.008	0.005	0.003	0.004	0.003	0.003	0.004	0.003	0.003	0.004	0.006	0.005	0.007
1,2,3,4,7,8-HxCDD	0.002	0.006	0.006	0.004	0.001	0.001	0.002	0.001	0.002	<0.001	0.001	0.002	0.005	0.005	0.006
1,2,3,6,7,8-HxCDD	0.003	0.008	0.010	0.006	0.002	0.002	0.003	0.002	0.003	<0.001	0.001	0.002	0.009	0.006	0.010
1,2,3,7,8,9-HxCDD	0.010	0.023	0.019	0.009	0.003	0.004	0.003	0.002	0.003	<0.001	0.001	0.003	0.009	0.006	0.013
1,2,3,4,6,7,8-HpCDD	0.043	0.132	0.117	0.075	0.025	0.038	0.042	0.030	0.057	0.009	0.015	0.032	0.116	0.062	0.131
OCDD	0.130	0.522	0.392	0.215	0.077	0.137	0.149	0.161	0.216	0.031	0.056	0.088	0.440	0.147	0.396
2,3,7,8-TCDF	0.006	0.009	0.014	0.007	0.007	0.006	0.008	0.005	0.006	0.003	0.003	0.005	0.013	0.006	0.016
1,2,3,7,8-PeCDF	0.002	0.002	0.004	0.002	0.002	0.001	0.002	0.001	0.002	<0.001	0.001	0.001	0.003	0.001	0.004
2,3,4,7,8-PeCDF	0.002	0.003	0.006	0.003	0.002	0.002	0.002	0.001	0.003	0.001	0.001	0.002	0.004	0.002	0.006
1,2,3,4,7,8-HxCDF	0.005	0.010	0.019	0.007	0.004	0.005	0.004	0.003	0.006	0.001	0.003	0.003	0.011	0.005	0.015
1,2,3,6,7,8-HxCDF	0.002	0.004	0.007	0.003	0.002	0.002	0.002	0.002	0.003	<0.001	0.002	0.002	0.005	0.002	0.007
2,3,4,6,7,8-HxCDF	0.002	0.005	0.010	0.004	0.001	0.003	0.002	0.002	0.003	<0.001	0.001	0.001	0.005	0.002	0.007
1,2,3,7,8,9-HxCDF	<0.001	<0.001	0.001	<0.001	<0.001	<0.001	<0.001	<0.001	0.001	<0.001	0.001	<0.001	<0.001	<0.001	0.001
1,2,3,4,6,7,8-HpCDF	0.008	0.027	0.036	0.014	0.008	0.014	0.011	0.008	0.016	0.004	0.007	0.009	0.030	0.010	0.030
1,2,3,4,7,8,9-HpCDF	0.001	0.004	0.006	<0.001	0.002	0.002	0.001	<0.001	0.003	<0.001	0.001	0.001	0.004	0.002	0.005
OCDF	0.008	0.023	0.025	0.013	0.006	0.010	0.006	0.004	0.017	0.003	0.006	0.005	0.023	0.010	0.022
<b>PCDD/F Homologues</b>															
TCDDs	0.007	0.020	0.030	0.013	0.016	0.007	0.009	0.004	0.011	0.004	0.003	0.012	0.032	0.010	0.027
PeCDDs	0.017	0.043	0.066	0.034	0.018	0.017	0.020	0.011	0.020	0.008	0.007	0.018	0.050	0.040	0.057
HxCDDs	0.054	0.151	0.148	0.089	0.033	0.041	0.042	0.027	0.040	0.009	0.013	0.039	0.116	0.100	0.158
HpCDDs	0.083	0.273	0.256	0.147	0.050	0.077	0.081	0.062	0.116	0.014	0.028	0.059	0.223	0.130	0.274
OCDD	0.130	0.522	0.392	0.215	0.077	0.137	0.149	0.161	0.216	0.031	0.056	0.088	0.440	0.147	0.396
TCDFs	0.050	0.068	0.095	0.057	0.065	0.049	0.066	0.047	0.058	0.019	0.030	0.034	0.100	0.043	0.104
PeCDFs	0.020	0.046	0.075	0.036	0.028	0.024	0.027	0.023	0.030	0.006	0.015	0.017	0.054	0.027	0.062
HxCDFs	0.019	0.049	0.082	0.031	0.016	0.021	0.019	0.021	0.028	0.006	0.013	0.012	0.053	0.021	0.068
HpCDFs	0.013	0.046	0.057	0.022	0.013	0.022	0.015	0.008	0.025	0.004	0.010	0.014	0.048	0.017	0.050
OCDF	0.008	0.023	0.025	0.013	0.006	0.010	0.006	0.004	0.017	0.003	0.006	0.005	0.023	0.010	0.022
<b>Total</b>															
$\Sigma$ PCDDs	0.291	1.009	0.891	0.498	0.193	0.278	0.300	0.264	0.404	0.066	0.107	0.216	0.861	0.427	0.912
$\Sigma$ PCDFs	0.109	0.232	0.333	0.159	0.128	0.126	0.133	0.102	0.159	0.037	0.073	0.082	0.278	0.116	0.305
$\Sigma$ PCDD/Fs	0.401	1.242	1.224	0.656	0.321	0.404	0.433	0.366	0.562	0.103	0.180	0.298	1.139	0.543	1.217
$\Sigma$ TEQ (PCDD/Fs)	0.009	0.016	0.021	0.012	0.007	0.008	0.008	0.006	0.008	0.005	0.005	0.008	0.015	0.010	0.019

Table A15. Atmospheric concentrations of PCDD/Fs ( $\mu\text{g m}^{-3}$ ) at NAPS rural sites in 2003

Station Name	Kejimikujik					Egbert							Burnt Island	
Sampling Period	1	2	3	4	5	1	2	3	4	5	6	7	1	2
Sampling Date	6/14/03	8/1/03	8/25/03	9/18/03	12/23/03	4/3/03	4/27/03	5/21/03	6/14/03	8/1/03	9/18/03	12/23/03	9/18/03	11/5/03
Sampling Volume (m <sup>3</sup> )	841	718	728	669	790	1059	964	1077	1109	1015	1055	1177	797	968
<b>PCDD/F Congeners</b>														
2,3,7,8-TCDD	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	0.001	<0.001	<0.001	<0.001	<0.001	0.001	<0.001	<0.001
1,2,3,7,8-PeCDD	0.003	0.003	0.003	0.004	0.005	0.003	0.009	0.003	0.002	0.004	0.003	0.008	0.003	0.003
1,2,3,4,7,8-HxCDD	<0.002	<0.001	0.001	0.001	<0.002	0.002	0.010	<0.001	0.001	<0.001	0.001	0.009	0.001	<0.001
1,2,3,6,7,8-HxCDD	<0.002	0.001	0.001	0.001	0.002	0.002	0.019	0.001	0.002	0.002	0.002	0.014	0.001	0.001
1,2,3,7,8,9-HxCDD	<0.002	<0.001	<0.001	<0.001	<0.002	0.002	0.013	<0.001	0.001	0.002	0.002	0.017	0.001	0.002
1,2,3,4,6,7,8-HpCDD	0.005	0.008	0.008	0.007	0.024	0.023	0.212	0.007	0.029	0.018	0.021	0.175	0.015	0.014
OCDD	0.018	0.021	0.023	0.029	0.106	0.060	0.420	0.020	0.076	0.052	0.066	0.492	0.059	0.059
2,3,7,8-TCDF	0.002	0.003	0.002	0.002	0.005	0.003	0.006	0.001	0.004	0.020	0.006	0.033	0.006	0.003
1,2,3,7,8-PeCDF	0.001	0.001	0.001	0.001	0.001	0.001	0.001	<0.001	0.001	0.003	0.001	0.008	0.001	<0.001
2,3,4,7,8-PeCDF	<0.001	<0.001	0.001	0.001	0.001	0.001	0.002	0.001	0.001	0.005	0.002	0.013	0.002	0.001
1,2,3,4,7,8-HxCDF	0.001	0.001	0.001	0.001	0.006	0.001	0.005	0.001	0.002	0.010	0.004	0.037	0.005	0.002
1,2,3,6,7,8-HxCDF	<0.001	<0.001	0.001	0.001	0.002	0.001	0.003	<0.001	0.001	0.004	0.002	0.015	0.002	0.001
2,3,4,6,7,8-HxCDF	<0.001	<0.001	0.001	0.001	0.004	0.001	0.003	<0.001	<0.001	0.004	0.002	0.016	0.002	0.001
1,2,3,7,8,9-HxCDF	<0.001	<0.001	0.001	0.001	<0.002	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	0.001	<0.001	<0.001
1,2,3,4,6,7,8-HpCDF	0.004	0.004	0.004	0.005	0.016	0.004	0.017	0.003	0.004	0.015	0.008	0.068	0.013	0.005
1,2,3,4,7,8,9-HpCDF	0.001	<0.001	<0.001	<0.001	<0.003	<0.001	0.002	<0.001	<0.001	0.002	0.001	0.010	<0.001	<0.001
OCDF	0.004	0.002	0.002	0.008	0.016	0.003	0.012	0.002	0.003	0.012	0.006	0.045	0.014	0.008
<b>PCDD/F Homologues</b>														
TCDDs	<0.001	0.001	<0.001	0.001	0.003	0.005	0.024	0.004	0.006	0.016	0.014	0.074	0.011	0.006
PeCDDs	0.003	0.009	0.005	0.010	0.014	0.013	0.082	0.005	0.010	0.026	0.020	0.112	0.015	0.005
HxCDDs	0.006	0.008	0.006	0.006	0.025	0.027	0.281	0.009	0.023	0.028	0.041	0.254	0.020	0.019
HpCDDs	0.007	0.011	0.009	0.010	0.052	0.041	0.437	0.012	0.052	0.034	0.048	0.357	0.032	0.027
OCDD	0.018	0.021	0.023	0.029	0.106	0.060	0.420	0.020	0.076	0.052	0.066	0.492	0.059	0.059
TCDFs	0.015	0.016	0.011	0.013	0.033	0.017	0.046	0.012	0.031	0.147	0.057	0.211	0.057	0.029
PeCDFs	0.006	0.005	0.004	0.004	0.019	0.011	0.029	0.006	0.012	0.078	0.035	0.157	0.029	0.009
HxCDFs	0.004	0.004	0.004	0.006	0.026	0.007	0.033	0.005	0.008	0.052	0.025	0.167	0.027	0.008
HpCDFs	0.005	0.005	0.004	0.005	0.023	0.005	0.030	0.004	0.006	0.021	0.013	0.107	0.019	0.007
OCDF	0.004	0.002	0.002	0.008	0.016	0.003	0.012	0.002	0.003	0.012	0.006	0.045	0.014	0.008
<b>Total</b>														
Σ PCDDs	0.034	0.049	0.043	0.056	0.201	0.146	1.243	0.050	0.168	0.155	0.190	1.289	0.137	0.116
Σ PCDFs	0.034	0.032	0.024	0.036	0.116	0.042	0.150	0.028	0.060	0.311	0.136	0.687	0.145	0.062
Σ PCDD/Fs	0.068	0.081	0.067	0.092	0.317	0.188	1.393	0.078	0.228	0.466	0.325	1.976	0.282	0.178
Σ TEQ (PCDD/Fs)	0.005	0.005	0.005	0.006	0.009	0.005	0.019	0.004	0.005	0.011	0.006	0.030	0.006	0.005

Table A15. Atmospheric concentrations of PCDD/Fs (pg m<sup>-3</sup>) at NAPS rural sites in 2003 (continued)

Station Name	Point Petre								Simcoe							
Sampling Period	1	2	3	4	5	6	7	8	1	2	3	4	5	6	7	8
Sampling Date	3/10/03	4/3/03	4/27/03	5/21/03	6/14/03	8/1/03	9/18/03	12/23/03	3/10/03	4/3/03	6/14/03	7/8/03	8/1/03	8/25/03	9/18/03	12/23/03
Sampling Volume (m3)	563	610	608	605	761	574	671	576	931	872	831.0	701	702	681	957	775
<b>PCDD/F Congeners</b>																
2,3,7,8-TCDD	<0.001	0.001	<0.001	<0.001	<0.001	<0.002	<0.001	0.003	<0.001	<0.001	0.001	<0.002	<0.001	0.001	0.001	0.001
1,2,3,7,8-PeCDD	0.005	0.007	0.005	0.004	0.003	0.006	0.004	0.012	0.005	0.003	0.005	0.006	0.005	0.007	0.004	0.006
1,2,3,4,7,8-HxCDD	0.002	0.006	0.002	<0.002	<0.001	<0.002	0.002	0.009	0.004	0.002	0.002	0.002	<0.002	0.003	0.002	0.005
1,2,3,6,7,8-HxCDD	<0.001	0.010	0.003	0.001	0.002	0.003	0.002	0.011	0.005	0.003	0.005	0.004	0.002	0.005	0.003	0.008
1,2,3,7,8,9-HxCDD	<0.001	0.011	0.003	<0.002	0.003	<0.002	0.003	0.012	0.003	0.002	0.003	0.004	<0.002	0.005	0.003	0.007
1,2,3,4,6,7,8-HpCDD	0.025	0.112	0.034	0.018	0.030	0.033	0.024	0.082	0.047	0.034	0.073	0.048	0.018	0.048	0.040	0.102
OCDD	0.063	0.258	0.101	0.070	0.065	0.100	0.088	0.247	0.162	0.092	0.278	0.137	0.049	0.502	0.148	0.302
2,3,7,8-TCDF	0.006	0.004	0.005	0.003	0.008	0.008	0.005	0.015	0.006	0.004	0.010	0.017	0.007	0.011	0.008	0.017
1,2,3,7,8-PeCDF	0.002	0.001	0.001	0.001	0.002	<0.002	0.002	0.008	0.001	0.001	0.002	0.004	0.003	0.002	0.002	0.003
2,3,4,7,8-PeCDF	0.002	0.002	0.001	<0.001	0.003	0.003	0.002	0.011	0.002	0.001	0.003	0.005	0.003	0.003	0.003	0.005
1,2,3,4,7,8-HxCDF	0.004	0.003	0.004	<0.001	0.006	0.005	0.004	0.022	0.004	0.002	0.007	0.014	0.006	0.008	0.005	0.013
1,2,3,6,7,8-HxCDF	0.002	0.002	0.002	0.001	0.003	0.003	0.002	0.013	0.001	0.001	0.004	0.007	0.002	0.004	0.003	0.006
2,3,4,6,7,8-HxCDF	0.002	0.002	0.001	0.001	0.002	<0.001	0.002	0.012	0.001	0.001	0.003	0.011	0.002	0.004	0.003	0.006
1,2,3,7,8,9-HxCDF	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	0.007	0.001	<0.001	<0.001	<0.002	<0.001	<0.001	<0.001	0.001
1,2,3,4,6,7,8-HpCDF	0.009	0.008	0.009	0.005	0.013	0.015	0.010	0.038	0.009	0.007	0.016	0.051	0.012	0.021	0.016	0.031
1,2,3,4,7,8,9-HpCDF	<0.001	0.001	<0.001	<0.001	<0.001	<0.003	0.001	0.011	0.003	<0.001	0.002	0.004	<0.002	0.002	0.002	0.005
OCDF	0.006	0.006	0.005	0.003	0.008	0.007	0.008	0.035	0.008	0.004	0.018	0.045	0.007	0.018	0.015	0.027
<b>PCDD/F Homologues</b>																
TCDDs	0.002	0.015	0.013	0.016	0.010	0.011	0.010	0.029	0.007	0.007	0.029	0.028	0.011	0.019	0.017	0.037
PeCDDs	0.011	0.043	0.025	0.017	0.013	0.017	0.021	0.053	0.021	0.017	0.036	0.048	0.022	0.036	0.031	0.054
HxCDDs	0.029	0.123	0.063	0.032	0.037	0.028	0.032	0.115	0.051	0.041	0.079	0.082	0.032	0.070	0.050	0.117
HpCDDs	0.048	0.198	0.067	0.033	0.061	0.057	0.044	0.162	0.089	0.069	0.149	0.092	0.028	0.100	0.080	0.205
OCDD	0.063	0.258	0.101	0.070	0.065	0.100	0.088	0.247	0.162	0.092	0.278	0.137	0.049	0.502	0.148	0.302
TCDFs	0.031	0.027	0.036	0.020	0.063	0.067	0.049	0.103	0.037	0.024	0.079	0.117	0.075	0.075	0.071	0.120
PeCDFs	0.017	0.016	0.019	0.008	0.034	0.043	0.039	0.074	0.021	0.014	0.047	0.092	0.047	0.045	0.041	0.069
HxCDFs	0.013	0.015	0.016	0.007	0.030	0.033	0.028	0.097	0.016	0.011	0.041	0.095	0.035	0.061	0.033	0.066
HpCDFs	0.011	0.014	0.013	0.007	0.019	0.022	0.015	0.065	0.016	0.009	0.027	0.078	0.016	0.035	0.025	0.053
OCDF	0.006	0.006	0.005	0.003	0.008	0.007	0.008	0.035	0.008	0.004	0.018	0.045	0.007	0.018	0.015	0.027
<b>Total</b>																
∑ PCDDs	0.153	0.636	0.269	0.169	0.186	0.214	0.195	0.606	0.329	0.225	0.571	0.387	0.142	0.726	0.324	0.714
∑ PCDFs	0.078	0.078	0.089	0.045	0.152	0.171	0.138	0.374	0.098	0.061	0.212	0.426	0.180	0.234	0.185	0.335
∑ PCDD/Fs	0.231	0.714	0.357	0.214	0.339	0.385	0.333	0.980	0.427	0.286	0.783	0.814	0.322	0.960	0.509	1.048
∑ TEQ (PCDD/Fs)	0.008	0.014	0.009	0.007	0.008	0.012	0.008	0.029	0.010	0.006	0.011	0.016	0.009	0.013	0.009	0.016

Table A16. Atmospheric concentrations of PCDD/Fs ( $\mu\text{g m}^{-3}$ ) at NAPS rural sites in 2004

Station Name	Kejimikujik											Egbert											
Sampling Period	1	2	3	4	5	6	7	8	9	10	11	1	2	3	4	5	6	7	8	9	10	11	12
Sampling Date	3/4/04	3/28/04	4/21/04	5/15/04	6/8/04	7/26/04	8/19/04	10/6/04	10/30/04	11/23/04	12/17/04	1/16/04	2/9/04	3/4/04	3/28/04	4/21/04	5/15/04	6/8/04	7/26/04	8/19/04	10/12/04	11/23/04	12/17/04
Sampling Volume (m <sup>3</sup> )	649	679	648	642	548	617	674	722	658	756	786	1143	870	653	692	666	712	774	790	1111	562	902	877
<b>PCDD/F Congeners</b>																							
2,3,7,8-TCDD	0.001	<0.001	<0.001	<0.002	<0.002	0.001	<0.001	0.001	<0.001	<0.001	0.001	<0.001	0.001	<0.002	0.001	0.001	<0.001	<0.001	<0.001	0.001	0.001	0.002	0.001
1,2,3,7,8-PeCDD	0.005	0.004	0.004	0.006	0.006	0.005	0.002	0.004	0.004	0.002	0.003	0.003	0.005	0.006	0.006	0.006	0.005	0.006	0.007	0.003	0.008	0.009	0.004
1,2,3,4,7,8-HxCDD	0.003	0.001	<0.001	0.003	<0.002	0.002	<0.002	0.001	<0.002	<0.002	0.001	0.001	0.003	0.003	0.002	0.004	0.002	0.004	0.002	<0.002	0.005	0.008	0.002
1,2,3,6,7,8-HxCDD	0.002	0.001	0.001	<0.002	0.001	0.002	0.001	0.001	<0.001	0.001	0.002	0.002	0.005	0.008	0.004	0.006	0.002	0.003	0.004	0.002	0.007	0.013	0.003
1,2,3,7,8,9-HxCDD	0.005	0.003	0.001	<0.002	<0.002	0.002	<0.001	0.002	<0.001	0.001	0.003	0.002	0.007	0.010	0.005	0.002	0.003	0.003	0.003	0.004	0.009	0.020	0.005
1,2,3,4,6,7,8-HpCDD	0.012	0.007	0.007	0.011	0.011	0.013	0.006	0.017	0.015	0.012	0.025	0.018	0.072	0.118	0.047	0.074	0.014	0.028	0.080	0.041	0.109	0.214	0.038
OCDD	0.040	0.018	0.024	0.040	0.047	0.058	0.021	0.035	0.075	0.035	0.074	0.042	0.250	0.328	0.125	0.237	0.042	0.111	0.785	0.119	0.317	0.564	0.095
2,3,7,8-TCDF	0.003	0.002	0.002	0.004	<0.002	0.002	0.002	0.007	0.002	0.001	0.019	0.003	0.011	0.023	0.011	0.016	0.002	0.003	0.002	0.002	0.003	0.005	0.003
1,2,3,7,8-PeCDF	0.002	0.001	<0.001	0.003	0.001	0.002	0.001	<0.001	<0.001	0.001	0.010	0.001	0.002	0.005	0.002	0.004	0.001	0.002	0.002	0.001	0.002	0.005	0.003
2,3,4,7,8-PeCDF	0.002	0.001	<0.001	<0.001	<0.002	<0.001	<0.001	0.002	<0.001	<0.001	0.012	0.001	0.003	0.009	0.003	0.005	0.001	0.003	0.002	0.001	0.005	0.007	0.005
1,2,3,4,7,8-HxCDF	0.003	0.001	0.001	0.001	0.002	0.002	0.001	0.007	0.002	0.002	0.009	0.002	0.009	0.008	0.009	0.011	0.003	0.006	0.004	0.004	0.012	0.019	0.010
1,2,3,6,7,8-HxCDF	0.002	0.001	0.000	<0.001	<0.001	0.002	0.001	0.002	0.001	0.001	0.004	0.001	0.004	0.008	0.003	0.005	0.001	0.003	0.002	0.001	0.004	0.008	0.003
2,3,4,6,7,8-HxCDF	0.003	0.001	0.001	<0.001	0.002	0.003	0.001	0.004	0.001	0.001	0.004	0.001	0.004	0.007	0.004	0.006	<0.001	0.003	0.003	0.002	0.007	0.009	0.004
1,2,3,7,8,9-HxCDF	0.003	0.001	<0.001	<0.001	<0.001	0.003	<0.001	<0.001	<0.001	<0.001	0.001	0.000	<0.001	0.002	<0.001	0.001	<0.001	0.002	0.001	<0.001	<0.002	<0.001	<0.001
1,2,3,4,6,7,8-HpCDF	0.008	0.004	0.004	0.007	0.006	0.007	0.004	0.012	0.006	0.005	0.012	0.004	0.022	0.032	0.017	0.023	0.005	0.013	0.016	0.009	0.026	0.038	0.016
1,2,3,4,7,8,9-HpCDF	0.004	0.002	<0.001	<0.003	<0.002	0.004	<0.002	0.001	<0.001	<0.001	0.002	<0.001	0.002	0.006	0.003	0.004	<0.002	0.004	0.003	<0.001	0.003	0.006	<0.001
OCDF	0.014	0.004	0.003	0.004	0.006	0.012	0.004	0.005	0.007	0.004	0.009	0.005	0.014	0.028	0.017	0.022	0.005	0.015	0.047	0.008	0.018	0.030	0.005
<b>PCDD/F Homologues</b>																							
TCDDs	0.001	<0.001	<0.001	<0.002	<0.002	0.001	0.001	0.011	0.001	0.001	0.004	0.004	0.019	0.032	0.054	0.026	0.010	0.024	0.007	0.025	0.035	0.064	
PeCDDs	0.008	0.006	0.006	0.014	0.014	0.005	0.002	0.032	0.013	0.006	0.014	0.014	0.037	0.087	0.048	0.043	0.020	0.024	0.053	0.015	0.067	0.081	0.057
HxCDDs	0.018	0.008	0.007	0.009	0.010	0.015	0.008	0.032	0.013	0.016	0.029	0.028	0.094	0.178	0.072	0.088	0.021	0.045	0.074	0.042	0.138	0.225	0.067
HpCDDs	0.017	0.010	0.011	0.019	0.019	0.022	0.010	0.031	0.026	0.022	0.047	0.037	0.153	0.250	0.090	0.143	0.026	0.056	0.145	0.075	0.222	0.418	0.065
OCDD	0.040	0.018	0.024	0.040	0.047	0.058	0.021	0.035	0.075	0.035	0.074	0.042	0.250	0.328	0.125	0.237	0.042	0.111	0.785	0.119	0.317	0.564	0.095
TCDFs	0.015	0.007	0.013	0.018	0.009	0.012	0.016	0.050	0.020	0.016	0.157	0.023	0.079	0.146	0.075	0.117	0.033	0.076	0.052	0.035	0.119	0.126	0.084
PeCDFs	0.010	0.004	0.001	0.006	0.007	0.007	0.007	0.031	0.007	0.008	0.090	0.010	0.043	0.100	0.043	0.063	0.018	0.047	0.030	0.019	0.066	0.093	0.058
HxCDFs	0.015	0.005	0.004	0.003	0.009	0.011	0.006	0.029	0.008	0.008	0.032	0.008	0.041	0.093	0.036	0.058	0.011	0.041	0.028	0.017	0.062	0.089	0.040
HpCDFs	0.013	0.006	0.005	0.007	0.008	0.012	0.004	0.018	0.010	0.006	0.018	0.007	0.033	0.053	0.027	0.040	0.008	0.025	0.038	0.012	0.042	0.065	0.022
OCDF	0.014	0.004	0.003	0.004	0.006	0.012	0.004	0.005	0.007	0.004	0.009	0.005	0.014	0.028	0.017	0.022	0.005	0.015	0.047	0.008	0.018	0.030	0.005
<b>Total</b>																							
∑ PCDDs	0.084	0.043	0.049	0.082	0.089	0.100	0.042	0.141	0.128	0.079	0.166	0.125	0.554	0.874	0.389	0.538	0.111	0.246	1.082	0.258	0.769	1.323	0.348
∑ PCDFs	0.067	0.026	0.026	0.038	0.038	0.053	0.036	0.132	0.052	0.042	0.307	0.052	0.210	0.419	0.198	0.299	0.074	0.205	0.196	0.091	0.307	0.403	0.207
∑ PCDD/Fs	0.151	0.069	0.075	0.120	0.127	0.153	0.078	0.273	0.180	0.121	0.473	0.178	0.763	1.293	0.587	0.837	0.186	0.451	1.278	0.349	1.076	1.725	0.555
∑ TEQ (PCDD/Fs)	0.009	0.006	0.005	0.010	0.010	0.008	0.004	0.008	0.006	0.004	0.012	0.005	0.012	0.019	0.011	0.015	0.008	0.011	0.012	0.006	0.017	0.024	0.011

Table A16. Atmospheric concentrations of PCDD/Fs (pg m<sup>-3</sup>) at NAPS rural sites in 2004 (continued)

Station Name	Point Petre										Bumt Island					Simcoe				
Sampling Period	1	2	3	4	5	6	7	8	9	1	2	3	4	5	6	1	2	3	4	5
Sampling Date	3/4/04	3/28/04	4/21/04	5/15/04	6/8/04	7/26/04	8/19/04	10/6/04	11/23/04	1/16/04	3/4/04	3/28/04	4/21/04	5/15/04	12/11/04	1/16/04	6/8/04	8/19/04	11/23/04	12/17/04
Sampling Volume (m3)	521	523	549	509	543	799	558	606	624	889	793	858	868	810	920	845	838	970	802	832
<b>PCDD/F Congeners</b>																				
2,3,7,8-TCDD	0.001	0.002	0.001	0.003	0.001	<0.001	<0.002	0.001	0.001	<0.001	<0.001	<0.001	0.000	<0.001	0.001	0.002	0.002	0.001	0.001	0.001
1,2,3,7,8-PeCDD	0.008	0.020	0.004	0.007	0.006	0.004	0.006	0.005	0.011	0.003	0.004	0.004	0.004	0.004	0.003	0.012	0.006	0.004	0.009	0.004
1,2,3,4,7,8-HxCDD	0.006	0.020	0.002	0.003	<0.002	<0.002	<0.002	0.004	0.012	0.001	0.002	0.002	0.003	0.003	0.001	0.012	0.004	0.002	0.009	0.002
1,2,3,6,7,8-HxCDD	0.008	0.036	0.003	0.002	0.003	0.003	0.003	0.004	0.017	0.001	0.003	0.002	0.004	0.001	0.002	0.018	0.006	0.003	0.013	0.003
1,2,3,7,8,9-HxCDD	0.008	0.043	0.002	0.002	0.002	0.003	0.003	0.007	0.014	0.001	0.004	0.003	0.005	0.002	0.002	0.020	0.006	0.003	0.019	0.004
1,2,3,4,6,7,8-HpCDD	0.108	0.492	0.037	0.035	0.034	0.047	0.034	0.088	0.298	0.011	0.043	0.024	0.060	0.010	0.016	0.221	0.119	0.038	0.221	0.039
OCDD	0.313	1.135	0.116	0.121	0.139	0.157	0.153	0.394	1.065	0.037	0.138	0.069	0.206	0.045	0.068	0.452	0.526	0.148	0.671	0.103
2,3,7,8-TCDF	0.013	0.010	0.011	0.003	0.005	0.007	0.002	0.003	0.004	0.001	0.004	0.006	0.007	0.001	0.002	0.014	0.003	0.004	0.003	0.002
1,2,3,7,8-PeCDF	0.004	0.002	0.002	0.003	0.003	0.001	0.002	0.003	0.005	<0.001	0.001	0.001	0.001	0.002	0.003	0.003	0.002	0.002	0.004	0.001
2,3,4,7,8-PeCDF	0.005	0.004	0.004	0.002	0.005	0.002	0.002	0.004	0.007	<0.001	0.002	0.002	0.003	<0.001	0.004	0.004	0.003	0.003	0.007	0.002
1,2,3,4,7,8-HxCDF	0.015	0.011	0.008	0.003	0.009	0.004	0.004	0.009	0.027	0.001	0.003	0.004	0.007	0.001	0.012	0.012	0.009	0.006	0.020	0.005
1,2,3,6,7,8-HxCDF	0.005	0.006	0.004	0.001	0.004	0.002	<0.001	0.003	0.010	<0.001	0.002	0.001	0.003	<0.001	0.004	0.005	0.004	0.002	0.007	0.002
2,3,4,6,7,8-HxCDF	0.007	0.006	0.004	0.002	0.004	0.003	0.002	0.005	0.012	<0.001	0.002	0.002	0.003	0.002	0.005	0.005	0.003	0.004	0.009	0.002
1,2,3,7,8,9-HxCDF	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.002	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	0.001	<0.001	0.001	<0.001	<0.002	<0.001	<0.001
1,2,3,4,6,7,8-HpCDF	0.035	0.035	0.015	0.012	0.020	0.011	0.009	0.023	0.072	0.003	0.008	0.009	0.016	0.005	0.016	0.022	0.022	0.012	0.044	0.009
1,2,3,4,7,8,9-HpCDF	0.005	0.006	0.002	<0.002	0.004	<0.002	<0.002	0.003	0.009	<0.001	0.002	0.002	0.002	0.002	0.001	0.004	0.004	<0.002	0.006	0.001
OCDF	0.033	0.042	0.011	0.009	0.018	0.009	0.009	0.031	0.079	0.003	0.004	0.007	0.013	0.006	0.006	0.024	0.025	0.005	0.032	0.008
<b>PCDD/F Homologues</b>																				
TCDDs	0.019	0.046	0.015	0.009	0.013	0.035	0.010	0.013	0.041	0.001	0.009	0.009	0.011	0.004	0.020	0.036	0.025	0.025	0.039	0.010
PeCDDs	0.047	0.157	0.025	0.021	0.020	0.031	0.020	0.028	0.089	0.008	0.039	0.032	0.030	0.023	0.030	0.096	0.042	0.027	0.071	0.020
HxCDDs	0.139	0.518	0.046	0.031	0.042	0.066	0.055	0.083	0.279	0.013	0.054	0.033	0.061	0.017	0.039	0.240	0.112	0.059	0.221	0.044
HpCDDs	0.222	0.916	0.068	0.063	0.064	0.090	0.069	0.171	0.581	0.019	0.091	0.047	0.120	0.018	0.030	0.390	0.245	0.076	0.433	0.074
OCDD	0.313	1.135	0.116	0.121	0.139	0.157	0.153	0.394	1.065	0.037	0.138	0.069	0.206	0.045	0.068	0.452	0.526	0.148	0.671	0.103
TCDFs	0.077	0.075	0.082	0.049	0.085	0.061	0.069	0.078	0.119	0.007	0.031	0.037	0.051	0.013	0.070	0.054	0.100	0.098	0.120	0.034
PeCDFs	0.059	0.051	0.041	0.021	0.058	0.040	0.032	0.044	0.084	0.002	0.016	0.022	0.027	0.007	0.061	0.045	0.065	0.052	0.080	0.021
HxCDFs	0.064	0.075	0.041	0.013	0.043	0.030	0.020	0.041	0.113	0.002	0.015	0.016	0.030	0.009	0.050	0.053	0.058	0.040	0.089	0.019
HpCDFs	0.058	0.080	0.025	0.015	0.034	0.016	0.014	0.040	0.110	0.003	0.015	0.016	0.027	0.009	0.023	0.046	0.041	0.020	0.074	0.015
OCDF	0.033	0.042	0.011	0.009	0.018	0.009	0.009	0.031	0.079	0.003	0.004	0.007	0.013	0.006	0.006	0.024	0.025	0.005	0.032	0.008
<b>Total</b>																				
∑ PCDDs	0.739	2.772	0.270	0.245	0.277	0.379	0.307	0.689	2.054	0.078	0.331	0.190	0.427	0.105	0.187	1.213	0.951	0.336	1.434	0.251
∑ PCDFs	0.291	0.322	0.201	0.107	0.238	0.156	0.145	0.234	0.505	0.018	0.081	0.098	0.147	0.044	0.210	0.222	0.288	0.214	0.394	0.096
∑ PCDD/Fs	1.031	3.094	0.470	0.352	0.515	0.534	0.452	0.923	2.559	0.096	0.412	0.287	0.574	0.150	0.396	1.435	1.239	0.550	1.829	0.347
∑ TEQ (PCDD/Fs)	0.018	0.042	0.010	0.012	0.012	0.009	0.010	0.012	0.027	0.004	0.008	0.007	0.009	0.007	0.008	0.027	0.014	0.009	0.023	0.007



Table 17. Atmospheric concentrations of PCDD/Fs (pg m<sup>-3</sup>) at NAPS rural sites in 2005

Station Name	Kejimikujik												Egbert													
Sampling Period	1	2	3	4	5	6	7	8	9	10	11	12	1	2	3	4	5	6	7	8	9	10	11	12	13	
Sampling Date	1/10/05	2/3/05	3/23/05	4/16/05	5/10/05	6/3/05	6/27/05	7/21/05	8/14/05	9/7/05	11/18/05	12/12/05	1/10/05	2/3/05	3/23/05	4/16/05	5/10/05	6/3/05	7/21/05	8/14/05	9/7/05	10/1/05	10/25/05	11/18/05	12/12/05	
Sampling Volume (m3)	806	746	656	657	704	705	644	677	782	770	744	896	917	887	804	699	841	822	915	948	853	813	929	962	926	
<b>PCDD/F Congeners</b>																										
2,3,7,8-TCDD	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	0.001	<0.001	0.000	<0.001	<0.001	0.001	0.002	0.001	0.001	0.001	<0.001	0.001	0.001	0.001	0.002	0.001	0.001	0.001	
1,2,3,7,8-PeCDD	0.003	0.003	0.004	0.004	0.003	0.004	0.004	0.005	0.003	0.003	0.003	0.004	0.004	0.008	0.005	0.006	0.006	0.004	0.003	0.006	0.010	0.008	0.004	0.005	0.004	
1,2,3,4,7,8-HxCDD	0.001	0.001	0.002	<0.001	<0.001	0.001	<0.001	0.002	<0.001	<0.001	<0.001	0.002	0.004	0.008	0.003	0.004	0.003	0.002	0.001	0.004	0.006	0.005	0.002	0.004	0.002	
1,2,3,6,7,8-HxCDD	0.002	<0.001	0.003	<0.001	<0.001	0.001	<0.001	0.002	0.000	0.001	0.001	0.004	0.005	0.009	0.005	0.006	0.006	0.003	0.002	0.008	0.010	0.007	0.002	0.008	0.003	
1,2,3,7,8,9-HxCDD	0.003	<0.001	0.003	0.001	0.001	<0.001	0.001	0.002	<0.001	0.001	0.001	0.003	0.009	0.015	0.004	0.007	0.006	0.002	0.002	0.009	0.010	0.009	0.004	0.008	0.003	
1,2,3,4,6,7,8-HpCDD	0.089	0.006	0.044	0.016	0.009	0.006	0.008	0.007	0.006	0.005	0.011	0.046	0.078	0.155	0.045	0.068	0.063	0.030	0.021	0.133	0.096	0.099	0.027	0.110	0.027	
OCDD	0.381	0.028	0.103	0.054	0.033	0.028	0.029	0.022	0.021	0.021	0.037	0.204	0.240	0.408	0.095	0.224	0.224	0.103	0.073	0.343	0.236	0.372	0.062	0.316	0.058	
2,3,7,8-TCDF	0.001	0.001	0.004	0.003	0.002	0.002	0.002	0.003	0.002	0.002	0.002	0.009	0.003	0.007	0.006	0.014	0.023	0.014	0.007	0.013	0.017	0.025	0.006	0.006	0.012	
1,2,3,7,8-PeCDF	0.001	0.001	0.001	0.001	<0.001	0.001	0.001	0.001	0.001	0.000	0.001	0.002	0.003	0.005	0.001	0.003	0.003	0.003	0.001	0.004	0.005	0.007	0.001	0.002	0.002	
2,3,4,7,8-PeCDF	0.001	0.001	0.001	0.001	<0.001	<0.001	0.001	0.001	0.001	0.000	0.001	0.003	0.004	0.009	0.002	0.004	0.005	0.004	0.003	0.005	0.005	0.013	0.001	0.003	0.004	
1,2,3,4,7,8-HxCDF	0.003	0.001	0.004	0.001	0.001	0.001	0.001	0.002	0.001	0.001	0.002	0.006	0.010	0.026	0.004	0.012	0.012	0.009	0.006	0.008	0.012	0.019	0.004	0.005	0.005	
1,2,3,6,7,8-HxCDF	0.001	0.000	0.001	0.001	<0.001	0.001	0.001	0.001	<0.001	<0.001	0.001	0.002	0.004	0.009	0.002	0.005	0.005	0.004	0.003	0.004	0.005	0.008	0.001	0.003	0.002	
2,3,4,6,7,8-HxCDF	0.001	0.001	0.002	<0.001	0.001	<0.001	0.001	0.001	<0.001	<0.001	0.001	0.002	0.004	0.010	0.002	0.005	0.005	0.004	0.003	0.003	0.004	0.009	0.004	0.003	0.002	
1,2,3,7,8,9-HxCDF	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	0.001	<0.001	<0.001	<0.001	<0.001	<0.002	<0.002	0.001	0.001	<0.001	<0.001	0.001	<0.001	<0.001	<0.003	<0.001	<0.001	<0.001	
1,2,3,4,6,7,8-HpCDF	0.008	0.004	0.008	0.005	0.004	0.003	0.004	0.004	0.003	0.003	0.005	0.021	0.019	0.047	0.007	0.024	0.022	0.018	0.016	0.016	0.020	0.037	0.006	0.012	0.007	
1,2,3,4,7,8,9-HpCDF	0.001	<0.001	<0.001	0.001	0.001	<0.001	<0.001	0.002	<0.001	<0.001	<0.001	0.001	0.002	0.004	0.005	0.002	0.003	0.003	0.003	0.002	0.003	0.005	<0.002	0.002	0.001	
OCDF	0.012	0.004	0.006	0.004	0.004	0.003	0.005	0.005	0.003	0.003	0.005	0.036	0.015	0.029	0.006	0.022	0.015	0.014	0.013	0.011	0.012	0.028	0.002	0.011	0.003	
<b>PCDD/F Homologues</b>																										
TCDDs	0.003	0.003	0.006	0.001	0.002	<0.001	<0.001	0.001	<0.001	0.002	0.001	0.011	0.021	0.063	0.009	0.016	0.038	0.032	0.016	0.018	0.082	0.029	0.008	0.015	0.023	
PeCDDs	0.011	0.006	0.019	0.007	0.007	0.005	0.009	0.008	0.004	0.003	0.005	0.014	0.027	0.095	0.023	0.039	0.050	0.028	0.019	0.038	0.071	0.058	0.019	0.035	0.027	
HxCDDs	0.032	0.006	0.053	0.017	0.007	0.001	0.008	0.010	0.005	0.006	0.011	0.038	0.093	0.218	0.053	0.092	0.095	0.045	0.033	0.104	0.175	0.121	0.044	0.116	0.048	
HpCDDs	0.149	0.010	0.088	0.031	0.016	0.010	0.013	0.011	0.009	0.007	0.018	0.074	0.158	0.322	0.078	0.140	0.130	0.060	0.040	0.244	0.204	0.214	0.058	0.214	0.051	
OCDD	0.381	0.028	0.103	0.054	0.033	0.028	0.029	0.022	0.021	0.021	0.037	0.204	0.240	0.408	0.095	0.224	0.224	0.103	0.073	0.343	0.236	0.372	0.062	0.316	0.058	
TCDFs	0.020	0.018	0.020	0.016	0.020	0.013	0.019	0.019	0.019	0.009	0.010	0.059	0.071	0.196	0.037	0.094	0.162	0.094	0.067	0.115	0.156	0.166	0.017	0.039	0.068	
PeCDFs	0.011	0.007	0.014	0.007	0.004	0.003	0.010	0.006	0.004	0.004	0.007	0.030	0.043	0.116	0.017	0.060	0.085	0.057	0.042	0.071	0.124	0.171	0.007	0.029	0.037	
HxCDFs	0.012	0.004	0.015	0.005	0.004	0.003	0.008	0.008	0.005	0.003	0.008	0.029	0.039	0.112	0.017	0.058	0.060	0.045	0.040	0.052	0.090	0.142	0.011	0.027	0.022	
HpCDFs	0.018	0.005	0.011	0.008	0.007	0.003	0.005	0.006	0.004	0.003	0.008	0.039	0.030	0.073	0.011	0.037	0.034	0.031	0.025	0.028	0.035	0.066	0.006	0.022	0.012	
OCDF	0.012	0.004	0.006	0.004	0.004	0.003	0.005	0.005	0.003	0.003	0.005	0.036	0.015	0.029	0.006	0.022	0.015	0.014	0.013	0.011	0.012	0.028	0.002	0.011	0.003	
<b>Total</b>																										
∑ PCDDs	0.576	0.052	0.270	0.110	0.065	0.044	0.059	0.052	0.038	0.040	0.073	0.341	0.540	1.106	0.257	0.511	0.538	0.268	0.181	0.747	0.768	0.794	0.180	0.695	0.207	
∑ PCDFs	0.071	0.037	0.066	0.041	0.038	0.025	0.046	0.044	0.034	0.021	0.038	0.193	0.198	0.526	0.088	0.271	0.356	0.241	0.186	0.276	0.416	0.572	0.044	0.128	0.142	
∑ PCDD/Fs	0.647	0.089	0.336	0.151	0.104	0.069	0.105	0.096	0.073	0.060	0.110	0.534	0.738	1.632	0.345	0.781	0.893	0.510	0.367	1.023	1.184	1.366	0.224	0.824	0.349	
∑ TEQ (PCDD/Fs)	0.006	0.004	0.007	0.006	0.005	0.005	0.006	0.007	0.004	0.004	0.004	0.008	0.011	0.023	0.009	0.014	0.015	0.011	0.008	0.015	0.020	0.024	0.008	0.012	0.009	

Table A17. Atmospheric concentrations of PCDD/Fs ( $\text{pg m}^{-3}$ ) at NAPS rural sites in 2005 (continued)

Station Name	Point Petre												
Sampling Period	1	2	3	4	5	6	7	8	9	10	11	12	13
Sampling Date	2/3/05	2/27/05	3/29/05	4/16/05	6/3/05	6/27/05	7/21/05	8/14/05	9/7/05	10/1/05	10/25/05	11/18/05	12/12/05
Sampling Volume (m3)	681	657	632	467	562	606	544	550	577	498	686	671	762
<b>PCDD/F Congeners</b>													
2,3,7,8-TCDD	0.002	0.006	0.001	0.002	<0.001	<0.001	0.001	0.001	<0.001	<0.001	<0.001	0.001	0.001
1,2,3,7,8-PeCDD	0.010	0.043	0.005	0.012	0.004	0.004	0.004	0.004	0.005	0.008	0.004	0.007	0.005
1,2,3,4,7,8-HxCDD	0.010	0.050	0.001	0.012	0.003	0.001	<0.001	<0.003	<0.002	0.004	0.002	0.006	0.002
1,2,3,6,7,8-HxCDD	0.015	0.085	0.002	0.017	0.004	0.002	0.002	<0.002	0.002	0.005	0.003	0.009	0.004
1,2,3,7,8,9-HxCDD	0.018	0.085	0.003	0.020	0.005	0.002	0.002	0.002	0.003	0.008	0.005	0.010	0.003
1,2,3,4,6,7,8-HpCDD	0.167	1.011	0.028	0.230	0.054	0.022	0.019	0.017	0.030	0.081	0.044	0.107	0.036
OCDD	0.492	2.000	0.084	0.752	0.209	0.085	0.079	0.059	0.107	0.279	0.120	0.238	0.081
2,3,7,8-TCDF	0.021	0.015	0.008	0.016	0.044	0.008	0.005	0.005	0.013	0.014	0.005	0.005	0.007
1,2,3,7,8-PeCDF	0.005	0.003	0.001	0.005	0.024	0.002	0.002	0.001	0.003	0.003	0.001	0.002	0.002
2,3,4,7,8-PeCDF	0.009	0.006	0.002	0.007	0.012	0.003	0.002	0.001	0.004	0.006	0.001	0.002	0.003
1,2,3,4,7,8-HxCDF	0.022	0.015	0.004	0.019	0.059	0.005	0.004	0.003	0.009	0.013	0.003	0.004	0.005
1,2,3,6,7,8-HxCDF	0.009	0.006	0.002	0.008	0.018	0.004	0.002	0.001	0.004	0.005	0.001	0.002	0.002
2,3,4,6,7,8-HxCDF	0.010	0.007	0.002	0.008	0.016	0.002	0.002	0.001	0.004	0.006	0.001	0.002	0.002
1,2,3,7,8,9-HxCDF	0.001	0.001	<0.001	0.001	0.004	0.000	0.000	<0.002	0.001	0.001	<0.001	<0.001	<0.001
1,2,3,4,6,7,8-HpCDF	0.041	0.037	0.008	0.040	0.119	0.015	0.011	0.007	0.022	0.029	0.006	0.011	0.008
1,2,3,4,7,8,9-HpCDF	0.006	0.009	0.002	0.005	0.038	0.002	0.002	<0.004	0.004	0.004	0.001	0.001	0.001
OCDF	0.030	0.036	0.006	0.032	0.172	0.003	0.011	0.005	0.013	0.024	0.006	0.008	0.004
<b>PCDD/F Homologues</b>													
TCDDs	0.044	0.118	0.023	0.035	0.016	0.008	0.012	0.001	0.002	0.012	0.012	0.014	0.015
PeCDDs	0.093	0.351	0.031	0.089	0.026	0.021	0.014	0.007	0.016	0.046	0.020	0.038	0.031
HxCDDs	0.229	1.131	0.048	0.272	0.063	0.034	0.026	0.024	0.036	0.092	0.056	0.123	0.065
HpCDDs	0.345	1.820	0.052	0.494	0.100	0.044	0.037	0.030	0.052	0.172	0.084	0.200	0.071
OCDD	0.492	2.000	0.084	0.752	0.209	0.085	0.079	0.059	0.107	0.279	0.120	0.238	0.081
TCDFs	0.139	0.107	0.049	0.120	0.196	0.096	0.062	0.022	0.056	0.067	0.033	0.034	0.039
PeCDFs	0.101	0.077	0.024	0.082	0.157	0.095	0.037	0.007	0.035	0.043	0.016	0.018	0.026
HxCDFs	0.100	0.100	0.017	0.095	0.181	0.068	0.028	0.011	0.037	0.047	0.013	0.023	0.020
HpCDFs	0.067	0.092	0.013	0.066	0.209	0.023	0.019	0.007	0.036	0.046	0.011	0.019	0.013
OCDF	0.030	0.036	0.006	0.032	0.172	0.003	0.011	0.005	0.013	0.024	0.006	0.008	0.004
<b>Total</b>													
$\Sigma$ PCDDs	1.202	5.420	0.237	1.642	0.415	0.193	0.167	0.121	0.214	0.601	0.292	0.613	0.263
$\Sigma$ PCDFs	0.437	0.412	0.109	0.395	0.914	0.285	0.157	0.051	0.178	0.228	0.079	0.102	0.101
$\Sigma$ PCDD/Fs	1.639	5.833	0.346	2.037	1.329	0.478	0.324	0.172	0.391	0.829	0.371	0.714	0.363
$\Sigma$ TEQ (PCDD/Fs)	0.027	0.089	0.009	0.029	0.027	0.009	0.008	0.007	0.011	0.018	0.007	0.013	0.010

Table A17. Atmospheric concentrations of PCDD/Fs ( $\text{pg m}^{-3}$ ) at NAPS rural sites in 2005 (continued)

Station Name	Burnt Island										Simcoe											
	1	2	3	4	5	6	7	8	9	10	1	2	3	4	5	6	7	8	9	10	11	12
Sampling Period	1/10/05	2/3/05	5/10/05	6/27/05	7/21/05	8/14/05	10/1/05	10/18/05	11/18/05	12/12/05	1/10/05	3/23/05	4/16/05	5/10/05	6/3/05	6/27/05	7/21/05	8/14/05	10/1/05	10/25/05	11/18/05	12/12/05
Sampling Volume (m3)	1228	984	868	800	909	912	566	786	771	844	929	768	817	875	797	808	903	904	925	915	903	939
<b>PCDD/F Congeners</b>																						
2,3,7,8-TCDD	<0.001	0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	0.001	0.001	0.001	<0.001	0.002	0.001	<0.001	0.001	0.001	<0.001	<0.002	0.001	0.001	0.001
1,2,3,7,8-PeCDD	0.003	0.004	0.003	0.003	0.002	0.003	0.006	0.003	0.007	0.005	0.006	0.005	0.009	0.008	0.004	0.005	0.006	0.005	0.008	0.004	0.006	0.006
1,2,3,4,7,8-HxCDD	0.002	0.004	0.001	<0.002	<0.001	0.001	0.003	0.001	0.005	0.002	0.006	0.002	0.009	0.008	0.001	0.003	0.003	0.003	0.001	0.002	0.005	0.005
1,2,3,6,7,8-HxCDD	0.003	0.006	0.003	0.003	0.001	0.001	0.004	0.002	0.008	0.004	0.009	0.003	0.013	0.014	0.002	0.006	0.007	0.005	0.004	0.003	0.008	0.008
1,2,3,7,8,9-HxCDD	0.004	0.006	0.003	0.002	0.001	0.001	0.004	0.002	0.009	0.003	0.010	0.006	0.016	0.015	0.002	0.005	0.009	0.006	0.005	0.005	0.007	0.008
1,2,3,4,6,7,8-HpCDD	0.044	0.085	0.037	0.043	0.008	0.009	0.064	0.012	0.102	0.025	0.097	0.048	0.163	0.195	0.022	0.047	0.064	0.099	0.053	0.039	0.090	0.079
OCDD	0.167	0.281	0.155	0.131	0.036	0.035	0.269	0.035	0.312	0.035	0.304	0.357	0.471	0.493	0.077	0.153	0.144	0.321	0.194	0.096	0.234	0.198
2,3,7,8-TCDF	0.004	0.008	0.005	0.003	0.003	0.002	0.007	0.008	0.006	0.004	0.019	0.008	0.021	0.019	0.008	0.014	0.012	0.007	0.009	0.009	0.010	0.015
1,2,3,7,8-PeCDF	0.001	0.002	0.001	0.001	0.001	0.000	0.002	0.001	0.001	0.001	0.003	0.001	0.004	0.004	0.002	0.004	0.002	0.001	0.003	0.002	0.002	0.003
2,3,4,7,8-PeCDF	0.001	0.003	0.001	0.001	0.001	0.001	0.003	0.002	0.002	0.001	0.006	0.003	0.006	0.006	0.002	0.005	0.003	0.003	0.004	0.003	0.004	0.005
1,2,3,4,7,8-HxCDF	0.003	0.008	0.005	0.002	0.002	0.001	0.006	0.005	0.006	0.002	0.014	0.005	0.017	0.016	0.005	0.011	0.009	0.005	0.010	0.006	0.009	0.009
1,2,3,6,7,8-HxCDF	0.001	0.004	0.002	0.001	0.001	0.001	0.002	0.002	0.002	0.001	0.005	0.002	0.007	0.007	0.002	0.006	0.005	0.003	0.004	0.002	0.004	0.004
2,3,4,6,7,8-HxCDF	0.002	0.004	0.002	0.002	0.001	0.001	0.003	0.003	0.003	0.001	0.006	0.002	0.007	0.006	0.002	0.005	0.006	0.003	0.004	0.002	0.004	0.004
1,2,3,7,8,9-HxCDF	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	0.001	0.000	0.000	<0.001	0.001	<0.001	0.001	<0.001	<0.001	0.002	0.000	<0.001	<0.002	<0.001	<0.001	<0.001
1,2,3,4,6,7,8-HpCDF	0.010	0.017	0.013	0.008	0.005	0.004	0.015	0.008	0.016	0.005	0.023	0.019	0.034	0.036	0.011	0.020	0.028	0.014	0.022	0.013	0.019	0.014
1,2,3,4,7,8,9-HpCDF	<0.001	0.002	<0.002	<0.002	<0.001	0.000	0.003	0.001	0.002	0.001	0.003	<0.002	0.005	0.005	0.001	0.004	0.003	<0.001	0.003	0.001	0.003	0.002
OCDF	0.007	0.016	0.012	0.002	0.004	0.002	0.016	0.003	0.014	0.002	0.014	0.021	0.027	0.032	0.007	0.020	0.026	0.011	0.018	0.008	0.014	0.008
<b>PCDD/F Homologues</b>																						
TCDDs	0.014	0.017	0.006	0.004	0.004	0.008	0.009	0.027	0.017	0.007	0.034	0.010	0.044	0.042	0.016	0.024	0.026	0.020	0.015	0.017	0.020	0.061
PeCDDs	0.023	0.032	0.019	0.018	0.009	0.009	0.025	0.043	0.042	0.018	0.055	0.026	0.087	0.078	0.022	0.030	0.055	0.029	0.041	0.028	0.043	0.071
HxCDDs	0.054	0.095	0.037	0.037	0.010	0.012	0.061	0.049	0.119	0.036	0.135	0.049	0.233	0.236	0.036	0.064	0.140	0.084	0.118	0.055	0.116	0.146
HpCDDs	0.092	0.176	0.076	0.081	0.014	0.016	0.127	0.024	0.207	0.041	0.203	0.089	0.336	0.406	0.047	0.088	0.147	0.190	0.103	0.078	0.172	0.175
OCDD	0.167	0.281	0.155	0.131	0.036	0.035	0.269	0.035	0.312	0.035	0.304	0.357	0.471	0.493	0.077	0.153	0.144	0.321	0.194	0.096	0.234	0.198
TCDFs	0.033	0.056	0.046	0.037	0.032	0.018	0.066	0.041	0.039	0.020	0.129	0.060	0.143	0.153	0.058	0.127	0.093	0.072	0.084	0.078	0.059	0.082
PeCDFs	0.017	0.034	0.026	0.014	0.012	0.006	0.031	0.031	0.026	0.011	0.077	0.031	0.084	0.092	0.033	0.089	0.069	0.042	0.067	0.037	0.042	0.055
HxCDFs	0.016	0.037	0.023	0.013	0.009	0.007	0.030	0.023	0.030	0.008	0.063	0.027	0.079	0.084	0.027	0.078	0.070	0.037	0.063	0.027	0.040	0.042
HpCDFs	0.014	0.030	0.018	0.011	0.007	0.005	0.026	0.011	0.028	0.007	0.036	0.027	0.059	0.059	0.016	0.035	0.042	0.020	0.031	0.020	0.032	0.025
OCDF	0.007	0.016	0.012	0.002	0.004	0.002	0.016	0.003	0.014	0.002	0.014	0.021	0.027	0.032	0.007	0.020	0.026	0.011	0.018	0.008	0.014	0.008
<b>Total</b>																						
∑ PCDDs	0.350	0.601	0.293	0.270	0.073	0.080	0.491	0.179	0.697	0.136	0.730	0.531	1.172	1.254	0.198	0.359	0.512	0.643	0.470	0.274	0.584	0.651
∑ PCDFs	0.088	0.172	0.125	0.077	0.064	0.038	0.169	0.109	0.137	0.048	0.319	0.165	0.391	0.419	0.140	0.348	0.300	0.182	0.264	0.170	0.188	0.212
∑ PCDD/Fs	0.438	0.772	0.418	0.347	0.137	0.118	0.660	0.287	0.834	0.184	1.049	0.696	1.563	1.674	0.337	0.707	0.812	0.826	0.734	0.444	0.772	0.863
∑ TEQ (PCDD/Fs)	0.007	0.011	0.007	0.006	0.004	0.004	0.011	0.007	0.013	0.007	0.017	0.010	0.024	0.022	0.008	0.013	0.014	0.011	0.015	0.009	0.014	0.015

Table A18. Atmospheric concentrations of PCDD/Fs ( $\mu\text{g m}^{-3}$ ) at NAPS rural sites in 2006

Station Name	Keijmkujik												Egbert												
	1	2	3	4	5	6	7	8	9	10	11	12	13	1	2	3	4	5	6	7	8	9	10	11	12
Sampling Period	1/5/06	1/29/06	3/18/06	4/11/06	5/5/06	5/29/06	6/22/06	8/9/06	9/2/06	9/26/06	11/13/06	12/7/06	12/31/06	1/5/06	1/29/06	2/22/06	3/18/06	4/11/06	5/5/06	5/29/06	6/22/06	7/16/06	8/9/06	9/2/06	12/31/06
Sampling Volume (m <sup>3</sup> )	712	751	661	709	563	630	735	791	761	714	787	834	873	919	856	634	894	636	976	767	829	827	965	1000	748
<b>PCDD/F Congeners</b>																									
2,3,7,8-TCDD	<0.001	<0.001	0.001	0.001	<0.002	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	0.001	0.002	0.001	<0.001	0.001	<0.001	0.000	<0.001	<0.001	0.000	0.001	0.001
1,2,3,7,8-PeCDD	0.004	0.003	0.004	0.004	0.006	0.004	0.003	0.002	0.004	0.003	0.003	0.002	0.002	0.006	0.017	0.008	0.003	0.008	0.003	0.005	0.004	0.004	0.003	0.006	0.009
1,2,3,4,7,8-HxCDD	0.001	<0.002	<0.001	0.001	<0.004	<0.002	<0.001	<0.003	<0.001	<0.001	0.001	0.001	0.001	0.003	0.020	0.006	0.001	0.007	0.001	<0.002	0.001	0.002	0.002	0.006	0.009
1,2,3,6,7,8-HxCDD	0.001	0.001	0.001	0.001	<0.004	0.001	0.001	<0.002	<0.001	0.001	0.000	0.001	0.001	0.005	0.040	0.010	0.001	0.011	<0.001	0.002	0.002	0.003	0.003	0.011	0.012
1,2,3,7,8,9-HxCDD	0.001	<0.002	0.001	0.002	<0.004	<0.002	0.000	<0.003	<0.001	0.001	0.001	0.001	0.001	0.006	0.042	0.014	0.001	0.016	0.001	0.003	0.002	0.003	0.003	0.010	0.015
1,2,3,4,6,7,8-HpCDD	0.011	0.009	0.011	0.010	0.009	0.011	0.005	0.004	0.007	0.007	0.008	0.011	0.012	0.056	0.487	0.108	0.010	0.144	0.017	0.023	0.031	0.046	0.035	0.152	0.168
OCDD	0.033	0.032	0.030	0.028	0.022	0.036	0.015	0.018	0.021	0.024	0.040	0.040	0.042	0.126	0.997	0.297	0.023	0.386	0.042	0.093	0.102	0.157	0.113	0.357	0.568
2,3,7,8-TCDF	0.003	0.002	0.002	0.002	0.003	0.003	0.002	0.002	0.002	0.002	0.003	0.003	0.002	0.014	0.025	0.026	0.003	0.024	0.003	0.011	0.013	0.006	0.008	0.006	0.023
1,2,3,7,8-PeCDF	<0.001	0.001	0.001	0.001	0.001	0.001	0.000	0.001	0.001	0.001	0.001	0.001	0.001	0.003	0.006	0.005	0.001	0.006	0.001	0.003	0.003	0.001	0.002	0.001	0.005
2,3,4,7,8-PeCDF	0.001	0.001	0.001	0.001	<0.002	0.001	0.001	0.001	0.000	0.001	0.001	0.001	0.001	0.006	0.011	0.008	0.001	0.007	0.001	0.003	0.004	0.001	0.002	0.002	0.010
1,2,3,4,7,8-HxCDF	0.004	0.002	0.001	0.002	<0.002	0.004	0.001	<0.001	0.001	0.001	0.001	0.002	0.002	0.015	0.029	0.022	0.002	0.022	0.002	0.007	0.010	0.003	0.005	0.004	0.042
1,2,3,6,7,8-HxCDF	0.001	<0.001	0.001	0.001	0.002	0.001	0.000	0.000	0.000	0.001	0.000	0.001	0.001	0.006	0.013	0.008	0.001	0.009	0.001	0.003	0.004	0.001	0.003	0.002	0.013
2,3,4,6,7,8-HxCDF	0.002	0.001	0.001	0.000	0.002	0.001	<0.001	<0.001	0.001	0.001	0.000	0.001	0.001	0.006	0.015	0.008	0.001	0.007	0.001	0.003	0.004	0.002	0.002	0.002	0.019
1,2,3,7,8,9-HxCDF	<0.002	<0.001	<0.001	<0.002	<0.004	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	0.001	0.001	0.001	<0.001	0.001	<0.001	<0.001	<0.002	<0.001	<0.001	<0.001	0.001
1,2,3,4,6,7,8-HpCDF	0.008	0.003	0.005	0.006	0.007	0.010	0.003	0.003	0.003	0.004	0.003	0.006	0.005	0.024	0.069	0.039	0.005	0.043	0.004	0.014	0.017	0.013	0.013	0.014	0.127
1,2,3,4,7,8,9-HpCDF	<0.002	<0.003	<0.001	0.001	<0.005	<0.002	<0.002	<0.002	0.001	<0.001	0.001	0.001	0.001	0.003	0.010	0.006	<0.001	0.005	<0.001	<0.002	0.001	<0.002	0.002	0.002	0.015
OCDF	0.004	0.006	0.006	0.006	0.005	0.007	0.002	0.003	0.003	0.003	0.003	0.005	0.004	0.014	0.050	0.024	0.003	0.034	0.003	0.007	0.012	0.009	0.010	0.012	0.155
<b>PCDD/F Homologues</b>																									
TCDDs	0.003	0.001	0.002	0.003	<0.002	0.003	0.001	<0.001	0.001	0.001	0.003	0.003	0.003	0.033	0.053	0.046	0.002	0.037	0.004	0.022	0.022	0.011	0.014	0.022	0.049
PeCDDs	0.010	0.006	0.005	0.010	0.010	0.013	0.005	0.004	0.005	0.003	0.006	0.005	0.007	0.049	0.136	0.080	0.007	0.076	0.010	0.031	0.025	0.021	0.018	0.051	0.088
HxCDDs	0.018	0.014	0.010	0.014	<0.004	0.013	0.008	0.007	0.005	0.006	0.007	0.012	0.018	0.099	0.505	0.171	0.016	0.201	0.018	0.043	0.041	0.055	0.039	0.169	0.225
HpCDDs	0.019	0.019	0.016	0.015	0.009	0.020	0.008	0.006	0.010	0.012	0.013	0.019	0.023	0.113	0.883	0.231	0.018	0.314	0.032	0.053	0.068	0.086	0.068	0.280	0.349
OCDD	0.033	0.032	0.030	0.028	0.022	0.036	0.015	0.018	0.021	0.024	0.040	0.040	0.042	0.126	0.997	0.297	0.023	0.386	0.042	0.093	0.102	0.157	0.113	0.357	0.568
TCDFs	0.016	0.011	0.010	0.017	0.025	0.033	0.016	0.021	0.010	0.012	0.023	0.020	0.015	0.101	0.185	0.178	0.018	0.189	0.024	0.124	0.113	0.054	0.057	0.045	0.142
PeCDFs	0.013	0.005	0.005	0.009	0.007	0.016	0.007	0.006	0.004	0.003	0.007	0.009	0.008	0.075	0.132	0.115	0.010	0.122	0.013	0.080	0.058	0.033	0.030	0.029	0.114
HxCDFs	0.012	0.006	0.005	0.007	0.007	0.016	0.004	0.003	0.003	0.004	0.004	0.009	0.008	0.068	0.144	0.096	0.008	0.099	0.009	0.055	0.048	0.027	0.026	0.028	0.161
HpCDFs	0.008	0.004	0.007	0.009	0.007	0.013	0.003	0.003	0.005	0.005	0.005	0.010	0.008	0.039	0.121	0.061	0.006	0.067	0.005	0.019	0.026	0.016	0.020	0.026	0.187
OCDF	0.004	0.006	0.006	0.006	0.005	0.007	0.002	0.003	0.003	0.003	0.003	0.005	0.004	0.014	0.050	0.024	0.003	0.034	0.003	0.007	0.012	0.009	0.010	0.012	0.155
<b>Total</b>																									
∑ PCDDs	0.083	0.072	0.064	0.069	0.040	0.084	0.036	0.036	0.042	0.046	0.069	0.078	0.092	0.420	2.575	0.825	0.067	1.015	0.106	0.241	0.258	0.330	0.250	0.878	1.278
∑ PCDFs	0.052	0.032	0.033	0.047	0.051	0.085	0.031	0.036	0.024	0.027	0.043	0.053	0.043	0.297	0.631	0.473	0.044	0.510	0.053	0.284	0.256	0.139	0.144	0.140	0.759
∑ PCDD/Fs	0.134	0.104	0.097	0.117	0.091	0.169	0.067	0.071	0.066	0.073	0.112	0.130	0.135	0.717	3.206	1.298	0.111	1.525	0.159	0.524	0.514	0.469	0.394	1.019	2.037
∑ TEQ (PCDD/Fs)	0.006	0.005	0.006	0.006	0.010	0.007	0.005	0.004	0.005	0.004	0.004	0.004	0.004	0.015	0.047	0.023	0.005	0.023	0.005	0.010	0.010	0.007	0.007	0.014	0.030

Table A18. Atmospheric concentrations of PCDD/Fs (pg m<sup>-3</sup>) at NAPS rural sites in 2006 (continued)

Station Name	Point Petre													
Sampling Period	1	2	3	4	5	6	7	8	9	10	11	12	13	14
Sampling Date	1/5/06	1/29/06	3/18/06	4/11/06	5/5/06	6/22/06	7/16/06	8/9/06	9/2/06	10/2/06	10/20/06	11/13/06	12/7/06	12/31/06
Sampling Volume (m3)	672	639	600	566	543	594	724	770	796	757	759	930	870	892
<b>PCDD/F Congeners</b>														
2,3,7,8-TCDD	0.001	0.002	0.001	0.002	<0.001	0.001	0.001	<0.001	<0.001	<0.001	<0.001	0.001	<0.001	<0.001
1,2,3,7,8-PeCDD	0.005	0.019	0.004	0.019	0.005	0.005	0.003	0.004	0.003	0.003	0.004	0.004	0.003	0.005
1,2,3,4,7,8-HxCDD	0.003	0.021	<0.002	0.019	<0.002	0.002	0.003	0.002	<0.001	0.001	0.002	0.003	0.002	0.004
1,2,3,6,7,8-HxCDD	0.006	0.036	0.002	0.030	<0.002	0.002	0.004	0.003	0.001	0.001	0.003	0.006	0.003	0.007
1,2,3,7,8,9-HxCDD	0.006	0.045	0.002	0.040	<0.002	0.004	0.004	0.002	0.001	0.002	0.003	0.005	0.003	0.008
1,2,3,4,6,7,8-HpCDD	0.061	0.408	0.023	0.396	0.023	0.035	0.064	0.023	0.017	0.018	0.032	0.070	0.039	0.083
OCDD	0.163	0.988	0.060	1.018	0.066	0.139	0.289	0.070	0.067	0.055	0.088	0.201	0.107	0.210
2,3,7,8-TCDF	0.008	0.015	0.003	0.018	0.005	0.007	0.007	0.003	0.003	0.003	0.004	0.008	0.005	0.010
1,2,3,7,8-PeCDF	0.002	0.004	0.001	0.005	0.001	0.002	0.002	0.001	0.001	0.001	0.001	0.002	0.001	0.003
2,3,4,7,8-PeCDF	0.003	0.007	0.001	0.007	0.001	0.003	0.002	0.001	0.001	0.001	0.001	0.003	0.002	0.004
1,2,3,4,7,8-HxCDF	0.007	0.021	0.002	0.026	0.004	0.007	0.007	0.003	0.002	0.002	0.002	0.008	0.004	0.013
1,2,3,6,7,8-HxCDF	0.003	0.009	0.001	0.010	0.002	0.004	0.002	0.001	0.001	0.001	0.001	0.003	0.002	0.005
2,3,4,6,7,8-HxCDF	0.003	0.010	0.001	0.011	0.001	0.004	0.003	0.001	0.001	0.001	0.002	0.004	0.002	0.005
1,2,3,7,8,9-HxCDF	<0.001	<0.001	<0.001	0.002	<0.003	<0.002	<0.003	<0.001	<0.001	<0.001	<0.001	0.001	<0.001	0.001
1,2,3,4,6,7,8-HpCDF	0.015	0.057	0.003	0.059	0.009	0.026	0.019	0.006	0.007	0.005	0.006	0.019	0.009	0.027
1,2,3,4,7,8,9-HpCDF	0.002	0.010	<0.002	0.006	<0.003	0.005	0.002	0.001	0.001	<0.002	0.001	0.004	0.001	0.004
OCDF	0.010	0.047	0.003	0.037	0.008	0.031	0.016	0.004	0.004	0.004	0.003	0.018	0.006	0.016
<b>PCDD/F Homologues</b>														
TCDDs	0.021	0.055	0.005	0.070	0.011	0.020	0.012	0.006	0.006	0.005	0.015	0.021	0.011	0.028
PeCDDs	0.034	0.165	0.014	0.196	0.017	0.025	0.023	0.021	0.010	0.010	0.029	0.032	0.020	0.049
HxCDDs	0.085	0.530	0.027	0.622	0.026	0.045	0.067	0.052	0.018	0.025	0.076	0.086	0.047	0.119
HpCDDs	0.125	0.820	0.044	0.915	0.043	0.078	0.131	0.051	0.031	0.035	0.082	0.139	0.076	0.170
OCDD	0.163	0.988	0.060	1.018	0.066	0.139	0.289	0.070	0.067	0.055	0.088	0.201	0.107	0.210
TCDFs	0.060	0.111	0.017	0.134	0.043	0.074	0.088	0.036	0.026	0.028	0.026	0.054	0.035	0.075
PeCDFs	0.036	0.087	0.009	0.110	0.017	0.043	0.041	0.022	0.018	0.011	0.014	0.038	0.020	0.056
HxCDFs	0.033	0.112	0.007	0.136	0.016	0.044	0.036	0.020	0.016	0.008	0.012	0.040	0.018	0.060
HpCDFs	0.026	0.101	0.004	0.096	0.011	0.041	0.028	0.012	0.012	0.006	0.008	0.034	0.014	0.042
OCDF	0.010	0.047	0.003	0.037	0.008	0.031	0.016	0.004	0.004	0.004	0.003	0.018	0.006	0.016
<b>Total</b>														
∑ PCDDs	0.428	2.558	0.150	2.821	0.164	0.307	0.521	0.200	0.132	0.131	0.289	0.479	0.261	0.575
∑ PCDFs	0.165	0.459	0.041	0.513	0.095	0.232	0.210	0.093	0.075	0.056	0.063	0.184	0.094	0.247
∑ PCDD/Fs	0.593	3.017	0.191	3.333	0.259	0.538	0.731	0.293	0.207	0.187	0.352	0.663	0.355	0.822
∑ TEQ (PCDD/Fs)	0.011	0.044	0.007	0.044	0.009	0.010	0.008	0.006	0.004	0.005	0.006	0.010	0.007	0.013

Table A18. Atmospheric concentrations of PCDD/Fs (pg m<sup>-3</sup>) at NAPS rural sites in 2006 (continued)

Station Name	Burnt Island										Simcoe										
	1	2	3	4	5	6	7	8	9	10	1	2	3	4	5	6	7	8	9	10	11
Sampling Period	1	2	3	4	5	6	7	8	9	10	1	2	3	4	5	6	7	8	9	10	11
Sampling Date	1/5/06	1/29/06	3/18/06	4/11/06	5/5/06	9/2/06	9/26/06	10/20/06	12/7/06	12/31/06	1/5/06	3/18/06	4/11/06	6/22/06	7/16/06	8/9/06	9/2/06	9/26/06	10/20/06	12/7/06	12/31/06
Sampling Volume (m3)	756	788	654	641	711	1007	846	887	1112	970	839	871	739	947	1006	1036	1073	895	1080	1131	1079
<b>PCDD/F Congeners</b>																					
2,3,7,8-TCDD	<0.001	<0.001	<0.001	0.001	0.001	<0.001	<0.001	<0.001	<0.001	<0.001	0.001	<0.001	0.001	0.001	0.001	<0.001	<0.001	<0.001	0.001	0.001	0.004
1,2,3,7,8-PeCDD	0.003	0.004	0.004	0.008	0.003	0.003	0.003	0.003	0.002	0.003	0.006	0.003	0.010	0.004	0.004	0.004	0.003	0.004	0.004	0.004	0.019
1,2,3,4,7,8-HxCDD	0.001	0.002	<0.002	0.006	<0.002	0.002	<0.001	<0.001	<0.001	0.001	0.004	0.002	0.013	0.001	0.002	0.002	0.002	0.002	0.003	0.003	0.018
1,2,3,6,7,8-HxCDD	0.001	0.003	0.001	0.011	<0.001	0.003	<0.001	0.001	0.001	0.002	0.007	0.003	0.017	0.003	0.004	0.004	0.005	0.003	0.006	0.005	0.032
1,2,3,7,8,9-HxCDD	0.001	0.002	<0.002	0.013	<0.002	0.002	0.001	<0.001	0.001	0.002	0.008	0.002	0.022	0.004	0.002	0.004	0.005	0.004	0.006	0.007	0.025
1,2,3,4,6,7,8-HpCDD	0.014	0.030	0.012	0.159	0.011	0.048	0.006	0.008	0.008	0.032	0.075	0.035	0.247	0.042	0.032	0.054	0.066	0.050	0.081	0.071	0.206
OCDD	0.036	0.097	0.039	0.494	0.031	0.139	0.025	0.030	0.026	0.097	0.192	0.088	0.783	0.172	0.113	0.151	0.244	0.136	0.187	0.198	0.301
2,3,7,8-TCDF	0.003	0.006	0.002	0.011	0.003	0.002	0.001	0.002	0.001	0.005	0.016	0.003	0.026	0.009	0.007	0.007	0.008	0.005	0.006	0.006	0.223
1,2,3,7,8-PeCDF	<0.001	0.002	0.001	0.003	0.001	0.001	<0.001	<0.001	<0.001	0.001	0.003	0.001	0.005	0.002	0.002	0.002	0.002	0.001	0.001	0.001	0.029
2,3,4,7,8-PeCDF	<0.001	0.002	<0.001	0.005	0.001	0.001	<0.001	<0.001	<0.001	0.002	0.006	0.001	0.011	0.002	0.002	0.002	0.002	0.002	0.001	0.002	0.052
1,2,3,4,7,8-HxCDF	0.002	0.004	0.001	0.012	0.001	0.001	0.001	0.001	0.001	0.009	0.014	0.002	0.024	0.005	0.005	0.005	0.006	0.004	0.003	0.006	0.186
1,2,3,6,7,8-HxCDF	0.001	0.002	0.001	0.005	0.002	0.001	<0.001	0.001	<0.001	0.003	0.006	0.001	0.010	0.002	0.003	0.002	0.003	0.002	0.002	0.002	0.059
2,3,4,6,7,8-HxCDF	<0.001	0.002	<0.001	0.002	0.001	0.001	<0.001	0.001	<0.001	0.004	0.007	0.001	0.011	0.002	0.003	0.002	0.002	0.002	0.002	0.002	0.097
1,2,3,7,8,9-HxCDF	<0.001	<0.001	<0.001	<0.001	<0.001	0.000	<0.001	<0.001	<0.001	<0.001	0.001	<0.001	0.002	<0.001	<0.001	<0.001	0.000	<0.001	<0.001	<0.001	0.003
1,2,3,4,6,7,8-HpCDF	0.005	0.011	0.004	0.031	0.006	0.005	0.003	0.003	0.002	0.031	0.025	0.004	0.052	0.016	0.012	0.014	0.016	0.010	0.008	0.015	0.249
1,2,3,4,7,8,9-HpCDF	<0.002	0.002	<0.002	0.005	<0.002	0.001	<0.001	<0.001	<0.001	0.004	0.004	<0.001	0.005	<0.002	0.001	0.001	0.002	0.001	0.001	0.001	0.024
OCDF	0.003	0.008	0.004	0.026	0.002	0.005	0.001	0.002	0.002	0.039	0.016	0.004	0.040	0.011	0.009	0.014	0.014	0.008	0.007	0.012	0.072
<b>PCDD/F Homologues</b>																					
TCDDs	0.005	0.012	0.002	0.017	0.004	0.005	0.005	0.003	0.003	0.010	0.038	0.007	0.039	0.020	0.023	0.017	0.020	0.014	0.017	0.018	0.998
PeCDDs	0.006	0.014	0.005	0.050	0.008	0.014	0.009	0.006	0.005	0.016	0.045	0.020	0.079	0.037	0.029	0.025	0.028	0.024	0.032	0.033	0.892
HxCDDs	0.014	0.039	0.011	0.175	0.008	0.040	0.010	0.006	0.008	0.035	0.108	0.051	0.258	0.058	0.060	0.068	0.065	0.058	0.100	0.083	0.870
HpCDDs	0.025	0.063	0.019	0.335	0.019	0.091	0.009	0.014	0.015	0.059	0.153	0.076	0.552	0.091	0.066	0.106	0.124	0.095	0.154	0.141	0.441
OCDD	0.036	0.097	0.039	0.494	0.031	0.139	0.025	0.030	0.026	0.097	0.192	0.088	0.783	0.172	0.113	0.151	0.244	0.136	0.187	0.198	0.301
TCDFs	0.016	0.043	0.007	0.087	0.018	0.018	0.010	0.011	0.007	0.038	0.110	0.024	0.202	0.092	0.075	0.057	0.062	0.042	0.041	0.046	1.252
PeCDFs	0.006	0.024	0.003	0.059	0.010	0.010	0.004	0.004	0.003	0.024	0.072	0.011	0.126	0.051	0.058	0.036	0.038	0.026	0.021	0.029	0.897
HxCDFs	0.005	0.018	0.003	0.064	0.009	0.009	0.003	0.004	0.002	0.035	0.067	0.009	0.124	0.045	0.054	0.032	0.032	0.023	0.018	0.031	0.748
HpCDFs	0.006	0.016	0.004	0.052	0.006	0.008	0.003	0.004	0.003	0.046	0.043	0.006	0.086	0.023	0.019	0.021	0.028	0.018	0.015	0.025	0.346
OCDF	0.003	0.008	0.004	0.026	0.002	0.005	0.001	0.002	0.002	0.039	0.016	0.004	0.040	0.011	0.009	0.014	0.014	0.008	0.007	0.012	0.072
<b>Total</b>																					
∑ PCDDs	0.087	0.225	0.076	1.072	0.070	0.288	0.056	0.058	0.058	0.218	0.536	0.241	1.711	0.377	0.291	0.368	0.481	0.327	0.490	0.474	3.503
∑ PCDFs	0.037	0.110	0.021	0.288	0.045	0.050	0.022	0.026	0.017	0.181	0.308	0.054	0.578	0.222	0.216	0.160	0.175	0.116	0.101	0.144	3.313
∑ PCDD/Fs	0.123	0.334	0.097	1.360	0.115	0.338	0.078	0.084	0.075	0.399	0.844	0.295	2.288	0.598	0.507	0.527	0.656	0.443	0.591	0.618	6.816
∑ TEQ (PCDD/Fs)	0.005	0.007	0.006	0.019	0.005	0.005	0.003	0.004	0.003	0.007	0.016	0.006	0.030	0.009	0.008	0.008	0.008	0.008	0.008	0.009	0.108

Table A19. Atmospheric concentrations of PCDD/Fs ( $\mu\text{g m}^{-3}$ ) at NAPS rural sites in 2007

Station Name	Kejimikujik												Egbert								
Sampling Period	1	2	3	4	5	6	7	8	9	10	11	12	1	2	3	4	5	6	7	8	9
Sampling Date	1/24/07	3/13/07	4/6/07	4/30/07	5/24/07	6/17/07	7/11/07	8/4/07	8/28/07	9/21/07	11/8/07	12/26/07	1/24/07	3/13/07	4/6/07	4/30/07	5/24/07	6/17/07	7/11/07	8/4/07	8/28/07
Sampling Volume (m3)	872	686	918	841	776	637	834	783	696	776	848	861	798	638	993	722	706	682	750	793	819
<b>PCDD/F Congeners</b>																					
2,3,7,8-TCDD	<0.001	<0.001	<0.002	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.005	<0.001	0.002	<0.001	<0.001	0.001	<0.001	0.001	<0.001	<0.001
1,2,3,7,8-PeCDD	0.003	0.003	0.003	0.003	0.003	0.004	0.003	0.003	0.003	0.002	0.003	0.002	0.003	0.012	0.002	0.003	0.005	0.004	0.003	0.003	0.005
1,2,3,4,7,8-HxCDD	0.001	<0.001	<0.002	<0.001	<0.001	<0.003	<0.001	<0.001	<0.002	<0.001	<0.001	0.001	<0.001	0.013	0.001	0.001	0.003	<0.003	<0.002	0.001	0.003
1,2,3,6,7,8-HxCDD	0.001	0.001	<0.001	0.000	<0.001	<0.002	<0.001	<0.001	<0.001	<0.001	<0.001	0.002	0.001	0.018	0.001	0.001	0.005	0.002	0.001	0.001	0.004
1,2,3,7,8,9-HxCDD	0.001	0.001	<0.002	0.001	<0.001	<0.002	<0.001	<0.001	<0.002	<0.001	<0.001	0.002	0.003	0.028	0.001	0.001	0.005	0.005	<0.002	0.002	0.005
1,2,3,4,6,7,8-HpCDD	0.014	0.020	0.008	0.005	0.005	0.007	0.004	0.005	0.003	0.005	0.009	0.019	0.021	0.286	0.006	0.011	0.054	0.041	0.018	0.014	0.053
OCDD	0.047	0.079	0.027	0.008	0.018	0.024	0.009	0.015	0.014	0.014	0.022	0.048	0.043	0.762	0.011	0.031	0.151	0.139	0.062	0.044	0.148
2,3,7,8-TCDF	0.004	0.003	0.002	0.002	0.002	0.001	0.002	0.002	0.002	0.002	0.003	0.003	0.005	0.020	0.001	0.004	0.013	0.008	0.003	0.003	0.009
1,2,3,7,8-PeCDF	0.001	0.001	0.001	0.001	0.001	0.001	0.001	<0.001	<0.001	0.001	0.001	0.001	0.001	0.005	0.001	0.001	0.003	0.001	0.001	0.001	0.002
2,3,4,7,8-PeCDF	0.001	0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	0.001	0.002	0.001	0.001	0.007	<0.001	0.002	0.004	0.003	0.001	0.001	0.003
1,2,3,4,7,8-HxCDF	0.005	0.002	0.002	0.002	0.001	0.001	0.001	0.001	0.001	0.002	0.004	0.003	0.002	0.021	0.001	0.006	0.010	0.007	0.002	0.002	0.007
1,2,3,6,7,8-HxCDF	0.001	0.001	<0.001	0.001	<0.001	<0.001	<0.001	<0.001	<0.001	0.001	0.002	0.001	0.001	0.008	0.001	0.002	0.004	0.003	0.002	0.001	0.003
2,3,4,6,7,8-HxCDF	0.002	0.001	<0.001	0.001	<0.001	<0.001	<0.001	<0.001	<0.001	0.001	0.002	0.001	<0.001	0.010	0.001	0.003	0.004	0.004	0.001	<0.001	0.003
1,2,3,7,8,9-HxCDF	<0.001	<0.001	<0.001	<0.001	<0.001	<0.002	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	0.001	<0.001	<0.001	<0.001	<0.002	<0.001	<0.001	<0.001
1,2,3,4,6,7,8-HpCDF	0.010	0.007	0.003	0.003	0.003	0.005	0.003	0.003	0.002	0.007	0.011	0.006	0.005	0.051	0.003	0.013	0.020	0.014	0.010	0.005	0.016
1,2,3,4,7,8,9-HpCDF	0.001	<0.002	<0.002	<0.001	<0.001	<0.003	<0.001	<0.001	<0.002	<0.001	0.002	<0.001	0.001	0.005	<0.001	0.002	0.002	<0.003	<0.002	<0.001	0.002
OCDF	0.010	0.011	0.005	0.003	0.003	0.005	0.002	0.002	0.001	0.005	0.007	0.003	0.003	0.039	0.003	0.005	0.017	0.008	0.008	0.003	0.013
<b>PCDD/F Homologues</b>																					
TCDDs	0.003	0.002	<0.002	0.001	0.001	<0.001	0.002	0.001	<0.001	<0.001	<0.001	0.004	0.007	0.055	0.002	0.008	0.031	0.018	0.004	0.003	0.014
PeCDDs	0.010	0.008	0.003	0.003	0.004	0.004	0.006	0.005	0.003	0.004	0.004	0.011	0.013	0.113	0.005	0.013	0.044	0.026	0.041	0.007	0.035
HxCDDs	0.019	0.016	0.002	0.003	0.003	<0.002	0.008	<0.001	<0.002	0.002	0.011	0.022	0.025	0.323	0.008	0.015	0.084	0.069	0.117	0.014	0.097
HpCDDs	0.028	0.039	0.014	0.007	0.008	0.007	0.005	0.008	0.003	0.009	0.016	0.035	0.040	0.575	0.009	0.021	0.109	0.084	0.163	0.025	0.135
OCDD	0.047	0.079	0.027	0.008	0.018	0.024	0.009	0.015	0.014	0.014	0.022	0.048	0.043	0.762	0.011	0.031	0.151	0.139	0.062	0.044	0.148
TCDFs	0.020	0.025	0.003	0.013	0.016	0.014	0.021	0.025	0.012	0.016	0.039	0.019	0.032	0.178	0.008	0.031	0.125	0.060	0.035	0.024	0.076
PeCDFs	0.011	0.008	0.001	0.006	0.004	0.004	0.010	0.007	0.004	0.008	0.027	0.011	0.015	0.102	0.003	0.020	0.078	0.038	0.020	0.012	0.047
HxCDFs	0.016	0.010	0.002	0.004	0.003	0.001	0.006	0.005	0.003	0.006	0.025	0.010	0.009	0.103	0.004	0.022	0.055	0.035	0.016	0.009	0.041
HpCDFs	0.014	0.010	0.003	0.003	0.004	0.005	0.003	0.004	0.002	0.009	0.018	0.008	0.006	0.078	0.003	0.018	0.029	0.018	0.010	0.007	0.025
OCDF	0.010	0.011	0.005	0.003	0.003	0.005	0.002	0.002	0.001	0.005	0.007	0.003	0.003	0.039	0.003	0.005	0.017	0.008	0.008	0.003	0.013
<b>Total</b>																					
∑ PCDDs	0.106	0.144	0.046	0.023	0.034	0.035	0.030	0.028	0.020	0.029	0.054	0.121	0.128	1.828	0.035	0.087	0.419	0.336	0.386	0.094	0.428
∑ PCDFs	0.070	0.063	0.014	0.030	0.030	0.030	0.041	0.043	0.021	0.045	0.114	0.051	0.063	0.499	0.020	0.095	0.304	0.159	0.090	0.054	0.202
∑ PCDD/Fs	0.176	0.207	0.060	0.053	0.064	0.064	0.070	0.071	0.041	0.074	0.168	0.172	0.191	2.327	0.055	0.182	0.723	0.495	0.476	0.148	0.630
∑ TEQ (PCDD/Fs)	0.005	0.006	0.006	0.004	0.005	0.007	0.005	0.004	0.005	0.005	0.007	0.009	0.006	0.031	0.003	0.006	0.012	0.010	0.006	0.005	0.011

Table A19. Atmospheric concentrations of PCDD/Fs (pg m<sup>-3</sup>) at NAPS rural sites in 2007 (continued)

Station Name	Point Petre												
Sampling Period	1	2	3	4	5	6	7	8	9	10	11	12	13
Sampling Date	1/24/07	3/13/07	4/6/07	4/30/07	6/17/07	7/11/07	8/4/07	8/28/07	9/21/07	10/15/07	11/8/07	12/2/07	12/26/07
Sampling Volume (m3)	886	748	833	709	567	721	711	652	668	759	728	842	836
<b>PCDD/F Congeners</b>													
2,3,7,8-TCDD	<0.001	0.001	<0.001	0.001	0.001	<0.001	<0.001	0.001	<0.002	<0.001	0.001	<0.001	<0.001
1,2,3,7,8-PeCDD	0.006	0.007	0.003	0.005	0.005	0.003	0.004	0.005	0.004	0.004	0.006	0.005	0.006
1,2,3,4,7,8-HxCDD	0.004	0.006	0.002	<0.002	0.003	0.001	0.003	0.002	0.002	0.002	0.004	0.003	0.006
1,2,3,6,7,8-HxCDD	0.006	0.009	0.002	0.002	0.004	0.001	0.005	0.004	0.003	0.004	0.006	0.006	0.009
1,2,3,7,8,9-HxCDD	0.008	0.012	0.002	0.003	0.006	0.001	0.007	0.005	0.005	0.003	0.004	0.006	0.011
1,2,3,4,6,7,8-HpCDD	0.073	0.148	0.026	0.035	0.094	0.018	0.081	0.051	0.050	0.043	0.064	0.058	0.129
OCDD	0.140	0.529	0.057	0.104	0.289	0.062	0.223	0.158	0.148	0.119	0.134	0.176	0.412
2,3,7,8-TCDF	0.004	0.017	0.003	0.004	0.006	0.005	0.004	0.005	0.009	0.006	0.006	0.009	0.011
1,2,3,7,8-PeCDF	0.001	0.005	0.001	0.001	0.001	0.002	0.001	0.002	0.002	0.001	0.001	0.002	0.003
2,3,4,7,8-PeCDF	0.001	0.007	0.001	0.002	0.001	0.002	0.001	0.002	0.004	0.002	0.002	0.004	0.005
1,2,3,4,7,8-HxCDF	0.003	0.021	0.003	0.003	0.002	0.005	0.004	0.005	0.008	0.007	0.004	0.011	0.013
1,2,3,6,7,8-HxCDF	0.001	0.008	0.001	0.002	0.002	0.002	0.002	0.003	0.003	0.002	0.002	0.005	0.006
2,3,4,6,7,8-HxCDF	0.002	0.009	0.001	0.003	0.002	0.002	0.002	0.002	0.004	0.003	0.001	0.005	0.005
1,2,3,7,8,9-HxCDF	<0.001	0.001	<0.001	<0.001	<0.002	<0.001	<0.001	<0.001	<0.002	<0.001	<0.001	0.001	0.001
1,2,3,4,6,7,8-HpCDF	0.007	0.049	0.006	0.007	0.013	0.012	0.009	0.013	0.021	0.011	0.008	0.024	0.028
1,2,3,4,7,8,9-HpCDF	0.001	0.005	<0.002	0.001	0.004	0.002	<0.001	<0.002	0.002	<0.001	0.002	0.003	0.004
OCDF	0.008	0.033	0.006	0.007	0.012	0.008	0.007	0.007	0.012	0.005	0.006	0.016	0.021
<b>PCDD/F Homologues</b>													
TCDDs	0.028	0.031	0.005	0.008	0.009	0.010	0.007	0.011	0.011	0.010	0.014	0.022	0.022
PeCDDs	0.049	0.060	0.012	0.014	0.031	0.014	0.023	0.026	0.017	0.019	0.030	0.036	0.045
HxCDDs	0.116	0.154	0.031	0.037	0.128	0.027	0.085	0.069	0.043	0.042	0.082	0.080	0.145
HpCDDs	0.139	0.298	0.047	0.071	0.212	0.035	0.159	0.109	0.095	0.081	0.114	0.113	0.255
OCDD	0.140	0.529	0.057	0.104	0.289	0.062	0.223	0.158	0.148	0.119	0.134	0.176	0.412
TCDFs	0.031	0.140	0.020	0.040	0.063	0.067	0.032	0.055	0.090	0.039	0.042	0.070	0.077
PeCDFs	0.017	0.100	0.010	0.017	0.030	0.038	0.018	0.054	0.066	0.028	0.023	0.057	0.057
HxCDFs	0.014	0.097	0.010	0.014	0.025	0.026	0.018	0.046	0.048	0.027	0.022	0.067	0.060
HpCDFs	0.012	0.079	0.009	0.011	0.024	0.019	0.014	0.020	0.030	0.016	0.016	0.041	0.046
OCDF	0.008	0.033	0.006	0.007	0.012	0.008	0.007	0.007	0.012	0.005	0.006	0.016	0.021
<b>Total</b>													
∑ PCDDs	0.471	1.072	0.152	0.233	0.669	0.147	0.497	0.373	0.314	0.271	0.374	0.427	0.879
∑ PCDFs	0.082	0.449	0.054	0.089	0.155	0.158	0.089	0.182	0.246	0.114	0.109	0.250	0.260
∑ PCDD/Fs	0.553	1.520	0.206	0.322	0.824	0.305	0.586	0.555	0.560	0.385	0.483	0.677	1.139
∑ TEQ (PCDD/Fs)	0.010	0.020	0.005	0.008	0.009	0.006	0.009	0.010	0.010	0.009	0.010	0.012	0.016



Table A19. Atmospheric concentrations of PCDD/Fs (pg m<sup>-3</sup>) at NAPS rural sites in 2007 (continued)

Station Name	Burnt Island										Simcoe											
Sampling Period	1	2	3	4	5	6	7	8	9	10	1	2	3	4	5	6	7	8	9	10	11	12
Sampling Date	1/24/07	5/24/07	6/17/07	7/11/07	8/4/07	8/28/07	9/21/07	10/15/07	11/8/07	12/2/07	1/24/07	3/13/07	4/6/07	4/30/07	5/24/07	6/17/07	7/11/07	8/4/07	8/28/07	9/21/07	10/15/07	12/26/07
Sampling Volume (m3)	1001	904	758	765	787	855	845	884	989	871	1054	868	1001	1069	937	749	946	860	804	858	1009	1117
<b>PCDD/F Congeners</b>																						
2,3,7,8-TCDD	<0.001	<0.001	<0.001	<0.001	<0.001	0.002	<0.001	<0.001	<0.001	<0.001	0.001	0.001	0.001	0.001	0.001	<0.001	0.001	0.001	<0.001	0.001	0.001	0.001
1,2,3,7,8-PeCDD	0.003	0.003	0.003	0.003	0.003	0.006	0.003	0.003	0.003	0.003	0.005	0.007	0.004	0.004	0.005	0.006	0.004	0.006	0.005	0.007	0.007	0.008
1,2,3,4,7,8-HxCDD	<0.001	0.002	<0.002	<0.001	0.001	0.003	0.001	<0.001	0.002	0.001	0.003	0.008	0.004	0.003	0.003	0.004	0.002	0.006	0.003	0.004	0.009	0.008
1,2,3,6,7,8-HxCDD	0.001	0.003	<0.002	0.001	0.001	0.003	0.001	<0.001	0.003	0.002	0.004	0.012	0.005	0.004	0.005	0.007	0.003	0.008	0.004	0.006	0.019	0.014
1,2,3,7,8,9-HxCDD	0.001	0.007	<0.002	<0.001	<0.001	0.004	0.001	0.002	0.003	0.001	0.005	0.016	0.007	0.005	0.006	0.010	0.003	0.013	0.005	0.007	0.022	0.018
1,2,3,4,6,7,8-HpCDD	0.007	0.074	0.009	0.013	0.003	0.022	0.017	0.008	0.032	0.014	0.046	0.191	0.078	0.063	0.074	0.103	0.038	0.149	0.067	0.075	0.358	0.181
OCDD	0.014	0.232	0.034	0.116	0.016	0.080	0.058	0.027	0.103	0.058	0.109	0.596	0.191	0.175	0.336	0.308	0.173	0.432	0.219	0.216	1.171	0.543
2,3,7,8-TCDF	0.002	0.005	0.002	0.001	0.001	0.005	0.004	0.002	0.004	0.002	0.011	0.027	0.004	0.009	0.018	0.010	0.006	0.008	0.012	0.061	0.009	0.019
1,2,3,7,8-PeCDF	<0.001	0.001	<0.001	<0.001	<0.001	0.003	0.001	0.001	0.001	0.001	0.002	0.006	0.001	0.002	0.003	0.002	0.001	0.002	0.003	0.013	0.002	0.004
2,3,4,7,8-PeCDF	<0.001	0.001	<0.001	<0.001	<0.001	0.004	0.002	0.001	0.001	0.001	0.003	0.007	0.001	0.003	0.005	0.003	0.001	0.003	0.004	0.018	0.004	0.007
1,2,3,4,7,8-HxCDF	0.001	0.009	<0.001	0.001	0.001	0.006	0.004	0.003	0.003	0.002	0.008	0.020	0.003	0.005	0.014	0.006	0.004	0.009	0.010	0.052	0.009	0.019
1,2,3,6,7,8-HxCDF	<0.001	0.003	<0.001	0.001	<0.001	0.004	0.002	0.001	0.001	0.001	0.003	0.009	0.001	0.003	0.006	0.003	0.002	0.004	0.004	0.018	0.003	0.008
2,3,4,6,7,8-HxCDF	0.001	0.003	<0.001	0.001	<0.001	0.004	0.002	0.002	0.002	0.001	0.003	0.009	0.001	0.004	0.005	0.004	0.002	0.004	0.004	0.021	0.004	0.009
1,2,3,7,8,9-HxCDF	<0.001	<0.002	<0.002	<0.001	<0.001	0.004	<0.001	<0.001	<0.001	<0.001	<0.001	0.000	<0.001	<0.001	<0.001	<0.002	<0.001	<0.001	<0.001	0.001	0.001	0.001
1,2,3,4,6,7,8-HpCDF	0.002	0.025	0.003	0.003	0.003	0.011	0.010	0.005	0.008	0.005	0.013	0.046	0.006	0.014	0.026	0.019	0.012	0.024	0.022	0.077	0.024	0.036
1,2,3,4,7,8,9-HpCDF	<0.001	0.002	<0.003	<0.001	<0.001	0.003	0.001	<0.001	0.001	0.001	0.001	0.004	<0.001	0.002	0.003	<0.003	<0.002	0.004	0.002	0.009	0.004	0.005
OCDF	0.002	0.024	0.002	0.002	0.003	0.011	0.007	0.005	0.005	0.004	0.008	0.028	0.006	0.020	0.027	0.012	0.013	0.022	0.014	0.035	0.024	0.023
<b>PCDD/F Homologues</b>																						
TCDDs	0.001	0.008	0.002	0.004	0.001	0.005	0.004	0.005	0.008	0.006	0.040	0.093	0.018	0.036	0.050	0.037	0.017	0.020	0.021	0.080	0.025	0.038
PeCDDs	0.005	0.024	0.016	0.009	0.003	0.015	0.008	0.011	0.016	0.010	0.048	0.102	0.031	0.044	0.073	0.068	0.023	0.045	0.039	0.105	0.056	0.068
HxCDDs	0.007	0.072	0.035	0.009	0.001	0.031	0.013	0.008	0.042	0.017	0.083	0.211	0.084	0.077	0.103	0.138	0.047	0.140	0.084	0.135	0.263	0.212
HpCDDs	0.012	0.160	0.016	0.025	0.014	0.042	0.033	0.016	0.065	0.024	0.097	0.393	0.148	0.132	0.166	0.203	0.078	0.304	0.133	0.147	0.641	0.367
OCDD	0.014	0.232	0.034	0.116	0.016	0.080	0.058	0.027	0.103	0.058	0.109	0.596	0.191	0.175	0.336	0.308	0.173	0.432	0.219	0.216	1.171	0.543
TCDFs	0.009	0.051	0.021	0.015	0.011	0.047	0.041	0.007	0.034	0.018	0.072	0.228	0.027	0.065	0.149	0.085	0.051	0.060	0.102	0.434	0.066	0.128
PeCDFs	0.004	0.038	0.009	0.005	0.005	0.029	0.025	0.009	0.018	0.011	0.040	0.130	0.014	0.042	0.093	0.065	0.038	0.045	0.074	0.302	0.043	0.088
HxCDFs	0.003	0.038	0.012	0.006	0.005	0.030	0.020	0.009	0.016	0.010	0.034	0.107	0.012	0.033	0.075	0.056	0.031	0.049	0.059	0.228	0.051	0.090
HpCDFs	0.002	0.038	0.003	0.003	0.003	0.018	0.015	0.008	0.013	0.009	0.021	0.074	0.010	0.021	0.043	0.029	0.019	0.043	0.036	0.116	0.052	0.062
OCDF	0.002	0.024	0.002	0.002	0.003	0.011	0.007	0.005	0.005	0.004	0.008	0.028	0.006	0.020	0.027	0.012	0.013	0.022	0.014	0.035	0.024	0.023
<b>Total</b>																						
∑ PCDDs	0.040	0.496	0.102	0.162	0.036	0.173	0.116	0.066	0.234	0.115	0.377	1.395	0.471	0.463	0.728	0.753	0.338	0.940	0.496	0.684	2.155	1.228
∑ PCDFs	0.020	0.188	0.047	0.030	0.026	0.134	0.108	0.038	0.086	0.051	0.175	0.566	0.069	0.181	0.386	0.247	0.151	0.219	0.285	1.115	0.234	0.391
∑ PCDD/Fs	0.060	0.684	0.149	0.193	0.062	0.307	0.224	0.103	0.320	0.166	0.552	1.961	0.539	0.644	1.115	1.000	0.489	1.158	0.781	1.798	2.389	1.619
∑ TEQ (PCDD/Fs)	0.003	0.008	0.006	0.005	0.004	0.013	0.006	0.005	0.006	0.005	0.011	0.023	0.008	0.010	0.014	0.014	0.007	0.015	0.013	0.032	0.021	0.023

Table A20. Atmospheric concentrations of PCDD/Fs ( $\mu\text{g m}^{-3}$ ) at NAPS rural sites in 2008

Station Name	Kejimkujik								Egbert										
Sampling Period	1	2	3	4	5	6	7	8	1	2	3	4	5	6	7	8	9	10	11
Sampling Date	1/19/08	2/12/08	7/5/08	7/29/08	8/22/08	11/2/08	11/26/08	12/20/08	1/19/08	4/24/08	5/18/08	6/11/08	7/5/08	7/29/08	8/22/08	9/15/08	11/2/08	11/26/08	12/20/08
Sampling Volume (m3)	895	926	723	728	680	653	647	777	747	722	734	740	708	787	814	635	879	608	634
<b>PCDD/F Congeners</b>																			
2,3,7,8-TCDD	<0.005	<0.001	<0.001	<0.001	<0.001	<0.001	<0.003	<0.002	<0.002	<0.001	<0.001	<0.001	0.001	<0.001	0.001	<0.001	<0.002	<0.001	<0.001
1,2,3,7,8-PeCDD	0.003	0.002	0.003	0.003	0.003	0.003	<0.005	0.001	0.005	0.005	0.006	0.004	0.004	0.005	0.008	0.005	0.006	0.004	0.002
1,2,3,4,7,8-HxCDD	0.001	<0.001	<0.001	<0.001	<0.002	<0.002	<0.009	<0.004	0.005	0.002	0.008	<0.001	0.002	0.004	0.006	<0.002	0.007	0.001	0.002
1,2,3,6,7,8-HxCDD	0.002	0.001	<0.001	<0.001	<0.002	<0.002	<0.007	<0.004	0.005	0.003	0.015	0.002	0.004	0.008	0.012	<0.002	0.011	0.003	0.003
1,2,3,7,8,9-HxCDD	0.002	0.001	<0.001	<0.001	<0.001	<0.001	<0.009	0.004	0.006	0.005	0.016	0.002	0.004	0.008	0.012	0.002	0.018	0.003	0.004
1,2,3,4,6,7,8-HpCDD	0.021	0.010	0.006	0.005	0.009	0.011	0.020	0.011	0.054	0.027	0.189	0.024	0.064	0.104	0.139	0.009	0.152	0.027	0.055
OCDD	0.060	0.028	0.015	0.016	0.036	0.024	0.072	0.030	0.162	0.083	0.427	0.068	0.179	0.200	0.332	0.025	0.293	0.083	0.195
2,3,7,8-TCDF	0.002	0.002	0.001	0.001	0.002	0.002	0.002	<0.001	0.006	0.005	0.006	0.004	0.005	0.008	0.017	0.003	0.016	0.006	0.010
1,2,3,7,8-PeCDF	0.001	0.001	0.000	0.001	0.001	<0.001	<0.003	<0.001	0.002	0.001	0.001	0.001	0.001	0.002	0.004	0.001	0.002	0.001	0.001
2,3,4,7,8-PeCDF	0.001	0.001	<0.001	<0.001	0.000	<0.001	<0.003	<0.002	0.003	0.002	0.002	0.001	0.002	0.002	0.005	0.001	0.008	0.002	0.004
1,2,3,4,7,8-HxCDF	0.002	0.003	0.001	0.001	0.002	0.003	<0.004	<0.002	0.007	0.004	0.004	0.003	0.005	0.005	0.012	0.003	0.014	0.005	0.003
1,2,3,6,7,8-HxCDF	0.001	0.002	<0.001	<0.001	0.001	0.002	<0.003	<0.002	0.005	0.002	0.003	0.001	0.002	0.002	0.006	0.002	0.006	0.002	0.003
2,3,4,6,7,8-HxCDF	0.001	0.002	<0.001	<0.001	<0.001	<0.001	<0.004	<0.002	0.003	0.001	0.003	0.002	0.002	0.002	0.005	0.001	0.006	0.002	<0.002
1,2,3,7,8,9-HxCDF	<0.001	<0.001	<0.001	<0.001	<0.001	<0.002	<0.005	<0.001	<0.002	<0.001	<0.001	<0.001	<0.001	<0.001	0.001	<0.002	<0.003	<0.001	<0.002
1,2,3,4,6,7,8-HpCDF	0.005	0.007	0.003	0.002	0.007	0.004	0.003	0.003	0.012	0.008	0.012	0.008	0.013	0.012	0.026	0.007	0.021	0.030	0.008
1,2,3,4,7,8,9-HpCDF	0.001	<0.001	<0.002	<0.001	<0.002	<0.003	<0.010	<0.002	<0.004	<0.001	0.003	<0.001	0.002	<0.001	0.002	<0.003	<0.005	0.002	<0.003
OCDF	0.004	0.005	0.001	0.001	0.004	<0.001	<0.019	0.004	0.007	0.006	0.012	0.005	0.008	0.007	0.020	0.004	0.011	0.070	0.011
<b>PCDD/F Homologues</b>																			
TCDDs	0.003	0.003	0.001	0.001	0.002	0.001	0.004	<0.002	0.010	0.007	0.010	0.012	0.009	0.020	0.017	0.005	0.055	0.011	0.021
PeCDDs	0.010	0.005	0.003	0.003	0.003	0.005	<0.005	0.008	0.026	0.018	0.037	0.013	0.023	0.040	0.012	0.086	0.017	0.034	
HxCDDs	0.023	0.013	0.003	0.004	0.009	0.008	<0.008	0.017	0.066	0.040	0.180	0.024	0.051	0.123	0.160	0.015	0.188	0.031	0.054
HpCDDs	0.039	0.017	0.007	0.008	0.015	0.018	0.043	0.020	0.103	0.063	0.370	0.042	0.115	0.206	0.266	0.016	0.299	0.052	0.123
OCDD	0.060	0.028	0.015	0.016	0.036	0.024	0.072	0.030	0.162	0.083	0.427	0.068	0.179	0.200	0.332	0.025	0.293	0.083	0.195
TCDFs	0.015	0.009	0.007	0.016	0.019	0.014	0.002	<0.001	0.044	0.042	0.048	0.033	0.031	0.052	0.080	0.018	0.078	0.045	0.066
PeCDFs	0.009	0.007	0.004	0.005	0.006	0.004	0.004	0.002	0.028	0.022	0.025	0.022	0.020	0.036	0.048	0.012	0.067	0.020	0.037
HxCDFs	0.010	0.012	0.003	0.003	0.008	0.007	<0.004	<0.002	0.026	0.019	0.024	0.015	0.027	0.029	0.057	0.012	0.062	0.022	0.022
HpCDFs	0.008	0.011	0.005	0.003	0.009	0.004	0.003	0.003	0.017	0.011	0.024	0.011	0.023	0.017	0.044	0.007	0.030	0.042	0.014
OCDF	0.004	0.005	0.001	0.001	0.004	0.001	<0.019	0.004	0.007	0.006	0.012	0.005	0.008	0.007	0.020	0.004	0.011	0.070	0.011
<b>Total</b>																			
∑ PCDDs	0.133	0.066	0.029	0.030	0.065	0.056	0.118	0.074	0.367	0.211	1.024	0.159	0.377	0.590	0.824	0.072	0.920	0.194	0.426
∑ PCDFs	0.047	0.044	0.021	0.028	0.046	0.028	0.009	0.010	0.121	0.100	0.132	0.087	0.108	0.140	0.250	0.052	0.248	0.199	0.150
∑ PCDD/Fs	0.180	0.110	0.049	0.058	0.112	0.084	0.127	0.083	0.488	0.311	1.156	0.246	0.485	0.730	1.073	0.124	1.168	0.392	0.576
∑ TEQ (PCDD/Fs)	0.010	0.005	0.005	0.004	0.006	0.006	0.013	0.005	0.012	0.009	0.015	0.006	0.009	0.012	0.019	0.008	0.020	0.008	0.008

Table A20. Atmospheric concentrations of PCDD/Fs ( $\text{pg m}^{-3}$ ) at NAPS rural sites in 2008 (continued)

Station Name	Point Petre											
Sampling Period	1	2	3	4	5	6	7	8	9	10	11	12
Sampling Date	1/19/08	3/7/08	3/31/08	4/24/08	5/18/08	6/11/08	7/5/08	7/29/08	8/22/08	9/15/08	10/9/08	11/2/08
Sampling Volume (m3)	978	691	839	769	722	774	679	650	604	693	747	859
<b>PCDD/F Congeners</b>												
2,3,7,8-TCDD	0.001	0.001	0.001	<0.001	<0.001	0.001	<0.001	<0.001	0.001	<0.001	<0.001	<0.002
1,2,3,7,8-PeCDD	0.005	0.005	0.004	0.003	0.005	0.004	0.003	0.004	0.007	0.004	0.004	0.005
1,2,3,4,7,8-HxCDD	0.004	0.002	0.003	0.002	0.003	<0.001	0.002	0.001	0.004	0.001	0.002	0.004
1,2,3,6,7,8-HxCDD	0.005	0.003	0.004	0.002	0.005	0.001	0.003	0.002	0.007	0.002	0.002	0.005
1,2,3,7,8,9-HxCDD	0.007	0.007	0.005	0.005	0.004	0.002	0.002	0.003	0.006	0.002	0.004	0.008
1,2,3,4,6,7,8-HpCDD	0.073	0.046	0.051	0.012	0.055	0.016	0.031	0.015	0.087	0.029	0.027	0.072
OCDD	0.206	0.114	0.152	0.027	0.179	0.048	0.079	0.059	0.302	0.076	0.086	0.184
2,3,7,8-TCDF	0.006	0.007	0.007	0.005	0.004	0.005	0.003	0.004	0.010	0.003	0.007	0.009
1,2,3,7,8-PeCDF	0.002	0.001	0.002	0.001	0.001	0.001	0.001	0.001	0.002	0.001	0.001	0.001
2,3,4,7,8-PeCDF	0.003	0.002	0.002	0.001	0.002	0.001	0.001	0.001	0.003	0.001	0.002	0.003
1,2,3,4,7,8-HxCDF	0.006	0.005	0.007	0.004	0.004	0.003	0.002	0.003	0.010	0.002	0.005	0.007
1,2,3,6,7,8-HxCDF	0.002	0.002	0.003	0.001	0.002	0.002	0.001	0.001	0.005	0.001	0.002	0.004
2,3,4,6,7,8-HxCDF	0.002	0.002	0.003	0.002	0.005	0.003	0.001	0.001	0.004	<0.001	0.002	0.004
1,2,3,7,8,9-HxCDF	<0.001	<0.001	<0.001	<0.001	<0.002	<0.001	<0.001	<0.001	<0.001	<0.001	<0.002	<0.003
1,2,3,4,6,7,8-HpCDF	0.012	0.009	0.017	0.007	0.010	0.008	0.006	0.008	0.023	0.006	0.011	0.017
1,2,3,4,7,8,9-HpCDF	0.001	0.001	0.003	<0.002	0.003	0.001	<0.001	<0.002	0.003	<0.002	0.002	<0.006
OCDF	0.010	0.006	0.015	0.004	0.008	0.006	0.004	0.003	0.017	0.006	0.009	0.008
<b>PCDD/F Homologues</b>												
TCDDs	0.013	0.012	0.018	0.008	0.003	0.007	0.007	0.008	0.021	0.002	0.013	0.018
PeCDDs	0.034	0.025	0.028	0.014	0.012	0.011	0.010	0.013	0.038	0.008	0.012	0.034
HxCDDs	0.087	0.065	0.067	0.025	0.043	0.017	0.029	0.019	0.086	0.023	0.031	0.086
HpCDDs	0.140	0.090	0.095	0.022	0.102	0.029	0.055	0.027	0.165	0.052	0.051	0.137
OCDD	0.206	0.114	0.152	0.027	0.179	0.048	0.079	0.059	0.302	0.076	0.086	0.184
TCDFs	0.038	0.056	0.060	0.038	0.015	0.045	0.023	0.038	0.058	0.014	0.076	0.066
PeCDFs	0.029	0.028	0.036	0.015	0.010	0.022	0.012	0.020	0.041	0.008	0.045	0.040
HxCDFs	0.024	0.022	0.033	0.013	0.017	0.019	0.012	0.015	0.051	0.008	0.033	0.046
HpCDFs	0.021	0.017	0.028	0.008	0.017	0.012	0.010	0.010	0.038	0.006	0.020	0.027
OCDF	0.010	0.006	0.015	0.004	0.008	0.006	0.004	0.003	0.017	0.006	0.009	0.008
<b>Total</b>												
$\Sigma$ PCDDs	0.481	0.305	0.360	0.096	0.339	0.111	0.180	0.126	0.612	0.162	0.193	0.459
$\Sigma$ PCDFs	0.122	0.128	0.172	0.079	0.067	0.104	0.060	0.085	0.206	0.042	0.183	0.186
$\Sigma$ PCDD/Fs	0.603	0.434	0.532	0.175	0.406	0.216	0.239	0.211	0.818	0.204	0.376	0.645
$\Sigma$ TEQ (PCDD/Fs)	0.011	0.011	0.010	0.007	0.010	0.006	0.006	0.007	0.015	0.007	0.008	0.013

Table A20. Atmospheric concentrations of PCDD/Fs (pg m<sup>-3</sup>) at NAPS rural sites in 2008 (continued)

Station Name	Burnt Island							Simcoe						
Sampling Period	1	2	3	4	5	6	7	1	2	3	4	5	6	7
Sampling Date	3/7/08	3/31/08	6/11/08	7/5/08	8/22/08	11/26/08	12/20/08	1/19/08	3/7/08	3/31/08	7/5/08	7/29/08	8/22/08	10/9/08
Sampling Volume (m3)	1057	911	883	772	768	745	907	1168	972	947	1045	1022	1000	977
<b>PCDD/F Congeners</b>														
2,3,7,8-TCDD	<0.001	0.002	<0.001	<0.001	0.001	<0.001	<0.001	0.001	<0.001	0.001	0.001	<0.001	<0.001	0.001
1,2,3,7,8-PeCDD	0.002	0.010	0.003	0.004	0.003	0.003	0.003	0.005	0.005	0.005	0.005	0.004	0.004	0.005
1,2,3,4,7,8-HxCDD	<0.001	0.013	<0.001	0.001	0.002	0.001	0.001	0.003	0.005	0.004	0.005	0.002	0.002	0.004
1,2,3,6,7,8-HxCDD	<0.001	0.015	0.000	0.002	0.004	0.002	0.002	0.006	0.007	0.007	0.011	0.004	0.005	0.005
1,2,3,7,8,9-HxCDD	0.001	0.021	<0.001	0.003	0.004	0.001	0.002	0.009	0.009	0.007	0.017	0.006	0.005	0.007
1,2,3,4,6,7,8-HpCDD	0.007	0.250	0.007	0.045	0.042	0.026	0.023	0.074	0.092	0.093	0.234	0.057	0.060	0.059
OCDD	0.017	0.942	0.009	0.182	0.153	0.089	0.052	0.228	0.287	0.280	0.819	0.151	0.223	0.177
2,3,7,8-TCDF	0.001	0.006	0.001	0.002	0.006	0.003	0.003	0.006	0.009	0.009	0.011	0.006	0.010	0.011
1,2,3,7,8-PeCDF	<0.001	0.002	<0.001	0.001	0.002	0.001	0.001	0.001	0.002	0.002	0.002	0.002	0.002	0.003
2,3,4,7,8-PeCDF	<0.001	0.002	<0.001	0.001	0.002	0.001	0.002	0.002	0.003	0.003	0.004	0.002	0.003	0.004
1,2,3,4,7,8-HxCDF	0.001	0.007	0.001	0.002	0.006	0.003	0.003	0.005	0.007	0.007	0.007	0.005	0.009	0.007
1,2,3,6,7,8-HxCDF	0.001	0.003	<0.001	0.001	0.003	0.001	0.002	0.002	0.003	0.003	0.003	0.002	0.004	0.004
2,3,4,6,7,8-HxCDF	<0.001	0.002	0.001	0.001	0.003	0.001	0.001	0.002	0.004	0.002	0.003	0.002	0.003	0.003
1,2,3,7,8,9-HxCDF	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	0.001
1,2,3,4,6,7,8-HpCDF	0.003	0.017	0.004	0.006	0.016	0.007	0.005	0.010	0.014	0.015	0.020	0.015	0.021	0.017
1,2,3,4,7,8,9-HpCDF	<0.001	0.003	<0.001	<0.001	<0.001	<0.001	<0.001	0.003	0.002	0.002	0.003	0.002	0.003	0.003
OCDF	0.003	0.016	0.002	0.005	0.011	0.006	0.005	0.011	0.009	0.013	0.020	0.014	0.018	0.013
<b>PCDD/F Homologues</b>														
TCDDs	0.002	0.021	0.004	0.004	0.006	0.005	0.006	0.019	0.018	0.023	0.022	0.015	0.011	0.024
PeCDDs	0.005	0.063	0.007	0.012	0.018	0.011	0.014	0.035	0.040	0.034	0.038	0.028	0.025	0.027
HxCDDs	0.006	0.216	0.006	0.031	0.047	0.024	0.030	0.088	0.119	0.104	0.155	0.073	0.070	0.082
HpCDDs	0.012	0.492	0.009	0.092	0.081	0.054	0.043	0.147	0.196	0.175	0.442	0.121	0.123	0.123
OCDD	0.017	0.942	0.009	0.182	0.153	0.089	0.052	0.228	0.287	0.280	0.819	0.151	0.223	0.177
TCDFs	0.008	0.052	0.013	0.025	0.046	0.025	0.019	0.043	0.069	0.067	0.074	0.055	0.051	0.116
PeCDFs	0.003	0.034	0.005	0.014	0.025	0.014	0.016	0.024	0.045	0.035	0.039	0.039	0.031	0.072
HxCDFs	0.003	0.034	0.006	0.013	0.032	0.012	0.018	0.024	0.040	0.031	0.041	0.035	0.041	0.059
HpCDFs	0.003	0.035	0.005	0.010	0.026	0.011	0.008	0.021	0.025	0.026	0.041	0.025	0.036	0.033
OCDF	0.003	0.016	0.002	0.005	0.011	0.006	0.005	0.011	0.009	0.013	0.020	0.014	0.018	0.013
<b>Total</b>														
Σ PCDDs	0.042	1.733	0.036	0.321	0.306	0.183	0.144	0.517	0.659	0.616	1.475	0.389	0.451	0.433
Σ PCDFs	0.020	0.170	0.031	0.067	0.140	0.066	0.065	0.123	0.187	0.172	0.215	0.167	0.176	0.292
Σ PCDD/Fs	0.062	1.904	0.066	0.388	0.445	0.249	0.210	0.640	0.846	0.787	1.690	0.556	0.627	0.725
Σ TEQ (PCDD/Fs)	0.003	0.022	0.004	0.006	0.008	0.005	0.006	0.011	0.013	0.012	0.016	0.008	0.009	0.012

Table A21. Atmospheric concentrations of PCDD/Fs ( $\mu\text{g m}^{-3}$ ) at NAPS rural sites in 2009

Station Name	Kejimikujik									Egbert										
Sampling Period	1	2	3	4	5	6	7	8	9	1	2	3	4	5	6	7	8	9	10	11
Sampling Date	1/13/09	2/6/09	3/2/09	3/26/09	4/19/09	5/13/09	6/6/09	7/24/09	8/17/09	1/13/09	2/6/09	3/2/09	3/26/09	4/19/09	7/24/09	8/17/09	9/10/09	10/4/09	10/28/09	11/21/09
Sampling Volume (m3)	641	621	633	690	917	649	567	623	617	655	534	606	642	730	481	466	609	718	666	568
<b>PCDD/F Congeners</b>																				
2,3,7,8-TCDD	<0.003	<0.001	0.002	<0.001	<0.002	<0.001	0.001	<0.001	<0.001	<0.002	0.001	<0.001	0.001	<0.001	<0.001	0.001	<0.001	0.001	0.001	0.001
1,2,3,7,8-PeCDD	<0.003	<0.002	0.002	0.000	<0.002	<0.001	0.000	<0.001	<0.001	0.003	0.004	<0.002	0.004	0.001	0.001	0.002	0.001	0.004	0.004	0.010
1,2,3,4,7,8-HxCDD	<0.011	<0.003	0.004	0.001	<0.002	<0.001	<0.002	<0.001	<0.001	0.003	0.007	<0.003	0.005	0.002	0.001	0.002	0.001	0.007	0.007	0.016
1,2,3,6,7,8-HxCDD	<0.010	<0.002	0.005	0.001	<0.002	<0.001	<0.001	<0.001	0.001	0.004	0.007	<0.002	0.007	0.001	0.003	0.002	0.002	0.015	0.011	0.030
1,2,3,7,8,9-HxCDD	<0.010	<0.002	0.005	0.001	<0.002	<0.001	<0.001	<0.001	<0.001	0.009	0.014	<0.002	0.010	0.003	0.003	0.004	0.003	0.028	0.016	0.038
1,2,3,4,6,7,8-HpCDD	<0.007	0.005	0.008	0.007	0.004	0.003	0.003	0.002	0.002	0.081	0.104	0.006	0.097	0.025	0.021	0.031	0.018	0.251	0.159	0.486
OCDD	0.019	0.016	0.022	0.023	0.019	0.022	0.011	0.009	0.017	0.213	0.283	0.021	0.292	0.056	0.052	0.093	0.055	1.143	0.400	1.677
2,3,7,8-TCDF	0.004	0.003	0.003	0.002	0.001	0.001	0.001	0.002	0.002	0.011	0.014	0.004	0.014	0.004	0.004	0.009	0.005	0.006	0.009	0.019
1,2,3,7,8-PeCDF	<0.006	<0.001	0.002	0.001	0.000	<0.001	<0.001	<0.001	<0.001	<0.002	0.003	0.001	0.003	0.002	<0.001	0.002	0.001	0.001	0.002	0.005
2,3,4,7,8-PeCDF	<0.006	<0.002	0.003	0.001	<0.002	<0.001	<0.001	<0.001	0.001	0.004	0.006	<0.001	0.006	0.002	<0.001	0.002	0.002	0.001	0.004	0.011
1,2,3,4,7,8-HxCDF	<0.004	<0.002	0.004	0.002	0.001	0.001	<0.001	<0.001	0.001	0.008	0.010	0.001	0.010	0.002	0.002	0.007	0.003	0.006	0.009	0.051
1,2,3,6,7,8-HxCDF	<0.004	<0.001	0.004	0.001	<0.001	<0.001	<0.001	<0.001	<0.001	0.004	0.003	<0.002	0.005	<0.001	0.001	0.004	0.002	0.003	0.004	0.018
2,3,4,6,7,8-HxCDF	<0.005	<0.002	0.005	0.001	<0.002	<0.001	<0.001	<0.001	<0.001	0.002	0.004	<0.002	0.004	0.001	<0.002	0.005	0.001	0.008	0.003	0.019
1,2,3,7,8,9-HxCDF	<0.005	<0.002	0.005	<0.001	<0.002	<0.002	<0.002	<0.001	<0.001	<0.003	<0.003	<0.003	0.001	<0.002	<0.002	0.001	<0.001	<0.003	<0.001	0.001
1,2,3,4,6,7,8-HpCDF	<0.004	<0.003	0.006	0.002	0.002	0.002	0.001	0.001	0.002	0.011	<0.005	<0.003	0.019	0.004	0.002	0.012	0.007	0.016	0.023	0.144
1,2,3,4,7,8,9-HpCDF	<0.005	<0.004	0.004	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	0.001	<0.007	<0.004	0.001	<0.002	<0.001	0.003	0.001	0.006	0.003	0.014
OCDF	<0.005	<0.002	0.012	0.002	<0.003	0.002	0.001	0.001	0.003	0.005	0.010	0.003	0.017	0.003	0.003	0.006	0.006	0.024	0.027	0.131
<b>PCDD/F Homologues</b>																				
TCDDs	<0.003	0.001	0.006	0.002	0.001	0.001	0.002	0.001	0.001	0.015	0.036	0.008	0.027	0.012	0.006	0.017	0.005	0.011	0.039	0.100
PeCDDs	<0.003	0.006	0.007	0.005	<0.002	0.002	0.001	0.001	0.002	0.037	0.072	0.005	0.046	0.017	0.013	0.015	0.009	0.028	0.050	0.164
HxCDDs	<0.010	<0.002	0.017	0.008	<0.002	0.002	0.002	<0.001	0.003	0.093	0.141	0.003	0.102	0.030	0.029	0.033	0.026	0.165	0.149	0.465
HpCDDs	<0.007	0.010	0.012	0.014	0.010	0.008	0.006	0.004	0.005	0.188	0.251	0.014	0.208	0.051	0.052	0.059	0.042	0.494	0.333	1.175
OCDD	0.019	0.016	0.022	0.023	0.019	0.022	0.011	0.009	0.017	0.213	0.283	0.021	0.292	0.056	0.052	0.093	0.055	1.143	0.400	1.677
TCDFs	0.007	0.012	0.023	0.010	0.013	0.013	0.009	0.010	0.020	0.066	0.107	0.024	0.115	0.031	0.024	0.036	0.028	0.022	0.081	0.140
PeCDFs	<0.006	0.006	0.013	0.006	0.007	0.003	0.003	0.004	0.006	0.041	0.067	0.006	0.057	0.019	0.009	0.013	0.014	0.011	0.048	0.141
HxCDFs	<0.005	<0.002	0.018	0.005	0.001	0.003	<0.001	0.003	0.005	0.034	0.046	0.001	0.052	0.008	0.011	0.033	0.016	0.034	0.042	0.200
HpCDFs	<0.004	<0.003	0.010	0.002	0.002	0.002	0.001	0.002	0.002	0.019	0.013	<0.003	0.032	0.006	0.003	0.022	0.011	0.046	0.037	0.224
OCDF	<0.005	0.002	0.012	0.002	<0.003	0.002	0.001	0.001	0.003	0.005	0.010	0.003	0.017	0.003	0.003	0.006	0.006	0.024	0.027	0.131
<b>Total</b>																				
∑ PCDDs	0.019	0.033	0.064	0.051	0.030	0.034	0.022	0.015	0.027	0.547	0.784	0.050	0.674	0.167	0.152	0.217	0.136	1.841	0.972	3.581
∑ PCDFs	0.007	0.019	0.076	0.025	0.024	0.023	0.014	0.019	0.036	0.164	0.242	0.034	0.272	0.069	0.050	0.109	0.076	0.136	0.236	0.835
∑ PCDD/Fs	0.026	0.052	0.140	0.076	0.054	0.057	0.035	0.034	0.063	0.711	1.026	0.084	0.947	0.235	0.202	0.326	0.211	1.977	1.208	4.416
∑ TEQ (PCDD/Fs)	0.014	0.005	0.008	0.002	0.005	0.002	0.002	0.003	0.002	0.011	0.014	0.005	0.013	0.005	0.004	0.007	0.004	0.016	0.014	0.040

Table A21. Atmospheric concentrations of PCDD/Fs ( $\text{pg m}^{-3}$ ) at NAPS rural sites in 2009 (continued)

Station Name	Point Petre											
Sampling Period	1	2	3	4	5	6	7	8	9	10	11	12
Sampling Date	1/13/09	2/6/09	3/2/09	3/26/09	4/19/09	5/13/09	6/6/09	7/24/09	8/17/09	9/10/09	10/28/09	11/21/09
Sampling Volume (m3)	656	699	748	820	788	778	588	563	671	620	681	556
<b>PCDD/F Congeners</b>												
2,3,7,8-TCDD	<0.001	0.002	<0.001	<0.001	<0.001	<0.001	<0.001	0.001	<0.002	<0.001	0.001	0.001
1,2,3,7,8-PeCDD	0.002	0.007	<0.001	0.002	0.002	0.002	0.003	<0.003	<0.002	0.002	0.004	0.003
1,2,3,4,7,8-HxCDD	0.004	0.008	0.001	0.004	0.002	0.003	0.005	<0.004	<0.004	0.001	0.007	0.003
1,2,3,6,7,8-HxCDD	0.006	0.014	<0.001	0.006	0.003	0.004	0.007	<0.004	0.002	0.002	0.011	0.006
1,2,3,7,8,9-HxCDD	0.007	0.020	0.002	0.008	0.005	0.008	0.010	0.004	0.002	0.002	0.013	0.007
1,2,3,4,6,7,8-HpCDD	0.077	0.167	0.010	0.079	0.050	0.064	0.158	0.027	0.028	0.036	0.135	0.095
OCDD	0.232	0.391	0.023	0.229	0.116	0.197	0.555	0.112	0.150	0.185	0.391	0.259
2,3,7,8-TCDF	0.007	0.010	0.002	0.008	0.004	0.005	0.006	0.006	0.007	0.008	0.008	0.008
1,2,3,7,8-PeCDF	0.002	0.003	0.001	0.002	0.001	0.002	0.001	0.002	0.002	0.002	0.002	0.001
2,3,4,7,8-PeCDF	0.003	0.005	<0.001	0.004	0.002	0.003	0.003	0.002	0.003	0.003	0.005	0.003
1,2,3,4,7,8-HxCDF	0.007	0.010	<0.001	0.009	0.006	0.010	0.007	<0.003	0.006	0.005	0.012	0.005
1,2,3,6,7,8-HxCDF	0.003	0.003	<0.001	0.004	0.002	0.005	0.003	<0.002	0.002	0.002	0.007	0.003
2,3,4,6,7,8-HxCDF	0.003	0.004	<0.001	0.004	0.002	0.004	0.003	<0.003	0.003	0.002	0.006	0.002
1,2,3,7,8,9-HxCDF	<0.002	<0.001	<0.002	<0.001	<0.001	<0.001	<0.001	<0.003	<0.003	<0.002	<0.001	<0.001
1,2,3,4,6,7,8-HpCDF	0.013	0.015	0.001	0.015	0.009	0.026	0.018	0.009	0.010	0.011	0.031	0.014
1,2,3,4,7,8,9-HpCDF	0.002	0.002	<0.001	0.002	0.001	0.002	0.003	<0.003	<0.002	0.001	0.005	0.002
OCDF	0.010	0.015	0.001	0.012	0.006	0.024	0.023	0.005	0.010	0.013	0.029	0.014
<b>PCDD/F Homologues</b>												
TCDDs	0.018	0.035	<0.001	0.020	0.013	0.014	0.014	0.008	0.011	0.012	0.024	0.019
PeCDDs	0.040	0.076	0.002	0.032	0.026	0.026	0.034	0.015	0.014	0.022	0.045	0.034
HxCDDs	0.086	0.206	0.012	0.088	0.066	0.074	0.113	0.023	0.036	0.026	0.130	0.083
HpCDDs	0.173	0.351	0.023	0.174	0.110	0.135	0.330	0.057	0.063	0.060	0.291	0.192
OCDD	0.232	0.391	0.023	0.229	0.116	0.197	0.555	0.112	0.150	0.185	0.391	0.259
TCDFs	0.067	0.094	0.006	0.075	0.038	0.060	0.063	0.089	0.109	0.076	0.092	0.078
PeCDFs	0.044	0.068	0.001	0.060	0.031	0.052	0.041	0.033	0.075	0.051	0.067	0.046
HxCDFs	0.038	0.073	0.003	0.051	0.028	0.054	0.043	0.016	0.034	0.039	0.075	0.039
HpCDFs	0.024	0.030	0.001	0.026	0.015	0.039	0.036	0.009	0.017	0.019	0.059	0.027
OCDF	0.010	0.015	0.001	0.012	0.006	0.024	0.023	0.005	0.010	0.013	0.029	0.014
<b>Total</b>												
∑ PCDDs	0.549	1.060	0.060	0.542	0.330	0.446	1.044	0.214	0.273	0.306	0.880	0.587
∑ PCDFs	0.183	0.280	0.013	0.224	0.117	0.230	0.206	0.152	0.244	0.199	0.323	0.205
∑ PCDD/Fs	0.733	1.339	0.072	0.766	0.447	0.676	1.251	0.366	0.517	0.504	1.203	0.791
∑ TEQ (PCDD/Fs)	0.009	0.019	0.004	0.009	0.005	0.009	0.011	0.008	0.008	0.006	0.015	0.010

Table A21. Atmospheric concentrations of PCDD/Fs (pg m<sup>-3</sup>) at NAPS rural sites in 2009 (continued)

Station Name	Burnt Island										Simcoe						
Sampling Period	1	2	3	4	5	6	7	8	9	10	1	2	3	4	5	6	7
Sampling Date	1/13/09	2/6/09	3/2/09	4/19/09	5/13/09	6/6/09	8/17/09	9/10/09	10/28/09	11/21/09	7/24/09	8/17/09	9/10/09	10/4/09	10/28/09	11/21/09	12/15/09
Sampling Volume (m3)	877	810	817	1063	762	1049	619	735	451	674	979	977	750	739	502	676	529
<b>PCDD/F Congeners</b>																	
2,3,7,8-TCDD	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.003	<0.001	0.001	<0.001	<0.001	0.001	0.001	0.002	0.001
1,2,3,7,8-PeCDD	0.001	0.003	<0.001	0.001	0.001	0.000	<0.001	<0.001	<0.005	0.001	0.002	0.002	0.002	0.002	0.004	0.006	0.006
1,2,3,4,7,8-HxCDD	<0.004	0.003	0.000	0.001	0.003	<0.001	0.001	<0.001	0.002	0.002	0.003	0.001	0.001	0.002	0.004	0.009	0.007
1,2,3,6,7,8-HxCDD	0.002	0.004	<0.001	0.001	0.003	<0.001	0.001	<0.001	<0.006	0.005	0.003	0.002	0.003	0.003	0.012	0.015	0.015
1,2,3,7,8,9-HxCDD	0.002	0.007	<0.001	0.001	0.005	<0.001	0.001	<0.001	0.003	0.005	0.006	0.002	0.004	0.004	0.010	0.017	0.013
1,2,3,4,6,7,8-HpCDD	0.030	0.059	0.004	0.011	0.060	0.003	0.011	0.007	0.042	0.071	0.052	0.027	0.071	0.044	0.138	0.230	0.140
OCDD	0.107	0.187	0.025	0.026	0.218	0.011	0.052	0.027	0.178	0.281	0.124	0.099	0.412	0.138	0.347	0.702	0.310
2,3,7,8-TCDF	0.003	0.006	0.001	0.001	0.005	0.001	0.003	0.001	0.007	0.005	0.008	0.005	0.008	0.008	0.018	0.015	0.014
1,2,3,7,8-PeCDF	<0.002	0.001	<0.001	<0.001	0.002	<0.001	0.001	<0.001	0.001	0.002	0.002	0.003	0.002	0.002	0.004	0.003	0.003
2,3,4,7,8-PeCDF	<0.002	0.003	<0.001	0.001	0.003	<0.001	0.001	0.001	0.002	0.002	0.002	0.002	0.005	0.003	0.007	0.005	0.004
1,2,3,4,7,8-HxCDF	0.002	0.005	0.001	0.001	0.006	<0.001	0.001	0.001	0.005	0.005	0.004	0.004	0.006	0.005	0.022	0.010	0.009
1,2,3,6,7,8-HxCDF	0.001	0.002	<0.001	<0.001	0.002	<0.001	0.001	<0.001	<0.003	0.002	0.002	0.002	0.003	0.002	0.010	0.005	0.004
2,3,4,6,7,8-HxCDF	0.001	0.002	<0.001	<0.001	0.002	<0.001	<0.001	<0.001	<0.003	0.003	0.002	0.002	0.005	0.002	0.012	0.005	0.004
1,2,3,7,8,9-HxCDF	<0.002	<0.002	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.003	<0.001	<0.001	<0.002	<0.002	0.000	<0.001	0.001	<0.002
1,2,3,4,6,7,8-HpCDF	0.003	0.011	0.001	0.002	0.012	<0.001	0.004	0.003	0.013	0.013	0.007	0.007	0.021	0.015	0.049	0.022	0.016
1,2,3,4,7,8,9-HpCDF	<0.002	0.001	<0.001	0.000	0.002	<0.001	<0.001	<0.001	<0.0069	<0.003	0.001	<0.002	0.003	<0.002	0.007	0.003	0.002
OCDF	0.007	0.010	0.004	0.002	0.016	0.001	0.007	0.003	0.025	0.020	0.007	0.008	0.038	0.016	0.071	0.031	0.014
<b>PCDD/F Homologues</b>																	
TCDDs	0.006	0.016	0.002	0.004	0.008	0.004	0.005	0.003	0.003	0.003	0.031	0.008	0.017	0.020	0.075	0.076	0.063
PeCDDs	0.015	0.030	0.001	0.007	0.019	0.002	0.016	0.005	0.034	0.016	0.033	0.008	0.021	0.023	0.079	0.090	0.085
HxCDDs	0.031	0.078	0.003	0.013	0.057	0.003	0.011	0.005	0.028	0.057	0.067	0.026	0.038	0.041	0.143	0.196	0.161
HpCDDs	0.076	0.146	0.007	0.022	0.142	0.006	0.023	0.014	0.078	0.153	0.115	0.056	0.132	0.090	0.244	0.430	0.274
OCDD	0.107	0.187	0.025	0.026	0.218	0.011	0.052	0.027	0.178	0.281	0.124	0.099	0.412	0.138	0.347	0.702	0.310
TCDFs	0.020	0.053	0.006	0.012	0.039	0.006	0.031	0.016	0.058	0.040	0.085	0.066	0.087	0.099	0.169	0.145	0.112
PeCDFs	0.009	0.025	0.001	0.008	0.025	0.001	0.013	0.004	0.026	0.027	0.052	0.035	0.049	0.045	0.124	0.096	0.080
HxCDFs	0.008	0.027	0.002	0.005	0.027	0.001	0.010	0.002	0.012	0.025	0.038	0.030	0.042	0.032	0.134	0.089	0.071
HpCDFs	0.006	0.019	0.003	0.004	0.022	0.001	0.006	0.003	0.022	0.018	0.013	0.011	0.045	0.025	0.092	0.050	0.035
OCDF	0.007	0.010	0.004	0.002	0.016	0.001	0.007	0.003	0.025	0.020	0.007	0.008	0.038	0.016	0.071	0.031	0.014
<b>Total</b>																	
∑ PCDDs	0.234	0.457	0.038	0.072	0.442	0.026	0.108	0.055	0.321	0.511	0.370	0.197	0.620	0.311	0.889	1.494	0.892
∑ PCDFs	0.049	0.134	0.016	0.030	0.129	0.010	0.068	0.027	0.143	0.130	0.195	0.150	0.261	0.217	0.591	0.410	0.312
∑ PCDD/Fs	0.283	0.590	0.054	0.102	0.572	0.036	0.176	0.082	0.464	0.641	0.565	0.347	0.881	0.528	1.479	1.904	1.204
∑ TEQ (PCDD/Fs)	0.005	0.008	0.001	0.002	0.006	0.001	0.002	0.002	0.012	0.007	0.007	0.006	0.008	0.006	0.018	0.020	0.017

Table A22. Atmospheric concentrations of PCDD/Fs ( $\mu\text{g m}^{-3}$ ) at NAPS suburban sites in 1994

Station Name	Saint John	Edmonton	Fort Saskatchewan		Trail
Sampling Period	1	1	1	2	1
Sampling Date	12/16/94	12/28/94	12/16/94	12/28/94	12/16/94
Sampling Volume (m <sup>3</sup> )	685	204	393	419	505
<b>PCDD/F Congeners</b>					
2,3,7,8-TCDD	<0.012	<0.020	<0.010	<0.010	<0.015
1,2,3,7,8-PeCDD	0.012	<0.020	0.021	<0.019	<0.015
1,2,3,4,7,8-HxCDD	0.006	<0.020	0.012	<0.019	<0.020
1,2,3,6,7,8-HxCDD	<0.006	0.026	0.034	<0.019	<0.020
1,2,3,7,8,9-HxCDD	0.011	<0.020	0.079	<0.019	<0.020
1,2,3,4,6,7,8-HpCDD	0.109	0.377	0.496	0.066	0.040
OCDD	0.396	2.392	1.121	0.413	0.145
2,3,7,8-TCDF	0.030	0.022	0.082	<0.010	0.075
1,2,3,7,8-PeCDF	<0.009	0.012	0.043	<0.010	<0.008
2,3,4,7,8-PeCDF	0.011	0.020	0.036	<0.010	0.009
1,2,3,4,7,8-HxCDF	<0.006	<0.020	0.090	<0.014	<0.015
1,2,3,6,7,8-HxCDF	0.013	<0.020	<0.010	<0.014	<0.015
2,3,4,6,7,8-HxCDF	0.011	<0.020	0.035	<0.014	<0.015
1,2,3,7,8,9-HxCDF	<0.006	<0.020	<0.010	<0.014	<0.015
1,2,3,4,6,7,8-HpCDF	0.032	0.053	0.125	<0.019	0.013
1,2,3,4,7,8,9-HpCDF	<0.012	<0.029	<0.015	<0.019	<0.012
OCDF	0.032	0.075	0.071	0.016	<0.024
<b>PCDD/F Homologues</b>					
TCDDs	0.014	<0.020	0.060	<0.010	<0.015
PeCDDs	0.040	<0.020	0.191	<0.019	<0.015
HxCDDs	0.080	0.026	0.588	<0.019	<0.020
HpCDDs	0.195	0.618	1.164	0.106	0.082
OCDD	0.396	2.392	1.121	0.413	0.145
TCDFs	0.054	0.022	0.282	<0.010	0.110
PeCDFs	0.058	0.041	0.348	<0.010	0.019
HxCDFs	0.073	<0.020	0.267	<0.014	<0.015
HpCDFs	0.061	0.084	0.199	<0.019	0.013
OCDF	0.032	0.075	0.071	0.016	<0.024
<b>Total</b>					
∑ PCDDs	0.725	3.036	3.125	0.519	0.227
∑ PCDFs	0.279	0.222	1.167	0.016	0.143
∑ PCDD/Fs	1.004	3.258	4.291	0.536	0.369
∑ TEQ (PCDD/Fs)	0.038	0.068	0.085	0.046	0.053



Table A23. Atmospheric concentrations of PCDD/Fs ( $\mu\text{g m}^{-3}$ ) at NAPS suburban sites in 1995

Station Name	Saint John		Edmonton		Fort Saskatchewan			Trail	Chilliwack	
Sampling Period	1	1	2	3	1	2	3	1	1	2
Sampling Date	2/2/95	1/21/95	2/2/95	11/17/95	1/9/95	1/21/95	2/2/95	2/8/95	5/15/95	7/2/95
Sampling Volume (m3)	580	129	187	575	397	358	414	506	723	687
<b>PCDD/F Congeners</b>										
2,3,7,8-TCDD	<0.007	<0.015	<0.032	<0.006	<0.010	<0.017	<0.010	<0.016	<0.007	<0.006
1,2,3,7,8-PeCDD	<0.014	0.049	<0.021	<0.005	<0.010	<0.022	<0.015	<0.016	<0.011	<0.006
1,2,3,4,7,8-HxCDD	<0.010	<0.046	0.024	<0.017	<0.010	<0.017	<0.024	<0.008	<0.014	<0.006
1,2,3,6,7,8-HxCDD	<0.010	0.111	0.081	<0.017	<0.010	<0.017	<0.024	<0.008	<0.014	<0.006
1,2,3,7,8,9-HxCDD	<0.010	0.124	0.071	<0.017	<0.010	<0.017	<0.024	<0.008	<0.014	<0.006
1,2,3,4,6,7,8-HpCDD	0.113	0.992	0.733	0.256	0.069	0.442	0.051	<0.020	0.163	0.044
OCDD	0.407	1.567	1.875	0.541	0.196	0.798	0.207	0.189	0.403	0.163
2,3,7,8-TCDF	0.016	0.609	0.503	0.019	<0.005	0.130	0.014	0.073	0.046	0.020
1,2,3,7,8-PeCDF	<0.007	0.235	0.222	<0.004	<0.005	0.018	<0.015	<0.012	<0.006	<0.005
2,3,4,7,8-PeCDF	<0.007	0.210	0.214	<0.004	<0.005	0.034	<0.015	<0.012	<0.006	<0.005
1,2,3,4,7,8-HxCDF	<0.007	0.735	1.091	<0.006	<0.010	0.114	<0.010	<0.008	<0.009	<0.006
1,2,3,6,7,8-HxCDF	<0.007	0.210	0.302	<0.006	<0.010	0.025	<0.010	<0.008	<0.009	<0.006
2,3,4,6,7,8-HxCDF	<0.007	0.300	0.353	<0.006	<0.010	<0.022	<0.010	<0.008	<0.009	<0.006
1,2,3,7,8,9-HxCDF	<0.007	<0.031	<0.032	<0.006	<0.010	<0.022	<0.010	<0.008	<0.009	<0.006
1,2,3,4,6,7,8-HpCDF	0.031	0.908	2.014	<0.010	<0.020	0.102	0.015	0.021	0.013	0.006
1,2,3,4,7,8,9-HpCDF	<0.010	0.127	0.272	<0.010	<0.020	<0.022	<0.010	<0.012	<0.011	<0.006
OCDF	0.023	0.420	1.824	<0.012	<0.015	0.077	<0.035	<0.025	<0.028	<0.029
<b>PCDD/F Homologues</b>										
TCDDs	<0.007	0.442	0.152	0.006	<0.010	<0.017	<0.010	<0.016	0.007	<0.006
PeCDDs	<0.014	0.825	0.237	0.021	<0.010	0.103	<0.015	<0.016	0.014	<0.006
HxCDDs	<0.010	1.322	0.840	0.175	0.026	0.361	<0.024	0.009	0.073	<0.006
HpCDDs	0.209	1.916	1.396	0.567	0.153	0.935	0.124	0.029	0.344	0.090
OCDD	0.407	1.567	1.875	0.541	0.196	0.798	0.207	0.189	0.403	0.163
TCDFs	0.032	1.934	1.424	0.059	<0.005	0.317	0.014	0.090	0.090	0.027
PeCDFs	0.022	2.883	2.820	0.031	<0.005	0.301	0.018	0.018	0.037	0.023
HxCDFs	0.009	2.271	3.263	0.022	<0.010	0.234	<0.010	<0.008	0.017	0.007
HpCDFs	0.031	1.499	3.274	<0.010	<0.020	0.102	0.015	0.021	0.012	0.006
OCDF	0.023	0.420	1.824	<0.012	<0.015	0.077	<0.035	<0.025	<0.028	<0.029
<b>Total</b>										
$\Sigma$ PCDDs	0.616	6.071	4.501	1.309	0.375	2.197	0.331	0.227	0.840	0.253
$\Sigma$ PCDFs	0.117	9.007	2.606	0.112	0.000	1.031	0.047	0.129	0.155	0.063
$\Sigma$ PCDD/Fs	0.733	15.078	7.107	1.422	0.375	3.227	0.378	0.355	0.995	0.316
$\Sigma$ TEQ (PCDD/Fs)	0.032	0.372	0.401	0.025	0.030	0.092	0.043	0.049	0.034	0.020

Table A24. Atmospheric concentrations of PCDD/Fs (pg m<sup>-3</sup>) at NAPS suburban sites in 1996

Station Name	Edmonton									Vancouver (Kensington)									Vancouver (Rocky Point)	
Sampling Period	1	2	3	4	5	3	4	6	1	2	3	4	5	6	7	8	9	1	2	
Sampling Date	1/1/96	1/7/96	1/22/96	2/21/96	4/9/96	11/11/96	12/5/96	12/29/96	5/27/96	6/20/96	7/8/96	8/31/96	9/24/96	10/18/96	11/11/96	12/5/96	12/29/96	1/4/96	4/9/96	
Sampling Volume (m3)	745	717	688	757	605	810	649	727	560	581	698	621	645	742	667	485	715	671	581	
<b>PCDD/F Congeners</b>																				
2,3,7,8-TCDD	<0.001	0.005	0.008	<0.008	<0.003	<0.002	<0.006	<0.003	0.006	<0.007	<0.006	<0.003	<0.006	<0.005	<0.0048	<0.008	<0.006	<0.006	0.007	
1,2,3,7,8-PeCDD	0.003	0.021	0.041	<0.008	<0.007	0.005	0.010	0.008	0.009	<0.007	<0.006	0.008	<0.012	<0.005	0.010	<0.012	0.016	0.014	0.016	
1,2,3,4,7,8-HxCDD	0.003	0.025	0.073	<0.005	<0.010	<0.007	<0.012	0.003	0.006	<0.010	<0.011	0.004	<0.012	<0.004	0.009	<0.012	<0.011	0.013	0.019	
1,2,3,6,7,8-HxCDD	0.006	0.053	0.087	0.007	<0.010	<0.007	<0.012	0.009	0.011	<0.010	0.012	0.008	<0.012	0.005	0.038	<0.012	0.026	0.035	0.021	
1,2,3,7,8,9-HxCDD	0.008	0.070	0.201	0.006	<0.010	<0.007	0.028	0.011	0.016	<0.010	0.017	0.014	<0.012	0.005	0.042	<0.012	0.034	0.046	0.033	
1,2,3,4,6,7,8-HpCDD	0.067	0.655	1.319	0.116	0.077	0.125	0.152	0.116	0.126	0.039	0.088	0.115	0.078	0.066	0.365	0.163	0.373	0.289	0.224	
OCDD	0.234	1.358	2.639	0.453	0.337	0.280	0.678	0.574	0.429	0.100	0.292	0.320	0.265	0.248	0.923	0.524	1.327	0.800	0.517	
2,3,7,8-TCDF	0.017	0.028	0.048	0.027	0.011	0.007	0.122	0.008	0.041	0.029	0.029	0.014	0.024	0.011	0.014	0.018	0.032	0.063	0.041	
1,2,3,7,8-PeCDF	<0.001	0.006	0.018	0.008	<0.004	<0.002	0.047	<0.004	0.007	<0.007	<0.006	0.005	<0.009	<0.003	<0.005	<0.008	<0.003	0.008	0.012	
2,3,4,7,8-PeCDF	0.006	0.009	0.023	0.013	<0.004	<0.002	0.039	<0.004	0.016	<0.007	<0.006	0.005	<0.009	0.009	0.014	<0.008	0.008	0.014	0.023	
1,2,3,4,7,8-HxCDF	0.012	0.017	0.045	0.021	0.007	<0.007	0.126	0.004	0.011	0.008	0.014	0.010	<0.009	0.003	0.013	0.011	0.016	0.016	0.016	
1,2,3,6,7,8-HxCDF	0.005	0.008	0.027	0.010	<0.003	<0.007	0.047	<0.004	0.006	<0.007	0.006	0.005	<0.009	0.003	0.007	<0.012	0.008	0.007	0.011	
2,3,4,6,7,8-HxCDF	0.006	0.012	0.026	0.010	<0.003	<0.007	0.060	<0.004	0.007	<0.007	0.006	0.006	<0.009	<0.003	0.009	<0.012	<0.008	0.008	0.014	
1,2,3,7,8,9-HxCDF	<0.001	<0.003	0.009	<0.005	<0.003	<0.007	<0.009	<0.004	<0.004	<0.007	<0.006	<0.003	<0.009	<0.003	<0.003	<0.012	<0.008	<0.006	0.006	
1,2,3,4,6,7,8-HpCDF	0.024	0.051	0.090	0.036	0.020	0.012	0.171	0.018	0.027	0.014	0.046	0.026	0.017	0.001	0.035	0.025	0.027	0.024	0.033	
1,2,3,4,7,8,9-HpCDF	0.003	0.007	0.017	<0.005	<0.005	<0.007	0.049	<0.006	<0.007	<0.007	<0.009	0.006	<0.012	<0.003	<0.007	<0.016	<0.008	<0.009	0.010	
OCDF	0.024	0.050	0.085	0.038	0.026	<0.015	0.114	0.038	0.040	<0.014	0.103	0.027	<0.047	0.012	0.027	<0.041	0.048	0.026	0.036	
<b>PCDD/F Homologues</b>																				
TCDDs	0.005	0.057	0.138	0.029	<0.003	0.004	0.013	0.004	0.026	0.045	0.006	0.016	<0.006	0.008	0.015	0.018	<0.006	<0.006	0.040	
PeCDDs	0.015	0.216	0.475	0.016	<0.007	0.022	0.054	0.018	0.025	0.052	0.015	0.019	<0.012	0.017	0.056	<0.012	0.065	0.085	0.070	
HxCDDs	0.052	0.584	1.627	0.066	0.048	0.106	0.205	0.065	0.121	0.093	0.189	0.077	0.055	0.054	0.345	0.163	0.292	0.322	0.260	
HpCDDs	0.139	1.340	3.746	0.257	0.173	0.240	0.314	0.208	0.263	0.067	0.163	0.245	0.178	0.137	0.740	0.325	0.688	0.664	0.510	
OCDD	0.234	1.358	2.639	0.453	0.337	0.280	0.678	0.574	0.429	0.100	0.292	0.320	0.265	0.248	0.923	0.524	1.327	0.800	0.517	
TCDFs	0.060	0.129	0.189	0.131	0.039	0.017	0.565	0.020	0.145	0.139	0.079	0.050	0.043	0.057	0.072	0.063	0.184	0.162	0.164	
PeCDFs	0.061	0.091	0.218	0.093	0.028	<0.002	0.470	0.007	0.059	0.091	0.040	0.015	0.020	0.013	0.049	0.034	0.078	0.099	0.039	
HxCDFs	0.053	0.100	0.255	0.067	0.033	<0.007	0.459	0.013	0.053	0.068	0.103	0.066	0.031	0.022	0.071	0.015	0.033	0.076	0.089	
HpCDFs	0.039	0.095	0.192	0.047	0.036	0.012	0.261	0.032	0.045	0.032	0.120	0.056	0.032	0.022	0.062	0.025	0.057	0.043	0.059	
OCDF	0.024	0.050	0.085	0.038	0.026	<0.015	0.114	0.038	0.040	<0.014	0.103	0.027	<0.047	0.012	0.027	<0.041	0.048	0.026	0.036	
<b>Total</b>																				
∑ PCDDs	0.445	3.555	8.625	0.822	0.559	0.652	1.264	0.870	0.865	0.356	0.665	0.676	0.498	0.465	2.079	1.030	2.372	1.871	1.397	
∑ PCDFs	0.238	0.466	0.938	0.365	0.162	0.029	1.870	0.110	0.342	0.331	0.445	0.214	0.125	0.126	0.281	0.137	0.399	0.405	0.386	
∑ PCDD/Fs	0.682	4.021	9.563	1.187	0.721	0.680	3.134	0.980	1.207	0.687	1.110	0.890	0.623	0.591	2.360	1.167	2.771	2.276	1.783	
∑ TEQ (PCDD/Fs)	0.013	0.058	0.123	0.031	0.018	0.016	0.074	0.019	0.031	0.026	0.026	0.021	0.032	0.018	0.037	0.036	0.043	0.047	0.049	

Table A25. Atmospheric concentrations of PCDD/Fs ( $\mu\text{g m}^{-3}$ ) at NAPS suburban sites in 1997

Station Name	Edmonton																Vancouver (Kensington)						
Sampling Period	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	1	2	3	4	5	6	7
Sampling Date	1/22/97	2/15/97	3/11/97	3/11/97	4/28/97	5/22/97	6/15/97	7/9/97	8/2/97	8/26/97	9/19/97	10/13/97	10/25/97	11/6/97	11/30/97	12/24/97	2/15/97	3/11/97	4/4/97	4/28/97	5/22/97	6/15/97	10/13/97
Sampling Volume (m3)	772	781	756	718	726	733	614	618	655	591	680	790	752	737	762	748	739	721	757	758	696	756	839
<b>PCDD/F Congeners</b>																							
2,3,7,8-TCDD	<0.004	<0.003	<0.005	<0.003	<0.006	<0.005	<0.007	<0.003	0.003	<0.007	<0.003	<0.005	<0.003	<0.003	<0.003	0.003	<0.005	<0.006	<0.005	<0.005	<0.006	<0.005	<0.002
1,2,3,7,8-PeCDD	0.007	<0.005	0.007	<0.008	0.008	0.023	0.011	0.007	0.009	0.009	0.014	0.011	0.014	0.013	0.011	0.009	0.005	0.007	<0.005	0.011	<0.006	<0.008	<0.005
1,2,3,4,7,8-HxCDD	<0.005	<0.005	0.008	<0.006	<0.006	0.012	<0.007	0.010	0.010	0.012	0.017	0.012	0.017	0.014	0.012	0.009	<0.005	<0.006	<0.008	<0.005	<0.009	<0.006	<0.005
1,2,3,6,7,8-HxCDD	0.010	0.010	0.016	0.006	0.006	0.034	0.012	0.010	0.010	0.020	0.034	0.022	0.028	0.027	0.020	0.020	<0.005	0.007	<0.008	0.013	<0.009	0.010	0.005
1,2,3,7,8,9-HxCDD	0.009	0.010	0.019	0.011	<0.006	0.053	0.021	0.016	0.018	0.030	0.046	0.043	0.051	0.044	0.038	0.042	0.009	0.008	<0.008	0.011	<0.009	0.006	0.008
1,2,3,4,6,7,8-HpCDD	0.156	0.114	0.165	0.128	0.070	0.398	0.180	0.122	0.082	0.322	0.398	0.304	0.375	0.338	0.262	0.187	0.050	0.300	0.073	0.065	0.069	0.096	0.041
OCDD	0.913	0.477	1.191	0.834	0.295	0.915	0.758	0.502	0.282	0.807	1.103	0.741	0.953	0.998	0.664	0.653	0.159	1.538	0.258	0.166	0.265	0.363	0.152
2,3,7,8-TCDF	0.013	0.017	0.049	0.003	0.003	0.005	0.008	0.010	0.009	0.030	0.027	0.010	0.015	0.015	0.023	0.022	0.014	0.013	0.011	0.012	0.008	0.012	0.010
1,2,3,7,8-PeCDF	0.004	<0.003	0.025	<0.004	<0.003	<0.004	<0.003	<0.003	0.009	0.005	0.005	<0.005	0.005	0.009	0.004	0.005	<0.003	<0.006	<0.003	<0.003	<0.004	<0.004	<0.002
2,3,4,7,8-PeCDF	0.012	0.008	0.030	<0.004	<0.003	<0.004	0.004	<0.003	0.006	0.009	0.011	<0.005	0.007	0.008	0.007	0.007	<0.003	<0.006	<0.003	<0.003	<0.004	<0.004	0.002
1,2,3,4,7,8-HxCDF	0.009	0.005	0.134	<0.006	0.004	<0.004	0.008	0.008	0.009	0.027	0.027	0.011	0.014	0.020	0.019	0.016	<0.004	0.005	<0.005	0.004	<0.005	0.005	0.004
1,2,3,6,7,8-HxCDF	0.003	<0.003	0.058	<0.006	<0.003	<0.004	0.006	0.006	0.007	0.012	0.011	0.005	0.008	0.008	0.007	0.007	<0.004	<0.004	<0.005	<0.004	<0.005	<0.005	<0.002
2,3,4,6,7,8-HxCDF	0.004	<0.003	0.044	<0.006	<0.003	<0.004	0.008	0.008	0.009	0.018	0.018	0.005	0.009	0.008	0.010	0.005	<0.004	<0.004	<0.005	<0.004	<0.005	<0.005	<0.002
1,2,3,7,8,9-HxCDF	<0.003	<0.003	<0.005	<0.006	<0.003	<0.004	<0.005	<0.003	0.009	<0.004	0.007	<0.004	0.003	<0.003	<0.004	<0.005	<0.004	<0.004	<0.005	<0.004	<0.005	<0.005	<0.002
1,2,3,4,6,7,8-HpCDF	0.025	0.017	0.320	0.018	0.013	0.013	0.023	0.028	0.022	0.058	0.058	0.024	0.030	0.041	0.040	0.030	0.009	0.022	<0.005	0.010	<0.011	<0.005	0.008
1,2,3,4,7,8,9-HpCDF	<0.003	<0.005	0.035	<0.006	<0.006	<0.005	<0.008	<0.010	0.008	0.012	0.012	<0.006	0.009	<0.008	0.009	0.009	<0.005	<0.003	<0.005	<0.003	<0.011	<0.005	<0.005
OCDF	0.100	0.024	0.362	0.035	0.014	0.021	0.039	0.032	0.026	0.034	0.041	0.027	0.041	0.042	0.043	0.037	0.007	0.150	0.014	0.007	0.010	0.020	0.009
<b>PCDD/F Homologues</b>																							
TCDDs	<0.004	0.013	<0.005	<0.003	<0.006	<0.005	<0.007	0.009	0.003	<0.007	0.034	0.006	0.046	0.021	0.030	0.034	<0.005	<0.006	<0.005	0.006	<0.006	<0.005	0.005
PeCDDs	0.016	0.022	0.013	<0.008	0.008	0.086	0.011	0.014	0.009	0.035	0.079	0.051	0.123	0.045	0.110	0.184	0.005	0.007	<0.005	0.011	<0.006	<0.008	0.006
HxCDDs	0.070	0.095	0.094	0.038	0.019	0.395	0.092	0.090	0.079	0.190	0.323	0.299	0.389	0.410	0.230	0.332	0.051	0.057	0.035	0.053	0.016	0.074	0.047
HpCDDs	0.268	0.223	0.316	0.239	0.117	0.880	0.328	0.241	0.160	0.604	0.836	0.677	0.755	0.742	0.544	0.445	0.101	0.461	0.129	0.126	0.126	0.190	0.097
OCDD	0.913	0.477	1.191	0.834	0.295	0.915	0.758	0.502	0.282	0.807	1.103	0.741	0.953	0.998	0.664	0.653	0.159	1.538	0.258	0.166	0.265	0.363	0.152
TCDFs	0.067	0.052	0.242	<0.003	0.010	0.039	0.086	0.125	0.042	0.220	0.195	0.053	0.095	0.074	0.145	0.114	0.029	0.052	0.037	0.035	0.036	0.085	0.055
PeCDFs	0.020	0.016	0.319	0.007	0.019	0.015	0.082	0.084	0.054	0.148	0.138	0.012	0.052	0.048	0.067	0.051	0.021	0.014	0.010	0.016	0.009	0.022	0.011
HxCDFs	0.043	0.012	0.480	0.011	0.018	0.022	0.070	0.080	0.056	0.134	0.142	0.053	0.073	0.094	0.101	0.071	0.011	0.037	0.008	0.012	0.014	0.044	0.006
HpCDFs	0.075	0.034	0.496	0.036	0.023	0.027	0.038	0.049	0.044	0.091	0.110	0.049	0.063	0.078	0.088	0.066	0.009	0.123	<0.005	0.004	<0.011	<0.005	0.013
OCDF	0.100	0.024	0.362	0.035	0.014	0.021	0.039	0.032	0.026	0.034	0.041	0.027	0.041	0.042	0.043	0.037	0.007	0.150	0.014	0.007	0.010	0.020	0.009
<b>Total</b>																							
∑ PCDDs	1.267	0.829	1.615	1.111	0.439	2.277	1.189	0.855	0.533	1.636	2.375	1.773	2.265	2.215	1.578	1.648	0.317	2.062	0.423	0.362	0.407	0.627	0.307
∑ PCDFs	0.305	0.138	1.898	0.089	0.084	0.125	0.316	0.370	0.222	0.626	0.626	0.194	0.324	0.336	0.444	0.339	0.077	0.376	0.069	0.074	0.069	0.170	0.094
∑ PCDD/Fs	1.571	0.968	3.513	1.200	0.523	2.403	1.505	1.225	0.755	2.262	3.001	1.967	2.589	2.551	2.022	1.987	0.394	2.439	0.492	0.436	0.476	0.797	0.401
∑ TEQ (PCDD/Fs)	0.023	0.017	0.062	0.019	0.018	0.046	0.029	0.020	0.023	0.039	0.043	0.032	0.038	0.036	0.033	0.029	0.017	0.023	0.018	0.023	0.019	0.021	0.012

Table A26. Atmospheric concentrations of PCDD/Fs (pg m<sup>-3</sup>) at NAPS suburban sites in 1998

Station Name	Edmonton										Vancouver (Kensington)							
	1	2	3	4	5	6	7	8	9	10	1	2	3	4	5	6	7	8
Sampling Period	1/17/98	2/10/98	3/6/98	3/30/98	4/23/98	5/17/98	6/10/98	7/28/98	11/25/98	12/19/98	1/17/98	2/10/98	3/6/98	3/30/98	4/23/98	5/17/98	6/10/98	7/28/98
Sampling Date	814	723	776	725	674	689	593	619	778	891	785	787	785	737	784	792	722	431
Sampling Volume (m3)																		
<b>PCDD/F Congeners</b>																		
2,3,7,8-TCDD	<0.005	<0.003	<0.003	<0.010	<0.006	<0.003	<0.007	<0.003	<0.003	<0.002	<0.003	<0.003	<0.004	<0.003	0.003	<0.003	0.003	<0.005
1,2,3,7,8-PeCDD	0.009	0.007	<0.005	<0.008	<0.009	0.007	<0.020	0.009	<0.005	<0.002	0.005	0.010	0.014	<0.011	0.015	<0.010	0.011	0.019
1,2,3,4,7,8-HxCDD	0.008	<0.006	<0.005	<0.008	<0.012	0.007	<0.020	<0.004	0.007	<0.005	<0.006	<0.005	<0.011	0.006	0.011	0.010	0.008	0.012
1,2,3,6,7,8-HxCDD	0.010	0.008	<0.005	<0.008	<0.012	0.015	<0.020	0.009	0.017	<0.005	0.004	0.005	0.006	0.007	0.024	0.021	0.012	0.022
1,2,3,7,8,9-HxCDD	0.022	0.012	<0.005	0.015	<0.012	0.030	<0.020	0.008	0.034	0.011	0.006	0.010	0.008	0.007	0.037	0.022	0.008	0.027
1,2,3,4,6,7,8-HpCDD	0.122	0.079	0.060	0.177	0.167	0.230	0.064	0.096	0.196	0.069	0.035	0.061	0.036	0.120	0.286	0.177	0.086	0.173
OCDD	0.321	0.227	0.476	0.705	0.829	0.680	0.260	0.400	0.484	0.242	0.103	0.243	0.132	0.566	0.885	0.554	0.290	0.759
2,3,7,8-TCDF	0.022	0.011	0.004	0.011	0.004	0.005	<0.007	0.006	0.030	0.009	0.010	0.010	0.011	0.014	0.020	0.015	0.014	0.029
1,2,3,7,8-PeCDF	0.005	<0.006	<0.003	<0.008	<0.005	<0.003	<0.007	<0.003	<0.003	<0.002	0.004	<0.003	<0.007	<0.005	0.006	<0.005	0.006	0.011
2,3,4,7,8-PeCDF	0.007	<0.006	<0.003	<0.008	<0.005	<0.003	<0.007	<0.003	0.010	<0.002	0.003	0.003	<0.007	<0.005	0.008	0.008	0.008	0.011
1,2,3,4,7,8-HxCDF	0.018	0.007	<0.005	0.012	<0.009	0.006	<0.017	0.005	0.027	0.006	0.006	0.005	0.006	0.010	0.019	0.014	0.009	0.015
1,2,3,6,7,8-HxCDF	0.007	<0.007	<0.005	0.006	<0.009	0.003	<0.017	0.003	0.008	0.003	0.003	0.003	<0.005	0.008	0.009	0.009	0.007	0.012
2,3,4,6,7,8-HxCDF	0.011	<0.007	<0.005	0.006	<0.009	<0.003	<0.017	<0.006	0.009	<0.002	0.003	0.003	0.006	0.006	0.012	0.009	0.008	0.011
1,2,3,7,8,9-HxCDF	<0.002	<0.007	<0.005	<0.005	<0.009	<0.003	<0.017	<0.006	<0.005	<0.002	0.003	0.004	<0.005	<0.005	<0.003	0.005	0.005	<0.007
1,2,3,4,6,7,8-HpCDF	0.031	0.013	0.015	0.033	0.020	0.018	0.015	0.022	0.047	0.010	0.009	0.011	0.017	0.022	0.041	0.023	0.021	0.062
1,2,3,4,7,8,9-HpCDF	0.007	<0.006	<0.005	<0.009	<0.012	<0.009	<0.013	<0.013	0.006	<0.005	0.008	<0.008	0.011	<0.016	0.011	0.013	<0.006	<0.014
OCDF	0.023	0.017	0.022	0.038	0.024	0.026	0.036	0.036	0.033	0.014	0.023	<0.010	0.029	0.039	0.040	0.044	0.024	0.067
<b>PCDD/F Homologues</b>																		
TCDDs	0.023	0.013	<0.003	<0.010	<0.006	<0.003	<0.007	0.018	0.017	<0.002	0.008	<0.003	<0.004	0.009	0.030	0.009	0.007	0.033
PeCDDs	0.064	<0.006	<0.005	0.011	<0.009	0.011	<0.020	<0.006	0.025	<0.002	0.005	0.010	0.026	<0.011	0.041	<0.010	0.020	0.054
HxCDDs	0.144	0.080	0.013	0.105	0.030	0.164	<0.020	0.075	0.238	0.048	0.032	0.051	0.038	0.059	0.255	0.190	0.085	0.212
HpCDDs	0.277	0.163	0.113	0.333	0.304	0.472	0.064	0.186	0.425	0.139	0.072	0.126	0.063	0.248	0.610	0.348	0.159	0.354
OCDD	0.321	0.227	0.476	0.705	0.829	0.680	0.260	0.400	0.484	0.242	0.103	0.243	0.132	0.566	0.885	0.554	0.290	0.759
TCDFs	0.130	0.064	0.007	0.080	0.008	0.033	<0.007	0.039	0.126	0.028	0.059	0.053	0.045	0.029	0.142	0.079	0.085	0.252
PeCDFs	0.064	0.011	0.004	0.018	0.007	0.009	<0.007	0.017	0.080	0.028	0.016	0.016	0.010	<0.005	0.057	0.015	0.039	0.103
HxCDFs	0.080	0.028	0.007	0.070	0.012	0.034	<0.017	0.039	0.106	0.024	0.022	0.028	0.012	0.041	0.097	0.069	0.064	0.205
HpCDFs	0.054	0.013	0.026	0.068	0.020	0.035	0.015	0.048	0.056	0.015	0.022	0.018	0.037	0.053	0.087	0.052	0.037	0.135
OCDF	0.023	0.017	0.022	0.038	0.024	0.026	0.036	0.036	0.033	0.014	0.023	<0.01	0.029	0.039	0.040	0.044	0.024	0.067
<b>Total</b>																		
∑ PCDDs	0.828	0.483	0.602	1.154	1.163	1.327	0.325	0.679	1.189	0.428	0.221	0.430	0.259	0.883	1.822	1.100	0.561	1.412
∑ PCDFs	0.350	0.133	0.066	0.273	0.072	0.136	0.051	0.178	0.401	0.109	0.141	0.115	0.134	0.162	0.423	0.258	0.248	0.763
∑ PCDD/Fs	1.178	0.616	0.668	1.427	1.235	1.463	0.376	0.857	1.590	0.537	0.362	0.545	0.393	1.045	2.245	1.358	0.809	2.175
∑ TEQ (PCDD/Fs)	0.028	0.019	0.014	0.030	0.026	0.021	0.044	0.019	0.027	0.010	0.014	0.019	0.027	0.024	0.038	0.028	0.025	0.044

Table A27. Atmospheric concentrations of PCDD/Fs (pg m<sup>-3</sup>) at NAPS suburban sites in 1999

Station Name	Montreal								Edmonton							
Sampling Period	1	2	3	4	1	2	3	4	5	6	7	8	9	10	11	12
Sampling Date	11/20/99	12/2/99	12/14/99	12/26/99	1/12/99	2/5/99	3/1/99	3/25/99	4/18/99	5/12/99	6/5/99	8/16/99	9/9/99	10/3/99	11/20/99	12/14/99
Sampling Volume (m3)	927	798	738	792	822	818	834	791	763	764	726	643	672	784	789	819
<b>PCDD/F Congeners</b>																
2,3,7,8-TCDD	0.009	0.003	<0.003	<0.005	<0.002	<0.002	<0.003	<0.003	<0.003	<0.003	<0.006	<0.006	<0.003	<0.003	0.003	<0.002
1,2,3,7,8-PeCDD	0.069	0.024	0.023	<0.005	0.003	<0.005	0.006	<0.003	<0.005	<0.003	<0.008	<0.012	<0.003	0.009	0.023	0.008
1,2,3,4,7,8-HxCDD	0.057	0.027	0.020	0.013	0.011	0.006	<0.005	<0.018	<0.005	<0.005	<0.008	<0.012	<0.003	0.005	0.023	0.003
1,2,3,6,7,8-HxCDD	0.093	0.049	0.035	0.021	0.019	0.009	0.007	<0.018	0.006	<0.005	<0.008	0.013	<0.003	0.007	0.039	0.007
1,2,3,7,8,9-HxCDD	0.154	0.069	0.062	0.031	0.031	0.021	0.020	<0.018	0.012	<0.005	<0.008	0.018	<0.003	0.014	0.065	0.014
1,2,3,4,6,7,8-HpCDD	0.932	0.478	0.407	0.312	0.208	0.103	0.095	0.098	0.072	0.038	0.101	0.117	0.023	0.101	0.401	0.087
OCDD	2.250	1.159	1.018	1.354	0.874	0.552	0.282	0.391	0.260	0.139	0.314	0.347	0.116	0.292	0.766	0.314
2,3,7,8-TCDF	0.344	0.056	0.099	0.024	0.011	0.008	0.009	0.009	0.005	0.005	<0.006	0.010	<0.003	0.005	0.040	0.008
1,2,3,7,8-PeCDF	0.061	0.010	0.057	0.006	<0.003	<0.002	<0.002	<0.005	<0.003	<0.004	<0.006	<0.006	<0.003	0.004	0.009	<0.002
2,3,4,7,8-PeCDF	0.129	0.018	0.075	0.010	0.003	<0.002	<0.002	<0.005	<0.003	<0.004	<0.006	<0.006	<0.003	<0.004	0.014	<0.002
1,2,3,4,7,8-HxCDF	0.271	0.034	0.170	0.021	0.008	0.007	0.013	0.008	<0.005	<0.005	<0.003	0.009	<0.004	0.005	0.021	0.007
1,2,3,6,7,8-HxCDF	0.117	0.016	0.088	0.010	0.003	<0.003	0.004	<0.005	<0.005	<0.005	<0.003	<0.008	<0.004	0.004	0.012	0.002
2,3,4,6,7,8-HxCDF	0.182	0.022	0.114	0.009	<0.002	<0.003	<0.002	<0.005	<0.005	<0.005	<0.003	0.008	<0.004	0.005	0.016	0.004
1,2,3,7,8,9-HxCDF	0.040	0.003	0.018	<0.005	<0.002	<0.003	<0.002	<0.005	<0.005	<0.005	<0.003	<0.008	<0.004	<0.003	<0.003	<0.002
1,2,3,4,6,7,8-HpCDF	0.450	0.060	0.355	0.069	0.030	0.018	0.018	0.015	0.011	0.010	0.010	0.026	0.007	0.017	0.041	0.018
1,2,3,4,7,8,9-HpCDF	0.058	0.014	0.072	0.007	<0.005	<0.007	<0.004	<0.006	<0.005	<0.005	<0.008	0.014	<0.004	<0.004	0.005	<0.002
OCDF	0.223	0.066	0.391	0.098	0.041	0.024	0.018	0.023	0.011	0.013	0.025	0.036	0.011	0.034	0.028	0.025
<b>PCDD/F Homologues</b>																
TCDDs	0.350	0.082	0.042	0.010	<0.002	<0.002	0.004	<0.003	0.004	<0.003	<0.006	0.009	<0.003	0.004	0.039	0.010
PeCDDs	0.782	0.202	0.168	0.024	0.022	<0.005	0.006	<0.003	0.008	<0.003	<0.008	0.016	<0.003	0.017	0.159	0.008
HxCDDs	1.296	0.545	0.460	0.183	0.201	0.089	0.103	0.113	0.075	0.017	0.030	0.132	0.003	0.091	0.496	0.080
HpCDDs	2.062	1.040	0.859	0.594	0.439	0.227	0.216	0.203	0.149	0.075	0.218	0.223	0.044	0.195	0.811	0.191
OCDD	2.250	1.159	1.018	1.354	0.874	0.552	0.282	0.391	0.260	0.139	0.314	0.347	0.116	0.292	0.766	0.314
TCDFs	1.784	0.338	0.763	0.104	0.045	0.018	0.032	0.030	0.011	0.011	<0.006	0.058	0.003	0.016	0.209	0.029
PeCDFs	1.452	0.188	0.880	0.069	0.031	0.019	0.018	0.013	0.016	0.008	0.017	0.067	<0.003	0.011	0.127	0.014
HxCDFs	1.244	0.147	0.895	0.102	0.042	0.028	0.033	0.022	0.010	0.009	0.018	0.054	0.006	0.022	0.089	0.030
HpCDFs	0.718	0.116	0.665	0.129	0.036	0.030	0.025	0.026	0.017	0.010	0.019	0.045	0.007	0.027	0.075	0.033
OCDF	0.223	0.066	0.391	0.098	0.041	0.024	0.018	0.023	0.011	0.013	0.025	0.036	0.011	0.034	0.028	0.025
<b>Total</b>																
∑ PCDDs	6.740	3.028	2.547	2.165	1.536	0.869	0.612	0.707	0.496	0.231	0.561	0.727	0.163	0.599	2.271	0.603
∑ PCDFs	5.421	0.855	3.594	0.502	0.195	0.119	0.126	0.113	0.065	0.051	0.078	0.260	0.027	0.110	0.528	0.131
∑ PCDD/Fs	12.161	3.883	6.141	2.667	1.731	0.988	0.738	0.820	0.561	0.282	0.639	0.987	0.190	0.709	2.799	0.734
∑ TEQ (PCDD/Fs)	0.259	0.066	0.120	0.031	0.017	0.015	0.017	0.018	0.015	0.012	0.021	0.030	0.010	0.019	0.057	0.017

Table A28. Atmospheric concentrations of PCDD/Fs ( $\text{pg m}^{-3}$ ) at NAPS suburban sites in 2000

Station Name	Montreal									Edmonton												
	1	2	3	4	5	6	7	8	9	1	2	3	4	5	6	7	8	9	10	11	12	13
Sampling Period	1/7/00	1/19/00	1/31/00	2/12/00	2/24/00	3/7/00	3/19/00	12/8/00	12/20/00	1/7/00	1/31/00	2/24/00	3/19/00	4/12/00	5/6/00	5/30/00	6/23/00	8/10/00	9/3/00	9/27/00	11/14/00	12/8/00
Sampling Volume (m <sup>3</sup> )	763	803	770	1	750	765	776	1163	850	799	823	792	763	772	775	770	749	683	769	733	859	878
<b>PCDD/F Congeners</b>																						
2,3,7,8-TCDD	0.006	0.012	<0.005	<0.006	<0.003	0.004	<0.004	0.003	<0.002	<0.005	<0.002	<0.005	<0.004	<0.005	<0.005	<0.004	<0.005	<0.003	<0.003	<0.003	<0.007	<0.002
1,2,3,7,8-PeCDD	0.052	0.061	0.016	<0.004	0.027	0.026	0.016	0.015	0.010	0.006	0.008	0.014	0.005	0.004	0.005	<0.003	<0.005	<0.003	<0.003	0.015	0.023	0.004
1,2,3,4,7,8-HxCDD	0.052	0.064	0.015	<0.008	0.028	0.027	0.018	0.014	0.008	0.004	<0.004	0.011	<0.005	<0.007	<0.005	<0.006	<0.008	<0.004	<0.004	0.017	0.015	<0.004
1,2,3,6,7,8-HxCDD	0.111	0.114	0.026	<0.008	0.043	0.047	0.027	0.023	0.014	0.008	<0.004	0.018	0.006	<0.007	<0.005	0.008	<0.008	<0.004	<0.004	0.033	0.044	0.006
1,2,3,7,8,9-HxCDD	0.160	0.145	0.050	<0.008	0.085	0.082	0.048	0.037	0.020	0.011	0.013	0.035	0.005	0.007	<0.005	0.008	<0.008	<0.004	<0.004	0.036	0.067	0.007
1,2,3,4,6,7,8-HpCDD	1.316	1.086	0.290	<0.008	0.495	0.511	0.302	0.194	0.166	0.091	0.113	0.180	0.062	0.066	0.053	0.095	0.079	<0.009	<0.008	0.436	0.368	0.050
OCDD	3.035	2.506	1.229	0.034	1.364	1.525	0.767	0.477	0.550	0.295	0.311	0.465	0.232	0.359	0.178	0.302	0.377	0.154	0.066	1.255	0.822	0.318
2,3,7,8-TCDF	0.049	0.175	0.061	<0.006	0.106	0.070	0.047	0.126	0.016	0.022	0.013	0.054	0.004	0.004	0.004	<0.005	<0.003	<0.003	<0.003	0.018	0.020	0.005
1,2,3,7,8-PeCDF	0.010	0.028	0.016	<0.004	0.021	0.014	0.010	0.022	0.003	<0.003	<0.003	0.012	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	0.007	<0.002
2,3,4,7,8-PeCDF	0.019	0.049	0.024	<0.004	0.037	0.021	0.015	0.041	0.006	0.004	0.007	0.018	<0.003	0.003	<0.003	<0.003	<0.003	<0.003	<0.003	0.003	0.011	0.003
1,2,3,4,7,8-HxCDF	0.042	0.119	0.061	<0.006	0.064	0.040	0.032	0.092	0.014	0.008	0.009	0.044	0.003	<0.004	0.004	0.007	<0.004	<0.004	<0.003	0.010	0.013	0.006
1,2,3,6,7,8-HxCDF	0.018	0.041	0.030	<0.006	0.026	0.021	0.013	0.033	0.006	0.005	0.004	0.018	<0.003	<0.004	<0.003	0.004	0.004	<0.004	<0.003	0.006	0.011	0.004
2,3,4,6,7,8-HxCDF	0.025	0.053	0.032	<0.006	0.033	0.024	0.018	0.050	0.009	0.004	<0.004	0.023	0.003	<0.004	<0.003	<0.003	<0.004	<0.004	<0.003	<0.004	0.011	<0.004
1,2,3,7,8,9-HxCDF	<0.005	<0.005	<0.005	<0.006	<0.003	0.003	<0.003	<0.003	<0.002	<0.003	<0.004	<0.004	<0.003	<0.004	<0.003	<0.003	<0.004	<0.004	<0.003	<0.004	0.004	<0.004
1,2,3,4,6,7,8-HpCDF	0.095	0.208	0.117	<0.004	0.091	0.075	0.053	0.157	0.035	0.016	0.021	0.080	0.021	0.008	0.014	0.018	0.015	<0.009	<0.008	0.043	0.034	0.017
1,2,3,4,7,8,9-HpCDF	0.012	0.022	0.017	<0.004	0.014	0.016	0.009	0.024	0.007	<0.003	<0.004	0.011	<0.003	<0.006	<0.003	<0.005	<0.008	<0.009	<0.008	<0.008	<0.007	<0.005
OCDF	0.101	0.223	0.107	<0.01	0.072	0.063	0.047	0.116	0.040	0.020	0.025	0.048	0.026	0.013	<0.008	0.011	0.039	<0.011	<0.004	0.040	0.027	0.016
<b>PCDD/F Homologues</b>																						
TCDDs	0.124	0.273	0.030	<0.006	0.121	0.114	0.031	0.131	0.008	0.058	0.008	0.079	0.004	<0.005	<0.005	0.004	<0.005	<0.003	<0.003	<0.003	0.010	0.004
PeCDDs	0.444	0.658	0.115	<0.004	0.296	0.266	0.130	0.236	0.050	0.025	0.033	0.118	0.010	0.016	0.010	<0.005	<0.003	<0.003	<0.003	0.061	0.088	0.012
HxCDDs	1.265	1.423	0.311	<0.008	0.699	0.687	0.325	0.316	0.148	0.101	0.087	0.258	0.042	0.042	0.026	0.069	0.027	<0.004	<0.004	0.425	0.422	0.048
HpCDDs	2.582	2.584	0.619	0.012	1.267	1.183	0.674	0.413	0.298	0.177	0.232	0.421	0.121	0.137	0.097	0.196	0.155	<0.009	<0.008	1.085	0.758	0.098
OCDD	3.035	2.506	1.229	0.034	1.364	1.525	0.767	0.477	0.550	0.295	0.311	0.465	0.232	0.359	0.178	0.302	0.377	0.154	0.066	1.255	0.822	0.318
TCDFs	0.281	0.927	0.538	<0.006	0.715	0.462	0.275	0.728	0.069	0.181	0.053	0.315	0.011	0.009	0.008	0.017	0.009	0.010	0.008	0.057	0.081	0.008
PeCDFs	0.185	0.550	0.314	<0.004	0.456	0.296	0.197	0.549	0.047	0.041	0.025	0.233	0.012	0.008	0.007	0.022	<0.003	<0.003	0.009	0.070	0.055	0.013
HxCDFs	0.223	0.492	0.331	<0.006	0.313	0.239	0.152	0.431	0.050	0.032	0.028	0.200	0.021	0.006	0.018	0.024	0.043	<0.004	<0.003	0.080	0.079	0.023
HpCDFs	0.186	0.351	0.208	<0.004	0.174	0.158	0.105	0.265	0.061	0.030	0.021	0.125	0.036	0.016	0.023	0.026	0.015	<0.009	<0.008	0.085	0.034	0.029
OCDF	0.101	0.223	0.107	<0.010	0.072	0.063	0.047	0.116	0.040	0.020	0.025	0.048	0.026	0.013	0.000	0.011	0.039	<0.011	<0.004	0.040	0.027	0.016
<b>Total</b>																						
∑ PCDDs	7.450	7.444	2.304	0.046	3.747	3.775	1.927	1.573	1.054	0.656	0.671	1.341	0.409	0.554	0.311	0.581	0.559	0.154	0.066	2.826	2.100	0.480
∑ PCDFs	0.976	2.543	1.498	0.000	1.730	1.218	0.776	2.089	0.267	0.304	0.152	0.921	0.106	0.052	0.056	0.100	0.106	0.010	0.017	0.332	0.276	0.089
∑ PCDD/Fs	8.426	9.987	3.802	0.046	5.477	4.993	2.703	3.662	1.321	0.960	0.823	2.262	0.515	0.606	0.367	0.681	0.665	0.164	0.083	3.158	2.376	0.569
∑ TEQ (PCDD/Fs)	0.125	0.174	0.061	0.017	0.087	0.075	0.049	0.073	0.025	0.020	0.019	0.048	0.014	0.015	0.015	0.014	0.017	0.010	0.010	0.037	0.056	0.012

Table A29. Atmospheric concentrations of PCDD/Fs (pg m<sup>-3</sup>) at NAPS suburban sites in 2001

Station Name	Montreal																												
Sampling Period	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	
Sampling Date	1/1/01	1/13/01	1/25/01	2/6/01	2/18/01	3/2/01	3/14/01	3/26/01	4/7/01	4/19/01	5/1/01	5/13/01	5/25/01	6/6/01	6/30/01	8/17/01	7/24/01	8/5/01	8/29/01	9/10/01	9/22/01	10/4/01	10/28/01	11/9/01	11/21/01	12/3/01	12/15/01	12/27/01	
Sampling Volume (m <sup>3</sup> )	909	1027	1025	865	946	968	862	862	876	848	816	894	801	865	811	787	829	824	817	831	793	827	787	823	834	780	834	780	
<b>PCDD/F Congeners</b>																													
2,3,7,8-TCDD	<0.002	0.009	<0.002	<0.002	<0.002	0.005	<0.002	<0.003	<0.005	<0.002	0.003	<0.002	<0.003	<0.002	<0.002	<0.003	0.002	0.002	0.001	0.001	0.002	<0.002	0.001	0.001	0.001	0.001	0.002	0.002	<0.001
1,2,3,7,8-PeCDD	0.004	0.051	0.007	0.009	0.009	0.034	0.007	0.006	0.008	0.010	0.057	0.006	0.011	0.012	0.028	0.013	0.015	0.023	0.008	0.014	0.011	0.011	0.013	0.009	0.008	0.011	0.008	0.011	
1,2,3,4,7,8-HxCDD	0.007	0.053	<0.004	0.008	0.011	0.051	0.007	0.010	0.006	0.010	0.065	<0.004	0.010	0.006	0.028	<0.005	0.008	0.017	0.005	0.005	0.008	0.013	0.007	0.007	0.005	0.008	0.007	0.013	
1,2,3,6,7,8-HxCDD	0.008	0.098	0.013	0.014	0.016	0.072	0.011	0.013	0.010	0.017	0.125	0.005	0.013	0.007	0.059	0.013	0.016	0.036	0.010	0.009	0.015	0.019	0.018	0.010	0.009	0.012	0.013	0.019	
1,2,3,7,8,9-HxCDD	0.012	0.157	0.016	0.020	0.025	0.129	0.016	0.021	0.017	0.027	0.255	0.005	0.016	0.009	0.043	0.013	0.019	0.046	0.009	0.012	0.021	0.022	0.027	0.020	0.017	0.020	0.019	0.035	
1,2,3,4,6,7,8-HpCDD	0.096	0.974	0.135	0.141	0.185	0.747	0.101	0.121	0.119	0.167	1.851	0.065	0.113	0.077	0.418	0.059	0.096	0.364	0.167	0.085	0.178	0.185	0.162	0.122	0.117	0.171	0.169	0.225	
OCDD	0.301	2.101	0.341	0.339	0.502	1.300	0.288	0.326	0.381	0.455	3.408	0.129	0.249	0.190	0.750	0.199	0.259	0.827	0.193	0.255	0.498	0.537	0.471	0.329	0.470	0.500	0.553	0.682	
2,3,7,8-TCDF	0.006	0.228	0.022	0.027	0.021	0.056	0.040	0.022	0.032	0.012	0.031	0.011	0.019	0.012	0.018	0.017	0.013	0.024	0.009	0.020	0.019	0.016	0.013	0.019	0.040	0.014	0.043		
1,2,3,7,8-PeCDF	<0.002	0.035	0.005	0.005	0.004	0.012	0.006	0.007	0.005	0.006	0.007	<0.002	0.003	<0.002	0.012	<0.003	0.005	0.011	0.003	0.005	<0.002	0.005	0.003	0.005	0.005	0.007	0.002	0.010	
2,3,4,7,8-PeCDF	<0.002	0.086	0.007	0.012	0.006	0.017	0.014	0.009	0.011	0.007	0.010	<0.002	0.007	0.005	0.011	<0.003	0.005	0.011	0.003	0.007	0.010	0.006	0.006	0.006	0.007	0.016	0.004	0.022	
1,2,3,4,7,8-HxCDF	0.005	0.133	0.027	0.024	0.014	0.037	0.045	0.026	0.017	0.014	0.032	0.005	0.018	0.012	0.037	0.014	0.013	0.038	0.007	0.011	0.025	0.015	0.004	0.015	0.013	0.037	0.007	0.063	
1,2,3,6,7,8-HxCDF	0.003	0.049	0.009	0.009	0.007	0.016	0.014	0.010	0.006	0.008	0.014	0.004	0.010	0.010	0.040	0.013	0.012	0.024	0.006	0.006	0.013	0.011	0.004	0.006	0.005	0.016	0.004	0.024	
2,3,4,6,7,8-HxCDF	0.004	0.066	0.012	0.012	0.009	0.022	0.025	0.014	0.007	0.010	0.019	0.005	0.009	0.007	0.037	0.011	0.010	0.028	0.004	0.015	0.012	0.005	0.007	0.008	0.020	0.004	0.029		
1,2,3,7,8,9-HxCDF	<0.002	0.006	<0.002	<0.003	<0.002	<0.004	<0.005	<0.003	<0.006	0.005	0.003	<0.004	<0.004	<0.005	0.010	<0.005	<0.001	<0.001	0.000	<0.002	<0.002	<0.002	<0.001	<0.002	<0.002	<0.001	0.001		
1,2,3,4,6,7,8-HpCDF	0.019	0.190	0.081	0.071	0.041	0.069	0.098	0.065	0.032	0.036	0.118	0.021	0.039	0.036	0.259	0.047	0.055	0.131	0.021	0.038	0.060	0.035	0.019	0.028	0.028	0.069	0.019	0.115	
1,2,3,4,7,8,9-HpCDF	<0.004	0.025	0.011	0.014	<0.004	0.010	0.016	0.009	<0.009	<0.007	<0.01	<0.004	<0.005	<0.007	0.026	<0.005	<0.001	0.014	0.002	<0.002	<0.004	<0.005	<0.002	0.003	0.003	0.007	0.002	0.016	
OCDF	0.024	0.106	0.425	0.216	0.032	0.050	0.140	0.129	0.045	0.066	0.123	0.015	0.027	0.068	0.178	0.075	0.020	0.082	0.014	0.023	0.041	0.027	0.015	0.025	0.027	0.053	0.030	0.085	
<b>PCDD/F Homologues</b>																													
TCDDs	<0.002	0.293	0.017	0.029	0.017	0.092	0.023	0.003	<0.005	0.003	0.090	0.013	0.026	0.027	0.010	0.018	0.045	0.062	0.027	0.053	0.018	0.024	0.019	0.019	0.019	0.029	0.053	0.030	0.049
PeCDDs	0.010	0.601	0.053	0.068	0.041	0.347	0.078	0.025	0.014	0.036	0.514	0.030	0.039	0.062	0.164	0.075	0.121	0.205	0.066	0.046	0.076	0.073	0.073	0.066	0.064	0.102	0.072	0.157	
HxCDDs	0.071	1.301	0.123	0.168	0.183	1.036	0.158	0.123	0.077	0.145	1.854	0.055	0.124	0.110	0.448	0.118	0.215	0.474	0.122	0.115	0.185	0.253	0.195	0.133	0.124	0.220	0.154	0.284	
HpCDDs	0.176	2.171	0.252	0.285	0.358	1.638	0.223	0.257	0.259	0.308	4.302	0.115	0.228	0.160	0.759	0.119	0.176	0.660	0.151	0.157	0.327	0.412	0.285	0.234	0.220	0.341	0.308	0.432	
OCDD	0.301	2.101	0.341	0.339	0.502	1.300	0.288	0.326	0.381	0.455	3.408	0.129	0.249	0.190	0.750	0.199	0.259	0.827	0.193	0.255	0.498	0.537	0.471	0.329	0.470	0.500	0.553	0.682	
TCDFs	0.017	1.089	0.125	0.155	0.120	0.347	0.201	0.088	0.162	0.069	0.247	0.097	0.099	0.222	0.236	0.223	0.238	0.379	0.138	0.284	0.136	0.155	0.118	0.106	0.121	0.268	0.084	0.244	
PeCDFs	0.007	0.741	0.068	0.099	0.076	0.224	0.199	0.071	0.068	0.075	0.210	0.099	0.108	0.270	0.667	0.272	0.401	0.688	0.191	0.168	0.096	0.137	0.065	0.093	0.079	0.177	0.053	0.254	
HxCDFs	0.034	0.575	0.094	0.092	0.081	0.182	0.194	0.121	0.079	0.070	0.291	0.064	0.108	0.156	0.747	0.219	0.270	0.462	0.107	0.127	0.166	0.123	0.051	0.084	0.059	0.173	0.043	0.257	
HpCDFs	0.019	0.348	0.129	0.123	0.063	0.135	0.172	0.103	0.032	0.036	0.248	0.021	0.039	0.049	0.383	0.070	0.079	0.204	0.032	0.058	0.081	0.054	0.029	0.051	0.044	0.115	0.039	0.176	
OCDF	0.024	0.106	0.425	0.216	0.032	0.050	0.140	0.129	0.045	0.066	0.123	0.015	0.027	0.068	0.178	0.075	0.020	0.082	0.014	0.023	0.041	0.027	0.015	0.025	0.027	0.053	0.030	0.085	
<b>Total</b>																													
∑ PCDDs	0.558	6.467	0.786	0.889	1.101	4.413	0.770	0.734	0.731	0.947	10.168	0.342	0.666	0.549	2.131	0.529	0.815	2.229	0.558	0.627	1.104	1.300	1.044	0.782	0.906	1.216	1.116	1.605	
∑ PCDFs	0.101	2.859	0.841	0.685	0.372	0.938	0.906	0.512	0.386	0.316	1.119	0.296	0.381	0.765	2.211	0.859	1.008	1.814	0.482	0.659	0.521	0.495	0.279	0.359	0.331	0.785	0.249	1.017	
∑ PCDD/Fs	0.659	9.326	1.627	1.574	1.473	5.351	1.676	1.246	1.117	1.263	11.287	0.638	1.047	1.314	4.342	1.388	1.823	4.043	1.040	1.286	1.625	1.795	1.322	1.140	1.237	2.001	1.365	2.621	
∑ TEQ (PCDD/Fs)	0.013	0.178	0.024	0.029	0.026	0.092	0.032	0.026	0.028	0.027	0.138	0.014	0.028	0.024	0.068	0.027	0.029	0.055	0.016	0.027	0.030	0.029	0.026	0.022	0.020	0.036	0.020	0.045	

Table A29. Atmospheric concentrations of PCDD/Fs ( $\text{pg m}^{-3}$ ) at NAPS suburban sites in 2001 (continued)

Station Name	Edmonton									
Sampling Period	1	2	3	4	5	6	7	8	9	10
Sampling Date	1/1/01	1/25/01	3/14/01	4/7/01	5/1/01	5/25/01	6/18/01	8/5/01	9/22/01	11/9/01
Sampling Volume (m3)	747	760	787	793	814	722	799	749	847	900
<b>PCDD/F Congeners</b>										
2,3,7,8-TCDD	0.004	0.004	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.001	0.003
1,2,3,7,8-PeCDD	0.023	0.031	0.010	0.005	0.004	0.006	0.013	0.009	0.005	0.024
1,2,3,4,7,8-HxCDD	0.028	0.043	<0.005	<0.005	<0.005	<0.006	0.027	0.006	<0.002	0.038
1,2,3,6,7,8-HxCDD	0.048	0.050	0.018	<0.005	<0.005	<0.006	0.024	0.015	0.003	0.059
1,2,3,7,8,9-HxCDD	0.070	0.111	0.022	<0.005	<0.005	0.006	0.058	0.012	0.003	0.063
1,2,3,4,6,7,8-HpCDD	0.538	0.539	0.187	0.051	0.047	0.050	0.274	0.099	0.025	0.636
OCDD	1.054	0.958	0.635	0.178	0.238	0.193	0.698	0.305	0.100	1.277
2,3,7,8-TCDF	0.024	0.023	0.035	0.005	0.005	0.006	0.011	0.006	0.006	0.015
1,2,3,7,8-PeCDF	0.005	0.005	0.008	<0.003	<0.003	<0.003	<0.003	<0.003	0.001	0.005
2,3,4,7,8-PeCDF	0.009	0.009	0.012	<0.003	<0.003	<0.003	0.004	<0.003	0.002	0.007
1,2,3,4,7,8-HxCDF	0.023	0.018	0.027	0.004	<0.005	0.004	0.005	0.006	0.003	0.014
1,2,3,6,7,8-HxCDF	0.009	0.006	0.012	0.004	<0.005	<0.004	0.005	<0.003	0.002	0.006
2,3,4,6,7,8-HxCDF	0.014	0.008	0.016	<0.003	<0.005	<0.004	0.007	<0.003	<0.001	0.010
1,2,3,7,8,9-HxCDF	<0.003	<0.003	<0.004	<0.003	<0.005	<0.004	<0.003	<0.003	<0.001	0.000
1,2,3,4,6,7,8-HpCDF	0.056	0.034	0.056	0.014	0.017	0.017	0.024	0.028	0.008	0.046
1,2,3,4,7,8,9-HpCDF	0.009	<0.007	<0.013	<0.006	<0.01	<0.008	<0.004	<0.005	<0.001	0.005
OCDF	0.072	0.024	0.040	0.023	0.029	0.023	0.049	0.044	0.007	0.055
<b>PCDD/F Homologues</b>										
TCDDs	0.064	0.099	0.003	<0.003	<0.003	0.009	0.016	0.005	0.011	0.088
PeCDDs	0.214	0.363	0.038	0.005	0.008	0.015	0.087	0.019	0.020	0.274
HxCDDs	0.597	0.904	0.162	0.005	0.012	0.053	0.402	0.100	0.028	1.022
HpCDDs	1.071	1.460	0.408	0.088	0.100	0.090	0.733	0.197	0.046	1.422
OCDD	1.054	0.958	0.635	0.178	0.238	0.193	0.698	0.305	0.100	1.277
TCDFs	0.111	0.102	0.108	0.008	0.008	0.028	0.045	0.042	0.031	0.099
PeCDFs	0.081	0.077	0.076	0.004	0.006	0.046	0.041	0.057	0.019	0.072
HxCDFs	0.117	0.090	0.111	0.013	0.012	0.037	0.059	0.064	0.020	0.089
HpCDFs	0.104	0.056	0.056	0.014	0.033	0.017	0.045	0.044	0.013	0.094
OCDF	0.072	0.024	0.040	0.023	0.029	0.023	0.049	0.044	0.007	0.055
<b>Total</b>										
$\Sigma$ PCDDs	3.000	3.784	1.246	0.276	0.358	0.360	1.936	0.626	0.205	4.083
$\Sigma$ PCDFs	0.485	0.349	0.391	0.062	0.088	0.151	0.239	0.251	0.089	0.410
$\Sigma$ PCDD/Fs	3.485	4.133	1.637	0.338	0.446	0.511	2.175	0.877	0.295	4.493
$\Sigma$ TEQ (PCDD/Fs)	0.058	0.070	0.034	0.013	0.013	0.015	0.035	0.020	0.009	0.056



Table A30. Atmospheric concentrations of PCDD/Fs ( $\mu\text{g m}^{-3}$ ) at NAPS suburban sites in 2002

Station Name	Saint John		Montreal										Edmonton											
Sampling Period	1	2	1	2	3	4	5	6	7	8	9	10	11	1	2	3	4	5	6	7	8	9	10	
Sampling Date	4/26/02	7/31/02	1/8/02	1/20/02	2/25/02	3/9/02	3/21/02	4/2/02	4/26/02	5/20/02	6/13/02	8/24/02	9/17/02	1/20/02	3/9/02	4/2/02	4/26/02	4/26/02	5/20/02	7/7/02	7/31/02	8/24/02	9/17/02	
Sampling Volume (m3)	768	683	805	815	843	835	845	854	788	789	871	655	791	874	1033	961	731	708	651	713	583	615	839	
<b>PCDD/F Congeners</b>																								
2,3,7,8-TCDD	<0.001	0.000	0.003	0.005	0.003	0.002	0.002	<0.001	0.001	0.001	0.002	0.002	0.002	0.001	0.001	0.002	0.001	0.001	0.001	0.001	0.001	0.001	0.003	0.001
1,2,3,7,8-PeCDD	0.003	0.005	0.014	0.023	0.012	0.008	0.008	0.004	0.009	0.009	0.011	0.012	0.014	0.005	0.006	0.006	0.004	0.009	0.005	0.006	0.005	0.012	0.004	0.004
1,2,3,4,7,8-HxCDD	0.001	0.001	0.015	0.021	0.012	0.007	0.008	0.002	0.006	0.010	0.008	0.009	0.009	0.003	0.005	0.003	0.002	0.009	0.002	0.004	0.001	0.009	0.002	0.002
1,2,3,6,7,8-HxCDD	0.000	0.002	0.024	0.036	0.019	0.013	0.013	0.004	0.009	0.014	0.012	0.016	0.018	0.005	0.008	0.005	0.005	0.013	0.005	0.005	0.002	0.014	0.005	0.005
1,2,3,7,8,9-HxCDD	0.001	0.001	0.042	0.066	0.033	0.022	0.022	0.006	0.013	0.023	0.022	0.015	0.021	0.011	0.013	0.004	0.005	0.016	0.004	0.005	0.002	0.022	0.003	0.003
1,2,3,4,6,7,8-HpCDD	0.008	0.012	0.326	0.514	0.196	0.168	0.223	0.077	0.123	0.264	0.164	0.164	0.124	0.084	0.088	0.049	0.047	0.189	0.070	0.071	0.024	0.236	0.047	0.047
OCDD	0.030	0.045	0.953	1.173	0.519	0.478	1.144	0.420	0.485	0.913	0.513	0.546	0.287	0.193	0.189	0.169	0.141	0.634	0.312	0.277	0.119	0.850	0.185	0.185
2,3,7,8-TCDF	0.005	0.004	0.045	0.073	0.048	0.026	0.017	0.019	0.016	0.014	0.019	0.024	0.028	0.010	0.011	0.009	0.007	0.011	0.008	0.006	0.003	0.012	0.006	0.006
1,2,3,7,8-PeCDF	0.001	0.001	0.008	0.014	0.012	0.006	0.004	0.005	0.003	0.002	0.005	0.006	0.009	0.003	0.002	0.005	0.003	0.002	0.002	0.002	0.001	0.004	0.002	0.002
2,3,4,7,8-PeCDF	<0.001	0.001	0.017	0.022	0.024	0.009	0.005	0.006	0.008	0.004	0.007	0.007	0.012	0.003	0.003	0.003	0.003	0.004	0.002	0.002	0.001	0.004	0.003	0.003
1,2,3,4,7,8-HxCDF	0.002	0.002	0.035	0.036	0.048	0.020	0.012	0.008	0.028	0.011	0.021	0.021	0.034	0.007	0.007	0.011	0.011	0.010	0.004	0.005	0.002	0.014	0.004	0.004
1,2,3,6,7,8-HxCDF	0.001	0.001	0.012	0.015	0.018	0.010	0.008	0.003	0.010	0.006	0.011	0.011	0.022	0.002	0.003	0.003	0.004	0.004	0.002	0.003	0.001	0.008	0.003	0.003
2,3,4,6,7,8-HxCDF	0.001	0.001	0.016	0.018	0.025	0.012	0.009	0.004	0.015	0.006	0.012	0.010	0.017	0.004	0.003	0.002	0.005	0.007	0.002	0.004	0.002	0.007	0.003	0.003
1,2,3,7,8,9-HxCDF	<0.001	<0.001	<0.001	0.001	0.002	<0.001	<0.001	<0.001	<0.001	0.001	<0.001	0.001	0.001	<0.001	<0.001	0.000	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	0.001
1,2,3,4,6,7,8-HpCDF	0.005	0.007	0.063	0.062	0.079	0.051	0.065	0.018	0.055	0.033	0.054	0.052	0.085	0.014	0.012	0.014	0.023	0.033	0.017	0.017	0.011	0.042	0.017	0.017
1,2,3,4,7,8,9-HpCDF	<0.001	<0.001	0.008	0.009	0.010	0.006	0.002	0.002	0.009	0.004	0.005	0.006	0.009	<0.001	0.001	0.004	0.003	0.005	0.001	<0.001	<0.001	0.005	0.002	0.002
OCDF	0.002	0.005	0.050	0.053	0.079	0.053	0.049	0.023	0.041	0.027	0.030	0.033	0.042	0.015	0.009	0.034	0.023	0.039	0.017	0.019	0.016	0.032	0.016	0.016
<b>PCDD/F Homologues</b>																								
TCDDs	0.004	0.004	0.087	0.112	0.055	0.037	0.025	0.012	0.042	0.027	0.046	0.034	0.060	0.022	0.027	0.020	0.017	0.033	0.016	0.013	0.005	0.032	0.009	0.009
PeCDDs	0.006	0.010	0.164	0.248	0.134	0.061	0.051	0.026	0.078	0.072	0.098	0.070	0.140	0.047	0.060	0.036	0.026	0.095	0.030	0.026	0.014	0.075	0.021	0.021
HxCDDs	0.010	0.016	0.393	0.615	0.320	0.186	0.175	0.066	0.171	0.219	0.202	0.190	0.232	0.116	0.133	0.064	0.063	0.267	0.073	0.066	0.021	0.198	0.051	0.051
HpCDDs	0.013	0.019	0.660	1.005	0.400	0.302	0.386	0.134	0.253	0.504	0.317	0.305	0.228	0.157	0.172	0.095	0.083	0.419	0.139	0.131	0.040	0.409	0.084	0.084
OCDD	0.030	0.045	0.953	1.173	0.519	0.478	1.144	0.420	0.485	0.913	0.513	0.546	0.287	0.193	0.189	0.169	0.141	0.634	0.312	0.277	0.119	0.850	0.185	0.185
TCDFs	0.042	0.035	0.258	0.406	0.232	0.214	0.156	0.139	0.132	0.127	0.221	0.198	0.322	0.046	0.072	0.060	0.048	0.082	0.091	0.049	0.026	0.105	0.050	0.050
PeCDFs	0.015	0.021	0.176	0.240	0.188	0.133	0.118	0.070	0.113	0.089	0.274	0.187	0.469	0.033	0.041	0.045	0.040	0.055	0.057	0.050	0.020	0.136	0.053	0.053
HxCDFs	0.010	0.018	0.156	0.183	0.210	0.141	0.143	0.044	0.141	0.086	0.195	0.164	0.302	0.030	0.032	0.038	0.043	0.069	0.045	0.048	0.018	0.137	0.047	0.047
HpCDFs	0.007	0.010	0.109	0.115	0.131	0.085	0.097	0.030	0.094	0.064	0.083	0.084	0.127	0.021	0.020	0.027	0.036	0.064	0.032	0.031	0.017	0.075	0.030	0.030
OCDF	0.002	0.005	0.050	0.053	0.079	0.053	0.049	0.023	0.041	0.027	0.030	0.033	0.042	0.015	0.009	0.034	0.023	0.039	0.017	0.019	0.016	0.032	0.016	0.016
<b>Total</b>																								
∑ PCDDs	0.064	0.094	2.257	3.154	1.429	1.063	1.780	0.658	1.028	1.735	1.175	1.144	0.948	0.536	0.581	0.384	0.329	1.448	0.570	0.512	0.199	1.564	0.349	0.349
∑ PCDFs	0.077	0.089	0.750	0.996	0.840	0.626	0.563	0.305	0.520	0.393	0.803	0.667	1.263	0.145	0.174	0.203	0.189	0.309	0.242	0.196	0.096	0.486	0.196	0.196
∑ PCDD/Fs	0.140	0.182	3.007	4.150	2.268	1.689	2.343	0.962	1.548	2.128	1.978	1.810	2.211	0.681	0.755	0.586	0.518	1.757	0.811	0.709	0.295	2.050	0.545	0.545
∑ TEQ (PCDD/Fs)	0.005	0.007	0.045	0.067	0.045	0.027	0.024	0.012	0.024	0.023	0.028	0.029	0.038	0.013	0.015	0.012	0.011	0.021	0.010	0.011	0.007	0.028	0.009	0.009

Table A31. Atmospheric concentrations of PCDD/Fs ( $\mu\text{g m}^{-3}$ ) at NAPS suburban sites in 2003

Station Name	Saint John					Montreal									Edmonton						
	1	2	3	4	5	1	2	3	4	5	6	7	8	9	1	2	3	4	5	6	7
Sampling Period	8/1/03	8/25/03	9/18/03	11/5/03	12/23/03	4/27/03	5/21/03	6/14/03	8/1/03	8/25/03	9/18/03	11/5/03	11/29/03	12/23/03	4/27/03	5/21/03	6/14/03	8/1/03	8/25/03	11/5/03	12/23/03
Sampling Volume (m3)	675	558	535	690	829	708	752	709	634	644	775	810	833	702	772	741	727.7	620	559	755	891
<b>PCDD/F Congeners</b>																					
2,3,7,8-TCDD	<0.001	0.001	0.001	0.001	<0.002	0.001	<0.001	0.001	0.001	0.003	0.002	0.005	0.002	0.004	0.000	<0.001	0.002	<0.001	0.001	<0.001	0.002
1,2,3,7,8-PeCDD	0.004	0.005	0.005	0.006	0.022	0.006	0.006	0.008	0.012	0.011	0.011	0.025	0.012	0.026	0.004	0.006	0.014	0.006	0.007	0.009	0.009
1,2,3,4,7,8-HxCDD	0.001	0.001	0.001	0.004	0.025	0.003	0.001	0.005	0.007	0.006	0.008	0.021	0.010	0.025	0.002	0.002	0.013	<0.002	0.002	0.006	0.006
1,2,3,6,7,8-HxCDD	0.000	0.002	0.002	0.004	0.023	0.005	0.002	0.008	0.010	0.009	0.012	0.038	0.019	0.051	0.003	0.006	0.024	0.003	0.010	0.012	0.011
1,2,3,7,8,9-HxCDD	<0.001	0.002	0.001	0.006	0.028	0.005	0.003	0.006	0.009	0.007	0.012	0.038	0.021	0.055	0.003	0.004	0.021	0.004	0.012	0.013	0.008
1,2,3,4,6,7,8-HpCDD	0.010	0.009	0.010	0.056	0.062	0.064	0.025	0.068	0.077	0.126	0.100	0.385	0.233	0.589	0.035	0.065	0.232	0.050	0.133	0.131	0.108
OCDD	0.025	0.029	0.025	0.173	0.140	0.199	0.071	0.277	0.225	0.374	0.225	0.880	1.725	1.523	0.183	0.313	0.732	0.533	0.392	0.419	0.290
2,3,7,8-TCDF	0.002	0.003	0.003	0.007	0.024	0.014	0.007	0.016	0.018	0.023	0.047	0.068	0.013	0.076	0.003	0.005	0.011	0.003	0.007	0.021	0.121
1,2,3,7,8-PeCDF	0.001	0.001	0.001	0.002	0.018	0.003	0.002	0.003	0.004	0.006	0.009	0.012	0.003	0.015	0.001	0.001	0.002	0.001	0.002	0.004	0.012
2,3,4,7,8-PeCDF	0.001	0.001	0.001	0.003	0.023	0.004	0.003	0.005	0.004	0.010	0.022	0.022	0.004	0.025	0.001	<0.001	0.004	<0.001	0.002	0.007	0.030
1,2,3,4,7,8-HxCDF	0.001	0.002	0.004	0.004	0.033	0.007	0.004	0.008	0.011	0.023	0.069	0.047	0.009	0.067	0.002	0.004	0.007	0.003	0.007	0.014	0.052
1,2,3,6,7,8-HxCDF	0.001	0.001	0.002	0.002	0.023	0.003	0.003	0.005	0.007	0.012	0.029	0.018	0.006	0.032	0.001	0.002	0.005	0.002	0.004	0.006	0.019
2,3,4,6,7,8-HxCDF	0.001	0.001	0.002	0.003	0.031	0.003	0.002	0.003	0.005	0.012	0.038	0.021	0.005	0.030	0.001	<0.001	0.004	<0.001	0.004	0.006	0.018
1,2,3,7,8,9-HxCDF	<0.001	0.001	0.001	0.003	0.018	0.000	<0.001	<0.001	<0.002	<0.001	0.003	<0.001	<0.001	0.002	<0.001	<0.001	0.001	<0.001	<0.001	<0.002	<0.001
1,2,3,4,6,7,8-HpCDF	0.006	0.006	0.010	0.007	0.039	0.017	0.013	0.020	0.031	0.060	0.168	0.064	0.048	0.175	0.007	0.018	0.021	0.009	0.023	0.032	0.085
1,2,3,4,7,8,9-HpCDF	0.001	0.001	0.002	0.004	0.018	0.002	<0.001	0.002	0.001	0.008	0.023	0.010	0.004	0.019	0.000	0.001	0.005	<0.001	0.004	<0.004	0.010
OCDF	0.003	0.006	0.011	0.016	0.044	0.010	0.008	0.011	0.018	0.044	0.116	0.066	0.089	0.151	0.008	0.022	0.022	0.016	0.027	0.049	0.127
<b>PCDD/F Homologues</b>																					
TCDDs	0.003	0.003	0.003	0.008	0.027	0.020	0.014	0.023	0.031	0.060	0.034	0.134	0.029	0.104	0.006	0.010	0.034	0.006	0.017	0.026	0.072
PeCDDs	0.011	0.010	0.013	0.018	0.055	0.036	0.032	0.042	0.059	0.096	0.086	0.251	0.079	0.261	0.016	0.029	0.088	0.021	0.042	0.066	0.093
HxCDDs	0.011	0.014	0.017	0.064	0.128	0.065	0.046	0.081	0.118	0.150	0.173	0.561	0.235	0.689	0.037	0.064	0.225	0.047	0.139	0.183	0.160
HpCDDs	0.016	0.016	0.017	0.115	0.107	0.116	0.047	0.118	0.152	0.210	0.188	0.734	0.438	1.119	0.064	0.126	0.431	0.096	0.240	0.266	0.208
OCDD	0.025	0.029	0.025	0.173	0.140	0.199	0.071	0.277	0.225	0.374	0.225	0.880	1.725	1.523	0.183	0.313	0.732	0.533	0.392	0.419	0.290
TCDFs	0.023	0.021	0.030	0.053	0.131	0.115	0.087	0.143	0.156	0.247	0.240	0.452	0.097	0.457	0.019	0.041	0.090	0.029	0.061	0.130	0.548
PeCDFs	0.017	0.015	0.022	0.026	0.095	0.070	0.077	0.124	0.136	0.269	0.228	0.298	0.081	0.343	0.015	0.030	0.073	0.023	0.054	0.080	0.278
HxCDFs	0.011	0.013	0.027	0.021	0.125	0.046	0.057	0.079	0.123	0.182	0.343	0.234	0.104	0.405	0.013	0.033	0.077	0.029	0.058	0.067	0.194
HpCDFs	0.008	0.007	0.018	0.015	0.057	0.026	0.019	0.034	0.047	0.096	0.252	0.115	0.086	0.289	0.011	0.034	0.048	0.019	0.047	0.057	0.124
OCDF	0.003	0.006	0.011	0.016	0.044	0.010	0.008	0.011	0.018	0.044	0.116	0.066	0.089	0.151	0.008	0.022	0.022	0.016	0.027	0.049	0.127
<b>Total</b>																					
$\Sigma$ PCDDs	0.066	0.071	0.075	0.378	0.456	0.436	0.210	0.540	0.585	0.890	0.707	2.560	2.505	3.695	0.305	0.540	1.510	0.703	0.830	0.960	0.823
$\Sigma$ PCDFs	0.062	0.062	0.109	0.131	0.452	0.266	0.248	0.391	0.480	0.838	1.179	1.165	0.457	1.645	0.067	0.160	0.309	0.116	0.247	0.382	1.271
$\Sigma$ PCDD/Fs	0.128	0.133	0.184	0.509	0.908	0.703	0.458	0.931	1.065	1.727	1.886	3.725	2.963	5.340	0.372	0.701	1.820	0.819	1.077	1.342	2.093
$\Sigma$ TEQ (PCDD/Fs)	0.006	0.007	0.008	0.012	0.053	0.013	0.010	0.016	0.023	0.028	0.044	0.067	0.026	0.079	0.007	0.010	0.029	0.010	0.015	0.022	0.046

Table A32. Atmospheric concentrations of PCDD/Fs ( $\text{pg m}^{-3}$ ) at NAPS suburban sites in 2004

Station Name	Saint John										Montreal									
	1	2	3	4	5	6	7	8	9	10	1	2	3	4	5	6	7	8	9	10
Sampling Period	1/16/04	3/28/04	3/4/04	5/15/04	6/8/04	7/26/04	9/12/04	10/6/04	11/23/04	12/17/04	3/4/04	3/28/04	4/21/04	5/15/04	6/8/04	7/26/04	8/19/04	9/12/04	11/23/04	12/17/04
Sampling Volume (m3)	650	703	634	578	716	585	615	631	673	665	624	677	678	715	676	725	752	821	688	739
<b>PCDD/F Congeners</b>																				
2,3,7,8-TCDD	<0.002	<0.001	<0.001	<0.001	<0.002	<0.001	<0.006	<0.001	0.001	0.001	0.004	0.001	0.001	0.002	0.003	0.002	0.002	0.002	0.004	0.001
1,2,3,7,8-PeCDD	0.003	0.004	0.005	0.005	0.004	0.005	0.006	0.004	0.005	0.006	0.019	0.006	0.010	0.013	0.015	0.015	0.020	0.015	0.015	0.008
1,2,3,4,7,8-HxCDD	<0.002	0.001	0.002	0.001	0.001	0.002	0.002	<0.001	0.002	0.003	0.014	0.004	0.008	0.007	0.009	0.012	0.017	0.014	0.012	0.009
1,2,3,6,7,8-HxCDD	<0.002	0.001	0.002	<0.001	0.001	0.002	0.003	<0.001	0.003	0.005	0.024	0.004	0.015	0.013	0.013	0.018	0.037	0.023	0.017	0.014
1,2,3,7,8,9-HxCDD	<0.002	0.001	0.005	0.002	0.002	0.002	0.005	0.003	0.003	0.007	0.031	0.006	0.010	0.011	0.010	0.022	0.025	0.030	0.026	0.018
1,2,3,4,6,7,8-HpCDD	0.018	0.014	0.012	0.015	0.013	0.019	0.042	0.013	0.030	0.068	0.229	0.055	0.154	0.095	0.092	0.171	0.267	0.375	0.253	0.231
OCDD	0.070	0.060	0.041	0.048	0.042	0.067	0.108	0.051	0.085	0.215	0.583	0.183	0.688	0.262	0.264	0.468	0.649	1.022	0.710	1.092
2,3,7,8-TCDF	0.009	0.005	0.007	0.002	0.005	0.002	0.005	0.001	0.006	0.019	0.099	0.018	0.027	0.021	0.004	0.011	0.005	0.008	0.015	0.005
1,2,3,7,8-PeCDF	<0.001	0.001	0.002	0.001	<0.001	0.002	0.001	0.001	0.008	0.008	0.017	0.004	0.008	0.006	0.006	0.011	0.007	0.005	0.012	0.005
2,3,4,7,8-PeCDF	0.002	0.001	0.003	0.001	<0.002	0.001	0.002	0.001	0.012	0.013	0.032	0.007	0.011	0.006	0.007	0.017	0.007	0.007	0.018	0.009
1,2,3,4,7,8-HxCDF	0.004	0.002	0.004	0.002	0.003	0.004	0.007	0.002	0.024	0.016	0.067	0.011	0.033	0.016	0.016	0.046	0.025	0.017	0.043	0.022
1,2,3,6,7,8-HxCDF	<0.002	0.001	0.002	0.001	0.002	0.002	0.002	<0.001	0.011	0.006	0.027	0.004	0.016	0.011	0.011	0.022	0.030	0.011	0.017	0.010
2,3,4,6,7,8-HxCDF	0.001	0.001	0.003	0.002	0.002	0.002	0.004	<0.001	0.013	0.007	0.031	0.004	0.014	0.007	0.010	0.022	0.012	0.009	0.017	0.010
1,2,3,7,8,9-HxCDF	<0.002	<0.001	<0.001	<0.001	<0.002	0.001	<0.001	<0.001	<0.001	<0.001	0.002	<0.001	0.003	0.001	0.003	<0.002	<0.002	0.001	0.001	<0.001
1,2,3,4,6,7,8-HpCDF	0.009	0.006	0.009	0.006	0.006	0.009	0.016	0.005	0.035	0.028	0.095	0.019	0.105	0.050	0.059	0.101	0.156	0.051	0.064	0.059
1,2,3,4,7,8,9-HpCDF	<0.003	<0.001	0.002	<0.002	<0.002	<0.001	0.002	<0.001	0.007	0.004	0.014	0.003	0.016	0.005	0.008	0.013	0.007	0.006	0.008	0.009
OCDF	0.014	0.006	0.012	0.004	0.006	0.006	0.009	0.004	0.023	0.024	0.061	0.015	0.109	0.037	0.029	0.047	0.037	0.029	0.041	0.052
<b>PCDD/F Homologues</b>																				
TCDDs	0.006	0.006	0.004	0.004	<0.002	0.003	0.005	0.001	0.014	0.012	0.114	0.016	0.028	0.067	0.044	0.085	0.046	0.055	0.096	0.039
PeCDDs	0.017	0.010	0.024	0.024	0.019	0.008	0.024	0.014	0.030	0.034	0.192	0.034	0.056	0.115	0.101	0.150	0.145	0.145	0.174	0.079
HxCDDs	0.019	0.018	0.027	0.012	0.013	0.024	0.048	0.014	0.052	0.079	0.380	0.069	0.156	0.175	0.162	0.302	0.424	0.362	0.343	0.201
HpCDDs	0.031	0.024	0.020	0.024	0.022	0.033	0.074	0.024	0.056	0.130	0.441	0.105	0.274	0.174	0.167	0.312	0.508	0.736	0.491	0.398
OCDD	0.070	0.060	0.041	0.048	0.042	0.067	0.108	0.051	0.085	0.215	0.583	0.183	0.688	0.262	0.264	0.468	0.649	1.022	0.710	1.092
TCDFs	0.038	0.034	0.040	0.032	0.018	0.043	0.040	0.025	0.177	0.201	0.593	0.122	0.236	0.251	0.264	0.534	0.219	0.276	0.318	0.162
PeCDFs	0.016	0.015	0.021	0.011	0.009	0.024	0.032	0.013	0.185	0.110	0.408	0.085	0.137	0.128	0.298	0.511	0.443	0.261	0.236	0.115
HxCDFs	0.010	0.010	0.017	0.011	0.014	0.023	0.041	0.008	0.140	0.064	0.301	0.052	0.208	0.166	0.220	0.332	0.559	0.203	0.201	0.119
HpCDFs	0.015	0.008	0.011	0.008	0.006	0.014	0.024	0.007	0.060	0.045	0.153	0.035	0.174	0.078	0.091	0.160	0.223	0.085	0.103	0.096
OCDF	0.014	0.006	0.012	0.004	0.006	0.006	0.009	0.004	0.023	0.024	0.061	0.015	0.109	0.037	0.029	0.047	0.037	0.029	0.041	0.052
<b>Total</b>																				
∑ PCDDs	0.143	0.117	0.115	0.111	0.095	0.136	0.259	0.105	0.238	0.471	1.711	0.407	1.202	0.794	0.739	1.317	1.771	2.319	1.814	1.809
∑ PCDFs	0.093	0.073	0.102	0.066	0.052	0.111	0.146	0.057	0.585	0.443	1.517	0.309	0.864	0.660	0.903	1.584	1.482	0.854	0.900	0.543
∑ PCDD/Fs	0.236	0.190	0.217	0.177	0.148	0.247	0.404	0.162	0.823	0.914	3.227	0.716	2.066	1.454	1.641	2.902	3.253	3.173	2.714	2.352
∑ TEQ (PCDD/Fs)	0.008	0.006	0.009	0.008	0.008	0.008	0.016	0.006	0.017	0.018	0.066	0.016	0.031	0.027	0.028	0.041	0.044	0.035	0.043	0.024

Table A32. Atmospheric concentrations of PCDD/Fs ( $\text{pg m}^{-3}$ ) at NAPS suburban sites in 2004 (continued)

Station Name	Edmonton										
Sampling Period	1	2	3	4	5	6	7	8	9	10	11
Sampling Date	1/16/04	3/4/04	4/21/04	5/15/04	6/8/04	7/26/04	8/19/04	9/12/04	10/6/04	11/23/04	12/17/04
Sampling Volume (m3)	689	779	669	675	660	668	659	617	663	635	703
<b>PCDD/F Congeners</b>											
2,3,7,8-TCDD	0.002	<0.001	0.001	0.001	<0.002	0.001	0.002	0.003	0.002	0.002	0.001
1,2,3,7,8-PeCDD	0.009	0.006	0.008	0.009	0.006	0.007	0.014	0.023	0.010	0.015	0.005
1,2,3,4,7,8-HxCDD	0.007	0.002	0.004	0.009	0.005	0.003	0.019	0.033	0.008	0.018	0.002
1,2,3,6,7,8-HxCDD	0.010	0.005	0.008	0.015	0.006	0.006	0.030	0.053	0.014	0.022	0.004
1,2,3,7,8,9-HxCDD	0.013	0.006	0.005	0.015	0.008	0.004	0.036	0.070	0.012	0.038	0.007
1,2,3,4,6,7,8-HpCDD	0.097	0.052	0.076	0.190	0.086	0.077	0.323	0.872	0.199	0.352	0.055
OCDD	0.209	0.132	0.298	0.581	0.227	0.522	0.711	2.114	0.789	1.030	0.135
2,3,7,8-TCDF	0.010	0.008	0.018	0.004	0.005	0.007	0.045	0.004	0.007	0.003	0.002
1,2,3,7,8-PeCDF	0.003	0.002	0.005	0.004	0.003	0.002	0.046	0.002	0.006	0.002	0.001
2,3,4,7,8-PeCDF	0.004	0.002	0.007	0.005	<0.002	0.002	0.083	0.001	0.009	0.004	0.002
1,2,3,4,7,8-HxCDF	0.004	0.004	0.014	0.011	0.004	0.006	0.380	0.008	0.021	0.010	0.006
1,2,3,6,7,8-HxCDF	0.003	0.002	0.007	0.005	0.002	0.003	0.112	0.004	0.008	0.004	0.002
2,3,4,6,7,8-HxCDF	0.004	0.002	0.005	0.005	0.002	0.002	0.120	0.004	0.009	0.004	0.002
1,2,3,7,8,9-HxCDF	0.002	<0.001	0.001	0.004	<0.002	<0.002	0.005	<0.001	<0.001	<0.001	<0.001
1,2,3,4,6,7,8-HpCDF	0.013	0.011	0.024	0.030	0.010	0.023	0.564	0.029	0.052	0.052	0.015
1,2,3,4,7,8,9-HpCDF	0.005	0.001	0.003	0.008	<0.002	<0.005	0.052	0.004	0.004	<0.003	0.002
OCDF	0.015	0.008	0.030	0.028	0.007	0.039	0.220	0.033	0.062	0.038	0.015
<b>PCDD/F Homologues</b>											
TCDDs	0.026	0.012	0.034	0.021	0.005	0.015	0.134	0.056	0.057	0.045	0.017
PeCDDs	0.053	0.042	0.066	0.070	0.022	0.039	0.251	0.224	0.109	0.231	0.031
HxCDDs	0.131	0.074	0.109	0.180	0.104	0.089	0.524	0.872	0.240	0.399	0.084
HpCDDs	0.183	0.096	0.146	0.358	0.159	0.148	0.634	1.725	0.396	0.667	0.111
OCDD	0.209	0.132	0.298	0.581	0.227	0.522	0.711	2.114	0.789	1.030	0.135
TCDFs	0.063	0.049	0.126	0.084	0.008	0.071	1.157	0.077	0.159	0.076	0.050
PeCDFs	0.034	0.029	0.087	0.065	0.013	0.061	1.074	0.053	0.119	0.048	0.028
HxCDFs	0.032	0.020	0.081	0.069	0.023	0.056	1.269	0.068	0.130	0.056	0.027
HpCDFs	0.025	0.019	0.046	0.053	0.016	0.048	0.786	0.067	0.099	0.081	0.025
OCDF	0.015	0.008	0.030	0.028	0.007	0.039	0.220	0.033	0.062	0.038	0.015
<b>Total</b>											
∑ PCDDs	0.601	0.357	0.653	1.209	0.517	0.813	2.254	4.991	1.590	2.371	0.377
∑ PCDFs	0.167	0.125	0.370	0.299	0.066	0.275	4.506	0.298	0.570	0.299	0.146
∑ PCDD/Fs	0.769	0.481	1.023	1.508	0.582	1.088	6.760	5.290	2.160	2.670	0.523
∑ TEQ (PCDD/Fs)	0.018	0.011	0.018	0.021	0.013	0.013	0.127	0.054	0.026	0.033	0.009

Table A33. Atmospheric concentrations of PCDD/Fs ( $\mu\text{g m}^{-3}$ ) at NAPS suburban sites in 2005

Station Name	Montreal										Edmonton									
Sampling Period	1	2	3	4	5	6	7	8	9	1	2	3	4	5	6	7	8	9	10	11
Sampling Date	1/10/05	3/23/05	4/16/05	5/10/05	6/3/05	6/27/05	10/1/05	11/18/05	12/12/05	3/23/05	4/16/05	5/10/05	6/3/05	6/27/05	7/21/05	8/14/05	9/7/05	10/1/05	11/18/05	12/12/05
Sampling Volume (m3)	783	756	709	652	574	646	679	739	723	728	585	608	639	606	657	681	640	688	681	761
<b>PCDD/F Congeners</b>																				
2,3,7,8-TCDD	0.002	0.001	0.003	0.003	0.002	0.003	0.001	0.001	0.001	0.004	0.001	0.000	0.001	0.001	0.001	<0.001	0.001	0.001	0.001	0.002
1,2,3,7,8-PeCDD	0.009	0.004	0.020	0.021	0.019	0.022	0.008	0.008	0.009	0.016	0.009	0.004	0.005	0.004	0.007	0.005	0.008	0.005	0.007	0.011
1,2,3,4,7,8-HxCDD	0.009	0.002	0.020	0.014	0.011	0.011	0.005	0.004	0.006	0.015	0.007	0.002	0.002	<0.001	0.002	0.003	0.005	0.003	0.004	0.010
1,2,3,6,7,8-HxCDD	0.013	0.003	0.035	0.022	0.019	0.021	0.007	0.009	0.012	0.017	0.015	0.003	0.003	0.003	0.003	0.005	0.008	0.005	0.008	0.019
1,2,3,7,8,9-HxCDD	0.017	0.003	0.036	0.024	0.017	0.022	0.006	0.007	0.013	0.017	0.016	0.004	0.002	0.003	0.003	0.005	0.010	0.005	0.008	0.018
1,2,3,4,6,7,8-HpCDD	0.212	0.032	0.344	0.300	0.149	0.113	0.058	0.090	0.122	0.083	0.195	0.043	0.033	0.025	0.031	0.064	0.117	0.075	0.084	0.214
OCDD	1.213	0.131	0.952	1.147	0.428	0.283	0.177	0.224	0.253	0.278	0.509	0.122	0.130	0.083	0.147	0.225	0.519	0.254	0.292	0.561
2,3,7,8-TCDF	0.007	0.017	0.292	0.034	0.063	0.045	0.015	0.022	0.031	0.013	0.011	0.005	0.005	0.005	0.006	0.005	0.016	0.008	0.015	0.037
1,2,3,7,8-PeCDF	0.007	0.003	0.078	0.007	0.013	0.013	0.004	0.005	0.005	0.009	0.002	0.001	0.001	0.002	0.001	0.001	0.003	0.002	0.002	0.010
2,3,4,7,8-PeCDF	0.010	0.005	0.237	0.012	0.023	0.017	0.006	0.009	0.010	0.011	0.002	0.001	0.001	0.001	0.001	0.001	0.004	0.003	0.003	0.016
1,2,3,4,7,8-HxCDF	0.021	0.013	0.323	0.027	0.057	0.037	0.012	0.019	0.027	0.015	0.005	0.002	0.003	0.005	0.003	0.002	0.009	0.009	0.008	0.032
1,2,3,6,7,8-HxCDF	0.010	0.005	0.120	0.014	0.027	0.027	0.006	0.008	0.010	0.012	0.003	0.001	0.001	0.001	0.002	0.001	0.004	0.003	0.004	0.013
2,3,4,6,7,8-HxCDF	0.010	0.007	0.170	0.013	0.024	0.019	0.006	0.008	0.012	0.011	0.003	0.001	0.001	0.003	<0.001	0.003	0.004	0.004	0.003	0.013
1,2,3,7,8,9-HxCDF	0.001	<0.001	0.010	0.001	0.002	0.001	<0.001	0.001	0.001	0.012	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	0.001	<0.001	0.001	0.001
1,2,3,4,6,7,8-HpCDF	0.058	0.025	0.421	0.066	0.113	0.082	0.031	0.042	0.047	0.020	0.016	0.006	0.009	0.013	0.009	0.012	0.029	0.020	0.022	0.058
1,2,3,4,7,8,9-HpCDF	0.005	0.004	0.058	0.008	0.015	0.007	0.003	0.006	0.005	0.013	0.002	<0.001	<0.002	0.002	<0.002	<0.001	0.002	0.003	0.002	0.010
OCDF	0.056	0.036	0.253	0.048	0.081	0.038	0.017	0.026	0.022	0.035	0.017	0.007	0.009	0.009	0.013	0.014	0.044	0.016	0.026	0.050
<b>PCDD/F Homologues</b>																				
TCDDs	0.046	0.016	0.129	0.061	0.128	0.104	0.021	0.027	0.048	0.025	0.029	0.016	0.006	0.008	0.007	0.009	0.031	0.018	0.042	0.052
PeCDDs	0.083	0.026	0.305	0.133	0.179	0.225	0.057	0.071	0.067	0.050	0.073	0.027	0.012	0.018	0.028	0.025	0.066	0.043	0.055	0.104
HxCDDs	0.211	0.043	0.642	0.304	0.281	0.291	0.092	0.139	0.151	0.131	0.214	0.057	0.038	0.033	0.042	0.071	0.128	0.087	0.117	0.262
HpCDDs	0.404	0.061	0.754	0.622	0.282	0.213	0.103	0.159	0.214	0.171	0.392	0.080	0.065	0.044	0.057	0.130	0.226	0.138	0.159	0.419
OCDD	1.213	0.131	0.952	1.147	0.428	0.283	0.177	0.224	0.253	0.278	0.509	0.122	0.130	0.083	0.147	0.225	0.519	0.254	0.292	0.561
TCDFs	0.204	0.108	1.438	0.281	0.579	0.652	0.127	0.112	0.178	0.063	0.077	0.029	0.035	0.034	0.050	0.038	0.087	0.039	0.113	0.249
PeCDFs	0.137	0.070	1.799	0.258	0.527	0.809	0.098	0.092	0.115	0.049	0.062	0.013	0.019	0.028	0.042	0.034	0.047	0.029	0.054	0.168
HxCDFs	0.129	0.060	1.486	0.237	0.389	0.462	0.091	0.096	0.109	0.063	0.037	0.012	0.021	0.028	0.031	0.029	0.064	0.041	0.047	0.149
HpCDFs	0.095	0.043	0.657	0.116	0.185	0.128	0.046	0.067	0.071	0.040	0.029	0.010	0.015	0.020	0.018	0.020	0.060	0.033	0.042	0.104
OCDF	0.056	0.036	0.253	0.048	0.081	0.038	0.017	0.026	0.022	0.035	0.017	0.007	0.009	0.009	0.013	0.014	0.044	0.016	0.026	0.050
<b>Total</b>																				
∑ PCDDs	1.957	0.277	2.782	2.266	1.298	1.116	0.449	0.619	0.732	0.654	1.218	0.302	0.250	0.185	0.282	0.459	0.970	0.539	0.665	1.399
∑ PCDFs	0.622	0.316	5.633	0.939	1.761	2.089	0.379	0.393	0.495	0.250	0.222	0.071	0.099	0.118	0.154	0.134	0.302	0.158	0.281	0.720
∑ PCDD/Fs	2.579	0.593	8.415	3.205	3.059	3.205	0.827	1.012	1.227	0.904	1.440	0.373	0.349	0.303	0.436	0.593	1.272	0.698	0.946	2.119
∑ TEQ (PCDD/Fs)	0.026	0.012	0.205	0.047	0.053	0.050	0.017	0.021	0.026	0.036	0.018	0.007	0.008	0.008	0.011	0.010	0.018	0.012	0.015	0.035

Table A34. Atmospheric concentrations of PCDD/Fs ( $\mu\text{g m}^{-3}$ ) at NAPS suburban sites in 2006

Station Name	Saint John					Montreal									
Sampling Period	1	1	2	3	4	5	6	7	8	9	10	11	12	13	14
Sampling Date	9/2/06	1/5/06	1/29/06	3/18/06	4/11/06	5/5/06	5/29/06	6/22/06	7/16/06	8/9/06	9/2/06	9/26/06	11/13/06	12/7/06	12/31/06
Sampling Volume (m3)	601	724	727	660	674	585	586	640	626	730	742	868	741	838	796
<b>PCDD/F Congeners</b>															
2,3,7,8-TCDD	0.000	0.001	0.001	0.001	0.001	0.001	0.002	0.002	0.002	0.001	0.001	0.001	0.001	0.001	0.005
1,2,3,7,8-PeCDD	0.004	0.010	0.006	0.005	0.009	0.008	0.016	0.015	0.016	0.009	0.006	0.006	0.005	0.007	0.037
1,2,3,4,7,8-HxCDD	0.001	0.010	0.005	0.003	0.007	0.003	0.007	0.011	0.007	0.007	0.004	0.003	0.003	0.006	0.054
1,2,3,6,7,8-HxCDD	0.001	0.013	0.009	0.006	0.013	0.007	0.013	0.023	0.013	0.010	0.007	0.005	0.004	0.010	0.094
1,2,3,7,8,9-HxCDD	0.001	0.017	0.010	0.006	0.014	0.008	0.014	0.023	0.010	0.014	0.006	0.005	0.004	0.010	0.119
1,2,3,4,6,7,8-HpCDD	0.008	0.167	0.140	0.070	0.155	0.060	0.126	0.155	0.092	0.089	0.061	0.029	0.041	0.130	1.498
OCDD	0.024	0.598	0.735	0.214	0.710	0.172	0.387	0.265	0.249	0.240	0.197	0.068	0.093	0.320	3.716
2,3,7,8-TCDF	0.003	0.035	0.014	0.013	0.029	0.021	0.037	0.020	0.021	0.019	0.019	0.025	0.012	0.026	0.054
1,2,3,7,8-PeCDF	0.001	0.006	0.003	0.003	0.006	0.004	0.008	0.006	0.006	0.005	0.003	0.005	0.003	0.007	0.012
2,3,4,7,8-PeCDF	0.001	0.011	0.004	0.004	0.010	0.007	0.009	0.007	0.006	0.006	0.006	0.010	0.004	0.011	0.021
1,2,3,4,7,8-HxCDF	0.001	0.022	0.010	0.010	0.020	0.019	0.019	0.020	0.018	0.016	0.016	0.025	0.012	0.031	0.051
1,2,3,6,7,8-HxCDF	0.001	0.008	0.004	0.004	0.008	0.008	0.012	0.016	0.012	0.010	0.007	0.011	0.004	0.011	0.020
2,3,4,6,7,8-HxCDF	0.001	0.007	0.005	0.006	0.010	0.007	0.008	0.014	0.008	0.008	0.008	0.011	0.005	0.012	0.023
1,2,3,7,8,9-HxCDF	<0.001	<0.003	0.001	0.001	<0.001	0.001	<0.001	<0.002	<0.001	<0.004	<0.001	0.001	0.001	0.001	0.002
1,2,3,4,6,7,8-HpCDF	0.004	0.034	0.046	0.029	0.043	0.064	0.054	0.108	0.055	0.050	0.040	0.042	0.022	0.055	0.097
1,2,3,4,7,8,9-HpCDF	<0.001	0.005	0.003	0.004	0.007	0.004	0.005	0.004	0.004	0.003	0.006	0.007	0.003	0.011	0.013
OCDF	0.002	0.044	0.069	0.020	0.040	0.073	0.027	0.025	0.026	0.027	0.027	0.019	0.018	0.039	0.088
<b>PCDD/F Homologues</b>															
TCDDs	0.007	0.063	0.020	0.015	0.050	0.041	0.103	0.051	0.058	0.065	0.020	0.034	0.020	0.036	0.152
PeCDDs	0.007	0.101	0.035	0.030	0.079	0.060	0.180	0.134	0.142	0.122	0.038	0.064	0.028	0.063	0.443
HxCDDs	0.010	0.227	0.099	0.069	0.176	0.104	0.231	0.314	0.183	0.193	0.086	0.090	0.060	0.159	1.825
HpCDDs	0.012	0.331	0.239	0.127	0.312	0.126	0.245	0.311	0.175	0.179	0.113	0.055	0.075	0.237	3.372
OCDD	0.024	0.598	0.735	0.214	0.710	0.172	0.387	0.265	0.249	0.240	0.197	0.068	0.093	0.320	3.716
TCDFs	0.026	0.212	0.099	0.085	0.235	0.210	0.529	0.270	0.363	0.317	0.145	0.214	0.085	0.165	0.343
PeCDFs	0.016	0.114	0.054	0.059	0.155	0.161	0.480	0.332	0.441	0.339	0.103	0.172	0.058	0.131	0.265
HxCDFs	0.011	0.098	0.068	0.058	0.121	0.123	0.271	0.322	0.266	0.213	0.093	0.128	0.052	0.130	0.257
HpCDFs	0.006	0.064	0.085	0.047	0.076	0.089	0.084	0.148	0.075	0.071	0.061	0.066	0.034	0.093	0.199
OCDF	0.002	0.044	0.069	0.020	0.040	0.073	0.027	0.025	0.026	0.027	0.027	0.019	0.018	0.039	0.088
<b>Total</b>															
∑ PCDDs	0.060	1.320	1.128	0.455	1.327	0.503	1.146	1.075	0.807	0.799	0.455	0.311	0.277	0.816	9.508
∑ PCDFs	0.061	0.531	0.374	0.269	0.627	0.656	1.391	1.097	1.172	0.966	0.428	0.599	0.247	0.558	1.152
∑ PCDD/Fs	0.121	1.851	1.503	0.724	1.953	1.159	2.537	2.172	1.978	1.765	0.883	0.910	0.524	1.373	10.660
∑ TEQ (PCDD/Fs)	0.005	0.029	0.016	0.013	0.026	0.020	0.033	0.034	0.030	0.022	0.016	0.019	0.012	0.024	0.108

Table A34. Atmospheric concentrations of PCDD/Fs ( $\text{pg m}^{-3}$ ) at NAPS suburban sites in 2006 (continued)

Station Name	Edmonton													
Sampling Period	1	2	3	4	5	6	7	8	9	10	11	12	13	14
Sampling Date	1/5/06	1/29/06	3/18/06	4/11/06	5/29/06	5/5/06	6/22/06	7/16/06	8/9/06	9/2/06	9/26/06	11/13/06	12/7/06	12/31/06
Sampling Volume (m3)	723	594	696	638	646	553	656	618	663	732	894	803	801	840
<b>PCDD/F Congeners</b>														
2,3,7,8-TCDD	0.002	0.001	0.001	0.003	<0.001	0.002	0.001	<0.001	<0.001	0.001	0.001	0.001	0.001	0.003
1,2,3,7,8-PeCDD	0.011	0.009	0.006	0.013	0.005	0.011	0.008	0.005	0.005	0.007	0.003	0.007	0.010	0.014
1,2,3,4,7,8-HxCDD	0.011	0.005	0.005	0.010	0.003	0.005	0.005	0.003	0.003	0.005	0.001	0.007	0.009	0.014
1,2,3,6,7,8-HxCDD	0.021	0.011	0.007	0.016	0.005	0.010	0.009	0.005	0.002	0.011	0.002	0.011	0.017	0.026
1,2,3,7,8,9-HxCDD	0.018	0.015	0.009	0.017	0.010	0.010	0.011	0.005	0.005	0.008	0.002	0.012	0.019	0.032
1,2,3,4,6,7,8-HpCDD	0.271	0.136	0.122	0.182	0.078	0.129	0.109	0.059	0.041	0.131	0.022	0.156	0.247	0.326
OCDD	0.569	0.334	0.647	0.555	0.325	0.590	0.341	0.212	0.192	0.436	0.099	0.584	0.500	0.893
2,3,7,8-TCDF	0.012	0.033	0.004	0.024	0.006	0.018	0.015	0.004	0.006	0.007	0.003	0.008	0.019	0.018
1,2,3,7,8-PeCDF	0.003	0.005	0.001	0.004	0.002	0.005	0.003	0.001	0.002	0.002	0.001	0.002	0.004	0.004
2,3,4,7,8-PeCDF	0.004	0.011	0.001	0.008	0.002	0.006	0.005	0.002	0.002	0.002	<0.001	0.003	0.006	0.007
1,2,3,4,7,8-HxCDF	0.012	0.032	0.004	0.016	0.004	0.014	0.016	0.004	0.004	0.004	0.001	0.006	0.015	0.015
1,2,3,6,7,8-HxCDF	0.004	0.010	0.002	0.007	0.003	0.006	0.005	<0.001	0.002	0.002	0.001	0.003	0.007	0.006
2,3,4,6,7,8-HxCDF	0.004	0.012	0.001	0.007	0.003	0.007	0.007	0.003	0.001	0.002	0.001	0.003	0.007	0.006
1,2,3,7,8,9-HxCDF	0.001	<0.003	<0.001	0.001	<0.001	0.001	<0.001	<0.002	<0.004	0.000	<0.001	0.001	0.001	0.001
1,2,3,4,6,7,8-HpCDF	0.024	0.053	0.027	0.038	0.017	0.036	0.036	0.015	0.014	0.014	0.008	0.023	0.033	0.031
1,2,3,4,7,8,9-HpCDF	0.006	0.006	0.004	0.004	<0.003	0.006	0.005	<0.003	<0.004	0.002	0.001	0.004	0.005	0.004
OCDF	0.028	0.041	0.058	0.036	0.023	0.059	0.043	0.018	0.010	0.013	0.009	0.042	0.038	0.032
<b>PCDD/F Homologues</b>														
TCDDs	0.041	0.067	0.006	0.063	0.008	0.044	0.046	0.009	0.012	0.016	0.005	0.020	0.047	0.060
PeCDDs	0.102	0.115	0.021	0.119	0.027	0.075	0.077	0.027	0.025	0.043	0.013	0.052	0.088	0.142
HxCDDs	0.293	0.224	0.070	0.293	0.075	0.135	0.152	0.069	0.054	0.125	0.027	0.159	0.262	0.432
HpCDDs	0.500	0.265	0.204	0.390	0.153	0.256	0.219	0.112	0.081	0.227	0.041	0.286	0.448	0.663
OCDD	0.569	0.334	0.647	0.555	0.325	0.590	0.341	0.212	0.192	0.436	0.099	0.584	0.500	0.893
TCDFs	0.089	0.180	0.024	0.180	0.050	0.142	0.099	0.051	0.066	0.063	0.030	0.048	0.129	0.122
PeCDFs	0.054	0.127	0.014	0.113	0.037	0.108	0.088	0.055	0.058	0.043	0.019	0.033	0.077	0.079
HxCDFs	0.063	0.132	0.026	0.093	0.036	0.106	0.088	0.042	0.048	0.040	0.016	0.041	0.074	0.077
HpCDFs	0.053	0.090	0.055	0.068	0.032	0.082	0.064	0.023	0.024	0.026	0.015	0.049	0.057	0.057
OCDF	0.028	0.041	0.058	0.036	0.023	0.059	0.043	0.018	0.010	0.013	0.009	0.042	0.038	0.032
<b>Total</b>														
$\Sigma$ PCDDs	1.505	1.004	0.947	1.420	0.588	1.100	0.836	0.428	0.364	0.846	0.185	1.102	1.345	2.190
$\Sigma$ PCDFs	0.286	0.569	0.176	0.491	0.179	0.497	0.381	0.190	0.206	0.184	0.088	0.213	0.374	0.368
$\Sigma$ PCDD/Fs	1.792	1.573	1.123	1.911	0.766	1.597	1.217	0.618	0.570	1.030	0.273	1.314	1.719	2.557
$\Sigma$ TEQ (PCDD/Fs)	0.026	0.028	0.012	0.030	0.011	0.023	0.019	0.010	0.010	0.014	0.005	0.016	0.026	0.034

Table A35. Atmospheric concentrations of PCDD/Fs ( $\mu\text{g m}^{-3}$ ) at NAPS suburban sites in 2007

Station Name	Saint John						Montreal									
Sampling Period	1	2	3	4	5	6	1	2	3	4	5	6	7	8	9	10
Sampling Date	4/6/07	4/30/07	6/17/07	7/11/07	8/28/07	12/2/07	1/24/07	3/13/07	4/6/07	4/30/07	5/24/07	6/17/07	7/11/07	9/21/07	11/8/07	12/2/07
Sampling Volume (m3)	831	594	645	715	732	685	774	763	734	820	763	751	558	696	775	767
<b>PCDD/F Congeners</b>																
2,3,7,8-TCDD	<0.002	<0.001	<0.001	<0.001	<0.001	0.001	0.001	0.002	<0.001	0.001	0.002	0.002	0.003	0.001	0.001	0.002
1,2,3,7,8-PeCDD	0.003	0.004	0.003	0.004	0.004	0.006	0.007	0.010	0.004	0.005	0.011	0.010	0.014	0.011	0.007	0.008
1,2,3,4,7,8-HxCDD	<0.002	<0.001	<0.002	0.001	0.001	0.002	0.006	0.011	0.002	0.002	0.007	0.007	0.007	0.010	0.005	0.006
1,2,3,6,7,8-HxCDD	0.001	<0.001	<0.001	0.001	0.001	0.004	0.010	0.016	0.003	0.003	0.011	0.010	0.012	0.011	0.011	0.010
1,2,3,7,8,9-HxCDD	<0.002	0.002	<0.002	<0.002	0.002	0.004	0.011	0.019	0.004	0.003	0.012	0.012	0.011	0.017	0.012	0.010
1,2,3,4,6,7,8-HpCDD	0.016	0.013	0.011	0.008	0.013	0.034	0.138	0.191	0.033	0.042	0.106	0.134	0.099	0.141	0.137	0.128
OCDD	0.066	0.047	0.073	0.028	0.054	0.110	0.425	0.443	0.088	0.172	0.267	0.619	0.359	0.363	0.433	0.469
2,3,7,8-TCDF	0.003	0.005	0.002	0.004	0.004	0.009	0.023	0.046	0.008	0.008	0.028	0.029	0.019	0.016	0.023	0.018
1,2,3,7,8-PeCDF	0.001	0.001	0.001	<0.001	0.001	0.001	0.004	0.010	0.002	0.002	0.007	0.009	0.005	0.004	0.005	0.003
2,3,4,7,8-PeCDF	<0.001	0.001	<0.001	0.001	0.001	0.003	0.007	0.014	0.002	0.002	0.008	0.011	0.005	0.006	0.008	0.006
1,2,3,4,7,8-HxCDF	0.002	0.005	0.002	0.003	0.004	0.004	0.018	0.053	0.005	0.005	0.021	0.026	0.014	0.018	0.015	0.012
1,2,3,6,7,8-HxCDF	0.001	0.002	0.001	0.001	0.002	0.002	0.008	0.019	0.003	0.002	0.013	0.014	0.009	0.010	0.006	0.005
2,3,4,6,7,8-HxCDF	0.001	0.002	0.001	0.001	0.002	0.002	0.008	0.022	0.002	0.002	0.012	0.012	0.007	0.011	0.006	0.005
1,2,3,7,8,9-HxCDF	<0.001	<0.001	<0.002	<0.001	<0.001	<0.001	0.000	0.002	<0.001	<0.001	0.000	<0.003	<0.002	0.001	0.001	<0.001
1,2,3,4,6,7,8-HpCDF	0.005	0.010	0.004	0.010	0.010	0.007	0.041	0.095	0.015	0.012	0.056	0.064	0.044	0.053	0.023	0.031
1,2,3,4,7,8,9-HpCDF	<0.002	<0.002	<0.002	<0.002	0.001	0.001	0.004	0.013	0.002	0.001	0.006	0.011	0.002	0.008	0.003	0.003
OCDF	0.007	0.005	0.006	0.016	0.007	0.006	0.027	0.058	0.010	0.012	0.034	0.051	0.030	0.040	0.018	0.046
<b>PCDD/F Homologues</b>																
TCDDs	<0.002	0.007	<0.001	0.003	0.002	0.020	0.040	0.160	0.018	0.024	0.096	0.047	0.045	0.034	0.029	0.029
PeCDDs	0.007	0.014	0.009	0.007	0.008	0.029	0.063	0.243	0.026	0.040	0.185	0.102	0.090	0.079	0.052	0.052
HxCDDs	0.011	0.016	0.005	0.005	0.013	0.044	0.150	0.396	0.042	0.050	0.194	0.155	0.147	0.212	0.140	0.126
HpCDDs	0.026	0.026	0.020	0.012	0.023	0.060	0.254	0.383	0.059	0.079	0.203	0.267	0.188	0.294	0.241	0.221
OCDD	0.066	0.047	0.073	0.028	0.054	0.110	0.425	0.443	0.088	0.172	0.267	0.619	0.359	0.363	0.433	0.469
TCDFs	0.011	0.034	0.016	0.032	0.033	0.059	0.150	0.300	0.061	0.107	0.394	0.363	0.240	0.164	0.156	0.110
PeCDFs	0.005	0.019	0.006	0.031	0.027	0.028	0.094	0.203	0.036	0.083	0.406	0.328	0.266	0.186	0.102	0.069
HxCDFs	0.009	0.018	0.007	0.017	0.026	0.018	0.093	0.225	0.029	0.040	0.228	0.245	0.170	0.162	0.073	0.069
HpCDFs	0.008	0.013	0.006	0.012	0.015	0.011	0.064	0.142	0.022	0.019	0.084	0.118	0.070	0.085	0.039	0.058
OCDF	0.007	0.005	0.006	0.016	0.007	0.006	0.027	0.058	0.010	0.012	0.034	0.051	0.030	0.040	0.018	0.046
<b>Total</b>																
$\Sigma$ PCDDs	0.110	0.109	0.107	0.056	0.100	0.262	0.931	1.625	0.233	0.364	0.946	1.190	0.829	0.981	0.896	0.897
$\Sigma$ PCDFs	0.040	0.090	0.042	0.108	0.107	0.122	0.429	0.929	0.158	0.261	1.146	1.104	0.775	0.637	0.388	0.351
$\Sigma$ PCDD/Fs	0.149	0.199	0.148	0.164	0.207	0.384	1.360	2.554	0.391	0.625	2.092	2.294	1.604	1.618	1.284	1.248
$\Sigma$ TEQ (PCDD/Fs)	0.006	0.007	0.006	0.007	0.007	0.011	0.020	0.039	0.008	0.010	0.028	0.029	0.028	0.026	0.021	0.019



Table A35. Atmospheric concentrations of PCDD/Fs ( $\text{pg m}^{-3}$ ) at NAPS suburban sites in 2007 (continued)

Station Name	Edmonton												
Sampling Period	1	2	3	4	5	6	7	8	9	10	11	12	13
Sampling Date	1/24/07	3/13/07	4/6/07	4/30/07	5/24/07	6/17/07	7/11/07	8/4/07	8/28/07	9/21/07	11/8/07	12/2/07	12/26/07
Sampling Volume (m3)	719	787	815	812	794	733	683	673	755	670	863	849	798
<b>PCDD/F Congeners</b>													
2,3,7,8-TCDD	0.001	0.000	<0.001	0.001	0.000	0.001	0.002	0.001	0.001	0.001	0.001	0.002	0.003
1,2,3,7,8-PeCDD	0.008	0.004	0.004	0.003	0.004	0.006	0.010	0.008	0.006	0.006	0.008	0.016	0.016
1,2,3,4,7,8-HxCDD	0.006	0.001	0.002	0.002	0.003	0.002	0.006	0.003	0.004	0.004	0.007	0.016	0.015
1,2,3,6,7,8-HxCDD	0.013	0.003	0.002	0.002	0.004	0.004	0.010	0.005	0.007	0.006	0.013	0.030	0.032
1,2,3,7,8,9-HxCDD	0.014	0.004	0.003	0.003	0.005	0.007	0.011	0.005	0.007	0.004	0.015	0.030	0.036
1,2,3,4,6,7,8-HpCDD	0.118	0.036	0.029	0.045	0.064	0.072	0.106	0.062	0.083	0.068	0.166	0.361	0.344
OCDD	0.322	0.138	0.085	0.106	0.185	0.310	0.307	0.239	0.260	0.259	0.411	1.168	0.868
2,3,7,8-TCDF	0.019	0.005	0.002	0.005	0.005	0.005	0.007	0.005	0.007	0.010	0.009	0.038	0.034
1,2,3,7,8-PeCDF	0.003	0.001	0.001	0.001	0.001	0.001	0.002	0.001	0.002	0.002	0.002	0.006	0.007
2,3,4,7,8-PeCDF	0.005	0.001	<0.001	0.001	0.001	0.001	0.002	<0.001	0.003	0.003	0.003	0.011	0.012
1,2,3,4,7,8-HxCDF	0.011	0.001	0.002	0.003	0.004	0.004	0.005	0.003	0.013	0.007	0.008	0.027	0.033
1,2,3,6,7,8-HxCDF	0.004	0.001	0.001	0.001	0.002	0.002	0.004	0.002	0.005	0.003	0.003	0.011	0.012
2,3,4,6,7,8-HxCDF	0.004	0.001	0.001	0.001	0.002	0.001	0.002	0.002	0.006	0.002	0.003	0.012	0.012
1,2,3,7,8,9-HxCDF	0.000	<0.001	<0.001	<0.001	<0.001	<0.001	0.001	<0.001	0.001	<0.001	0.000	0.001	0.001
1,2,3,4,6,7,8-HpCDF	0.020	0.009	0.005	0.007	0.015	0.010	0.021	0.015	0.039	0.015	0.016	0.058	0.056
1,2,3,4,7,8,9-HpCDF	<0.002	<0.001	<0.001	<0.001	0.001	<0.001	<0.002	<0.002	0.003	0.002	0.002	0.006	0.007
OCDF	0.016	0.013	0.005	0.008	0.016	0.016	0.015	0.020	0.029	0.014	0.014	0.088	0.054
<b>PCDD/F Homologues</b>													
TCDDs	0.050	0.012	0.005	0.010	0.013	0.012	0.038	0.010	0.016	0.017	0.022	0.133	0.087
PeCDDs	0.078	0.024	0.014	0.019	0.028	0.030	0.072	0.026	0.034	0.016	0.058	0.205	0.160
HxCDDs	0.191	0.049	0.031	0.043	0.069	0.069	0.158	0.049	0.089	0.060	0.208	0.465	0.448
HpCDDs	0.236	0.081	0.052	0.082	0.126	0.146	0.201	0.105	0.161	0.120	0.340	0.692	0.639
OCDD	0.322	0.138	0.085	0.106	0.185	0.310	0.307	0.239	0.260	0.259	0.411	1.168	0.868
TCDFs	0.181	0.037	0.011	0.039	0.032	0.049	0.085	0.036	0.055	0.065	0.042	0.215	0.192
PeCDFs	0.076	0.021	0.007	0.015	0.026	0.040	0.103	0.038	0.048	0.046	0.031	0.156	0.151
HxCDFs	0.058	0.019	0.006	0.012	0.023	0.030	0.079	0.038	0.061	0.039	0.040	0.138	0.143
HpCDFs	0.030	0.015	0.009	0.010	0.025	0.017	0.035	0.031	0.059	0.028	0.029	0.115	0.096
OCDF	0.016	0.013	0.005	0.008	0.016	0.016	0.015	0.020	0.029	0.014	0.014	0.088	0.054
<b>Total</b>													
$\Sigma$ PCDDs	0.877	0.304	0.187	0.260	0.421	0.567	0.776	0.429	0.560	0.471	1.038	2.662	2.203
$\Sigma$ PCDFs	0.360	0.105	0.038	0.084	0.122	0.151	0.318	0.163	0.251	0.192	0.156	0.711	0.636
$\Sigma$ PCDD/Fs	1.237	0.409	0.225	0.344	0.543	0.718	1.094	0.592	0.811	0.664	1.194	3.373	2.838
$\Sigma$ TEQ (PCDD/Fs)	0.020	0.007	0.006	0.006	0.008	0.010	0.018	0.013	0.014	0.012	0.017	0.042	0.044

Table A36. Atmospheric concentrations of PCDD/Fs (pg m<sup>-3</sup>) at NAPS suburban sites in 2008

Station Name	Saint John											Montreal												
	1	2	3	4	5	6	7	8	9	10	11	1	2	3	4	5	6	7	8	9	10	11	12	13
Sampling Period	1/19/08	3/7/08	3/31/08	4/24/08	5/18/08	6/11/08	7/5/08	8/22/08	11/2/08	11/26/08	12/20/08	1/19/08	3/7/08	3/31/08	4/24/08	5/18/08	6/11/08	7/5/08	7/29/08	8/22/08	9/15/08	11/2/08	11/26/08	12/20/08
Sampling Volume (m <sup>3</sup> )	707	775	847	908	735	762	687	779	742	732	831	791	674	791	779	828	674	680	704	747	700	768	738	693
<b>PCDD/F Congeners</b>																								
2,3,7,8-TCDD	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	0.001	0.002	<0.002	<0.003	0.001	0.002	0.002	0.004	0.001	0.001	0.002	0.001	0.004	0.001	0.001	<0.002	0.002
1,2,3,7,8-PeCDD	0.005	<0.006	0.003	0.004	0.004	0.003	0.004	0.004	0.007	0.002	<0.002	0.006	0.012	0.009	0.031	0.007	0.010	0.012	0.011	0.028	0.011	0.010	0.008	0.008
1,2,3,4,7,8-HxCDD	0.002	0.003	<0.001	0.002	0.001	<0.001	<0.002	<0.001	0.006	<0.004	<0.003	0.005	0.008	0.007	0.031	0.005	0.004	0.006	0.005	0.024	0.006	0.007	0.005	0.008
1,2,3,6,7,8-HxCDD	0.003	0.004	0.003	0.002	0.002	0.002	0.002	0.002	0.007	<0.004	<0.003	0.008	0.015	0.010	0.055	0.009	0.008	0.015	0.012	0.050	0.012	0.013	0.009	0.011
1,2,3,7,8,9-HxCDD	0.003	0.003	<0.001	0.003	0.003	<0.001	0.002	<0.001	0.012	<0.004	0.007	0.009	0.017	0.011	0.063	0.007	0.008	0.010	0.009	0.046	0.009	0.015	0.010	0.006
1,2,3,4,6,7,8-HpCDD	0.060	0.043	0.016	0.025	0.015	0.009	0.016	0.018	0.042	0.015	0.043	0.100	0.184	0.127	0.660	0.113	0.049	0.125	0.064	0.534	0.071	0.130	0.111	0.105
OCDD	0.461	0.099	0.059	0.088	0.043	0.026	0.039	0.059	0.089	0.055	0.133	0.590	0.704	0.368	1.787	0.326	0.105	0.369	0.138	1.462	0.155	0.267	0.350	0.269
2,3,7,8-TCDF	0.006	0.007	0.010	0.006	0.005	0.003	0.006	0.004	0.031	0.006	0.007	0.013	0.056	0.023	0.040	0.009	0.014	0.018	0.015	0.045	0.014	0.052	0.022	0.033
1,2,3,7,8-PeCDF	0.001	0.002	0.002	0.001	0.001	0.001	0.003	0.001	0.007	<0.002	0.002	0.002	0.014	0.004	0.012	0.002	0.005	0.005	0.006	0.012	0.003	0.013	0.004	0.005
2,3,4,7,8-PeCDF	0.001	<0.001	0.002	0.002	0.001	0.001	0.003	<0.001	0.013	<0.002	0.003	0.003	0.018	0.008	0.017	0.002	0.006	0.006	0.005	0.017	0.005	0.020	0.005	0.010
1,2,3,4,7,8-HxCDF	0.004	0.006	0.003	0.009	0.003	0.002	0.006	0.003	0.035	0.005	0.006	0.007	0.034	0.016	0.036	0.007	0.014	0.014	0.012	0.040	0.014	0.052	0.008	0.012
1,2,3,6,7,8-HxCDF	0.002	0.002	0.001	0.004	0.001	0.001	0.003	0.001	0.014	0.003	0.002	0.003	0.013	0.007	0.021	0.005	0.009	0.012	0.026	0.012	0.022	0.004	0.004	0.004
2,3,4,6,7,8-HxCDF	0.003	0.002	0.001	0.003	0.001	<0.001	0.003	<0.001	0.011	0.003	0.002	0.004	0.014	0.006	0.017	0.004	0.008	0.006	0.006	0.022	0.005	0.028	0.005	0.003
1,2,3,7,8,9-HxCDF	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	0.001	<0.001	<0.003	<0.003	<0.003	<0.001	<0.002	<0.001	0.002	<0.001	<0.001	<0.001	<0.001	0.002	<0.002	0.004	<0.003	0.001
1,2,3,4,6,7,8-HpCDF	0.016	0.012	0.007	0.021	0.008	0.006	0.018	0.006	0.033	0.006	0.012	0.018	0.066	0.027	0.076	0.028	0.035	0.043	0.037	0.112	0.046	0.075	0.024	0.019
1,2,3,4,7,8,9-HpCDF	0.004	<0.001	<0.001	0.003	0.001	<0.001	0.003	<0.001	<0.006	<0.003	<0.002	0.002	0.010	0.003	0.007	0.002	0.003	0.004	<0.002	0.011	<0.004	0.014	<0.007	<0.002
OCDF	0.032	0.008	0.007	0.012	0.005	0.003	0.009	0.004	0.006	0.004	0.020	0.020	0.052	0.025	0.036	0.023	0.013	0.020	0.010	0.065	0.011	0.053	0.024	0.033
<b>PCDD/F Homologues</b>																								
TCDDs	0.011	0.009	0.011	0.007	0.006	0.002	0.005	0.005	0.034	0.005	0.008	0.015	0.052	0.040	0.151	0.027	0.063	0.073	0.083	0.106	0.043	0.050	0.041	0.058
PeCDDs	0.019	0.017	0.012	0.012	0.013	0.005	0.015	0.007	0.064	0.015	0.006	0.037	0.093	0.066	0.306	0.053	0.116	0.147	0.164	0.268	0.095	0.117	0.058	0.064
HxCDDs	0.037	0.046	0.018	0.028	0.025	0.009	0.022	0.016	0.100	0.018	0.039	0.096	0.213	0.151	0.803	0.121	0.133	0.204	0.190	0.651	0.163	0.220	0.156	0.111
HpCDDs	0.102	0.078	0.027	0.045	0.029	0.014	0.031	0.035	0.076	0.034	0.081	0.188	0.315	0.237	1.164	0.199	0.087	0.230	0.125	1.050	0.132	0.239	0.243	0.204
OCDD	0.461	0.099	0.059	0.088	0.043	0.026	0.039	0.059	0.089	0.055	0.133	0.590	0.704	0.368	1.787	0.326	0.105	0.369	0.138	1.462	0.155	0.267	0.350	0.269
TCDFs	0.032	0.051	0.062	0.038	0.037	0.023	0.069	0.036	0.193	0.050	0.045	0.085	0.360	0.172	0.366	0.118	0.283	0.349	0.388	0.593	0.220	0.367	0.191	0.218
PeCDFs	0.021	0.022	0.024	0.018	0.018	0.013	0.054	0.020	0.145	0.025	0.035	0.045	0.219	0.104	0.343	0.100	0.338	0.382	0.481	0.612	0.300	0.309	0.110	0.111
HxCDFs	0.022	0.024	0.014	0.038	0.015	0.010	0.047	0.020	0.139	0.034	0.043	0.034	0.161	0.071	0.270	0.074	0.146	0.195	0.216	0.446	0.211	0.285	0.101	0.068
HpCDFs	0.034	0.018	0.013	0.033	0.013	0.007	0.030	0.008	0.046	0.009	0.024	0.032	0.110	0.045	0.123	0.047	0.054	0.065	0.051	0.190	0.065	0.136	0.043	0.039
OCDF	0.032	0.008	0.007	0.012	0.005	0.003	0.009	0.004	0.006	0.004	0.020	0.020	0.052	0.025	0.036	0.023	0.013	0.020	0.010	0.065	0.011	0.053	0.024	0.033
<b>Total</b>																								
∑ PCDDs	0.631	0.248	0.128	0.179	0.117	0.056	0.111	0.122	0.362	0.126	0.268	0.926	1.377	0.862	4.211	0.727	0.504	1.023	0.700	3.537	0.588	0.892	0.847	0.705
∑ PCDFs	0.141	0.122	0.120	0.138	0.087	0.055	0.209	0.087	0.529	0.121	0.165	0.217	0.902	0.417	1.138	0.362	0.834	1.010	1.146	1.906	0.807	1.150	0.468	0.468
∑ PCDD/Fs	0.772	0.370	0.247	0.317	0.204	0.111	0.320	0.209	0.891	0.247	0.433	1.143	2.279	1.279	5.349	1.089	1.338	2.034	1.846	5.443	1.394	2.042	1.315	1.173
∑ TEQ (PCDD/Fs)	0.010	0.010	0.007	0.008	0.007	0.005	0.009	0.006	0.026	0.008	0.010	0.015	0.039	0.023	0.074	0.015	0.021	0.026	0.022	0.070	0.022	0.039	0.020	0.022

Table A36. Atmospheric concentrations of PCDD/Fs ( $\text{pg m}^{-3}$ ) at NAPS suburban sites in 2008 (continued)

Station Name	Edmonton												
Sampling Period	1	2	3	4	5	6	7	8	9	10	11	12	13
Sampling Date	2/12/08	3/7/08	3/31/08	4/24/08	5/18/08	6/11/08	7/5/08	7/29/08	8/22/08	9/15/08	10/9/08	11/26/08	12/20/08
Sampling Volume (m3)	870	842	943	821	641	740	628	617	674	619	864	793	728
<b>PCDD/F Congeners</b>													
2,3,7,8-TCDD	<0.001	0.002	0.001	0.001	0.002	<0.001	0.001	0.001	0.000	0.001	0.001	0.002	0.006
1,2,3,7,8-PeCDD	0.005	0.010	0.003	0.006	0.008	0.005	0.006	0.007	0.008	0.008	0.007	0.057	0.031
1,2,3,4,7,8-HxCDD	0.003	0.008	0.002	0.004	0.004	0.002	0.002	0.003	0.006	0.002	0.006	0.050	0.032
1,2,3,6,7,8-HxCDD	0.004	0.012	0.004	0.007	0.005	0.003	0.004	0.006	0.012	0.006	0.009	0.114	0.067
1,2,3,7,8,9-HxCDD	0.006	0.016	0.005	0.008	0.005	0.003	0.005	0.005	0.011	0.007	0.015	0.171	0.064
1,2,3,4,6,7,8-HpCDD	0.054	0.138	0.053	0.092	0.065	0.025	0.036	0.065	0.187	0.069	0.100	1.111	0.683
OCDD	0.356	0.388	0.226	0.335	0.285	0.112	0.150	0.273	0.605	0.337	0.316	2.420	1.315
2,3,7,8-TCDF	0.006	0.011	0.007	0.006	0.005	0.004	0.004	0.007	0.009	0.011	0.004	0.036	0.055
1,2,3,7,8-PeCDF	0.001	0.002	0.001	0.001	0.001	0.001	0.002	0.001	0.002	0.003	0.002	0.009	0.009
2,3,4,7,8-PeCDF	0.002	0.003	0.002	0.001	0.002	0.002	0.002	0.002	0.003	0.003	0.002	0.019	0.023
1,2,3,4,7,8-HxCDF	0.003	0.005	0.004	0.003	0.003	0.003	0.004	0.007	0.007	0.009	0.003	0.064	0.026
1,2,3,6,7,8-HxCDF	0.001	0.002	0.001	0.001	0.002	0.002	0.002	0.003	0.003	0.004	0.001	0.025	0.012
2,3,4,6,7,8-HxCDF	0.001	0.003	0.001	0.002	0.001	0.001	0.002	0.003	0.004	0.003	0.001	0.020	0.011
1,2,3,7,8,9-HxCDF	<0.001	<0.001	<0.001	<0.001	<0.001	<0.002	<0.001	<0.001	<0.001	<0.002	<0.002	<0.005	<0.003
1,2,3,4,6,7,8-HpCDF	0.012	0.013	0.010	0.015	0.018	0.010	0.014	0.019	0.022	0.027	0.012	0.442	0.043
1,2,3,4,7,8,9-HpCDF	<0.001	0.002	0.001	0.001	<0.002	<0.002	<0.001	0.002	0.003	<0.004	<0.003	0.032	0.007
OCDF	0.021	0.020	0.014	0.020	0.027	0.010	0.017	0.028	0.027	0.030	0.017	0.675	0.059
<b>PCDD/F Homologues</b>													
TCDDs	0.020	0.034	0.024	0.016	0.014	0.009	0.010	0.033	0.015	0.020	0.014	0.173	0.170
PeCDDs	0.027	0.068	0.028	0.037	0.036	0.018	0.021	0.050	0.049	0.041	0.047	0.645	0.340
HxCDDs	0.055	0.185	0.070	0.093	0.059	0.033	0.042	0.088	0.144	0.090	0.123	2.091	0.776
HpCDDs	0.093	0.279	0.100	0.178	0.118	0.043	0.062	0.133	0.330	0.141	0.198	2.644	1.368
OCDD	0.356	0.388	0.226	0.335	0.285	0.112	0.150	0.273	0.605	0.337	0.316	2.420	1.315
TCDFs	0.043	0.063	0.055	0.035	0.052	0.033	0.047	0.052	0.069	0.100	0.027	0.189	0.577
PeCDFs	0.021	0.037	0.025	0.017	0.048	0.024	0.045	0.041	0.047	0.083	0.023	0.146	0.317
HxCDFs	0.016	0.029	0.019	0.021	0.041	0.023	0.044	0.047	0.050	0.082	0.022	0.310	0.190
HpCDFs	0.020	0.031	0.021	0.028	0.034	0.016	0.026	0.040	0.046	0.048	0.026	0.632	0.106
OCDF	0.021	0.020	0.014	0.020	0.027	0.010	0.017	0.028	0.027	0.030	0.017	0.675	0.059
<b>Total</b>													
$\Sigma$ PCDDs	0.551	0.954	0.448	0.659	0.512	0.215	0.284	0.577	1.142	0.629	0.697	7.973	3.969
$\Sigma$ PCDFs	0.121	0.179	0.134	0.121	0.203	0.105	0.178	0.207	0.239	0.343	0.115	1.953	1.250
$\Sigma$ PCDD/Fs	0.672	1.133	0.582	0.780	0.715	0.320	0.462	0.784	1.381	0.972	0.812	9.926	5.219
$\Sigma$ TEQ (PCDD/Fs)	0.009	0.020	0.007	0.011	0.013	0.010	0.010	0.013	0.017	0.015	0.014	0.130	0.078

Table A37. Atmospheric concentrations of PCDD/Fs (pg m<sup>-3</sup>) at NAPS suburban sites in 2009

Station Name	Montreal										Edmonton													
Sampling Period	1	2	3	4	5	6	7	8	9	10	1	2	3	4	5	6	7	8	9	10	11	12	13	14
Sampling Date	2/6/09	3/2/09	3/26/09	4/19/09	5/13/09	6/6/09	7/24/09	8/17/09	10/4/09	11/21/09	1/13/09	2/6/09	3/2/09	3/26/09	4/19/09	5/13/09	6/6/09	6/30/09	8/17/09	9/10/09	10/4/09	10/28/09	11/21/09	12/15/09
Sampling Volume (m3)	631	791	744	709	728	605	656	630	611	588	680	685	758	932	858	884	879	620	767	739	854	746	733	779
<b>PCDD/F Congeners</b>																								
2,3,7,8-TCDD	0.012	<0.001	<0.001	<0.001	0.001	0.002	0.001	0.001	0.001	<0.001	0.001	0.002	0.001	0.001	0.001	<0.001	<0.001	0.001	0.001	0.001	0.000	0.001	0.001	0.002
1,2,3,7,8-PeCDD	0.047	0.001	0.003	0.001	0.010	0.006	0.004	0.009	0.005	0.002	0.002	0.039	0.002	0.004	0.004	0.001	0.001	0.002	0.007	0.002	0.001	0.001	0.005	0.012
1,2,3,4,7,8-HxCDD	0.065	0.002	0.005	0.002	0.012	0.007	0.002	0.006	0.006	0.002	<0.005	0.045	0.004	0.005	0.004	0.002	0.001	<0.002	0.007	0.002	0.001	0.001	0.006	0.012
1,2,3,6,7,8-HxCDD	0.085	0.003	0.007	0.003	0.018	0.012	0.004	0.012	0.008	0.003	0.005	0.068	0.005	0.008	0.009	0.003	0.002	0.003	0.010	0.005	0.003	0.003	0.014	0.022
1,2,3,7,8,9-HxCDD	0.184	0.003	0.007	0.003	0.032	0.020	0.004	0.013	0.009	0.004	0.007	0.113	0.004	0.009	0.009	0.002	0.003	0.002	0.012	0.004	0.002	0.003	0.010	0.022
1,2,3,4,6,7,8-HpCDD	1.011	0.048	0.069	0.047	0.226	0.187	0.024	0.113	0.110	0.035	0.061	0.758	0.054	0.104	0.119	0.036	0.036	0.024	0.132	0.049	0.034	0.019	0.183	0.269
OCDD	1.821	0.264	0.196	0.204	0.731	0.460	0.067	0.285	0.303	0.110	0.227	1.351	0.159	0.284	0.465	0.189	0.140	0.142	0.367	0.173	0.138	0.087	0.597	0.603
2,3,7,8-TCDF	0.217	0.009	0.025	0.008	0.021	0.012	0.012	0.016	0.024	0.011	0.005	0.019	0.005	0.004	0.011	0.003	0.003	0.005	0.008	0.024	0.003	0.012	0.011	0.019
1,2,3,7,8-PeCDF	0.257	0.003	0.006	0.002	0.005	0.005	0.003	0.008	0.006	0.002	<0.004	0.004	0.001	0.001	0.002	0.000	0.001	0.001	0.002	0.003	0.001	0.002	0.002	0.003
2,3,4,7,8-PeCDF	0.138	0.004	0.009	0.003	0.006	0.004	0.003	0.006	0.010	0.004	0.001	0.008	0.002	0.001	0.003	0.001	0.001	0.002	0.003	0.007	0.001	0.004	0.003	0.006
1,2,3,4,7,8-HxCDF	0.218	0.006	0.024	0.007	0.023	0.011	0.010	0.017	0.020	0.005	0.002	0.018	0.004	0.003	0.005	0.001	0.002	0.002	0.006	0.029	0.002	0.006	0.007	0.012
1,2,3,6,7,8-HxCDF	0.058	0.003	0.008	0.001	0.009	0.006	0.004	0.009	0.009	0.003	0.002	0.008	0.002	0.001	0.002	0.001	0.001	0.002	0.004	0.010	0.001	0.003	0.003	0.005
2,3,4,6,7,8-HxCDF	0.064	0.001	0.007	0.002	0.003	0.005	0.004	0.004	0.010	0.003	0.002	0.008	0.001	0.001	0.002	0.001	0.001	<0.002	0.003	0.015	0.001	0.003	0.003	0.006
1,2,3,7,8,9-HxCDF	0.061	<0.001	<0.001	<0.001	<0.002	<0.002	<0.002	<0.001	<0.002	<0.001	<0.004	<0.003	<0.003	<0.001	<0.001	<0.001	<0.001	<0.002	<0.001	0.002	<0.001	<0.001	<0.001	0.001
1,2,3,4,6,7,8-HpCDF	0.150	0.011	0.037	0.011	0.045	0.023	0.014	0.031	0.030	0.012	0.007	0.038	0.004	0.006	0.016	0.006	0.012	0.007	0.023	0.058	0.005	0.009	0.024	0.028
1,2,3,4,7,8,9-HpCDF	0.108	0.001	0.005	0.002	0.007	0.001	0.001	0.002	0.006	0.002	<0.004	0.003	<0.002	0.001	0.001	0.001	0.001	<0.002	0.002	0.011	<0.001	<0.002	0.002	0.002
OCDF	0.085	0.020	0.040	0.027	0.051	0.024	0.006	0.019	0.027	0.012	0.011	0.032	0.009	0.010	0.033	0.016	0.016	0.017	0.030	0.063	0.012	0.013	0.091	0.029
<b>PCDD/F Homologues</b>																								
TCDDs	0.460	0.008	0.037	0.013	0.052	0.056	0.018	0.069	0.036	0.018	0.011	0.218	0.020	0.019	0.028	0.010	0.008	0.009	0.022	0.020	0.006	0.013	0.032	0.121
PeCDDs	0.701	0.011	0.052	0.018	0.117	0.105	0.029	0.151	0.064	0.023	0.025	0.601	0.035	0.039	0.043	0.009	0.009	0.013	0.057	0.039	0.011	0.016	0.065	0.159
HxCDDs	1.444	0.035	0.093	0.040	0.324	0.203	0.053	0.189	0.102	0.036	0.074	1.326	0.077	0.108	0.110	0.025	0.023	0.026	0.137	0.068	0.029	0.028	0.151	0.277
HpCDDs	2.331	0.088	0.150	0.091	0.561	0.389	0.050	0.222	0.201	0.068	0.145	1.841	0.121	0.206	0.250	0.071	0.064	0.062	0.307	0.098	0.074	0.036	0.338	0.513
OCDD	1.821	0.264	0.196	0.204	0.731	0.460	0.067	0.285	0.303	0.110	0.227	1.351	0.159	0.284	0.465	0.189	0.140	0.142	0.367	0.173	0.138	0.087	0.597	0.603
TCDFs	2.041	0.061	0.221	0.077	0.198	0.227	0.128	0.443	0.261	0.121	0.030	0.131	0.044	0.033	0.103	0.023	0.020	0.041	0.070	0.096	0.015	0.089	0.070	0.122
PeCDFs	2.144	0.053	0.144	0.050	0.189	0.325	0.158	0.796	0.232	0.073	0.020	0.105	0.024	0.018	0.036	0.011	0.009	0.035	0.065	0.107	0.012	0.045	0.045	0.080
HxCDFs	1.944	0.041	0.124	0.054	0.175	0.115	0.113	0.369	0.162	0.040	0.013	0.113	0.019	0.018	0.032	0.014	0.016	0.028	0.079	0.135	0.013	0.029	0.047	0.064
HpCDFs	0.800	0.022	0.063	0.034	0.087	0.040	0.023	0.051	0.059	0.020	0.013	0.072	0.009	0.015	0.036	0.017	0.023	0.015	0.046	0.096	0.010	0.015	0.072	0.045
OCDF	0.085	0.020	0.040	0.027	0.051	0.024	0.006	0.019	0.027	0.012	0.011	0.032	0.009	0.010	0.033	0.016	0.016	0.017	0.030	0.063	0.012	0.013	0.091	0.029
<b>Total</b>																								
∑ PCDDs	6.757	0.405	0.529	0.365	1.785	1.213	0.216	0.916	0.706	0.254	0.482	5.338	0.413	0.655	0.896	0.305	0.243	0.251	0.890	0.397	0.258	0.180	1.183	1.673
∑ PCDFs	7.014	0.197	0.593	0.242	0.699	0.730	0.428	1.679	0.742	0.265	0.088	0.452	0.106	0.095	0.239	0.080	0.085	0.137	0.290	0.497	0.063	0.190	0.323	0.340
∑ PCDD/Fs	13.771	0.602	1.122	0.607	2.483	1.943	0.645	2.595	1.448	0.520	0.569	5.790	0.518	0.750	1.135	0.385	0.328	0.388	1.180	0.894	0.321	0.370	1.506	2.013
∑ TEQ (PCDD/Fs)	0.217	0.006	0.017	0.006	0.028	0.019	0.010	0.022	0.019	0.007	0.007	0.079	0.007	0.009	0.011	0.004	0.003	0.006	0.015	0.015	0.004	0.007	0.016	0.029

Table A38. Atmospheric concentrations of PCDD/Fs ( $\mu\text{g m}^{-3}$ ) at NAPS urban sites in 1989

Station Name	Windsor (University Ave.)										
Sampling Period	1	2	3	4	5	6	7	8	9	10	11
Sampling Date	4/22/89	5/16/89	6/9/89	7/3/89	7/27/89	8/20/89	9/13/89	10/7/89	10/31/89	11/24/89	12/18/89
Sampling Volume (m3)	2168	2126	2257	2141	2087	2137	2135	2300	2120	2016	2309
<b>PCDD/F Congeners</b>											
2,3,7,8-TCDD	0.005	0.021	0.003	<0.001	0.006	0.033	0.012	0.021	<0.001	<0.001	<0.001
1,2,3,7,8-PeCDD	<0.001	0.096	0.006	<0.001	0.027	0.013	0.029	0.045	0.039	<0.002	<0.001
1,2,3,4,7,8-HxCDD	0.011	0.144	0.008	0.016	0.031	0.013	0.028	0.113	0.061	<0.002	0.055
1,2,3,6,7,8-HxCDD	0.025	0.228	0.013	0.021	0.040	0.025	0.036	0.113	0.095	0.020	0.078
1,2,3,7,8,9-HxCDD	0.041	0.422	0.016	0.031	<0.001	0.034	0.067	0.189	0.178	<0.002	0.166
1,2,3,4,6,7,8-HpCDD	0.254	1.434	0.100	0.229	0.320	0.213	0.244	1.073	1.013	0.504	0.631
OCDD	0.628	1.904	0.308	0.650	0.988	0.604	0.547	2.938	2.116	4.721	1.227
2,3,7,8-TCDF	0.286	1.121	0.091	0.183	0.252	0.210	0.275	0.239	0.477	0.255	0.408
1,2,3,7,8-PeCDF	0.040	0.201	0.016	0.057	0.055	0.047	0.070	0.063	0.078	0.035	0.084
2,3,4,7,8-PeCDF	0.082	0.362	0.023	0.065	0.095	0.066	0.091	0.092	0.146	0.039	0.157
1,2,3,4,7,8-HxCDF	0.084	0.782	0.047	0.110	0.240	0.120	0.206	0.380	0.259	0.041	0.333
1,2,3,6,7,8-HxCDF	0.035	0.295	0.019	0.030	0.093	0.044	0.101	0.157	0.126	<0.002	0.125
2,3,4,6,7,8-HxCDF	0.050	0.493	0.022	0.068	0.126	0.069	0.090	0.098	0.141	0.019	0.179
1,2,3,7,8,9-HxCDF	<0.001	0.019	<0.001	<0.001	<0.001	<0.001	<0.001	<0.002	<0.003	<0.002	0.009
1,2,3,4,6,7,8-HpCDF	0.085	1.336	0.065	0.197	0.384	0.119	0.286	0.443	0.311	0.188	0.485
1,2,3,4,7,8,9-HpCDF	0.014	0.125	0.009	0.016	0.032	0.029	0.540	<0.002	0.049	<0.002	0.074
OCDF	0.074	0.711	0.063	0.092	0.192	0.163	0.140	0.096	0.201	0.528	0.356
<b>PCDD/F Homologues</b>											
TCDDs	0.005	1.471	0.064	0.040	0.196	0.179	0.433	0.242	0.781	<0.001	1.190
PeCDDs	0.103	2.357	0.086	0.057	0.383	0.247	0.412	0.445	1.322	<0.002	1.255
HxCDDs	0.239	3.522	0.212	0.372	0.557	0.414	0.501	0.997	1.971	0.341	1.789
HpCDDs	0.538	2.898	0.209	0.508	0.633	0.410	0.540	2.393	2.248	1.222	1.404
OCDD	0.628	1.904	0.308	0.650	0.988	0.604	0.547	2.938	2.116	4.721	1.227
TCDFs	1.402	3.693	0.299	0.456	0.886	0.758	1.734	0.718	1.738	0.610	1.829
PeCDFs	0.938	3.393	0.175	0.286	0.983	0.648	1.393	0.927	1.595	0.115	1.546
HxCDFs	0.556	3.328	0.201	0.369	1.174	0.612	0.984	1.435	1.253	0.181	1.467
HpCDFs	0.183	2.218	0.119	0.323	0.662	0.270	0.503	0.845	0.616	0.207	0.896
OCDF	0.074	0.711	0.063	0.092	0.192	0.163	0.140	0.096	0.201	0.528	0.356
<b>Total</b>											
∑ PCDDs	1.513	12.152	0.880	1.627	2.757	1.855	2.432	7.015	8.438	6.284	6.866
∑ PCDFs	3.154	13.343	0.858	1.526	3.896	2.450	4.753	4.021	5.404	1.640	6.095
∑ PCDD/Fs	4.667	25.495	1.738	3.153	6.653	4.306	7.185	11.036	13.842	7.924	12.960
∑ TEQ (PCDD/Fs)	0.089	0.612	0.039	0.074	0.150	0.123	0.161	0.241	0.235	0.060	0.199

Table A39. Atmospheric concentrations of PCDD/Fs ( $\mu\text{g m}^{-3}$ ) at NAPS urban sites in 1990

Station Name	Windsor (University Ave.)															Windsor (College)						
Sampling Period	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	1	2	3	4	5	6	7
Sampling Date	1/11/90	2/4/90	2/28/90	3/24/90	4/17/90	5/11/90	6/4/90	6/28/90	7/22/90	8/16/90	9/8/90	10/2/90	10/26/90	11/20/90	12/13/90	6/28/90	8/16/90	9/8/90	10/2/90	10/26/90	11/19/90	12/14/90
Sampling Volume (m3)	2193	2323	2305	1819	2107	2171	2200	2198	759	2034	2070	2011	2171	1963	2088	1483	1367	1558	1492	1485	1513	1601
<b>PCDD/F Congeners</b>																						
2,3,7,8-TCDD	0.005	<0.001	0.061	0.012	0.007	0.004	0.004	0.032	<0.005	0.006	<0.002	<0.002	<0.002	0.010	<0.002	<0.003	<0.003	<0.003	<0.003	<0.003	<0.004	<0.002
1,2,3,7,8-PeCDD	0.011	<0.002	<0.001	0.031	0.017	0.007	0.015	0.194	<0.004	<0.003	<0.002	<0.002	0.023	0.197	0.024	0.011	<0.004	<0.003	<0.003	<0.003	0.030	0.052
1,2,3,4,7,8-HxCDD	0.016	<0.002	0.053	0.041	0.021	0.009	0.011	0.098	<0.005	0.013	0.008	0.010	0.025	0.293	0.028	0.009	0.014	0.013	0.011	<0.004	0.048	0.053
1,2,3,6,7,8-HxCDD	0.031	<0.002	0.080	0.059	0.034	0.014	0.019	0.119	0.020	0.029	0.018	0.021	0.053	0.458	0.069	0.021	0.030	0.033	0.023	0.029	0.116	0.141
1,2,3,7,8,9-HxCDD	0.050	<0.002	0.155	0.110	0.059	0.023	0.025	0.119	0.021	0.030	0.022	0.030	0.078	0.958	0.097	0.021	0.034	0.038	0.030	0.036	0.167	0.201
1,2,3,4,6,7,8-HpCDD	0.411	0.303	0.492	0.443	0.229	0.156	0.116	0.255	0.264	0.258	0.186	0.188	0.472	4.436	0.476	0.173	0.263	0.386	0.190	0.273	1.294	0.714
OCDD	1.261	0.753	0.936	0.930	0.520	0.445	0.449	0.587	0.751	0.951	0.495	0.630	1.002	5.443	1.211	0.506	0.876	1.196	0.580	0.822	2.986	0.893
2,3,7,8-TCDF	0.088	0.090	0.334	0.322	0.240	0.027	0.113	0.176	0.033	0.319	0.067	0.163	0.081	0.209	0.116	0.144	0.184	0.081	0.203	0.051	0.225	0.207
1,2,3,7,8-PeCDF	0.017	<0.002	0.200	0.079	0.066	0.012	0.033	0.137	0.017	0.051	0.013	0.029	0.040	0.074	0.036	0.023	0.036	0.016	0.043	0.017	0.094	0.084
2,3,4,7,8-PeCDF	0.027	0.037	<0.001	0.136	0.070	0.016	0.047	0.157	0.029	0.132	0.024	0.060	0.055	0.176	0.081	0.047	0.085	0.031	0.066	0.030	0.176	0.193
1,2,3,4,7,8-HxCDF	0.062	0.112	0.341	0.268	0.166	0.031	0.087	0.205	0.028	0.144	0.018	0.119	0.096	0.313	0.205	0.077	0.066	<0.003	0.115	0.075	0.313	0.485
1,2,3,6,7,8-HxCDF	0.025	0.037	0.151	0.146	0.061	0.013	0.050	0.174	0.021	0.066	0.019	0.054	0.051	0.152	0.102	0.038	0.048	0.028	0.052	0.029	0.216	0.241
1,2,3,4,6,7,8-HxCDF	0.032	0.039	0.183	0.133	0.067	0.016	0.032	0.156	0.026	0.068	0.015	0.057	0.038	0.144	0.119	0.033	0.047	<0.003	0.054	0.030	0.134	0.302
1,2,3,7,8,9-HxCDF	<0.001	<0.002	<0.001	<0.001	<0.001	0.002	<0.003	0.089	<0.011	<0.003	<0.003	<0.002	<0.003	<0.003	<0.003	<0.005	<0.004	<0.003	<0.003	<0.004	<0.005	<0.003
1,2,3,4,6,7,8-HpCDF	0.100	0.169	0.597	0.419	0.230	0.052	0.130	0.286	0.088	0.214	0.073	0.218	0.190	0.564	0.443	0.175	0.202	0.117	0.237	0.163	0.485	0.909
1,2,3,4,7,8,9-HpCDF	0.013	<0.002	0.055	0.049	0.051	0.007	0.010	0.114	0.011	0.020	0.009	0.017	0.029	0.051	0.038	0.013	0.020	0.010	0.019	0.018	0.032	0.052
OCDF	0.107	0.098	0.256	0.188	0.252	0.082	0.042	0.224	0.074	0.097	0.044	0.103	0.144	0.360	0.323	0.097	0.123	0.060	0.129	0.130	0.218	0.176
<b>PCDD/F Homologues</b>																						
TCDDs	0.116	0.053	0.338	0.587	0.253	0.037	0.125	0.170	0.088	0.363	0.069	0.087	0.114	0.748	0.141	0.188	0.187	0.096	0.102	0.064	0.238	0.317
PeCDDs	0.164	0.132	2.108	1.146	0.550	0.087	0.130	0.258	0.080	0.284	0.076	0.167	0.116	2.860	0.397	0.114	0.203	0.115	0.120	0.048	0.433	0.825
HxCDDs	0.398	0.278	1.092	1.382	0.680	1.910	0.186	0.447	0.231	0.416	0.224	0.277	0.568	8.017	0.729	0.286	0.335	0.343	0.272	0.294	1.409	1.566
HpCDDs	0.810	0.671	2.244	1.064	0.513	0.343	0.246	0.435	0.506	0.611	0.445	0.442	1.000	11.304	0.935	0.418	0.576	0.845	0.435	0.583	2.672	1.386
OCDD	1.261	0.753	0.936	0.930	0.520	0.445	0.449	0.587	0.751	0.951	0.495	0.630	1.002	5.443	1.211	0.506	0.876	1.196	0.580	0.822	2.986	0.893
TCDFs	0.405	0.199	1.544	1.634	0.926	0.259	0.707	0.857	0.355	1.816	0.331	0.960	0.533	1.128	0.667	0.881	0.757	0.458	1.124	0.288	1.085	0.877
PeCDFs	0.281	0.331	4.078	1.424	0.746	0.164	0.568	0.835	0.294	1.176	0.328	0.711	0.651	1.577	0.850	0.606	0.842	0.425	0.752	0.326	1.772	1.763
HxCDFs	0.269	0.321	1.502	1.288	0.601	0.145	0.392	0.851	0.223	0.641	0.198	0.523	0.430	1.429	0.911	0.434	0.589	0.247	0.542	0.313	1.301	2.307
HpCDFs	0.193	0.276	1.022	0.751	0.440	0.096	0.184	0.473	0.142	0.353	0.132	0.330	0.331	0.940	0.700	0.277	0.376	0.209	0.384	0.265	0.708	1.287
OCDF	0.107	0.098	0.256	0.188	0.252	0.082	0.042	0.224	0.074	0.097	0.044	0.103	0.144	0.360	0.323	0.097	0.123	0.060	0.129	0.130	0.218	0.176
<b>Total</b>																						
∑ PCDDs	2.750	1.887	6.718	5.110	2.516	2.822	1.136	1.898	1.657	2.625	1.309	1.602	2.800	28.372	3.413	1.512	2.177	2.593	1.509	1.812	7.739	4.987
∑ PCDFs	1.254	1.224	8.401	5.285	2.966	0.747	1.893	3.240	1.088	4.084	1.033	2.628	2.090	5.434	3.451	2.295	2.687	1.400	2.933	1.322	5.084	6.410
∑ PCDD/Fs	4.004	3.111	15.119	10.394	5.482	3.569	3.029	5.138	2.745	6.709	2.342	4.230	4.890	33.806	6.864	3.808	4.863	3.993	4.442	3.134	12.823	11.397
∑ TEQ (PCDD/Fs)	0.060	0.048	0.210	0.203	0.117	0.033	0.071	0.398	0.039	0.123	0.031	0.073	0.093	0.567	0.136	0.068	0.081	0.040	0.080	0.046	0.231	0.296

Table A40. Atmospheric concentrations of PCDD/Fs ( $\mu\text{g m}^{-3}$ ) at NAPS urban sites in 1991

Station Name	Windsor (University Ave.)													Toronto (Junction)
Sampling Period	1	2	3	4	5	6	7	8	9	10	11	12	13	1
Sampling Date	1/6/91	1/30/91	3/19/91	4/12/91	5/6/91	5/30/91	8/10/91	9/3/91	9/27/91	10/21/91	11/14/91	11/26/91	12/8/91	9/23/91
Sampling Volume (m3)	1048	826	592	835	838	1068	979	846	932	949	939	1021	871	651
<b>PCDD/F Congeners</b>														
2,3,7,8-TCDD	0.022	0.029	<0.007	<0.006	<0.006	<0.006	0.017	<0.014	<0.019	<0.011	0.027	<0.003	0.008	<0.021
1,2,3,7,8-PeCDD	0.220	0.052	0.017	<0.006	<0.008	0.007	0.048	<0.002	<0.015	<0.019	0.003	<0.002	0.015	<0.031
1,2,3,4,7,8-HxCDD	0.142	0.050	0.010	0.005	0.033	<0.007	<0.001	<0.002	0.016	<0.019	0.021	0.017	0.013	<0.015
1,2,3,6,7,8-HxCDD	0.308	0.134	0.022	0.014	0.012	0.008	0.040	0.024	0.029	<0.019	0.040	0.048	0.023	<0.015
1,2,3,7,8,9-HxCDD	0.456	0.177	0.034	0.014	0.014	<0.007	0.043	<0.002	0.018	<0.019	0.034	0.037	0.022	<0.015
1,2,3,4,6,7,8-HpCDD	1.672	0.649	0.248	0.105	0.131	0.048	0.314	0.282	0.294	0.028	0.441	0.677	0.331	0.220
OCDD	2.551	1.035	0.971	0.358	0.341	0.160	0.703	0.862	1.044	0.103	1.171	1.452	0.962	0.844
2,3,7,8-TCDF	0.760	0.171	0.095	0.069	0.091	0.097	0.090	4.108	0.089	0.021	0.076	0.024	0.050	0.031
1,2,3,7,8-PeCDF	0.618	0.128	0.030	0.012	<0.006	0.026	0.095	0.754	0.027	0.020	0.043	0.009	0.023	<0.025
2,3,4,7,8-PeCDF	0.722	0.211	0.030	0.013	0.020	0.039	0.113	2.621	0.050	<0.009	0.047	0.023	0.029	<0.025
1,2,3,4,7,8-HxCDF	1.487	0.490	<0.008	0.023	<0.010	<0.007	0.089	0.645	0.048	0.013	0.035	0.017	0.025	0.032
1,2,3,6,7,8-HxCDF	0.917	0.259	<0.008	0.011	0.018	0.020	0.090	0.402	0.035	<0.013	0.036	<0.006	0.022	<0.025
2,3,4,6,7,8-HxCDF	0.744	0.241	0.025	0.008	<0.010	0.016	0.077	0.573	0.056	<0.013	0.042	0.027	0.025	<0.025
1,2,3,7,8,9-HxCDF	<0.005	<0.007	<0.008	<0.005	<0.010	<0.007	<0.006	0.108	0.016	<0.013	<0.006	<0.006	0.010	<0.025
1,2,3,4,6,7,8-HpCDF	2.373	0.866	0.790	0.042	0.049	0.040	0.218	0.369	0.198	0.018	0.127	0.085	0.110	0.098
1,2,3,4,7,8,9-HpCDF	0.221	0.059	<0.008	0.005	0.006	<0.007	0.031	0.091	0.044	<0.008	0.020	0.013	0.018	0.020
OCDF	0.878	0.267	0.900	0.019	0.012	0.009	0.115	0.162	0.239	0.017	0.115	0.072	0.114	0.084
<b>PCDD/F Homologues</b>														
TCDDs	0.977	0.300	0.083	0.083	0.099	0.228	0.420	0.099	0.139	<0.011	0.104	0.024	0.129	<0.021
PeCDDs	2.437	0.813	0.034	0.059	0.140	0.164	0.337	<0.002	<0.015	<0.019	0.120	0.049	0.101	<0.031
HxCDDs	3.441	1.508	0.228	0.109	0.189	0.075	0.417	0.184	0.223	<0.019	0.380	0.545	0.263	0.049
HpCDDs	3.412	1.344	0.537	0.222	0.298	0.110	0.629	0.597	0.591	<0.017	0.971	1.357	0.687	0.530
OCDD	2.551	1.035	0.971	0.358	0.341	0.160	0.703	0.862	1.044	0.103	1.171	1.452	0.962	0.844
TCDFs	4.539	0.824	0.350	0.241	0.454	0.495	2.017	18.266	0.660	0.249	0.664	0.203	0.715	0.244
PeCDFs	8.350	1.834	0.272	0.170	0.156	0.450	1.348	12.193	0.454	0.070	0.323	0.062	0.324	<0.025
HxCDFs	6.839	2.098	0.135	0.095	0.125	0.126	0.673	3.816	0.330	0.057	0.307	0.095	0.228	0.143
HpCDFs	3.697	1.240	1.086	0.061	0.074	0.060	0.382	0.689	0.387	0.018	0.228	0.166	0.208	0.132
OCDF	0.878	0.267	0.900	0.019	0.012	0.009	0.115	0.162	0.239	0.017	0.115	0.072	0.114	0.084
<b>Total</b>														
∑ PCDDs	12.817	5.000	1.853	0.830	1.067	0.737	2.506	1.743	1.997	0.157	2.747	3.428	2.142	1.423
∑ PCDFs	24.303	6.265	2.743	0.586	0.821	1.141	4.535	35.125	2.070	0.410	1.637	0.597	1.588	0.603
∑ PCDD/Fs	37.121	11.265	4.596	1.416	1.888	1.878	7.041	36.868	4.068	0.567	4.384	4.025	3.730	2.027
∑ TEQ (PCDD/Fs)	1.003	0.317	0.066	0.033	0.042	0.043	0.152	1.419	0.087	0.046	0.080	0.038	0.056	0.082

Table A40. Atmospheric concentrations of PCDD/Fs ( $\mu\text{g m}^{-3}$ ) at NAPS urban sites in 1991 (continued)

Station Name	Windsor (College)													Hamilton (Elgin)	Jonquiere	
Sampling Period	1	2	3	4	5	6	7	8	9	10	11	12	13	1	1	
Sampling Date	1/6/91	1/30/91	4/12/91	5/6/91	5/30/91	6/23/91	7/29/91	8/10/91	9/27/91	11/2/91	11/14/91	12/8/91	12/20/91	4/30/91	12/3/91	
Sampling Volume (m3)	774	711	593	629	703	688	663	711	714	725	711	623	665	790	773	
<b>PCDD/F Congeners</b>																
2,3,7,8-TCDD	<0.006	<0.007	<0.012	<0.013	<0.009	<0.009	<0.009	<0.006	0.022	<0.014	<0.015	<0.003	0.029	<0.025	0.028	
1,2,3,7,8-PeCDD	0.066	<0.010	<0.017	<0.011	0.021	<0.012	<0.012	<0.006	<0.003	<0.014	<0.017	<0.005	<0.018	0.022	<0.005	
1,2,3,4,7,8-HxCDD	0.048	0.121	<0.017	<0.016	<0.014	0.015	<0.012	0.010	<0.007	<0.017	<0.020	<0.005	0.153	<0.011	0.028	
1,2,3,6,7,8-HxCDD	0.112	0.343	0.024	0.021	0.013	0.025	0.020	0.022	0.034	<0.017	<0.020	0.027	0.302	0.041	0.054	
1,2,3,7,8,9-HxCDD	0.158	0.487	0.017	<0.016	<0.014	0.026	0.045	0.031	<0.007	<0.017	<0.020	0.024	0.171	0.015	0.045	
1,2,3,4,6,7,8-HpCDD	0.867	1.603	0.262	0.137	0.105	0.139	0.223	0.190	0.227	0.302	0.684	0.424	2.165	0.596	0.797	
OCDD	1.926	1.958	1.066	0.262	0.320	0.350	0.501	0.461	0.852	0.987	1.537	1.273	3.757	70.970	8.345	
2,3,7,8-TCDF	0.207	0.388	0.057	0.060	0.068	0.036	0.106	0.070	0.078	0.037	0.048	0.035	0.248	0.147	0.058	
1,2,3,7,8-PeCDF	0.103	0.270	<0.010	<0.013	<0.009	<0.010	<0.012	0.017	0.043	0.026	0.075	0.018	0.356	0.049	0.047	
2,3,4,7,8-PeCDF	0.187	0.510	0.020	<0.013	<0.009	<0.010	<0.012	0.027	0.057	0.061	0.111	<0.011	0.630	0.067	0.036	
1,2,3,4,7,8-HxCDF	0.398	1.309	0.039	0.032	0.027	0.042	0.066	0.037	0.052	<0.019	0.228	0.022	1.021	0.051	0.032	
1,2,3,6,7,8-HxCDF	0.216	0.721	0.020	0.019	0.021	0.019	0.060	0.025	0.056	0.040	0.131	0.016	0.776	0.052	0.031	
2,3,4,6,7,8-HxCDF	0.186	0.735	0.020	<0.016	<0.011	0.025	0.057	0.022	<0.007	0.033	0.137	0.026	0.928	0.061	0.026	
1,2,3,7,8,9-HxCDF	<0.009	<0.010	<0.017	<0.016	<0.011	<0.010	<0.012	<0.006	<0.007	<0.019	0.045	<0.010	0.436	<0.013	0.027	
1,2,3,4,6,7,8-HpCDF	0.652	2.566	0.184	0.041	0.085	0.097	0.207	0.060	0.135	0.091	0.654	0.128	3.227	0.335	0.079	
1,2,3,4,7,8,9-HpCDF	0.040	0.200	<0.017	<0.016	<0.011	<0.012	0.020	0.010	0.025	<0.019	0.146	0.026	0.741	0.044	0.040	
OCDF	0.159	0.933	0.332	<0.032	0.031	0.038	0.101	0.034	0.165	0.145	0.664	0.151	2.619	2.182	0.268	
<b>PCDD/F Homologues</b>																
TCDDs	0.209	0.621	0.017	0.046	0.073	0.299	0.204	0.083	0.074	<0.014	0.107	0.013	0.756	0.423	0.049	
PeCDDs	0.573	1.723	0.032	<0.011	0.055	0.190	<0.012	0.121	0.073	<0.014	0.042	<0.005	1.281	0.156	<0.005	
HxCDDs	1.264	3.529	0.128	0.048	0.117	0.378	0.416	0.219	0.097	<0.017	0.456	0.246	3.318	0.390	0.357	
HpCDDs	1.809	3.177	0.461	0.235	0.236	0.321	0.462	0.425	0.495	0.533	1.426	0.846	4.300	1.168	1.431	
OCDD	1.926	1.958	1.066	0.262	0.320	0.350	0.501	0.461	0.852	0.987	1.537	1.273	3.757	70.970	8.345	
TCDFs	1.104	2.107	0.169	0.191	0.283	0.180	0.620	0.491	0.436	0.375	0.858	0.440	4.020	1.462	0.176	
PeCDFs	2.012	4.894	0.162	0.035	0.285	0.099	0.422	0.344	0.188	0.273	0.460	0.077	5.713	0.686	0.092	
HxCDFs	1.735	5.966	0.143	0.081	0.239	0.209	0.471	0.225	0.304	0.192	1.240	0.207	7.449	0.556	0.131	
HpCDFs	0.913	3.856	0.262	0.059	0.134	0.125	0.335	0.104	0.273	0.152	1.199	0.238	6.089	0.957	0.252	
OCDF	0.159	0.933	0.332	<0.032	0.031	0.038	0.101	0.034	0.165	0.145	0.664	0.151	2.619	2.182	0.268	
<b>Total</b>																
$\Sigma$ PCDDs	5.782	11.006	1.704	0.592	0.801	1.539	1.583	1.309	1.590	1.521	3.567	2.378	13.413	73.106	10.182	
$\Sigma$ PCDFs	5.922	17.757	1.068	0.366	0.972	0.651	1.949	1.198	1.366	1.136	4.422	1.113	25.891	5.843	0.919	
$\Sigma$ PCDD/Fs	11.704	28.763	2.773	0.958	1.773	2.189	3.532	2.506	2.956	2.656	7.989	3.490	39.304	78.949	11.101	
$\Sigma$ TEQ (PCDD/Fs)	0.281	0.634	0.061	0.050	0.053	0.046	0.068	0.045	0.073	0.071	0.148	0.035	0.713	0.139	0.088	



Table A41. Atmospheric concentrations of PCDD/Fs (pg m<sup>-3</sup>) at NAPS urban sites in 1992

Station Name	Windsor (University Ave.)															Toronto (Junction T) Montreal (1125)	
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	1	1
Sampling Period	1/1/92	1/25/92	2/18/92	3/13/92	4/12/92	5/6/92	5/30/92	6/23/92	7/17/92	8/10/92	9/3/92	9/27/92	10/21/92	11/14/92	12/8/92	6/11/92	7/17/92
Sampling Date	1/1/92	1/25/92	2/18/92	3/13/92	4/12/92	5/6/92	5/30/92	6/23/92	7/17/92	8/10/92	9/3/92	9/27/92	10/21/92	11/14/92	12/8/92	6/11/92	7/17/92
Sampling Volume (m3)	891	809	850	1108	1105	1082	1033	1073	1014	1029	1073	988	1027	1029	1142	726	729
<b>PCDD/F Congeners</b>																	
2,3,7,8-TCDD	<0.022	0.015	<0.024	<0.018	<0.023	0.004	0.006	0.005	0.009	0.005	<0.023	<0.020	<0.021	<0.019	<0.018	0.026	0.003
1,2,3,7,8-PeCDD	0.058	0.049	<0.035	<0.027	<0.023	0.014	0.017	0.012	0.056	0.018	<0.028	<0.030	<0.0292	<0.029	<0.035	0.045	<0.003
1,2,3,4,7,8-HxCDD	<0.045	<0.049	<0.047	<0.027	<0.036	0.011	0.008	0.013	0.020	0.010	<0.037	<0.030	<0.039	<0.039	<0.035	0.083	0.010
1,2,3,6,7,8-HxCDD	<0.045	0.032	<0.047	<0.027	<0.036	0.029	0.013	0.018	0.037	0.017	<0.037	<0.030	<0.039	<0.039	<0.035	0.158	0.010
1,2,3,7,8,9-HxCDD	<0.045	<0.049	<0.047	<0.027	<0.036	0.053	0.026	0.041	0.071	0.031	<0.037	<0.030	<0.039	<0.039	<0.035	0.199	0.016
1,2,3,4,6,7,8-HpCDD	0.515	0.527	0.283	0.079	0.081	0.431	0.167	0.289	0.407	0.212	0.063	0.168	0.154	0.241	0.269	1.759	0.128
OCDD	1.144	0.930	0.725	0.294	0.166	1.211	1.228	0.788	1.025	0.697	0.218	0.597	1.259	0.757	0.669	3.123	0.520
2,3,7,8-TCDF	0.227	0.273	0.154	0.031	0.179	0.112	0.128	0.125	0.449	0.183	0.129	0.088	0.277	0.166	0.194	1.016	0.041
1,2,3,7,8-PeCDF	0.071	0.100	<0.029	<0.023	0.065	0.033	0.040	0.037	0.154	0.055	<0.028	<0.022	<0.021	<0.025	<0.021	0.236	0.008
2,3,4,7,8-PeCDF	0.100	0.137	<0.029	<0.023	0.053	0.039	0.039	0.058	0.161	0.066	<0.028	<0.022	0.069	0.051	0.081	0.540	0.007
1,2,3,4,7,8-HxCDF	0.222	0.140	<0.029	<0.027	<0.027	0.146	0.101	0.143	0.291	0.150	<0.028	<0.030	<0.029	<0.029	0.143	1.451	<0.003
1,2,3,6,7,8-HxCDF	0.081	0.089	0.028	<0.027	0.032	0.040	0.032	0.040	0.112	0.038	<0.028	<0.030	0.033	<0.029	0.040	0.591	0.010
2,3,4,6,7,8-HxCDF	0.082	0.074	0.064	<0.027	0.033	0.063	0.036	0.054	0.104	0.053	<0.028	<0.030	0.091	0.040	0.057	0.913	0.019
1,2,3,7,8,9-HxCDF	<0.045	<0.049	<0.029	<0.027	<0.027	<0.037	0.014	0.012	0.009	<0.008	<0.028	<0.030	<0.029	<0.029	<0.026	0.117	<0.003
1,2,3,4,6,7,8-HpCDF	0.301	0.292	0.127	0.033	0.121	0.244	0.094	0.162	0.249	0.157	0.081	0.078	0.328	0.102	0.223	2.982	0.069
1,2,3,4,7,8,9-HpCDF	<0.045	<0.049	<0.035	<0.027	<0.032	0.042	0.017	0.025	0.036	0.026	<0.037	<0.030	0.017	<0.039	0.021	1.055	<0.005
OCDF	0.172	<0.080	0.078	0.036	0.057	0.224	0.053	0.094	0.119	0.099	<0.047	0.059	0.215	0.055	0.191	6.770	0.043
<b>PCDD/F Homologues</b>																	
TCDDs	0.149	0.115	0.062	<0.018	0.086	0.167	0.177	0.152	0.582	0.218	0.067	0.028	0.263	0.272	0.089	0.451	0.038
PeCDDs	0.181	0.236	<0.035	<0.027	0.073	0.250	0.212	0.245	0.693	0.345	<0.028	<0.030	0.114	0.191	<0.035	0.875	<0.003
HxCDDs	0.435	0.626	0.092	<0.027	<0.036	0.414	0.198	0.308	0.516	0.281	<0.037	<0.030	0.067	0.146	<0.035	2.163	0.075
HpCDDs	1.153	1.233	0.678	0.163	0.201	0.948	0.366	0.650	0.805	0.446	0.134	0.168	0.953	0.583	0.554	3.501	0.291
OCDD	1.144	0.930	0.725	0.294	0.166	1.211	1.228	0.788	1.025	0.697	0.218	0.597	1.259	0.757	0.669	3.123	0.520
TCDFs	1.581	1.636	0.994	0.031	1.233	0.515	0.648	0.802	3.705	0.949	0.813	0.352	1.671	0.847	0.780	4.254	0.398
PeCDFs	1.201	1.749	0.263	<0.023	0.740	0.490	0.582	0.679	2.272	0.899	0.293	0.161	0.985	0.320	0.475	4.894	0.204
HxCDFs	0.880	1.000	0.092	<0.027	0.314	0.470	0.369	0.483	1.161	0.600	0.084	<0.030	0.756	0.132	0.429	6.427	0.119
HpCDFs	0.474	0.425	0.161	0.033	0.154	0.475	0.178	0.299	0.476	0.330	0.081	0.099	0.599	0.102	0.358	6.413	0.099
OCDF	0.172	<0.080	0.078	0.036	0.057	0.224	0.053	0.094	0.119	0.099	<0.047	0.059	0.215	0.055	0.191	6.770	0.043
<b>Total</b>																	
∑ PCDDs	3.061	3.140	1.556	0.458	0.526	2.990	2.181	2.143	3.622	1.987	0.419	0.793	2.656	1.949	1.312	10.114	0.924
∑ PCDFs	4.307	4.811	1.588	0.099	2.498	2.174	1.830	2.356	7.732	2.877	1.270	0.671	4.226	1.457	2.233	28.757	0.862
∑ PCDD/Fs	7.368	7.951	3.144	0.557	3.024	5.164	4.011	4.499	11.354	4.864	1.689	1.464	6.882	3.406	3.545	38.870	1.786
∑ TEQ (PCDD/Fs)	0.201	0.193	0.118	0.076	0.106	0.088	0.075	0.085	0.235	0.098	0.098	0.091	0.135	0.110	0.139	0.754	0.021

Table A41. Atmospheric concentrations of PCDD/Fs ( $\mu\text{g m}^{-3}$ ) at NAPS urban sites in 1992 (continued)

Station Name	Windsor (College)																	Hamilton (Elgin)		Jonquiere
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	1	1	
Sampling Period	1/1/92	1/25/92	2/6/92	2/18/92	3/13/92	3/25/92	4/12/92	5/6/92	5/30/92	6/23/92	7/17/92	8/10/92	9/3/92	9/27/92	10/21/92	11/14/92	12/8/92	10/21/92	8/22/92	
Sampling Volume (m3)	742	668	678	693	843	815	754	768	790	755	652	713	651	1146	733	743	835	740	886	
<b>PCDD/F Congeners</b>																				
2,3,7,8-TCDD	0.053	0.052	<0.010	<0.014	0.002	<0.002	0.003	0.039	0.025	0.005	0.008	0.008	0.009	0.009	0.010	0.009	0.023	<0.027	0.005	
1,2,3,7,8-PeCDD	<0.024	0.142	0.021	<0.020	0.008	<0.004	<0.003	0.117	0.061	<0.003	<0.003	<0.003	<0.003	0.017	0.018	0.012	0.061	<0.041	0.008	
1,2,3,4,7,8-HxCDD	0.044	0.094	<0.006	<0.014	<0.006	0.042	0.013	0.087	0.041	0.016	0.020	<0.006	0.012	0.042	0.102	0.010	0.045	<0.041	0.010	
1,2,3,6,7,8-HxCDD	0.062	0.132	<0.006	0.043	0.019	0.050	0.019	0.102	0.068	0.024	0.028	0.032	0.035	0.071	0.198	0.026	0.194	<0.041	0.014	
1,2,3,7,8,9-HxCDD	0.051	0.129	<0.006	0.053	0.024	0.112	0.030	0.224	0.120	0.046	0.046	0.045	0.043	0.120	0.098	0.055	0.264	<0.041	0.027	
1,2,3,4,6,7,8-HpCDD	0.476	0.743	0.383	0.463	0.132	0.465	0.217	0.556	0.348	0.252	0.285	0.243	0.190	1.108	0.465	0.419	2.507	0.446	0.260	
OCDD	1.228	1.404	0.879	1.136	0.576	0.947	0.689	0.936	0.645	0.696	0.811	0.582	0.372	3.194	1.064	1.286	4.503	0.817	0.701	
2,3,7,8-TCDF	0.113	0.358	0.096	0.033	0.055	0.584	0.057	0.488	0.432	0.083	0.132	0.161	0.169	0.190	0.270	0.287	0.454	0.128	0.046	
1,2,3,7,8-PeCDF	0.089	0.358	0.093	0.029	0.012	0.217	0.015	0.240	0.146	0.028	0.021	0.032	0.043	0.024	0.056	0.041	0.064	<0.027	0.010	
2,3,4,7,8-PeCDF	0.104	0.434	0.097	0.065	0.017	0.156	0.017	0.255	0.166	0.033	0.031	0.055	0.040	0.049	0.038	0.031	0.078	<0.027	0.016	
1,2,3,4,7,8-HxCDF	0.082	0.397	0.150	0.055	0.043	0.453	0.030	0.648	0.395	<0.013	0.075	0.159	<0.005	<0.003	0.089	0.048	0.167	<0.041	0.025	
1,2,3,6,7,8-HxCDF	0.078	0.451	0.096	0.061	0.020	0.144	0.016	0.311	0.196	0.041	0.032	0.062	0.043	0.069	0.038	0.016	0.055	<0.041	0.010	
2,3,4,6,7,8-HxCDF	0.070	0.315	<0.012	0.075	0.025	0.114	0.025	0.207	0.156	0.057	<0.003	<0.007	0.077	0.124	0.043	0.015	0.071	<0.041	0.010	
1,2,3,7,8,9-HxCDF	0.038	<0.030	<0.012	<0.029	0.009	0.015	0.003	0.021	0.013	0.004	<0.003	<0.007	0.006	<0.003	0.022	<0.013	<0.004	<0.041	<0.001	
1,2,3,4,6,7,8-HpCDF	0.182	0.728	0.467	0.166	0.095	0.512	0.076	0.665	0.390	0.159	0.184	0.345	0.183	0.404	0.118	0.097	0.190	0.134	0.038	
1,2,3,4,7,8,9-HpCDF	0.034	0.109	0.112	0.040	0.021	0.082	0.011	0.077	0.046	0.020	0.018	0.034	0.023	0.038	0.022	0.008	0.021	<0.041	0.005	
OCDF	0.108	0.336	0.351	0.173	0.095	0.233	0.058	0.174	0.146	0.086	0.095	0.152	0.091	0.306	0.101	0.659	0.151	<0.068	0.049	
<b>PCDD/F Homologues</b>																				
TCDDs	0.133	0.869	0.118	0.105	0.049	0.302	0.060	0.823	0.635	0.113	0.229	0.224	0.186	0.273	0.116	0.203	0.492	0.139	0.032	
PeCDDs	0.429	1.139	0.075	0.055	0.027	0.407	0.046	1.354	0.899	0.044	0.097	0.105	0.101	0.225	0.372	0.244	0.932	<0.041	0.067	
HxCDDs	0.518	1.558	0.240	0.227	0.146	0.840	0.252	1.518	0.963	0.372	0.402	0.487	0.445	1.192	0.745	0.508	2.012	0.285	0.192	
HpCDDs	1.022	1.503	0.762	1.058	0.278	1.060	0.472	1.190	0.736	0.588	0.630	0.553	0.418	2.282	1.397	0.993	5.280	1.041	0.536	
OCDD	1.228	1.404	0.879	1.136	0.576	0.947	0.689	0.936	0.645	0.696	0.811	0.582	0.372	3.194	1.064	1.286	4.503	0.817	0.701	
TCDFs	0.795	5.615	0.916	0.948	0.377	4.412	0.383	4.275	3.887	0.667	1.266	1.440	0.845	0.927	0.812	0.859	2.013	0.761	0.279	
PeCDFs	0.574	5.004	0.450	0.384	0.235	2.194	0.244	4.110	3.028	0.558	0.719	1.010	0.711	0.680	0.518	0.335	1.059	0.127	0.184	
HxCDFs	0.465	3.107	0.808	0.465	0.182	1.584	0.166	3.029	1.889	0.467	0.545	1.064	0.600	0.912	0.254	0.110	0.418	0.134	0.127	
HpCDFs	0.310	1.306	0.846	0.335	0.134	0.896	0.123	1.146	0.761	0.252	0.314	0.561	0.307	0.725	0.232	0.189	0.417	0.180	0.068	
OCDF	0.108	0.336	0.351	0.173	0.095	0.233	0.058	0.174	0.146	0.086	0.095	0.152	0.091	0.306	0.101	0.659	0.151	<0.068	0.049	
<b>Total</b>																				
∑ PCDDs	3.329	6.472	2.075	2.581	1.075	3.557	1.519	5.820	3.877	1.813	2.169	1.952	1.522	7.166	3.695	3.234	13.219	2.283	1.527	
∑ PCDFs	2.252	15.368	3.371	2.305	1.023	9.318	0.974	12.734	9.711	2.029	2.939	4.226	2.554	3.550	1.917	2.152	4.058	1.202	0.707	
∑ PCDD/Fs	5.582	21.840	5.445	4.886	2.098	12.874	2.493	18.554	13.588	3.842	5.108	6.178	4.076	10.716	5.611	5.385	17.277	3.485	2.234	
∑ TEQ (PCDD/Fs)	0.172	0.543	0.111	0.098	0.038	0.222	0.034	0.462	0.290	0.052	0.060	0.083	0.069	0.120	0.134	0.084	0.264	0.125	0.036	

Table A42. Atmospheric concentrations of PCDD/Fs ( $\mu\text{g m}^{-3}$ ) at NAPS urban sites in 1993

Station Name	Windsor (University Ave.)														Toronto (Junction Tr.)		Montreal (1125)
Sampling Period	1	2	3	4	5	6	7	8	9	10	11	12	13	1	1		
Sampling Date	1/1/93	1/25/93	2/18/93	3/14/93	5/1/93	6/18/93	7/18/93	8/11/93	9/4/93	9/28/93	10/22/93	11/15/93	12/9/93	6/30/93	3/14/93		
Sampling Volume (m3)	1066	1078	1128	1095	1028	987	1234	1010	914	922	968	1022	914	707	797		
<b>PCDD/F Congeners</b>																	
2,3,7,8-TCDD	0.002	0.002	0.004	0.003	0.001	<0.002	0.004	0.003	<0.001	0.005	<0.002	<0.001	<0.002	0.002	0.004		
1,2,3,7,8-PeCDD	0.005	0.004	0.010	0.006	0.003	0.024	0.009	0.015	0.006	<0.002	0.011	0.011	0.019	0.003	0.008		
1,2,3,4,7,8-HxCDD	0.008	0.058	0.052	0.017	0.003	0.027	0.020	0.016	<0.004	0.008	0.027	<0.003	<0.004	<0.001	0.015		
1,2,3,6,7,8-HxCDD	0.024	0.041	0.036	0.012	0.008	0.039	0.025	0.017	0.025	0.015	<0.004	0.036	0.067	0.007	0.018		
1,2,3,7,8,9-HxCDD	0.026	0.028	0.037	0.021	0.016	0.068	0.037	<0.003	0.029	0.031	0.034	0.053	0.095	0.014	0.030		
1,2,3,4,6,7,8-HpCDD	0.147	0.309	0.280	0.181	0.117	0.463	0.261	0.237	0.188	0.145	0.230	0.207	0.402	0.106	0.462		
OCDD	0.414	0.364	0.444	0.301	0.176	0.624	0.919	0.732	0.575	0.513	0.623	0.497	1.200	0.389	2.890		
2,3,7,8-TCDF	0.037	0.099	0.092	0.023	0.039	0.108	0.112	0.169	0.084	0.078	0.095	0.130	0.075	0.055	0.028		
1,2,3,7,8-PeCDF	0.010	0.043	0.020	0.007	0.008	0.027	0.025	0.044	0.016	0.012	0.021	0.040	0.024	0.006	0.005		
2,3,4,7,8-PeCDF	0.010	0.037	0.037	0.008	0.006	0.037	0.028	0.050	0.024	0.023	0.027	0.033	0.031	0.014	0.010		
1,2,3,4,7,8-HxCDF	0.025	0.183	0.087	0.020	0.019	0.104	0.063	0.120	0.067	0.096	0.060	0.048	0.089	0.042	0.023		
1,2,3,6,7,8-HxCDF	0.018	0.076	0.032	0.009	0.007	0.041	0.025	0.065	0.020	0.030	0.020	0.018	0.040	0.002	0.011		
2,3,4,6,7,8-HxCDF	0.016	0.063	0.043	0.013	0.011	0.060	0.030	0.059	0.036	0.037	0.038	0.019	0.053	0.007	0.019		
1,2,3,7,8,9-HxCDF	0.006	0.021	0.016	<0.002	0.009	<0.004	0.011	0.023	0.012	<0.002	<0.002	<0.004	0.026	0.004	0.002		
1,2,3,4,6,7,8-HpCDF	0.043	0.389	0.173	0.050	0.040	0.246	0.100	0.169	0.131	0.180	0.109	0.067	0.161	0.156	0.087		
1,2,3,4,7,8,9-HpCDF	0.013	0.069	0.012	0.007	0.004	0.030	0.009	<0.002	0.025	0.021	<0.004	<0.004	0.028	0.021	0.015		
OCDF	0.049	0.368	0.121	0.048	0.026	0.156	0.081	0.119	0.207	0.266	0.154	0.068	0.190	0.147	0.174		
<b>PCDD/F Homologues</b>																	
TCDDs	0.048	0.093	0.262	0.031	0.081	0.288	0.240	0.136	0.095	0.151	0.121	0.114	0.095	0.049	0.036		
PeCDDs	0.072	0.123	0.188	0.071	0.061	0.295	0.199	0.165	0.103	0.155	0.145	0.149	0.199	0.052	0.064		
HxCDDs	0.218	0.338	0.403	0.177	0.133	0.606	0.375	0.305	0.279	0.278	0.355	0.372	0.665	0.134	0.187		
HpCDDs	0.353	0.622	0.650	0.408	0.267	0.989	0.683	0.652	0.481	0.369	0.524	0.468	0.932	0.228	0.838		
OCDD	0.414	0.364	0.444	0.301	0.176	0.624	0.919	0.732	0.575	0.513	0.623	0.497	1.200	0.389	2.890		
TCDFs	0.175	0.466	0.527	0.113	0.207	0.617	0.599	0.858	0.442	0.371	0.450	0.837	0.538	0.341	0.180		
PeCDFs	0.149	0.437	0.397	0.108	0.127	0.422	0.413	0.722	0.342	0.269	0.354	0.332	0.413	0.143	0.120		
HxCDFs	0.134	0.668	0.421	0.108	0.102	0.568	0.348	0.600	0.296	0.372	0.308	0.201	0.447	0.231	0.158		
HpCDFs	0.083	0.685	0.314	0.110	0.076	0.470	0.195	0.300	0.261	0.334	0.223	0.111	0.296	0.263	0.204		
OCDF	0.049	0.368	0.121	0.048	0.026	0.156	0.081	0.119	0.207	0.266	0.154	0.068	0.190	0.147	0.174		
<b>Total</b>																	
$\Sigma$ PCDDs	1.104	1.539	1.947	0.989	0.719	2.802	2.417	1.989	1.533	1.466	1.768	1.599	3.090	0.853	4.015		
$\Sigma$ PCDFs	0.591	2.624	1.780	0.487	0.539	2.233	1.636	2.598	1.549	1.613	1.489	1.548	1.885	1.125	0.836		
$\Sigma$ PCDD/Fs	1.694	4.163	3.727	1.475	1.258	5.035	4.053	4.588	3.082	3.079	3.257	3.147	4.976	1.978	4.851		
$\Sigma$ TEQ (PCDD/Fs)	0.028	0.084	0.069	0.026	0.018	0.091	0.059	0.086	0.046	0.047	0.053	0.057	0.082	0.025	0.036		

Table A42. Atmospheric concentrations of PCDD/Fs ( $\mu\text{g m}^{-3}$ ) at NAPS urban sites in 1993 (continued)

Station Name	Windsor (College)													Hamilton (Elgin)	Jonquiere	
Sampling Period	1	2	3	4	5	6	7	8	9	10	11	12	13	1	1	
Sampling Date	1/1/93	1/25/93	2/18/93	3/14/93	4/7/93	5/1/93	6/18/93	7/18/93	9/4/93	9/28/93	10/22/93	11/15/93	12/9/93	3/26/93	6/18/93	
Sampling Volume (m3)	708	754	794	741	675	661	656	632	657	709	704	731	711	725	1046	
<b>PCDD/F Congeners</b>																
2,3,7,8-TCDD	0.004	0.005	0.006	0.002	0.003	0.003	0.004	<0.002	<0.002	<0.001	<0.001	<0.001	<0.001	0.003	0.005	
1,2,3,7,8-PeCDD	0.006	0.032	0.057	0.006	0.019	0.010	0.016	0.024	<0.003	0.011	0.011	0.007	0.023	0.013	0.048	
1,2,3,4,7,8-HxCDD	<0.003	0.029	0.067	<0.003	0.033	0.010	0.019	0.054	<0.005	<0.006	<0.004	<0.003	0.078	0.010	0.031	
1,2,3,6,7,8-HxCDD	0.017	0.080	0.084	0.024	0.060	0.016	0.033	<0.005	0.055	0.026	0.070	<0.003	0.122	0.020	0.315	
1,2,3,7,8,9-HxCDD	0.026	0.147	0.100	0.034	0.078	0.031	0.050	0.053	0.089	0.045	0.075	0.042	0.166	0.042	0.316	
1,2,3,4,6,7,8-HpCDD	0.219	0.941	0.884	0.209	0.648	0.298	0.407	0.226	0.529	0.204	0.419	0.176	0.728	0.317	2.743	
OCDD	0.755	1.775	1.890	0.473	1.677	0.942	0.978	1.031	1.006	0.478	0.837	0.469	1.533	0.901	5.852	
2,3,7,8-TCDF	0.109	0.629	0.141	0.166	0.162	0.226	0.223	0.111	0.227	0.092	0.246	0.063	0.910	0.146	0.036	
1,2,3,7,8-PeCDF	0.016	0.092	0.055	0.034	0.010	0.070	0.043	0.033	0.061	<0.003	0.048	0.022	0.191	0.026	0.009	
2,3,4,7,8-PeCDF	0.012	0.206	0.065	0.061	0.069	0.150	0.070	0.019	0.064	0.031	0.080	0.018	0.163	0.041	0.012	
1,2,3,4,7,8-HxCDF	0.028	0.869	0.370	0.229	0.176	0.204	0.267	0.090	0.201	0.117	0.253	0.039	0.535	0.122	0.043	
1,2,3,6,7,8-HxCDF	0.009	0.239	0.093	0.076	0.041	0.084	0.063	0.056	0.078	0.049	0.078	0.022	0.203	0.029	0.022	
2,3,4,6,7,8-HxCDF	0.010	0.322	0.097	0.085	0.081	0.091	0.107	0.060	0.101	0.045	0.111	0.031	0.221	0.045	0.036	
1,2,3,7,8,9-HxCDF	<0.003	<0.004	<0.004	<0.003	<0.004	<0.015	0.024	0.031	0.027	0.021	<0.004	<0.003	<0.006	<0.008	0.017	
1,2,3,4,6,7,8-HpCDF	0.037	1.421	0.631	0.359	0.279	0.159	0.497	0.150	0.347	0.224	0.395	0.089	0.718	0.143	0.222	
1,2,3,4,7,8,9-HpCDF	<0.021	0.118	0.127	0.049	0.033	0.028	0.051	<0.006	0.064	0.041	0.066	0.015	0.125	0.018	0.022	
OCDF	0.056	0.939	0.859	0.286	0.178	0.064	0.255	0.209	0.265	0.186	0.370	0.070	0.583	0.066	0.355	
<b>PCDD/F Homologues</b>																
TCDDs	0.021	1.125	0.144	0.235	0.216	0.106	0.287	0.134	0.278	0.186	0.331	0.138	0.373	0.226	0.150	
PeCDDs	0.075	1.665	0.359	0.324	0.384	0.149	0.404	0.163	0.333	0.189	0.327	0.157	0.652	0.301	0.422	
HxCDDs	0.191	1.704	0.772	0.394	0.563	0.232	0.432	0.364	0.828	0.381	0.696	0.285	1.628	0.365	2.895	
HpCDDs	0.498	2.104	1.898	0.461	1.387	0.645	0.871	0.495	1.126	0.440	0.988	0.378	1.873	0.679	5.252	
OCDD	0.755	1.775	1.890	0.473	1.677	0.942	0.978	1.031	1.006	0.478	0.837	0.469	1.533	0.901	5.852	
TCDFs	0.257	3.223	0.663	0.889	0.741	1.157	1.136	0.695	1.447	0.523	1.254	0.408	6.006	0.627	3.307	
PeCDFs	0.151	3.150	0.858	0.873	0.896	1.232	1.017	0.382	0.779	0.336	0.949	0.252	1.927	0.522	0.173	
HxCDFs	0.057	1.775	0.709	0.517	0.336	0.518	0.570	0.507	0.930	0.474	0.954	0.223	2.008	0.421	0.382	
HpCDFs	0.074	2.408	1.180	0.668	0.535	0.304	0.907	0.150	0.604	0.409	0.719	0.196	1.313	0.244	0.535	
OCDF	0.056	0.939	0.859	0.286	0.178	0.064	0.255	0.209	0.265	0.186	0.370	0.070	0.583	0.066	0.355	
<b>Total</b>																
∑ PCDDs	1.541	8.373	5.063	1.887	4.227	2.073	2.971	2.187	3.571	1.673	3.179	1.427	6.058	2.470	14.572	
∑ PCDFs	0.595	11.495	4.269	3.232	2.686	3.275	3.886	1.942	4.024	1.927	4.245	1.148	11.836	1.878	1.753	
∑ PCDD/Fs	2.136	19.869	9.332	5.119	6.914	5.348	6.857	4.129	7.595	3.601	7.425	2.575	17.895	4.349	16.324	
∑ TEQ (PCDD/Fs)	0.037	0.358	0.197	0.096	0.116	0.133	0.130	0.083	0.114	0.067	0.131	0.038	0.319	0.077	0.171	

Table A43. Atmospheric concentrations of PCDD/Fs ( $\mu\text{g m}^{-3}$ ) at NAPS urban sites in 1994

Station Name	Windsor (University Ave.)																	
	Estevan	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	
Sampling Period	1	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	
Sampling Date	12/28/94	1/14/94	1/26/94	2/7/94	2/19/94	3/3/94	4/20/94	5/2/94	6/7/94	7/7/94	7/25/94	8/18/94	9/11/94	10/5/94	10/29/94	11/22/94	12/16/94	
Sampling Volume (m3)	729	927	983	905	985	920	978	975	666	991	930	936	898	882	946	957	909	
<b>PCDD/F Congeners</b>																		
2,3,7,8-TCDD	<0.008	0.006	<0.001	<0.001	<0.001	<0.001	<0.001	<0.002	<0.003	0.006	0.005	0.006	0.003	0.011	0.005	<0.001	0.013	
1,2,3,7,8-PeCDD	<0.008	0.008	0.013	0.028	0.007	0.015	0.017	0.007	0.014	0.007	0.008	<0.001	0.010	0.027	0.007	0.016	0.060	
1,2,3,4,7,8-HxCDD	<0.008	<0.002	<0.003	0.071	0.009	0.027	0.019	<0.003	0.026	0.005	0.011	0.031	0.011	0.018	0.011	0.016	0.081	
1,2,3,6,7,8-HxCDD	<0.008	0.018	0.017	0.151	0.014	0.049	0.030	0.017	0.074	0.008	0.016	0.063	0.023	0.041	0.018	0.034	0.116	
1,2,3,7,8,9-HxCDD	<0.008	0.028	0.022	0.238	0.025	0.075	0.049	<0.003	0.080	0.020	0.024	0.090	0.036	0.069	0.026	0.044	0.194	
1,2,3,4,6,7,8-HpCDD	0.091	0.167	0.171	0.936	0.167	0.323	0.233	0.128	0.656	0.220	0.197	0.754	0.321	0.559	0.189	0.222	1.281	
OCDD	0.348	0.599	0.363	1.533	0.588	0.758	0.554	0.374	1.156	0.779	0.719	2.315	0.924	2.014	0.592	0.476	2.863	
2,3,7,8-TCDF	0.012	0.203	0.061	0.347	0.079	0.238	0.154	0.103	0.194	0.102	0.120	0.234	0.100	0.200	0.092	0.235	0.348	
1,2,3,7,8-PeCDF	<0.008	0.090	<0.001	0.087	0.013	<0.002	0.051	0.046	0.063	0.013	0.024	<0.001	0.010	0.037	0.010	0.028	0.057	
2,3,4,7,8-PeCDF	<0.008	0.031	0.006	0.104	0.013	0.067	0.041	0.041	0.062	0.018	0.031	<0.001	0.016	0.061	0.015	0.052	0.122	
1,2,3,4,7,8-HxCDF	<0.005	0.159	0.021	0.276	0.035	0.211	0.124	0.078	<0.003	0.042	0.073	0.230	0.052	0.145	0.043	0.111	0.274	
1,2,3,6,7,8-HxCDF	<0.005	0.072	0.007	0.104	0.015	0.080	0.051	0.034	0.062	0.017	0.027	0.085	0.025	0.068	0.015	0.041	0.103	
2,3,4,6,7,8-HxCDF	<0.005	0.053	0.013	0.158	0.014	0.107	0.057	0.029	0.138	0.018	0.040	0.115	0.026	0.075	0.019	0.067	0.133	
1,2,3,7,8,9-HxCDF	<0.005	<0.002	0.004	0.010	<0.002	0.008	0.006	0.006	0.011	0.007	<0.001	<0.003	0.010	0.028	0.002	0.003	0.008	
1,2,3,4,6,7,8-HpCDF	0.014	0.203	0.041	0.391	0.062	0.371	0.195	0.129	0.399	0.074	0.179	0.363	0.095	0.201	0.084	0.169	0.380	
1,2,3,4,7,8,9-HpCDF	<0.011	0.072	<0.003	0.034	0.009	0.042	0.028	0.024	0.099	0.006	0.014	0.028	0.012	0.031	0.011	0.022	0.042	
OCDF	0.020	0.298	0.092	0.166	0.044	0.423	0.280	0.108	0.806	0.047	0.102	0.248	0.199	0.158	0.075	0.113	0.286	
<b>PCDD/F Homologues</b>																		
TCDDs	<0.008	0.075	0.045	1.197	0.138	0.412	0.133	0.101	0.510	0.088	0.134	0.216	0.081	0.189	0.094	1.547	0.382	
PeCDDs	<0.008	0.139	0.091	1.796	0.093	0.361	0.266	0.151	0.527	0.096	0.136	0.364	0.107	0.298	0.069	0.925	0.602	
HxCDDs	<0.008	0.193	0.173	2.744	0.211	0.719	0.414	0.199	1.018	0.178	0.257	0.798	0.248	0.480	0.258	0.828	1.742	
HpCDDs	0.177	0.438	0.292	2.065	0.369	0.667	0.457	0.268	1.244	0.427	0.411	1.510	0.665	1.201	0.460	0.508	2.831	
OCDD	0.348	0.599	0.363	1.533	0.588	0.758	0.554	0.374	1.156	0.779	0.719	2.315	0.924	2.014	0.592	0.476	2.863	
TCDFs	0.012	0.573	0.199	1.607	0.500	1.397	0.868	0.659	1.247	0.585	0.777	1.379	0.625	1.243	0.563	1.302	1.971	
PeCDFs	<0.008	0.408	0.076	1.227	0.185	0.835	0.549	0.672	0.768	0.296	0.383	1.032	0.263	0.691	0.274	0.814	1.572	
HxCDFs	0.005	0.602	0.082	1.238	0.161	0.921	0.528	0.522	0.810	0.222	0.349	1.001	0.253	0.685	0.210	0.552	1.272	
HpCDFs	0.014	0.484	0.094	0.614	0.110	0.638	0.360	0.282	0.882	0.124	0.272	0.567	0.173	0.368	0.151	0.313	0.704	
OCDF	0.020	0.298	0.092	0.166	0.044	0.423	0.280	0.108	0.806	0.047	0.102	0.248	0.199	0.158	0.075	0.113	0.286	
<b>Total</b>																		
∑ PCDDs	0.525	1.443	0.963	9.336	1.400	2.917	1.825	1.093	4.454	1.566	1.657	5.203	2.028	4.182	1.473	4.283	8.420	
∑ PCDFs	0.051	2.364	0.543	4.852	0.999	4.213	2.586	2.243	4.514	1.274	1.883	4.226	1.513	3.144	1.274	3.094	5.805	
∑ PCDD/Fs	0.576	3.807	1.506	14.187	2.399	7.130	4.410	3.335	8.969	2.841	3.540	9.429	3.541	7.325	2.747	7.377	14.225	
∑ TEQ (PCDD/Fs)	0.025	0.084	0.033	0.212	0.034	0.123	0.086	0.053	0.108	0.044	0.058	0.105	0.051	0.131	0.043	0.093	0.255	

Table A43. Atmospheric concentrations of PCDD/Fs ( $\mu\text{g m}^{-3}$ ) at NAPS urban sites in 1994 (continued)

Station Name	Windsor (College)													Hamilton (Elgin)
Sampling Period	1	2	3	4	5	6	7	8	9	10	11	12	13	1
Sampling Date	2/7/94	2/19/94	3/3/94	4/20/94	6/7/94	7/1/94	7/25/94	8/18/94	9/11/94	10/5/94	10/29/94	11/22/94	12/16/94	5/26/94
Sampling Volume (m3)	716	524	699	747	623	612	648	648	711	749	693	755	730	697
<b>PCDD/F Congeners</b>														
2,3,7,8-TCDD	<0.001	<0.002	<0.001	<0.003	<0.003	0.007	0.008	0.009	0.007	0.007	0.008	0.008	0.014	<0.001
1,2,3,7,8-PeCDD	0.049	0.019	0.010	0.016	0.010	<0.002	0.025	0.023	0.008	0.020	0.007	0.003	0.056	0.013
1,2,3,4,7,8-HxCDD	0.102	0.063	0.017	0.012	0.016	0.008	0.011	0.056	0.011	0.016	0.010	0.005	0.078	0.006
1,2,3,6,7,8-HxCDD	0.193	0.082	0.033	0.029	0.027	0.025	0.031	0.062	0.025	0.053	0.019	0.010	0.114	0.011
1,2,3,7,8,9-HxCDD	0.327	<0.006	0.051	0.040	0.037	0.034	0.060	0.062	0.030	0.063	0.028	0.014	0.188	0.011
1,2,3,4,6,7,8-HpCDD	1.169	0.601	0.295	0.229	0.329	0.258	0.486	0.418	0.347	0.764	0.239	0.111	1.475	0.077
OCDD	2.155	0.976	0.761	0.632	1.128	0.764	1.184	1.139	1.008	2.065	0.775	0.438	3.318	0.218
2,3,7,8-TCDF	0.513	0.307	0.223	0.166	0.109	0.082	0.179	0.219	0.114	0.144	0.110	0.143	0.326	0.083
1,2,3,7,8-PeCDF	<0.003	<0.002	0.065	0.064	0.029	0.008	0.029	0.023	0.020	0.023	0.012	0.019	0.066	0.010
2,3,4,7,8-PeCDF	0.152	0.097	0.054	0.056	<0.003	0.015	0.049	0.049	0.018	0.043	0.018	0.028	0.112	0.017
1,2,3,4,7,8-HxCDF	<0.004	<0.006	0.197	0.153	0.048	0.041	0.116	0.196	0.062	0.079	0.040	0.034	0.239	0.046
1,2,3,6,7,8-HxCDF	0.155	0.151	0.072	0.056	0.022	0.020	0.042	0.079	0.018	0.028	0.015	0.015	0.098	0.020
2,3,4,6,7,8-HxCDF	0.222	0.200	0.092	0.064	0.032	0.021	0.062	0.097	0.025	0.043	0.022	0.018	0.130	0.017
1,2,3,7,8,9-HxCDF	0.011	0.011	0.010	0.007	<0.003	<0.003	<0.002	0.025	0.008	<0.003	<0.001	<0.001	0.009	<0.004
1,2,3,4,6,7,8-HpCDF	0.577	0.676	0.380	0.266	0.125	0.139	0.251	0.335	0.096	0.132	0.092	0.055	0.387	0.059
1,2,3,4,7,8,9-HpCDF	0.059	0.071	0.050	0.028	0.006	0.011	0.022	0.020	0.011	0.011	0.011	0.008	0.071	0.006
OCDF	0.254	0.235	0.561	0.237	0.095	0.093	0.145	0.235	0.080	0.073	0.093	0.065	0.290	0.027
<b>PCDD/F Homologues</b>														
TCDDs	1.186	0.241	0.186	0.183	0.167	0.072	0.258	0.233	0.069	0.083	0.076	0.056	0.298	0.109
PeCDDs	2.133	0.433	0.226	0.252	0.135	0.093	0.268	0.380	0.094	0.198	0.101	0.028	0.637	0.126
HxCDDs	3.287	1.277	0.493	0.461	0.320	0.322	0.515	0.565	0.301	0.462	0.255	0.126	1.614	0.122
HpCDDs	2.545	1.205	0.621	0.475	0.789	0.480	0.890	0.917	0.717	1.454	0.376	0.240	3.294	0.182
OCDD	2.155	0.976	0.761	0.632	1.128	0.764	1.184	1.139	1.008	2.065	0.775	0.438	3.318	0.218
TCDFs	2.414	1.487	1.139	0.890	0.702	0.485	1.067	1.582	0.641	0.689	0.579	0.668	1.674	0.448
PeCDFs	1.693	0.960	0.541	0.633	0.304	0.296	0.618	1.000	0.315	0.395	0.297	0.304	1.389	0.228
HxCDFs	1.855	1.720	0.904	0.640	0.342	0.397	0.586	1.171	0.401	0.351	0.222	0.166	1.110	0.195
HpCDFs	0.947	1.037	0.704	0.458	0.214	0.237	0.410	0.594	0.205	0.239	0.175	0.116	0.740	0.102
OCDF	0.254	0.235	0.561	0.237	0.095	0.093	0.145	0.235	0.080	0.073	0.093	0.065	0.290	0.027
<b>Total</b>														
$\Sigma$ PCDDs	11.306	4.131	2.287	2.003	2.538	1.731	3.115	3.233	2.189	4.262	1.583	0.888	9.161	0.757
$\Sigma$ PCDFs	7.163	5.439	3.848	2.859	1.656	1.508	2.827	4.581	1.642	1.749	1.365	1.319	5.203	1.000
$\Sigma$ PCDD/Fs	18.469	9.570	6.135	4.862	4.194	3.239	5.942	7.814	3.832	6.011	2.948	2.207	14.364	1.757
$\Sigma$ TEQ (PCDD/Fs)	0.267	0.146	0.107	0.096	0.049	0.041	0.106	0.136	0.056	0.093	0.049	0.046	0.244	0.041

Table A44. Atmospheric concentrations of PCDD/Fs ( $\mu\text{g m}^{-3}$ ) at NAPS urban sites in 1995

Station Name	Victoria	Fort McMurray		Edmonton (104th St.)		Prince Albert					Estevan	Windsor (University Ave.)			
Sampling Period	1	1	2	1	2	1	2	3	4	5	1	1	2	3	4
Sampling Date	7/2/95	4/21/95	5/15/95	4/21/95	5/15/95	2/14/95	2/28/95	3/11/95	3/24/95	4/5/95	1/21/95	1/9/95	2/26/95	3/22/95	4/15/95
Sampling Volume (m3)	600	400	390	332	347	756	688	549	607	583	697	880	850	835	833
<b>PCDD/F Congeners</b>															
2,3,7,8-TCDD	<0.003	<0.025	<0.026	<0.012	<0.012	<0.005	<0.006	<0.007	<0.007	<0.007	<0.011	0.004	0.008	0.006	0.006
1,2,3,7,8-PeCDD	<0.007	<0.040	<0.021	<0.024	<0.012	<0.008	<0.009	<0.007	<0.010	<0.007	<0.017	0.008	0.006	0.007	0.008
1,2,3,4,7,8-HxCDD	<0.010	<0.030	<0.026	<0.030	<0.035	<0.005	0.012	<0.007	<0.015	<0.010	<0.011	0.008	<0.002	<0.012	0.011
1,2,3,6,7,8-HxCDD	<0.010	<0.030	<0.026	<0.030	<0.035	0.013	0.028	<0.007	<0.015	<0.010	<0.011	0.036	0.014	0.019	0.022
1,2,3,7,8,9-HxCDD	<0.010	<0.030	<0.026	<0.030	<0.035	0.037	0.033	<0.007	<0.015	<0.010	<0.011	0.027	0.018	<0.012	0.026
1,2,3,4,6,7,8-HpCDD	0.031	<0.050	0.035	0.098	0.056	0.418	0.442	0.031	0.082	0.044	0.263	0.294	0.196	0.156	0.221
OCDD	0.163	0.234	0.100	0.447	0.183	0.981	1.138	0.087	0.423	0.206	1.920	0.505	0.720	0.468	0.484
2,3,7,8-TCDF	0.046	<0.025	<0.026	0.016	<0.012	0.019	0.012	0.012	0.008	0.008	0.009	0.136	0.098	0.152	0.204
1,2,3,7,8-PeCDF	0.007	<0.025	<0.021	<0.015	<0.012	<0.005	<0.006	<0.005	<0.003	<0.005	<0.006	0.037	0.008	0.015	0.028
2,3,4,7,8-PeCDF	0.007	<0.025	<0.021	<0.015	<0.012	<0.005	<0.006	<0.005	0.003	<0.005	<0.006	0.031	0.010	0.017	0.052
1,2,3,4,7,8-HxCDF	0.013	<0.030	<0.026	<0.012	<0.024	<0.008	<0.009	<0.007	<0.007	<0.005	<0.017	0.087	0.029	0.045	0.102
1,2,3,6,7,8-HxCDF	0.009	<0.030	<0.026	<0.012	<0.024	<0.008	<0.009	<0.007	<0.007	<0.005	<0.017	0.030	0.011	0.014	0.041
2,3,4,6,7,8-HxCDF	0.004	<0.030	<0.026	<0.012	<0.024	<0.008	<0.009	<0.007	<0.007	<0.005	<0.017	0.045	0.014	0.026	0.060
1,2,3,7,8,9-HxCDF	<0.003	<0.030	<0.026	<0.012	<0.024	<0.008	<0.009	<0.007	<0.007	<0.005	<0.017	0.003	<0.002	<0.005	<0.004
1,2,3,4,6,7,8-HpCDF	0.025	<0.040	<0.031	0.018	<0.017	0.012	<0.006	0.009	0.011	<0.010	0.040	0.161	0.068	0.074	0.164
1,2,3,4,7,8,9-HpCDF	<0.007	<0.040	<0.031	<0.018	<0.017	<0.01	<0.006	<0.007	<0.010	<0.010	<0.011	0.023	0.007	<0.012	0.030
OCDF	0.030	<0.001	<0.092	<0.044	<0.058	<0.026	<0.014	<0.02	<0.026	<0.021	0.052	0.160	0.063	0.025	0.147
<b>PCDD/F Homologues</b>															
TCDDs	0.005	<0.025	<0.026	<0.012	<0.012	<0.005	<0.006	<0.007	<0.007	<0.007	<0.011	0.042	0.021	0.044	0.066
PeCDDs	0.061	<0.040	<0.021	<0.024	<0.012	0.019	0.033	<0.007	<0.010	<0.007	<0.017	0.112	0.054	0.086	0.109
HxCDDs	0.039	<0.030	<0.026	<0.030	<0.035	0.277	0.300	0.007	<0.015	<0.010	0.053	0.365	0.168	0.175	0.273
HpCDDs	0.049	<0.050	0.035	0.209	0.116	0.941	0.954	0.031	0.140	0.069	0.508	0.628	0.415	0.272	0.273
OCDD	0.163	0.234	0.100	0.447	0.183	0.981	1.138	0.087	0.423	0.206	1.920	0.505	0.720	0.468	0.484
TCDFs	0.094	<0.025	<0.026	0.016	<0.012	0.040	0.017	0.012	0.008	0.008	0.009	0.605	0.259	0.620	1.946
PeCDFs	0.066	0.025	<0.021	<0.015	<0.012	0.007	0.014	<0.005	0.003	<0.005	0.007	0.397	0.120	0.214	0.891
HxCDFs	0.050	<0.030	<0.026	<0.012	<0.024	0.013	0.010	<0.007	<0.007	<0.005	<0.017	0.364	0.115	0.195	0.570
HpCDFs	0.035	<0.040	<0.031	0.018	<0.017	0.012	0.026	0.009	0.011	<0.010	0.078	0.302	0.128	0.114	0.326
OCDF	0.030	<0.001	<0.092	<0.044	<0.058	<0.026	<0.014	<0.02	<0.026	<0.021	0.052	0.160	0.063	0.025	0.147
<b>Total</b>															
∑ PCDDs	0.318	0.234	0.134	0.656	0.299	2.217	2.424	0.125	0.564	0.274	2.481	1.652	1.378	1.045	1.205
∑ PCDFs	0.275	0.025	0.000	0.034	0.000	0.071	0.067	0.020	0.022	0.008	0.146	1.828	0.685	1.168	3.882
∑ PCDD/Fs	0.594	0.259	0.134	0.689	0.299	2.288	2.491	0.146	0.586	0.282	2.627	3.480	2.062	2.213	5.087
∑ TEQ (PCDD/Fs)	0.024	0.098	0.075	0.058	0.049	0.030	0.034	0.022	0.027	0.022	0.045	0.065	0.038	0.049	0.082

Table A44. Atmospheric concentrations of PCDD/Fs ( $\mu\text{g m}^{-3}$ ) at NAPS urban sites in 1995 (continued)

Station Name	Toronto (Junction Triangle)						Montreal (1125)							Halifax		Charlottetown			Winnipeg				
Sampling Period	1	2	3	4	5	6	1	2	3	4	5	6	7	1	2	1	2	3	1	2	3	4	5
Sampling Date	2/2/95	3/22/95	5/15/95	6/26/95	8/13/95	11/17/95	2/2/95	3/22/95	5/9/95	6/26/95	8/13/95	9/30/95	11/17/95	6/26/95	9/18/95	5/21/95	7/14/95	8/25/95	4/3/95	4/27/95	8/22/95	9/3/95	11/17/95
Sampling Volume (m <sup>3</sup> )	859	851	852	800	820	745	1097	1145	1017	704	1012	979	909	752	646	596	691	807	642	570	662	716	949
<b>PCDD/F Congeners</b>																							
2,3,7,8-TCDD	0.008	0.006	<0.009	<0.020	<0.004	<0.007	<0.005	0.002	<0.006	<0.006	<0.002	<0.004	0.009	<0.013	<0.003	<0.017	0.003	0.003	<0.019	<0.035	0.004	0.004	<0.0021
1,2,3,7,8-PeCDD	0.013	0.007	0.017	<0.012	<0.007	0.013	0.009	0.006	<0.006	<0.009	0.031	<0.008	0.012	<0.016	<0.006	<0.013	0.006	<0.002	<0.028	<0.035	<0.030	<0.101	0.007
1,2,3,4,7,8-HxCDD	0.018	0.012	0.045	<0.022	<0.010	0.014	<0.007	0.004	0.005	<0.006	<0.004	<0.008	<0.011	<0.016	<0.012	<0.020	<0.002	<0.004	<0.056	<0.032	0.055	<0.064	0.005
1,2,3,6,7,8-HxCDD	0.028	0.014	0.141	<0.022	<0.010	0.030	0.012	0.009	0.013	<0.006	<0.004	0.008	0.022	<0.016	<0.012	<0.020	0.002	<0.004	<0.056	<0.032	0.047	0.078	0.008
1,2,3,7,8,9-HxCDD	0.047	0.021	0.127	<0.022	<0.010	0.038	0.024	<0.003	0.012	<0.006	<0.004	0.012	0.042	<0.016	<0.012	<0.020	0.005	<0.004	<0.056	<0.032	0.123	0.150	0.014
1,2,3,4,6,7,8-HpCDD	0.328	0.096	1.726	0.084	0.086	0.217	0.236	0.110	0.201	0.081	0.255	0.118	0.227	0.208	0.028	<0.020	0.035	0.025	<0.050	0.117	0.216	0.742	0.095
OCDD	0.759	0.324	2.687	0.468	0.250	0.424	0.644	0.381	0.502	0.251	0.702	0.509	0.637	0.388	0.116	0.056	0.140	0.126	0.352	0.316	0.920	2.501	0.400
2,3,7,8-TCDF	0.109	0.083	0.525	0.045	0.055	0.156	0.082	0.046	0.108	0.023	0.035	0.073	0.097	0.230	0.024	<0.013	0.035	0.049	<0.031	0.025	0.016	0.043	0.036
1,2,3,7,8-PeCDF	0.015	0.014	0.263	<0.012	0.008	0.033	0.009	0.007	0.015	<0.006	<0.004	0.012	0.022	0.022	<0.002	<0.010	0.005	<0.002	<0.031	<0.018	0.011	0.044	0.005
2,3,4,7,8-PeCDF	0.019	0.016	0.325	<0.012	0.009	0.049	0.014	0.011	0.024	0.006	<0.004	0.013	0.028	0.035	<0.002	<0.010	0.005	<0.002	<0.031	<0.018	0.008	<0.020	0.017
1,2,3,4,7,8-HxCDF	0.035	0.026	1.718	0.017	0.021	0.114	0.032	0.029	0.096	0.012	0.006	0.010	0.117	0.092	<0.002	<0.017	0.011	<0.004	<0.019	<0.042	0.069	0.214	0.019
1,2,3,6,7,8-HxCDF	0.014	0.012	0.657	<0.007	0.009	0.035	0.012	0.005	0.025	0.003	<0.004	0.010	0.035	0.036	0.002	<0.017	0.005	<0.004	<0.019	<0.042	0.068	0.103	0.008
2,3,4,6,7,8-HxCDF	0.020	0.016	1.309	<0.007	0.003	0.061	0.009	0.006	0.039	<0.003	<0.004	0.007	0.033	0.049	<0.002	<0.017	0.005	<0.004	<0.019	<0.042	0.077	0.193	0.011
1,2,3,7,8,9-HxCDF	0.007	<0.005	0.839	<0.007	<0.005	0.009	<0.004	<0.002	0.029	<0.003	<0.004	<0.006	<0.007	<0.011	<0.002	<0.017	0.003	<0.004	<0.019	<0.042	0.102	0.299	<0.003
1,2,3,4,6,7,8-HpCDF	0.060	0.040	4.338	0.055	0.039	0.172	0.051	0.076	0.165	0.036	0.029	0.029	0.281	0.164	0.036	<0.020	0.028	0.008	<0.028	<0.032	0.102	0.438	0.031
1,2,3,4,7,8,9-HpCDF	0.013	0.014	2.116	<0.015	<0.007	0.032	<0.007	0.004	0.015	<0.009	<0.006	<0.01	0.049	<0.016	<0.009	<0.020	0.003	<0.005	<0.028	<0.032	0.079	0.246	0.003
OCDF	0.051	0.038	12.816	0.142	0.033	0.155	0.033	0.105	0.099	0.023	0.024	0.036	0.420	0.076	0.030	<0.047	0.028	0.013	<0.087	<0.040	0.074	0.371	0.026
<b>PCDD/F Homologues</b>																							
TCDDs	0.062	0.021	0.116	0.021	0.024	0.072	<0.005	0.004	0.025	<0.006	0.007	0.013	0.014	1.991	<0.003	<0.017	0.003	0.003	<0.019	<0.035	0.004	<0.003	0.059
PeCDDs	0.117	0.021	0.471	<0.012	0.012	0.145	0.055	0.023	0.043	0.015	0.025	<0.008	0.057	0.824	<0.006	<0.013	0.006	<0.002	<0.028	<0.035	<0.030	<0.101	0.099
HxCDDs	0.319	0.116	1.698	<0.022	0.059	0.314	0.180	0.126	0.155	0.046	0.151	0.065	0.224	0.593	<0.012	<0.020	0.030	0.008	<0.056	<0.032	0.288	0.175	0.145
HpCDDs	0.655	0.190	3.861	0.185	0.187	0.435	0.478	0.226	0.422	0.179	0.544	0.238	0.443	0.548	0.055	0.021	0.073	0.041	<0.050	0.155	0.369	1.267	0.207
OCDD	0.759	0.324	2.687	0.468	0.250	0.424	0.644	0.381	0.502	0.251	0.702	0.509	0.637	0.388	0.116	0.056	0.140	0.126	0.352	0.316	0.920	2.501	0.400
TCDFs	0.312	0.216	1.665	0.187	0.271	0.713	0.342	0.218	0.657	0.385	0.223	0.393	0.360	1.219	0.056	0.085	0.132	0.132	<0.031	0.025	0.021	<0.022	0.193
PeCDFs	0.208	0.124	3.562	0.067	0.166	0.511	0.123	0.061	0.350	0.153	0.104	0.103	0.303	0.731	0.018	0.024	0.054	0.015	<0.031	<0.018	0.011	0.073	0.094
HxCDFs	0.177	0.098	7.454	0.049	0.098	0.460	0.118	0.076	0.354	0.121	0.066	0.067	0.355	0.389	0.025	<0.017	0.070	0.018	<0.019	<0.042	0.213	1.142	0.076
HpCDFs	0.147	0.081	11.695	0.088	0.039	0.282	0.078	0.117	0.286	0.036	0.047	0.048	0.459	0.239	0.052	<0.020	0.045	0.014	<0.028	<0.032	0.247	0.983	0.055
OCDF	0.051	0.038	12.816	0.142	0.033	0.155	0.033	0.105	0.099	0.023	0.024	0.036	0.420	0.076	0.030	<0.047	0.028	0.013	<0.087	<0.040	0.074	0.371	0.026
<b>Total</b>																							
∑ PCDDs	1.912	0.672	8.834	0.674	0.533	1.390	1.358	0.759	1.148	0.491	1.429	0.824	1.376	4.346	0.171	0.077	0.252	0.178	0.352	0.471	1.581	3.944	0.910
∑ PCDFs	0.895	0.557	37.193	0.535	0.608	2.121	0.693	0.577	1.745	0.719	0.463	0.646	1.896	2.653	0.182	0.109	0.330	0.193	0.000	0.025	0.567	2.569	0.443
∑ PCDD/Fs	2.807	1.229	46.026	1.209	1.141	3.511	2.051	1.336	2.893	1.210	1.892	1.470	3.272	6.998	0.353	0.187	0.582	0.372	0.352	0.496	2.147	6.512	1.353
∑ TEQ (PCDD/Fs)	0.060	0.038	0.755	0.054	0.027	0.086	0.040	0.024	0.056	0.024	0.044	0.031	0.072	0.091	0.018	0.048	0.018	0.014	0.086	0.107	0.097	0.241	0.026



Table A44. Atmospheric concentrations of PCDD/Fs ( $\mu\text{g m}^{-3}$ ) at NAPS urban sites in 1995 (continued)

Station Name	Windsor (College)															Hamilton (Elgin)						Jonquiere			
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	1	2	3	4	5	6	1	2	3	4
Sampling Period	1/9/95	2/2/95	2/26/95	3/22/95	4/15/95	5/9/95	6/2/95	6/26/95	7/20/95	8/13/95	9/6/95	9/30/95	10/24/95	11/17/95	12/11/95	2/2/95	3/22/95	5/9/95	6/26/95	9/30/95	11/17/95	6/20/95	8/7/95	11/11/95	12/29/95
Sampling Volume (m <sup>3</sup> )	770	735	746	723	663	713	905	903	1410	1396	732	667	710	745	769	724	650	654	626	688	686	883	568	1017	1048
<b>PCDD/F Congeners</b>																									
2,3,7,8-TCDD	0.009	0.009	0.007	0.009	0.010	0.010	<0.004	<0.006	<0.004	<0.002	0.008	<0.003	<0.003	0.009	0.004	<0.008	<0.003	<0.012	<0.013	<0.009	<0.003	<0.009	<0.004	<0.004	0.009
1,2,3,7,8-PeCDD	0.010	0.012	0.007	0.009	0.013	0.014	0.009	0.006	0.005	0.004	0.028	<0.0045	0.005	0.012	0.014	<0.008	<0.003	<0.009	<0.013	0.012	<0.006	<0.009	<0.008	0.007	0.021
1,2,3,4,7,8-HxCDD	0.006	0.017	0.006	0.010	0.012	0.013	0.014	0.009	<0.004	0.004	0.044	<0.0054	<0.005	0.015	0.016	<0.016	<0.003	<0.018	<0.019	0.008	0.018	<0.009	<0.008	<0.008	0.018
1,2,3,6,7,8-HxCDD	0.024	0.031	0.011	0.016	0.027	0.020	0.029	0.014	0.005	0.010	0.085	0.010	0.008	0.022	0.025	0.018	<0.003	0.070	<0.019	0.016	0.051	<0.009	0.016	0.013	0.035
1,2,3,7,8,9-HxCDD	0.022	0.041	0.019	0.020	0.042	0.036	0.029	0.016	0.009	0.009	0.111	0.013	<0.005	0.040	0.037	0.027	<0.003	<0.018	<0.019	0.016	<0.012	<0.009	0.019	<0.008	0.053
1,2,3,4,6,7,8-HpCDD	0.189	0.281	0.158	0.153	0.248	0.207	0.221	0.127	0.107	0.093	0.928	0.152	0.164	0.276	0.265	0.264	0.076	0.611	0.178	0.206	0.488	0.200	0.647	0.253	0.395
OCDD	0.407	0.624	0.525	0.423	0.614	0.548	0.491	0.245	0.330	0.197	2.318	0.550	0.443	0.819	0.793	0.681	0.231	1.469	1.298	0.525	1.078	0.562	1.622	1.197	1.055
2,3,7,8-TCDF	0.137	0.170	0.099	0.123	0.125	0.174	0.100	0.066	0.062	0.028	0.143	0.078	0.101	0.111	0.099	0.040	0.019	0.136	0.135	0.095	0.110	0.045	0.065	0.112	0.086
1,2,3,7,8-PeCDF	0.017	0.039	0.008	0.019	0.018	0.024	0.021	0.014	0.009	0.005	0.026	0.010	0.011	0.017	0.023	<0.006	<0.003	0.027	0.023	0.029	0.035	0.014	0.004	0.011	0.011
2,3,4,7,8-PeCDF	0.023	0.069	0.009	0.022	0.028	0.036	0.033	0.017	0.021	0.007	0.037	0.008	0.023	0.030	0.049	0.009	0.006	0.029	0.030	0.041	0.047	0.018	0.006	0.015	0.020
1,2,3,4,7,8-HxCDF	0.037	0.116	0.025	0.040	0.074	0.036	<0.007	<0.006	<0.004	<0.004	0.132	0.023	0.066	0.068	0.051	<0.006	0.009	0.071	0.078	0.128	0.190	0.177	0.016	0.030	0.028
1,2,3,6,7,8-HxCDF	0.016	0.048	0.010	0.016	0.027	0.022	0.039	0.013	0.012	0.007	0.046	0.012	0.021	0.027	0.022	<0.006	0.004	0.023	0.029	0.049	0.065	0.054	0.005	0.009	0.011
2,3,4,6,7,8-HxCDF	0.018	0.077	0.013	0.022	0.040	0.027	0.044	<0.006	0.021	<0.004	0.055	0.012	0.040	0.035	0.032	<0.006	0.004	0.013	<0.019	0.058	0.073	0.048	<0.004	0.011	0.013
1,2,3,7,8,9-HxCDF	<0.003	0.004	<0.001	0.004	<0.003	<0.004	<0.007	<0.006	<0.004	<0.004	<0.004	<0.003	<0.003	<0.002	0.007	<0.006	<0.003	<0.008	<0.019	<0.009	<0.007	<0.009	<0.004	<0.006	<0.004
1,2,3,4,6,7,8-HpCDF	0.053	0.202	0.065	0.062	0.141	0.085	0.140	0.056	0.136	0.060	0.329	0.072	0.138	0.129	0.074	0.024	0.015	0.120	0.154	0.244	0.385	0.539	0.057	0.060	0.066
1,2,3,4,7,8,9-HpCDF	0.006	0.041	0.006	0.013	0.015	0.008	0.020	<0.010	0.013	<0.004	0.022	<0.004	0.016	0.019	0.015	0.006	<0.006	<0.008	<0.026	<0.012	0.073	0.053	<0.008	<0.008	0.010
OCDF	0.042	0.223	0.074	0.082	0.121	0.058	0.070	0.035	0.197	0.027	0.224	0.068	0.129	0.113	0.072	0.040	0.015	0.090	<0.038	0.359	0.076	1.210	0.079	0.117	0.099
<b>PCDD/F Homologues</b>																									
TCDDs	0.066	0.153	0.025	0.039	0.100	0.133	0.115	0.041	0.054	0.044	0.266	0.092	0.057	0.046	0.074	<0.008	0.044	0.032	0.105	0.730	0.199	<0.009	0.018	0.182	0.090
PeCDDs	0.122	0.251	0.043	0.086	0.154	0.194	0.173	0.076	0.024	0.053	0.389	0.033	0.092	0.153	0.143	0.029	0.028	0.029	0.141	0.459	0.282	<0.009	0.014	0.148	0.202
HxCDDs	0.253	0.449	0.139	0.183	0.324	0.321	0.370	0.142	0.104	0.099	1.267	0.133	0.178	0.298	0.323	0.212	0.071	0.597	0.168	0.441	0.691	0.053	0.266	0.140	0.432
HpCDDs	0.404	0.558	0.310	0.304	0.532	0.475	0.484	0.246	0.263	0.189	2.268	0.309	0.338	0.573	0.664	0.500	0.180	1.235	0.547	0.448	1.089	0.359	1.372	0.459	0.809
OCDD	0.407	0.624	0.525	0.423	0.614	0.548	0.491	0.245	0.330	0.197	2.318	0.550	0.443	0.819	0.793	0.681	0.231	1.469	1.298	0.525	1.078	0.562	1.622	1.197	1.055
TCDFs	0.471	1.437	0.314	0.452	0.435	0.848	0.505	0.377	0.345	0.209	0.713	0.356	0.344	0.364	0.453	0.102	0.361	0.639	0.814	0.403	0.388	0.074	0.187	0.324	0.330
PeCDFs	0.288	1.241	0.124	0.220	0.331	0.448	0.488	0.289	0.248	0.166	0.711	0.185	0.313	0.283	0.346	0.077	0.046	0.358	0.441	0.512	0.559	0.148	0.085	0.204	0.127
HxCDFs	0.173	0.747	0.133	0.162	0.309	0.234	0.490	0.208	0.219	0.209	0.723	0.187	0.286	0.291	0.225	0.040	0.038	0.262	0.284	0.456	0.619	0.444	0.086	0.108	0.124
HpCDFs	0.102	0.463	0.120	0.133	0.247	0.158	0.277	0.106	0.237	0.100	0.580	0.122	0.235	0.209	0.052	0.055	0.033	0.257	0.305	0.432	0.680	0.903	0.101	0.111	0.122
OCDF	0.042	0.223	0.074	0.082	0.121	0.058	0.070	0.035	0.197	0.027	0.224	0.068	0.129	0.113	0.072	0.040	0.015	0.090	<0.038	0.359	0.076	1.210	0.079	0.117	0.099
<b>Total</b>																									
∑ PCDDs	1.252	2.035	1.043	1.035	1.724	1.671	1.634	0.750	0.775	0.583	6.508	1.116	1.108	1.890	1.997	1.423	0.554	3.363	2.259	2.602	3.338	0.974	3.292	2.126	2.587
∑ PCDFs	1.076	4.111	0.765	1.049	1.443	1.746	1.831	1.016	1.246	0.710	2.952	0.918	1.307	1.261	1.149	0.314	0.492	1.607	1.844	2.163	2.322	2.779	0.538	0.865	0.802
∑ PCDD/Fs	2.328	6.146	1.809	2.084	3.166	3.417	3.464	1.766	2.022	1.293	9.460	2.034	2.415	3.151	3.146	1.737	1.046	4.970	4.103	4.765	5.660	3.753	3.830	2.990	3.389
∑ TEQ (PCDD/Fs)	0.055	0.099	0.038	0.052	0.071	0.072	0.055	0.032	0.030	0.018	0.124	0.028	0.044	0.067	0.066	0.035	0.014	0.074	0.073	0.076	0.086	0.068	0.034	0.039	0.066

Table A45. Atmospheric concentrations of PCDD/Fs ( $\mu\text{g m}^{-3}$ ) at NAPS urban sites in 1996

Station Name	Powell River									Vancouver (Kitsilano)				Estevan
Sampling Period	1	2	3	4	5	6	7	8	9	1	2	3	4	1
Sampling Date	7/14/96	8/7/96	8/25/96	9/24/96	10/1/96	11/26/96	12/1/96	12/10/96	12/26/96	1/4/96	2/21/96	4/9/96	5/27/96	2/22/96
Sampling Volume (m3)	1074	1111	1456	764	2363	1553	2343	1187	1614	582	566	706	673	686
<b>PCDD/F Congeners</b>														
2,3,7,8-TCDD	<0.002	<0.002	<0.004	<0.008	<0.003	<0.005	<0.002	<0.005	0.001	<0.01	<0.004	<0.004	<0.003	<0.003
1,2,3,7,8-PeCDD	0.010	0.008	0.005	<0.009	0.006	<0.005	0.014	<0.005	0.007	<0.01	0.009	0.009	<0.006	0.008
1,2,3,4,7,8-HxCDD	0.005	0.008	0.002	<0.010	<0.003	<0.005	0.007	<0.005	0.012	0.015	0.006	0.006	<0.004	<0.006
1,2,3,6,7,8-HxCDD	0.013	0.028	0.005	0.010	0.008	<0.005	0.015	<0.005	0.013	0.032	0.014	0.011	<0.004	0.009
1,2,3,7,8,9-HxCDD	0.013	0.021	0.007	<0.010	0.011	0.006	0.012	<0.005	0.031	0.030	0.016	0.012	<0.004	0.013
1,2,3,4,6,7,8-HpCDD	0.072	0.453	0.034	0.038	0.069	0.038	0.083	0.043	0.174	0.359	0.138	0.111	0.050	0.118
OCDD	0.367	2.921	0.094	0.070	0.243	0.062	0.138	0.536	0.433	0.810	0.528	0.341	0.252	0.303
2,3,7,8-TCDF	0.042	0.018	0.029	0.037	0.042	0.051	0.110	0.019	0.024	0.048	0.030	0.023	0.008	0.009
1,2,3,7,8-PeCDF	0.007	0.003	0.004	<0.005	0.006	0.008	0.017	<0.004	0.006	0.011	0.008	<0.006	<0.004	<0.003
2,3,4,7,8-PeCDF	0.013	0.004	0.005	<0.005	0.010	<0.003	0.029	0.005	0.007	0.014	0.021	0.018	<0.004	0.008
1,2,3,4,7,8-HxCDF	0.010	0.007	0.005	<0.005	<0.001	0.007	0.016	<0.005	0.010	0.022	0.019	0.013	<0.004	0.005
1,2,3,6,7,8-HxCDF	0.007	0.008	0.003	0.005	0.006	0.004	0.011	<0.005	0.005	0.009	0.009	0.006	<0.004	<0.003
2,3,4,6,7,8-HxCDF	0.008	0.011	0.003	<0.005	0.005	<0.003	0.015	<0.005	0.006	0.010	0.010	0.007	<0.004	0.005
1,2,3,7,8,9-HxCDF	<0.002	<0.003	<0.003	<0.005	<0.001	<0.003	<0.002	<0.005	<0.001	<0.007	<0.004	<0.003	<0.004	<0.003
1,2,3,4,6,7,8-HpCDF	0.031	0.158	0.013	0.011	0.013	0.008	0.015	0.012	0.015	0.041	0.045	0.029	0.015	0.013
1,2,3,4,7,8,9-HpCDF	0.004	<0.003	<0.003	<0.008	0.002	<0.003	0.005	<0.005	0.005	<0.01	0.006	<0.004	<0.003	<0.005
OCDF	0.036	0.301	0.009	<0.016	0.007	<0.006	0.008	0.020	0.022	0.044	0.039	0.020	0.015	0.025
<b>PCDD/F Homologues</b>														
TCDDs	0.232	0.029	0.182	0.141	0.101	0.124	0.338	0.033	0.047	0.036	0.030	0.020	0.005	<0.003
PeCDDs	0.229	0.128	0.120	0.157	0.098	0.106	0.391	0.014	0.078	0.076	0.047	0.027	<0.006	0.008
HxCDDs	0.250	0.317	0.096	0.190	0.109	0.120	0.347	0.024	0.182	0.328	0.151	0.123	0.023	0.081
HpCDDs	0.140	0.773	0.063	0.072	0.141	0.075	0.179	0.083	0.366	0.732	0.292	0.222	0.101	0.219
OCDD	0.367	2.921	0.094	0.070	0.243	0.062	0.138	0.536	0.433	0.810	0.528	0.341	0.252	0.303
TCDFs	0.316	0.068	0.274	0.228	0.338	0.406	0.824	0.129	0.155	0.214	0.172	0.171	0.036	0.020
PeCDFs	0.154	0.100	0.087	<0.005	0.116	0.115	0.321	0.040	0.078	0.120	0.085	0.092	0.025	0.012
HxCDFs	0.099	0.278	0.045	0.026	0.045	0.036	0.111	<0.005	0.044	0.094	0.083	0.066	0.023	0.019
HpCDFs	0.079	0.616	0.023	0.011	0.018	0.013	0.034	0.022	0.036	0.081	0.080	0.048	0.029	0.023
OCDF	0.036	0.301	0.009	<0.016	0.007	<0.006	0.008	0.020	0.022	0.044	0.039	0.020	0.015	0.025
<b>Total</b>														
∑ PCDDs	1.217	4.168	0.555	0.629	0.692	0.487	1.393	0.691	1.107	1.982	1.047	0.733	0.380	0.611
∑ PCDFs	0.684	1.362	0.438	0.265	0.524	0.571	1.296	0.211	0.335	0.460	0.459	0.396	0.128	0.098
∑ PCDD/Fs	1.901	5.530	0.993	0.894	1.216	1.058	2.689	0.902	1.442	2.442	1.506	1.130	0.509	0.709
∑ TEQ (PCDD/Fs)	0.027	0.029	0.017	0.028	0.020	0.020	0.045	0.018	0.023	0.046	0.032	0.028	0.014	0.020

Table A45. Atmospheric concentrations of PCDD/Fs ( $\mu\text{g m}^{-3}$ ) at NAPS urban sites in 1996 (continued)

Station Name	Toronto (Junction Triangle)											Montreal (1125)									
	1	2	3	4	5	6	7	8	9	10	11	1	2	3	4	5	6	7	8	9	10
Sampling Period	1/4/96	2/21/96	4/9/96	5/27/96	7/14/96	8/7/96	8/31/96	9/24/96	10/18/96	11/11/96	12/5/96	1/4/96	2/21/96	5/27/96	7/14/96	8/7/96	8/31/96	9/24/96	10/18/96	11/11/96	12/5/96
Sampling Volume (m3)	939	902	849	897	811	896	795	859	786	817	665	1308	1125	989	921	956	1115	1040	995	1052	649
<b>PCDD/F Congeners</b>																					
2,3,7,8-TCDD	0.003	0.006	<0.002	<0.002	<0.002	<0.003	<0.003	<0.007	<0.003	<0.003	0.014	0.007	0.005	<0.002	<0.009	0.003	<0.004	0.002	<0.008	<0.002	<0.003
1,2,3,7,8-PeCDD	0.015	0.038	0.013	0.020	0.003	0.012	0.016	0.020	<0.010	0.010	0.053	0.019	0.087	0.093	0.029	0.023	0.017	0.020	0.010	0.010	0.013
1,2,3,4,7,8-HxCDD	0.014	<0.006	0.012	0.019	<0.007	<0.007	0.025	0.027	<0.008	0.007	0.040	0.020	0.011	0.015	0.011	0.009	<0.006	0.008	<0.008	0.005	0.011
1,2,3,6,7,8-HxCDD	0.025	0.816	0.024	0.031	0.007	0.010	0.038	0.055	0.008	0.011	0.058	0.034	0.022	0.032	0.021	0.016	0.006	0.011	0.016	0.010	0.017
1,2,3,7,8,9-HxCDD	0.039	0.420	0.035	0.050	0.012	0.015	0.068	0.080	0.015	0.019	0.106	0.054	0.035	0.049	0.052	0.028	0.011	0.013	0.031	0.016	0.025
1,2,3,4,6,7,8-HpCDD	0.231	1.558	0.192	0.268	0.053	0.064	0.395	0.488	0.106	0.178	0.362	0.348	0.219	0.466	0.265	0.144	0.062	0.165	0.224	0.143	0.289
OCDD	0.526	4.654	0.469	0.725	0.143	0.158	0.484	1.251	0.281	0.491	0.803	0.646	0.550	1.118	0.807	0.427	0.183	0.536	0.741	0.491	1.309
2,3,7,8-TCDF	0.113	0.237	0.100	0.214	0.030	0.050	0.134	0.151	0.051	0.020	0.840	0.158	0.174	0.089	0.041	0.072	0.025	0.032	0.031	0.022	0.029
1,2,3,7,8-PeCDF	0.022	0.041	0.018	0.045	0.007	0.010	0.022	0.029	0.007	0.004	0.134	0.016	0.015	0.010	<0.007	0.008	0.005	0.008	0.006	0.004	0.007
2,3,4,7,8-PeCDF	0.051	0.074	0.039	0.143	0.007	0.014	0.038	0.068	0.016	0.011	0.295	0.038	0.035	0.032	0.012	0.022	0.006	0.012	0.011	0.012	0.018
1,2,3,4,7,8-HxCDF	0.065	0.172	0.074	0.199	0.015	0.030	0.052	0.148	0.021	0.015	0.360	0.068	0.046	0.036	0.031	0.044	0.011	0.032	0.031	0.015	0.018
1,2,3,6,7,8-HxCDF	0.025	0.065	0.030	0.080	0.006	0.017	0.024	0.076	0.009	0.006	0.147	0.030	0.017	0.016	0.020	0.021	0.005	0.013	0.014	0.005	0.009
2,3,4,6,7,8-HxCDF	0.034	0.088	0.044	0.113	0.007	0.016	0.035	0.074	0.011	0.008	0.173	0.043	0.027	0.021	0.024	0.024	0.004	0.018	0.015	0.008	0.010
1,2,3,7,8,9-HxCDF	<0.003	0.009	<0.003	<0.004	<0.003	<0.004	<0.005	0.031	<0.005	<0.003	<0.006	<0.003	<0.002	<0.003	0.011	<0.008	<0.004	0.003	<0.01	<0.002	<0.003
1,2,3,4,6,7,8-HpCDF	0.106	0.266	0.107	0.300	0.023	0.049	0.076	0.275	0.034	0.046	0.341	0.123	0.071	0.090	0.068	0.097	0.023	0.067	0.057	0.030	0.046
1,2,3,4,7,8,9-HpCDF	0.015	0.039	0.020	0.038	<0.007	0.006	0.015	0.033	<0.008	<0.006	0.035	0.020	0.010	0.019	0.031	<0.008	<0.004	0.013	<0.016	0.005	<0.006
OCDF	0.084	0.185	0.069	0.136	0.028	0.038	0.058	0.131	0.024	0.054	0.100	0.092	0.054	0.087	0.103	0.067	0.019	0.067	0.101	0.030	0.075
<b>PCDD/F Homologues</b>																					
TCDDs	0.121	0.345	0.103	0.301	0.026	0.069	0.062	0.209	0.056	0.027	0.753	0.081	0.071	0.034	0.012	0.188	0.016	0.023	0.017	0.025	0.024
PeCDDs	0.190	0.480	0.152	0.415	0.008	0.105	0.141	0.387	0.055	0.055	0.920	0.136	0.095	0.068	0.036	0.113	0.014	0.060	0.062	0.040	0.044
HxCDDs	0.339	5.306	0.338	0.464	0.079	0.165	0.594	0.753	0.119	0.159	0.813	0.380	0.271	0.360	0.202	0.285	0.086	0.131	0.181	0.109	0.217
HpCDDs	0.495	2.889	0.430	0.574	0.109	0.143	0.884	1.023	0.221	0.404	0.757	0.707	0.453	0.917	0.536	0.322	0.137	0.352	0.471	0.283	0.537
OCDD	0.526	4.654	0.469	0.725	0.143	0.158	0.484	1.251	0.281	0.491	0.803	0.646	0.550	1.118	0.807	0.427	0.183	0.536	0.741	0.491	1.309
TCDFs	0.626	1.540	0.490	1.142	0.179	0.395	0.834	0.872	0.340	0.111	4.789	0.823	0.923	0.505	0.304	0.584	0.139	0.208	0.139	0.129	0.176
PeCDFs	0.382	0.904	0.377	1.170	0.145	0.305	0.461	0.834	0.128	0.073	2.777	0.355	0.289	0.236	0.152	0.399	0.110	0.133	0.080	0.063	0.089
HxCDFs	0.278	0.767	0.325	0.881	0.084	0.205	0.310	0.661	0.085	0.065	1.510	0.335	0.206	0.189	0.185	0.295	0.061	0.155	0.103	0.071	0.086
HpCDFs	0.176	0.461	0.191	0.483	0.047	0.088	0.161	0.428	0.047	0.084	0.519	0.221	0.125	0.174	0.130	0.140	0.010	0.128	0.097	0.056	0.098
OCDF	0.084	0.185	0.069	0.136	0.028	0.038	0.058	0.131	0.024	0.054	0.100	0.092	0.054	0.087	0.103	0.067	0.019	0.067	0.101	0.030	0.075
<b>Total</b>																					
∑ PCDDs	1.670	3.675	1.493	2.478	0.365	0.640	2.165	3.623	0.732	1.136	4.046	1.950	1.439	2.497	1.592	1.334	0.435	1.102	1.472	0.947	2.131
∑ PCDFs	1.545	3.857	1.453	3.811	0.484	1.033	1.825	2.927	0.625	0.387	9.694	1.826	1.598	1.191	0.875	1.485	0.339	0.690	0.519	0.348	0.524
∑ PCDD/Fs	3.216	7.532	2.946	6.290	0.849	1.673	3.990	6.550	1.357	1.523	13.740	3.776	3.036	3.688	2.467	2.819	0.774	1.792	1.991	1.296	2.655
∑ TEQ (PCDD/Fs)	0.070	0.269	0.063	0.143	0.017	0.036	0.074	0.121	0.032	0.028	0.340	0.084	0.140	0.137	0.067	0.058	0.031	0.041	0.040	0.026	0.038

Table A45. Atmospheric concentrations of PCDD/Fs (pg m<sup>-3</sup>) at NAPS urban sites in 1996 (continued)

Station Name	Winnipeg													Windsor (College)												
Sampling Period	1	2	3	4	5	6	7	8	9	10	11	1	2	3	4	5	6	7	8	9	10	11	12	13		
Sampling Date	2/21/96	4/9/96	5/27/96	7/14/96	8/7/96	8/31/96	9/24/96	10/18/96	11/23/96	12/5/96	12/29/96	1/4/96	1/28/96	2/21/96	3/16/96	4/9/96	5/3/96	6/20/96	7/14/96	8/31/96	10/18/96	11/11/96	12/5/96	12/29/96		
Sampling Volume (m3)	967	865	796	887	836	810	892	875	948	842	755	746	820	787	770	778	657	643	641	642	844	729	796	796		
<b>PCDD/F Congeners</b>																										
2,3,7,8-TCDD	<0.002	<0.003	<0.005	<0.003	<0.007	<0.010	<0.007	<0.002	<0.004	<0.003	<0.005	0.004	<0.007	<0.008	<0.002	0.002	0.003	<0.003	0.016	<0.012	<0.007	<0.004	<0.005	<0.004		
1,2,3,7,8-PeCDD	0.004	0.006	0.012	<0.007	<0.012	<0.012	0.020	<0.0057	0.010	0.008	0.030	0.025	0.029	0.015	0.005	0.010	0.016	0.024	0.060	<0.031	<0.005	<0.008	0.015	0.015		
1,2,3,4,7,8-HxCDD	<0.004	<0.005	0.011	<0.007	<0.019	<0.02	<0.009	<0.006	0.006	<0.006	0.024	0.031	0.038	0.020	0.005	0.011	0.020	0.016	0.061	<0.037	<0.007	<0.006	0.012	0.015		
1,2,3,6,7,8-HxCDD	0.007	0.006	0.017	<0.007	<0.019	<0.02	<0.009	0.008	0.013	0.011	0.041	0.064	0.079	0.034	0.011	0.019	0.036	0.035	0.071	0.039	0.012	0.006	0.017	0.024		
1,2,3,7,8,9-HxCDD	0.008	0.007	0.010	<0.007	<0.019	<0.02	<0.009	<0.006	0.016	0.017	0.086	0.092	0.121	0.074	0.016	0.030	0.064	0.060	0.099	<0.037	0.013	0.011	0.031	0.049		
1,2,3,4,6,7,8-HpCDD	0.067	0.057	0.196	0.046	0.057	0.120	0.059	0.101	0.118	0.230	0.518	0.611	0.773	0.461	0.106	0.245	0.378	0.391	0.523	0.177	0.118	0.081	0.260	0.327		
OCDD	0.196	0.165	0.594	0.175	0.164	0.341	0.177	0.319	0.277	2.029	0.903	1.458	1.765	1.076	0.293	0.839	0.926	1.353	1.560	0.434	0.402	0.032	1.198	0.909		
2,3,7,8-TCDF	0.017	0.014	0.041	0.012	0.007	0.022	0.031	0.027	0.037	0.012	0.022	0.191	0.219	0.122	0.059	0.120	0.154	0.125	0.085	0.048	0.043	0.035	0.036	0.059		
1,2,3,7,8-PeCDF	0.002	0.002	0.007	<0.004	<0.007	<0.015	<0.004	<0.004	0.006	<0.002	0.004	0.037	0.048	0.028	0.011	0.020	0.026	0.029	0.043	0.013	0.009	0.007	0.008	0.014		
2,3,4,7,8-PeCDF	0.011	0.012	0.026	<0.004	<0.007	<0.015	<0.004	0.014	0.014	0.010	0.007	0.069	0.088	0.051	0.017	0.037	0.056	0.070	0.051	<0.012	0.021	0.016	0.018	0.031		
1,2,3,4,7,8-HxCDF	0.007	<0.003	0.029	0.006	<0.012	<0.01	<0.009	0.009	0.017	0.009	0.010	0.137	0.258	0.077	0.026	0.049	0.114	0.088	0.102	0.051	0.027	0.013	0.025	0.043		
1,2,3,6,7,8-HxCDF	0.003	0.003	0.013	<0.005	<0.012	<0.01	<0.009	0.004	0.007	0.003	<0.008	0.056	0.091	0.036	0.012	0.025	0.049	0.044	0.064	0.031	0.011	0.006	0.011	0.020		
2,3,4,6,7,8-HxCDF	0.003	<0.003	0.017	<0.005	<0.012	<0.01	<0.009	0.005	0.008	0.004	<0.008	0.076	0.135	0.052	0.015	0.031	0.078	0.052	0.072	0.021	0.015	0.008	0.012	0.027		
1,2,3,7,8,9-HxCDF	<0.002	<0.003	<0.003	<0.005	<0.012	<0.01	<0.009	<0.005	<0.003	<0.003	<0.008	0.006	0.011	<0.005	0.002	0.003	0.005	<0.003	0.035	<0.019	<0.002	<0.006	<0.005	<0.007		
1,2,3,4,6,7,8-HpCDF	0.013	0.015	0.062	0.017	0.026	0.073	0.021	0.018	0.027	0.023	0.029	0.219	0.495	0.117	0.044	0.093	0.245	0.228	0.276	0.168	0.054	0.026	0.059	0.084		
1,2,3,4,7,8,9-HpCDF	<0.002	<0.004	0.009	<0.007	<0.019	0.019	<0.018	<0.006	<0.006	<0.004	<0.008	0.029	0.055	0.017	0.006	0.017	0.027	0.022	0.067	<0.019	0.009	<0.008	0.011	0.013		
OCDF	0.015	0.019	0.064	0.011	0.034	0.065	<0.02	0.018	0.017	0.099	0.026	0.198	0.400	0.102	0.059	0.074	0.148	0.138	0.284	0.128	0.037	0.024	0.072	0.067		
<b>PCDD/F Homologues</b>																										
TCDDs	0.020	<0.003	0.114	0.010	<0.007	<0.010	0.007	0.057	0.046	<0.003	0.073	0.454	0.355	0.151	0.051	0.061	0.133	0.189	0.165	0.065	0.079	0.023	0.036	0.083		
PeCDDs	0.031	0.021	0.149	<0.007	0.012	<0.012	<0.018	<0.006	0.084	0.038	0.183	0.713	0.608	0.299	0.085	0.120	0.219	0.238	0.166	0.086	0.034	0.015	0.096	0.122		
HxCDDs	0.079	0.045	0.264	0.050	<0.019	<0.020	<0.009	0.080	0.148	0.127	0.726	1.192	1.212	0.583	0.161	0.249	0.523	0.528	0.654	0.274	0.153	0.080	0.221	0.367		
HpCDDs	0.173	0.122	0.458	0.085	0.120	0.260	0.114	0.179	0.244	0.447	1.220	1.330	1.640	1.094	0.243	0.545	0.860	0.883	1.144	0.383	0.246	0.169	0.536	0.725		
OCDD	0.196	0.165	0.594	0.175	0.164	0.341	0.177	0.319	0.277	2.029	0.903	1.458	1.765	1.076	0.293	0.839	0.926	1.353	1.560	0.434	0.402	0.032	1.198	0.909		
TCDFs	0.080	0.097	0.368	0.066	0.014	0.082	0.057	0.173	0.217	0.067	0.094	1.030	0.910	0.712	0.337	0.867	0.870	1.007	0.388	0.171	0.308	0.198	0.223	0.401		
PeCDFs	0.026	0.043	0.248	0.062	0.015	0.142	0.035	0.078	0.130	0.031	0.044	0.812	1.089	0.557	0.199	0.516	0.572	0.725	0.354	0.160	0.162	0.084	0.113	0.198		
HxCDFs	0.031	0.018	0.192	0.042	<0.012	0.085	<0.009	0.054	0.065	0.039	0.042	0.635	1.092	0.388	0.131	0.353	0.550	0.604	0.528	0.319	0.139	0.041	0.116	0.218		
HpCDFs	0.018	0.023	0.114	0.026	0.026	0.128	0.021	0.042	0.041	0.060	0.054	0.408	0.790	0.202	0.078	0.193	0.408	0.366	0.476	0.276	0.093	0.042	0.084	0.154		
OCDF	0.015	0.019	0.064	0.011	0.034	0.065	<0.02	0.018	0.017	0.099	0.026	0.198	0.400	0.102	0.059	0.074	0.148	0.138	0.284	0.128	0.037	0.024	0.072	0.067		
<b>Total</b>																										
∑ PCDDs	0.500	0.353	1.579	0.319	0.296	0.601	0.298	0.635	0.799	2.642	3.105	5.145	5.580	3.204	0.833	1.814	2.661	3.191	3.690	1.243	0.914	0.319	2.087	2.206		
∑ PCDFs	0.170	0.199	0.986	0.206	0.090	0.503	0.113	0.366	0.470	0.296	0.260	3.083	4.279	1.962	0.804	2.003	2.548	2.840	2.031	1.053	0.740	0.390	0.608	1.038		
∑ PCDD/Fs	0.670	0.552	2.565	0.525	0.386	1.104	0.411	1.001	1.269	2.938	3.365	8.228	9.859	5.166	1.637	3.816	5.209	6.031	5.721	2.296	1.654	0.708	2.694	3.244		
∑ TEQ (PCDD/Fs)	0.016	0.018	0.042	0.017	0.034	0.041	0.039	0.020	0.031	0.024	0.064	0.125	0.173	0.087	0.029	0.056	0.096	0.098	0.161	0.079	0.033	0.027	0.044	0.057		

Table A45. Atmospheric concentrations of PCDD/Fs ( $\mu\text{g m}^{-3}$ ) at NAPS urban sites in 1996 (continued)

Station Name	Hamilton (Elgin)										Jonquiere								
	1	2	3	4	5	6	7	8	9	10	1	2	3	4	5	6	7	8	9
Sampling Period	1/4/96	2/21/96	4/9/96	5/27/96	7/14/96	8/7/96	8/31/96	10/18/96	11/11/96	12/5/96	2/15/96	4/3/96	5/21/96	8/5/96	8/30/96	9/18/96	10/24/96	11/17/96	12/11/96
Sampling Volume (m3)	791	762	765	681	673	656	690	708	713	769	1163	1069	1068	1027	907	814	1529	790	777
<b>PCDD/F Congeners</b>																			
2,3,7,8-TCDD	0.008	<0.005	<0.004	<0.003	<0.003	0.041	<0.009	<0.011	<0.003	0.005	0.008	0.005	0.004	<0.006	<0.002	<0.002	<0.003	0.010	0.010
1,2,3,7,8-PeCDD	0.029	0.034	0.009	0.009	0.013	0.167	0.014	0.016	<0.006	0.021	0.015	<0.004	0.010	0.020	0.005	0.016	0.010	0.067	0.041
1,2,3,4,7,8-HxCDD	0.032	0.026	0.007	0.010	0.013	0.155	0.022	<0.011	<0.006	0.021	0.014	<0.004	0.011	0.014	0.003	0.023	0.008	0.066	0.042
1,2,3,6,7,8-HxCDD	0.040	0.061	0.015	0.016	0.015	0.301	0.034	0.016	<0.006	0.038	0.020	<0.004	0.037	0.018	0.004	0.043	0.018	0.115	0.089
1,2,3,7,8,9-HxCDD	0.067	0.107	0.022	0.021	0.030	0.605	0.042	0.021	0.007	0.063	0.033	<0.004	0.015	0.018	0.005	0.087	0.019	0.179	0.125
1,2,3,4,6,7,8-HpCDD	0.374	0.542	0.143	0.146	0.153	2.428	0.333	0.141	0.087	0.459	0.153	0.055	0.240	0.078	0.068	0.674	0.239	1.056	0.838
OCDD	0.780	1.467	0.380	0.526	0.432	3.930	0.712	0.474	0.282	1.187	0.357	0.360	0.568	0.234	0.312	1.306	1.226	1.963	1.763
2,3,7,8-TCDF	0.085	0.294	0.083	0.113	0.066	0.650	0.088	0.122	0.015	0.130	0.184	0.034	0.063	0.047	0.013	0.051	0.112	0.574	1.056
1,2,3,7,8-PeCDF	0.036	0.052	0.016	0.028	0.013	0.153	0.017	0.024	<0.008	0.025	0.025	0.003	0.008	0.020	0.003	0.013	0.015	0.106	0.457
2,3,4,7,8-PeCDF	0.055	0.105	0.031	0.079	0.017	0.203	0.027	0.038	<0.008	0.041	0.047	0.002	0.016	0.018	<0.002	0.017	0.025	0.192	0.271
1,2,3,4,7,8-HxCDF	0.132	0.201	0.044	0.070	0.043	0.685	0.059	0.051	0.012	0.083	0.064	0.002	0.020	0.023	0.005	0.069	0.040	0.372	0.910
1,2,3,6,7,8-HxCDF	0.060	0.076	0.018	0.033	0.020	0.273	0.028	0.032	<0.006	0.030	0.028	<0.002	0.008	0.018	0.003	0.025	0.015	0.142	0.263
2,3,4,6,7,8-HxCDF	0.079	0.104	0.025	0.037	0.024	0.385	0.039	0.034	<0.006	0.037	0.037	<0.002	0.011	0.021	0.003	0.032	0.016	0.180	0.264
1,2,3,7,8,9-HxCDF	0.015	<0.006	<0.003	<0.006	<0.005	0.061	<0.006	<0.008	<0.006	<0.005	<0.002	<0.002	<0.002	0.014	<0.002	0.004	<0.003	<0.010	0.051
1,2,3,4,6,7,8-HpCDF	0.302	0.300	0.070	0.115	0.086	1.382	0.097	0.068	0.035	0.141	0.074	0.008	0.039	0.053	0.014	0.158	0.065	0.456	0.341
1,2,3,4,7,8,9-HpCDF	0.068	0.033	0.011	0.015	0.014	0.191	0.017	<0.011	<0.006	0.025	0.012	<0.003	0.007	0.030	<0.003	0.031	<0.007	0.044	0.272
OCDF	0.390	0.161	0.058	0.080	0.057	0.710	0.056	0.059	0.042	0.110	0.048	0.017	0.043	0.081	0.021	0.196	0.098	0.196	1.608
<b>PCDD/F Homologues</b>																			
TCDDs	0.158	0.928	0.198	0.141	0.303	30.554	0.475	0.061	0.026	0.225	0.122	0.007	0.065	0.026	0.024	0.061	0.089	0.946	0.559
PeCDDs	0.288	1.131	0.168	0.135	0.226	21.482	0.511	0.099	<0.006	0.335	0.174	<0.004	0.071	0.020	0.025	0.151	0.065	1.198	0.795
HxCDDs	0.538	1.406	0.210	0.233	0.321	18.517	0.730	0.147	0.075	0.518	0.244	0.012	0.219	0.088	0.041	0.592	0.192	1.549	1.072
HpCDDs	0.804	1.240	0.295	0.345	0.450	6.919	0.749	0.304	0.191	1.015	0.311	0.097	0.500	0.137	0.135	1.456	0.487	2.147	1.672
OCDD	0.780	1.467	0.380	0.526	0.432	3.930	0.712	0.474	0.282	1.187	0.357	0.360	0.568	0.234	0.312	1.306	1.226	1.963	1.763
TCDFs	0.393	1.708	0.444	0.690	0.477	4.454	0.561	0.784	0.079	0.835	0.884	0.074	0.286	0.180	0.072	0.271	0.594	3.199	3.858
PeCDFs	0.395	1.084	0.329	0.453	0.332	3.824	0.458	0.386	0.022	0.480	0.426	0.009	0.125	0.125	0.035	0.197	0.296	2.420	3.257
HxCDFs	0.541	0.898	0.208	0.347	0.248	3.800	0.346	0.232	0.055	0.336	0.282	0.009	0.095	0.116	0.028	0.287	0.249	1.659	2.966
HpCDFs	0.522	0.486	0.121	0.199	0.154	2.315	0.170	0.131	0.066	0.247	0.130	0.017	0.080	0.104	0.026	0.293	0.188	0.709	2.288
OCDF	0.390	0.161	0.058	0.080	0.057	0.710	0.056	0.059	0.042	0.110	0.048	0.017	0.043	0.081	0.021	0.196	0.098	0.196	1.608
<b>Total</b>																			
∑ PCDDs	2.568	6.173	1.252	1.380	1.732	81.402	3.178	1.085	0.573	3.280	1.207	0.476	1.422	0.505	0.536	3.566	2.059	7.803	5.860
∑ PCDFs	2.241	4.336	1.160	1.770	1.268	15.103	1.591	1.591	0.263	2.008	1.770	0.127	0.630	0.606	0.183	1.245	1.425	8.183	3.978
∑ PCDD/Fs	4.809	10.509	2.411	3.150	3.000	96.505	4.769	2.676	0.836	5.288	2.977	0.602	2.052	1.111	0.719	4.811	3.484	15.986	9.837
∑ TEQ (PCDD/Fs)	0.113	0.169	0.047	0.071	0.046	0.626	0.068	0.071	0.019	0.087	0.079	0.015	0.039	0.051	0.012	0.066	0.048	0.318	0.442

Table A46. Atmospheric concentrations of PCDD/Fs ( $\mu\text{g m}^{-3}$ ) at NAPS urban sites in 1997

Station Name	Powell River						Toronto (Junction Triangle)										
	1	2	3	4	5	6	1	2	3	4	5	6	7	8	9	10	11
Sampling Period	1	2	3	4	5	6	1	2	3	4	5	6	7	8	9	10	11
Sampling Date	1/3/97	1/14/97	3/14/97	4/4/97	9/19/97	9/19/97	1/22/97	4/4/97	4/28/97	5/22/97	6/15/97	7/9/97	8/2/97	8/26/97	10/13/97	11/30/97	12/24/97
Sampling Volume (m3)	556	2464	1566	747	864	864	828	895	857	894	866	841	864	830	842	901	836
<b>PCDD/F Congeners</b>																	
2,3,7,8-TCDD	<0.004	0.005	<0.005	<0.008	<0.003	<0.003	<0.007	<0.004	<0.007	<0.004	<0.007	<0.012	<0.005	<0.005	<0.007	<0.004	<0.005
1,2,3,7,8-PeCDD	<0.007	0.017	0.008	0.010	<0.012	<0.012	<0.007	0.012	0.014	<0.009	0.018	<0.007	0.006	0.006	0.007	0.006	0.007
1,2,3,4,7,8-HxCDD	<0.011	0.015	0.005	0.010	0.015	0.015	<0.007	0.007	0.012	<0.007	0.022	<0.007	<0.005	<0.007	0.009	0.009	0.006
1,2,3,6,7,8-HxCDD	<0.011	0.020	0.016	0.022	0.011	0.011	0.026	0.016	0.023	0.008	0.047	0.009	0.005	<0.007	0.021	0.017	0.013
1,2,3,7,8,9-HxCDD	0.012	0.039	0.014	0.023	0.011	0.011	0.018	0.020	0.037	0.012	0.073	<0.007	0.013	<0.007	0.031	0.024	0.022
1,2,3,4,6,7,8-HpCDD	0.045	0.233	0.070	0.072	0.049	0.049	0.185	0.208	0.221	0.076	0.745	0.049	0.066	0.090	0.212	0.201	0.150
OCDD	0.130	1.132	0.107	0.144	0.143	0.143	0.737	0.789	0.660	0.276	1.985	0.321	0.347	0.407	0.768	0.601	0.447
2,3,7,8-TCDF	0.040	0.152	0.034	0.053	0.023	0.023	0.052	0.172	0.106	0.030	0.032	0.032	0.030	0.076	0.057	0.042	0.034
1,2,3,7,8-PeCDF	0.006	0.020	0.006	0.010	0.012	0.012	0.009	0.035	0.021	0.007	0.007	<0.007	0.005	0.014	0.011	0.008	0.008
2,3,4,7,8-PeCDF	0.009	0.039	0.009	0.017	<0.007	<0.007	0.009	0.051	0.043	0.010	0.009	0.011	0.006	0.019	0.017	0.012	0.011
1,2,3,4,7,8-HxCDF	0.009	0.028	0.013	0.022	0.009	0.009	0.038	0.069	0.092	0.020	0.021	0.021	0.010	0.028	0.039	0.028	0.016
1,2,3,6,7,8-HxCDF	<0.007	0.013	0.007	0.011	0.007	0.007	0.015	0.033	0.040	0.007	0.014	0.009	0.006	0.016	0.019	0.012	0.013
2,3,4,6,7,8-HxCDF	<0.007	0.020	0.008	0.010	0.007	0.007	0.021	0.035	0.058	0.013	0.014	0.017	0.007	0.020	0.022	0.017	0.010
1,2,3,7,8,9-HxCDF	<0.007	0.002	<0.004	<0.005	0.007	0.007	<0.005	0.010	0.005	<0.004	<0.005	<0.007	<0.005	0.005	0.004	<0.004	<0.005
1,2,3,4,6,7,8-HpCDF	<0.012	0.035	0.015	0.032	0.021	0.021	0.087	0.112	0.146	0.041	0.140	0.043	0.042	0.059	0.108	0.054	0.030
1,2,3,4,7,8,9-HpCDF	<0.012	0.006	0.007	<0.003	<0.014	<0.014	0.013	0.018	0.035	<0.007	0.023	0.012	0.006	0.015	0.016	0.009	0.005
OCDF	0.021	0.039	0.008	0.011	0.019	0.019	0.073	0.074	0.128	0.028	0.353	0.043	0.048	0.056	0.121	0.043	0.024
<b>PCDD/F Homologues</b>																	
TCDDs	0.082	0.347	0.216	0.320	0.070	0.070	0.036	0.070	0.088	0.035	0.021	<0.012	0.025	0.040	0.025	0.045	0.019
PeCDDs	0.101	0.364	0.210	0.201	0.141	0.141	0.037	0.064	0.060	<0.009	0.065	<0.007	0.025	0.043	0.033	0.026	0.026
HxCDDs	0.055	0.386	0.238	0.325	0.077	0.077	0.117	0.191	0.280	0.053	0.550	<0.007	0.055	0.051	0.160	0.219	0.107
HpCDDs	0.045	0.469	0.113	0.130	0.082	0.082	0.441	0.416	0.452	0.145	1.658	0.096	0.124	0.187	0.467	0.414	0.288
OCDD	0.130	1.132	0.107	0.144	0.143	0.143	0.737	0.789	0.660	0.276	1.985	0.321	0.347	0.407	0.768	0.601	0.447
TCDFs	0.263	1.072	0.231	0.353	0.133	0.133	0.347	1.102	0.597	0.175	0.234	0.248	0.268	0.596	0.404	0.249	0.214
PeCDFs	0.071	0.433	0.096	0.175	0.038	0.038	0.157	0.580	0.469	0.117	0.128	0.101	0.079	0.285	0.172	0.106	0.070
HxCDFs	0.032	0.166	0.038	0.099	0.036	0.036	0.153	0.341	0.411	0.088	0.139	0.110	0.079	0.158	0.175	0.103	0.066
HpCDFs	<0.012	0.075	0.031	0.050	0.030	0.030	0.146	0.195	0.263	0.055	0.249	0.080	0.069	0.115	0.189	0.098	0.046
OCDF	0.021	0.039	0.008	0.011	0.019	0.019	0.073	0.074	0.128	0.028	0.353	0.043	0.048	0.056	0.121	0.043	0.024
<b>Total</b>																	
∑ PCDDs	0.414	2.698	0.884	1.120	0.513	0.513	1.368	1.530	1.540	0.509	4.279	0.417	0.576	0.728	1.452	1.304	0.886
∑ PCDFs	0.386	1.785	0.404	0.688	0.256	0.256	0.877	2.291	1.868	0.463	1.103	0.581	0.543	1.210	1.060	0.599	0.421
∑ PCDD/Fs	0.800	4.483	1.288	1.808	0.769	0.769	2.245	3.821	3.409	0.972	5.382	0.998	1.119	1.938	2.512	1.903	1.307
∑ TEQ (PCDD/Fs)	0.025	0.066	0.027	0.040	0.027	0.027	0.039	0.073	0.076	0.028	0.060	0.035	0.022	0.035	0.043	0.032	0.029

Table A46. Atmospheric concentrations of PCDD/Fs ( $\mu\text{g m}^{-3}$ ) at NAPS urban sites in 1997 (continued)

Station Name	Montreal (1125)													
Sampling Period	1	2	3	4	5	6	7	8	9	10	11	12	13	14
Sampling Date	1/22/97	2/15/97	3/11/97	4/16/97	5/10/97	6/3/97	6/27/97	7/9/97	8/2/97	8/26/97	9/19/97	10/13/97	11/30/97	12/24/97
Sampling Volume (m3)	818	1124	1094	1014	1031	1014	1010	1002	989	985	978	948	1123	1079
<b>PCDD/F Congeners</b>														
2,3,7,8-TCDD	<0.007	<0.004	<0.004	<0.004	<0.004	<0.004	<0.003	<0.003	<0.002	<0.003	<0.006	<0.004	<0.002	0.002
1,2,3,7,8-PeCDD	0.021	0.016	0.013	0.019	0.016	0.008	<0.004	0.007	<0.006	0.013	0.006	0.012	0.011	0.020
1,2,3,4,7,8-HxCDD	0.015	0.012	0.008	0.009	0.004	0.007	<0.004	0.005	<0.008	0.012	0.005	0.010	0.005	0.017
1,2,3,6,7,8-HxCDD	0.029	0.020	0.008	0.017	0.006	0.011	0.009	0.016	<0.008	0.026	0.012	0.029	0.011	0.029
1,2,3,7,8,9-HxCDD	0.053	0.040	0.016	0.033	0.020	0.019	0.009	0.012	<0.008	0.039	0.014	0.036	0.015	0.051
1,2,3,4,6,7,8-HpCDD	0.411	0.338	0.120	0.227	0.139	0.141	0.063	0.125	0.118	0.249	0.101	0.266	0.175	0.473
OCDD	1.099	0.893	0.483	1.645	0.572	0.547	0.253	0.378	0.435	0.709	0.491	0.788	1.282	1.210
2,3,7,8-TCDF	0.049	0.072	0.019	0.044	0.020	0.032	0.025	0.057	0.029	0.064	0.026	0.046	0.027	0.048
1,2,3,7,8-PeCDF	0.015	0.011	0.004	0.009	0.003	0.007	<0.002	0.008	0.004	0.021	0.007	0.011	0.006	0.010
2,3,4,7,8-PeCDF	0.024	0.022	0.005	0.012	0.005	0.011	0.005	0.016	0.006	0.029	0.009	0.019	0.010	0.016
1,2,3,4,7,8-HxCDF	0.056	0.047	0.010	0.029	0.012	0.024	0.012	0.041	0.013	0.135	0.012	0.062	0.020	0.037
1,2,3,6,7,8-HxCDF	0.029	0.019	0.004	0.013	0.006	0.011	0.004	0.015	0.007	0.048	0.007	0.024	0.009	0.014
2,3,4,6,7,8-HxCDF	0.045	0.020	0.006	0.017	0.008	0.015	0.007	0.030	0.013	0.058	0.008	0.032	0.009	0.020
1,2,3,7,8,9-HxCDF	<0.007	<0.005	<0.004	<0.004	<0.002	<0.005	<0.004	<0.004	<0.005	0.010	<0.003	<0.006	<0.004	<0.003
1,2,3,4,6,7,8-HpCDF	0.100	0.074	0.025	0.069	0.029	0.063	0.022	0.076	0.039	0.303	0.028	0.130	0.050	0.060
1,2,3,4,7,8,9-HpCDF	0.017	<0.007	<0.007	0.014	<0.004	0.009	<0.004	0.011	0.010	0.045	<0.006	0.021	0.012	0.010
OCDF	0.084	0.077	0.022	0.079	0.070	0.065	0.011	0.036	0.031	0.254	0.029	0.090	0.075	0.045
<b>PCDD/F Homologues</b>														
TCDDs	0.034	0.057	0.007	0.024	0.007	<0.004	0.018	0.046	0.013	0.052	0.017	0.049	0.015	0.094
PeCDDs	0.116	0.117	0.010	<0.006	<0.004	<0.005	<0.004	0.063	<0.006	<0.004	<0.004	0.037	0.043	0.201
HxCDDs	0.418	0.337	0.090	0.169	0.094	0.112	0.053	0.226	0.029	0.347	0.089	0.255	0.102	0.461
HpCDDs	0.867	0.730	0.248	0.504	0.270	0.287	0.111	0.258	0.229	0.524	0.214	0.573	0.346	0.966
OCDD	1.099	0.893	0.483	1.645	0.572	0.547	0.253	0.378	0.435	0.709	0.491	0.788	1.282	1.210
TCDFs	0.181	0.405	0.139	0.317	0.110	0.246	0.244	0.376	0.244	0.446	0.251	0.311	0.181	0.313
PeCDFs	0.243	0.265	0.055	0.140	0.042	0.181	0.105	0.273	0.125	0.407	0.089	0.203	0.079	0.191
HxCDFs	0.238	0.170	0.046	0.130	0.058	0.159	0.082	0.213	0.080	0.573	0.087	0.280	0.095	0.171
HpCDFs	0.177	0.107	0.034	0.130	0.061	0.117	0.034	0.115	0.072	0.495	0.046	0.207	0.112	0.121
OCDF	0.084	0.077	0.022	0.079	0.070	0.065	0.011	0.036	0.031	0.254	0.029	0.090	0.075	0.045
<b>Total</b>														
$\Sigma$ PCDDs	2.534	2.134	0.837	2.342	0.943	0.946	0.435	0.971	0.706	1.632	0.811	1.701	1.788	2.933
$\Sigma$ PCDFs	0.923	1.024	0.297	0.795	0.341	0.769	0.476	1.012	0.552	2.175	0.502	1.090	0.542	0.841
$\Sigma$ PCDD/Fs	3.457	3.158	1.133	3.137	1.284	1.715	0.911	1.983	1.257	3.807	1.313	2.792	2.330	3.774
$\Sigma$ TEQ (PCDD/Fs)	0.070	0.054	0.028	0.047	0.031	0.030	0.017	0.036	0.021	0.072	0.025	0.051	0.029	0.055

Table A46. Atmospheric concentrations of PCDD/Fs (pg m<sup>-3</sup>) at NAPS urban sites in 1997 (continued)

Station Name	Winnipeg															Windsor (College)									
Sampling Period	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	1	2	3	4	5	6	7	8	9	10
Sampling Date	1/22/97	2/15/97	3/11/97	4/4/97	4/28/97	5/22/97	6/15/97	7/9/97	8/2/97	8/26/97	9/19/97	10/13/97	11/6/97	11/30/97	12/24/97	1/22/97	2/15/97	3/11/97	5/10/97	6/3/97	7/9/97	8/2/97	8/26/97	11/30/97	12/24/97
Sampling Volume (m3)	649	1026	674	970	873	900	882	756	849	871	949	983	1000	965	929	761	697	801	539	867	825	791	836	819	855
<b>PCDD/F Congeners</b>																									
2,3,7,8-TCDD	<0.006	<0.004	<0.009	<0.006	<0.005	<0.004	<0.002	0.003	<0.003	<0.002	0.025	<0.002	<0.002	0.003	<0.002	0.005	<0.006	<0.010	<0.019	<0.009	<0.012	<0.015	<0.007	<0.010	<0.009
1,2,3,7,8-PeCDD	<0.009	0.012	0.018	<0.004	<0.009	0.010	0.006	0.019	0.013	0.007	0.146	<0.002	0.009	0.008	0.010	0.023	0.011	<0.010	<0.015	<0.009	<0.015	0.022	0.022	<0.010	0.018
1,2,3,4,7,8-HxCDD	<0.006	0.011	0.014	<0.005	<0.007	0.008	0.005	0.016	0.012	0.011	0.128	<0.004	0.008	0.006	0.006	0.022	0.007	<0.015	<0.011	<0.014	<0.012	0.011	0.041	<0.01	0.023
1,2,3,6,7,8-HxCDD	<0.006	0.023	0.016	0.005	<0.007	0.016	0.022	0.033	0.021	0.011	0.282	<0.004	0.008	0.009	0.006	0.041	0.015	<0.015	<0.011	<0.014	0.015	0.032	0.080	0.012	0.043
1,2,3,7,8,9-HxCDD	<0.006	0.030	0.033	0.009	<0.007	0.021	0.010	0.042	0.028	0.026	0.463	<0.004	0.020	0.013	0.008	0.068	0.032	<0.015	0.013	<0.014	0.013	0.020	0.116	0.031	0.044
1,2,3,4,6,7,8-HpCDD	0.047	0.216	0.142	0.067	0.085	0.191	0.719	0.353	0.177	0.137	3.646	0.031	0.107	0.070	0.075	0.256	0.247	0.114	0.111	0.059	0.171	0.291	0.545	0.173	0.545
OCDD	0.175	0.542	0.329	0.309	0.362	0.611	5.793	0.995	0.438	0.388	8.274	0.109	0.350	0.223	0.212	0.750	0.850	0.423	0.769	0.248	0.621	0.872	1.495	0.500	2.144
2,3,7,8-TCDF	0.018	0.076	0.135	0.015	0.012	0.019	0.188	0.010	0.022	0.052	0.069	0.003	0.010	0.017	0.021	0.209	0.049	0.059	0.042	0.027	0.078	0.264	0.104	0.032	0.028
1,2,3,7,8-PeCDF	<0.009	0.016	0.030	<0.006	<0.004	0.005	0.004	<0.003	0.010	0.012	0.014	<0.002	0.004	0.007	0.004	0.051	0.010	<0.010	<0.011	0.009	0.016	0.042	0.020	0.008	0.008
2,3,4,7,8-PeCDF	<0.009	0.027	0.059	0.007	<0.004	0.007	0.005	<0.003	0.011	0.023	0.024	<0.002	0.004	0.009	0.008	0.091	0.021	0.017	0.013	<0.007	0.032	0.048	0.034	0.015	<0.007
1,2,3,4,7,8-HxCDF	0.007	0.051	0.112	0.009	0.008	0.020	0.014	0.006	0.025	0.058	0.026	<0.002	0.007	0.015	0.011	0.174	0.039	0.028	0.017	0.012	0.041	0.112	0.067	0.034	0.029
1,2,3,6,7,8-HxCDF	<0.006	0.025	0.045	0.005	<0.003	0.011	0.006	0.004	0.015	0.026	0.016	<0.002	0.004	0.007	0.006	0.076	0.016	0.008	0.010	<0.007	0.019	0.042	0.034	0.015	0.013
2,3,4,6,7,8-HxCDF	<0.006	0.028	0.061	0.005	0.004	0.011	0.015	0.006	0.020	0.031	0.022	<0.002	0.005	0.009	0.006	0.096	0.018	0.016	0.010	0.008	0.021	0.060	0.030	0.021	0.017
1,2,3,7,8,9-HxCDF	<0.006	0.005	<0.009	<0.004	<0.003	<0.003	<0.005	<0.004	0.006	<0.005	0.008	<0.002	0.003	0.004	<0.004	0.008	<0.006	<0.007	<0.007	<0.007	<0.010	0.015	0.012	<0.01	<0.009
1,2,3,4,6,7,8-HpCDF	0.014	0.084	0.149	0.020	<0.005	0.053	0.096	0.026	0.065	0.103	0.056	0.004	0.018	0.022	0.020	0.241	0.079	0.061	0.044	0.027	0.064	0.246	0.149	0.060	0.060
1,2,3,4,7,8,9-HpCDF	<0.012	0.015	0.019	<0.003	<0.005	0.011	0.010	<0.008	0.015	0.019	0.015	<0.003	0.008	0.007	0.007	0.039	0.014	0.010	<0.015	<0.009	0.011	0.026	0.032	0.013	0.012
OCDF	0.045	0.052	0.054	0.012	0.018	0.048	0.277	0.049	0.058	0.054	0.049	0.004	0.035	0.027	0.016	0.132	0.111	0.028	0.059	0.036	0.091	0.205	0.128	0.061	0.072
<b>PCDD/F Homologues</b>																									
TCDDs	<0.006	0.039	<0.009	0.008	0.014	0.008	0.040	0.043	<0.003	0.037	0.451	<0.002	<0.002	0.015	0.044	0.129	0.072	<0.010	<0.019	<0.009	<0.012	1.016	0.139	0.013	0.036
PeCDDs	0.010	0.045	0.102	<0.004	0.033	0.029	0.006	0.081	0.033	0.022	0.977	<0.002	<0.004	0.014	0.042	0.196	0.069	0.029	0.016	<0.009	0.038	0.345	0.262	0.041	0.123
HxCDDs	<0.006	0.243	0.164	0.036	0.038	0.141	0.128	0.421	0.204	0.139	3.050	0.013	0.124	0.079	0.114	0.461	0.223	0.061	0.065	0.050	0.129	0.426	0.746	0.153	0.478
HpCDDs	0.093	0.445	0.282	0.139	0.165	0.392	1.326	0.766	0.361	0.291	6.759	0.055	0.250	0.140	0.162	0.569	0.577	0.243	0.224	0.111	0.336	0.652	1.197	0.395	1.137
OCDD	0.175	0.542	0.329	0.309	0.362	0.611	5.793	0.995	0.438	0.388	8.274	0.109	0.350	0.223	0.212	0.750	0.850	0.423	0.769	0.248	0.621	0.872	1.495	0.500	2.144
TCDFs	0.041	0.437	0.746	0.071	0.074	0.117	0.175	0.108	0.175	0.268	0.567	0.012	0.052	0.083	0.111	1.243	0.293	0.295	0.152	0.125	0.473	2.165	0.819	0.175	0.108
PeCDFs	0.011	0.216	0.555	0.023	0.015	0.081	0.050	0.075	0.126	0.219	0.252	0.013	0.018	0.054	0.064	0.926	0.201	0.167	0.073	0.071	0.260	0.872	0.392	0.105	0.068
HxCDFs	0.016	0.225	0.422	0.043	0.033	0.093	0.109	0.077	0.142	0.259	0.217	0.005	0.025	0.060	0.050	0.808	0.167	0.097	0.096	0.067	0.203	0.602	0.467	0.167	0.127
HpCDFs	<0.012	0.145	0.227	0.027	<0.005	0.105	0.226	0.059	0.110	0.174	0.169	<0.003	0.037	0.048	0.035	0.411	0.119	0.107	0.059	0.041	0.120	0.395	0.314	0.132	0.138
OCDF	0.045	0.052	0.054	0.012	0.018	0.048	0.277	0.049	0.058	0.054	0.049	0.004	0.035	0.027	0.016	0.132	0.111	0.028	0.059	0.036	0.091	0.205	0.128	0.061	0.072
<b>Total</b>																									
∑ PCDDs	0.278	1.314	0.878	0.492	0.614	1.181	7.294	2.307	1.035	0.877	19.510	0.177	0.725	0.471	0.576	2.106	1.790	0.756	1.073	0.410	1.124	3.310	3.839	1.101	3.918
∑ PCDFs	0.113	1.075	2.004	0.175	0.140	0.444	0.837	0.367	0.612	0.975	1.255	0.035	0.167	0.272	0.276	3.520	0.892	0.695	0.439	0.340	1.147	4.238	2.120	0.640	0.514
∑ PCDD/Fs	0.391	2.389	2.882	0.667	0.754	1.625	8.131	2.674	1.647	1.851	20.765	0.212	0.892	0.743	0.852	5.626	2.682	1.451	1.513	0.750	2.271	7.548	5.959	1.741	4.432
∑ TEQ (PCDD/Fs)	0.025	0.052	0.091	0.020	0.021	0.029	0.046	0.039	0.038	0.042	0.320	0.007	0.020	0.023	0.022	0.132	0.045	0.044	0.052	0.032	0.060	0.114	0.096	0.044	0.057



Table A46. Atmospheric concentrations of PCDD/Fs (pg m<sup>-3</sup>) at NAPS urban sites in 1997 (continued)

Station Name	Hamilton (Elgin)												Jonquiere											
	1	2	3	4	5	6	7	8	9	10	11	1	2	3	4	5	6	7	8	9	10	11	12	
Sampling Period	2/15/97	3/11/97	4/16/97	5/10/97	6/3/97	7/9/97	8/2/97	8/26/97	9/19/97	11/6/97	12/24/97	1/4/97	1/28/97	2/21/97	5/4/97	6/9/97	7/15/97	9/1/97	9/25/97	10/19/97	11/12/97	12/6/97	12/30/97	
Sampling Volume (m3)	760	635	750	749	719	719	687	683	698	792	683	868	848	709	920	872	849	835	915	923	987	939	962	
<b>PCDD/F Congeners</b>																								
2,3,7,8-TCDD	<0.005	<0.006	<0.005	<0.003	<0.008	<0.008	<0.009	0.004	<0.006	<0.005	<0.003	0.005	<0.002	<0.003	<0.004	<0.005	<0.005	<0.007	<0.005	<0.003	<0.003	<0.004	<0.006	
1,2,3,7,8-PeCDD	0.013	<0.006	0.012	0.012	0.017	0.010	0.009	0.012	0.013	0.027	<0.006	0.023	0.011	0.005	<0.006	0.008	0.009	0.012	0.010	0.008	0.010	0.010	<0.006	
1,2,3,4,7,8-HxCDD	0.008	<0.013	0.008	0.008	0.013	<0.007	<0.009	<0.008	0.013	0.025	<0.009	0.026	0.007	<0.006	<0.006	<0.009	0.008	0.013	<0.01	0.010	0.009	<0.009	<0.008	
1,2,3,6,7,8-HxCDD	0.012	<0.013	0.019	0.010	0.015	0.008	0.014	0.014	0.023	0.080	0.017	0.046	0.015	0.006	0.008	0.029	0.013	0.020	0.014	0.026	0.015	0.026	0.014	
1,2,3,7,8,9-HxCDD	0.022	<0.013	0.041	0.014	0.022	0.015	0.013	0.021	0.038	0.103	0.009	0.074	0.019	0.014	0.006	0.032	0.022	0.032	0.025	0.029	0.010	0.023	0.019	
1,2,3,4,6,7,8-HpCDD	0.236	0.232	0.296	0.110	0.198	0.087	0.124	0.113	0.198	1.850	0.138	0.382	0.272	0.145	0.044	0.521	0.216	0.363	0.074	0.230	0.186	0.144	0.108	
OCDD	0.802	1.484	1.075	0.379	0.696	0.354	0.499	0.592	0.603	3.894	0.434	0.920	1.756	2.001	0.189	1.435	1.034	0.989	0.205	0.622	1.449	0.367	0.552	
2,3,7,8-TCDF	0.031	0.035	0.045	0.021	0.153	0.115	0.048	0.163	0.085	0.048	0.036	0.192	0.236	0.019	0.027	0.026	0.095	0.039	0.129	0.113	0.031	0.025	0.066	
1,2,3,7,8-PeCDF	0.008	0.004	0.008	<0.005	0.026	0.019	0.010	0.035	0.023	0.006	<0.005	0.030	0.017	<0.003	<0.004	<0.005	0.008	0.010	0.017	0.016	0.011	0.006	0.009	
2,3,4,7,8-PeCDF	0.011	0.009	0.014	0.007	0.032	0.024	0.013	0.053	0.032	0.013	0.008	0.075	0.044	0.005	0.005	<0.005	0.016	0.013	0.030	0.030	0.019	0.006	0.018	
1,2,3,4,7,8-HxCDF	<0.007	0.020	0.049	0.013	0.052	0.034	0.029	0.067	0.078	0.037	0.015	0.159	0.053	0.012	0.007	0.011	0.024	0.026	0.047	0.052	0.052	0.011	0.027	
1,2,3,6,7,8-HxCDF	0.008	0.009	0.016	0.005	0.014	0.016	0.016	0.036	0.036	0.022	0.009	0.059	0.021	0.007	0.004	0.007	0.011	0.012	0.021	0.020	0.021	0.004	0.015	
2,3,4,6,7,8-HxCDF	0.014	0.005	0.020	0.007	0.035	0.017	0.017	0.044	0.048	0.009	0.009	0.093	0.024	0.007	0.006	0.007	0.009	0.012	0.026	0.026	0.026	0.004	0.016	
1,2,3,7,8,9-HxCDF	<0.007	<0.005	<0.003	<0.005	<0.011	<0.006	<0.006	0.007	0.006	<0.008	<0.007	<0.005	<0.002	<0.004	<0.004	<0.007	<0.005	<0.005	0.007	<0.004	0.007	<0.004	0.006	
1,2,3,4,6,7,8-HpCDF	0.051	0.045	0.071	0.019	0.068	0.045	0.070	0.104	0.122	0.098	0.021	0.283	0.093	0.037	0.019	0.039	0.046	0.053	0.071	0.081	0.102	0.020	0.048	
1,2,3,4,7,8,9-HpCDF	<0.008	<0.009	0.011	<0.008	<0.011	<0.007	0.008	0.027	0.026	<0.008	<0.007	0.046	0.010	<0.008	<0.007	0.011	<0.007	0.010	0.019	0.013	0.015	<0.009	0.012	
OCDF	0.068	0.061	0.081	0.022	0.044	0.027	0.052	0.087	0.096	0.101	0.028	0.286	0.147	0.300	0.029	0.044	0.082	0.055	0.108	0.105	0.079	0.021	0.097	
<b>PCDD/F Homologues</b>																								
TCDDs	0.014	0.006	0.073	0.020	0.147	0.100	0.150	0.159	0.577	0.083	0.069	0.269	0.157	0.014	0.052	0.041	0.136	0.050	0.109	0.065	0.010	0.006	0.155	
PeCDDs	0.057	0.017	0.130	0.012	0.137	0.096	0.012	0.096	0.186	0.070	<0.006	0.422	0.102	0.014	0.012	0.056	0.114	0.077	0.143	0.078	0.028	0.023	0.169	
HxCDDs	0.087	0.086	0.257	0.053	0.174	0.089	0.115	0.127	0.231	1.032	0.081	0.631	0.138	0.076	0.060	0.168	0.217	0.225	0.155	0.235	0.112	0.179	0.190	
HpCDDs	0.493	0.370	0.683	0.207	0.437	0.213	0.273	0.258	0.429	4.037	0.300	0.790	0.487	0.255	0.083	1.021	0.472	0.676	0.143	0.457	0.348	0.296	0.216	
OCDD	0.802	1.484	1.075	0.379	0.696	0.354	0.499	0.592	0.603	3.894	0.434	0.920	1.756	2.001	0.189	1.435	1.034	0.989	0.205	0.622	1.449	0.367	0.552	
TCDFs	0.154	0.144	0.310	0.144	1.084	0.772	0.438	1.229	0.635	0.296	0.212	0.969	0.919	0.094	0.107	0.181	0.484	0.233	0.574	0.511	0.127	0.113	0.330	
PeCDFs	0.081	0.048	0.196	0.028	0.370	0.359	0.273	0.464	0.406	0.115	0.046	0.737	0.403	0.041	0.042	0.031	0.174	0.135	0.297	0.280	0.156	0.040	0.119	
HxCDFs	0.116	0.065	0.180	0.034	0.252	0.163	0.215	0.398	0.402	0.080	0.033	0.706	0.217	0.058	0.025	0.060	0.117	0.140	0.180	0.198	0.186	0.043	0.102	
HpCDFs	0.079	0.086	0.130	0.019	0.100	0.072	0.114	0.203	0.213	0.183	0.029	0.501	0.155	0.139	0.032	0.055	0.073	0.098	0.115	0.145	0.189	0.035	0.087	
OCDF	0.068	0.061	0.081	0.022	0.044	0.027	0.052	0.087	0.096	0.101	0.028	0.286	0.147	0.300	0.029	0.044	0.082	0.055	0.108	0.105	0.079	0.021	0.097	
<b>Total</b>																								
∑ PCDDs	1.452	1.964	2.217	0.671	1.591	0.851	1.049	1.232	2.026	9.117	0.885	3.031	2.640	2.360	0.396	2.721	1.973	2.018	0.755	1.457	1.947	0.870	1.283	
∑ PCDFs	0.498	0.404	0.897	0.248	1.849	1.393	1.092	2.382	1.752	0.775	0.347	3.200	1.841	0.632	0.235	0.371	0.931	0.661	1.274	1.239	0.738	0.252	0.736	
∑ PCDD/Fs	1.950	2.368	3.114	0.919	3.440	2.245	2.141	3.614	3.778	9.892	1.232	6.232	4.481	2.992	0.631	3.092	2.904	2.679	2.029	2.696	2.685	1.122	2.019	
∑ TEQ (PCDD/Fs)	0.036	0.030	0.046	0.027	0.071	0.049	0.040	0.072	0.065	0.090	0.024	0.124	0.069	0.020	0.019	0.034	0.041	0.044	0.054	0.052	0.040	0.028	0.037	

Table A47. Atmospheric concentrations of PCDD/Fs ( $\mu\text{g m}^{-3}$ ) at NAPS urban sites in 1998

Station Name	Powell River					Toronto (Evans)							
Sampling Period	1	2	3	4	5	1	2	3	4	5	6	7	8
Sampling Date	7/25/98	8/16/98	9/14/98	10/9/98	11/1/98	7/4/98	7/28/98	8/21/98	9/14/98	10/8/98	11/1/98	11/25/98	12/19/98
Sampling Volume (m3)	876	880	908	914	942	809	754	885	876	853	1109	920	942
<b>PCDD/F Congeners</b>													
2,3,7,8-TCDD	<0.005	<0.005	<0.002	<0.002	<0.002	<0.006	<0.008	<0.005	<0.005	<0.004	<0.004	<0.002	<0.003
1,2,3,7,8-PeCDD	0.010	<0.005	0.005	<0.005	0.006	<0.009	0.007	0.005	0.006	0.008	0.007	0.011	0.006
1,2,3,4,7,8-HxCDD	<0.005	<0.007	<0.007	<0.004	<0.003	<0.012	<0.011	<0.005	<0.007	0.013	0.008	0.013	0.006
1,2,3,6,7,8-HxCDD	<0.005	<0.007	<0.007	<0.004	0.005	<0.012	<0.011	0.008	0.008	0.014	0.006	0.024	0.011
1,2,3,7,8,9-HxCDD	<0.005	<0.007	<0.007	<0.004	0.011	0.010	<0.011	0.014	0.008	0.020	0.010	0.030	0.018
1,2,3,4,6,7,8-HpCDD	0.025	0.049	0.029	0.014	0.089	0.086	0.089	0.075	0.160	0.175	0.121	0.243	0.128
OCDD	0.049	0.275	0.219	0.055	0.254	0.250	0.489	0.275	0.680	0.597	0.403	0.738	0.442
2,3,7,8-TCDF	0.009	0.006	0.009	0.007	0.007	0.025	0.029	0.040	0.022	0.020	0.018	0.044	0.024
1,2,3,7,8-PeCDF	<0.005	<0.007	<0.004	<0.003	<0.002	0.006	0.007	0.007	0.006	0.005	<0.004	0.011	0.005
2,3,4,7,8-PeCDF	<0.005	<0.007	<0.004	<0.003	<0.002	0.009	0.012	0.012	0.010	0.010	0.007	0.020	0.009
1,2,3,4,7,8-HxCDF	0.005	<0.007	<0.006	<0.002	0.004	0.021	0.028	0.032	0.024	0.020	0.015	0.051	0.016
1,2,3,6,7,8-HxCDF	<0.005	<0.007	<0.006	<0.002	<0.002	0.012	0.014	0.018	0.013	0.009	0.008	0.019	0.006
2,3,4,6,7,8-HxCDF	<0.005	<0.007	<0.006	<0.002	<0.002	0.016	0.016	0.019	0.015	0.011	0.008	0.031	0.007
1,2,3,7,8,9-HxCDF	<0.005	<0.007	<0.006	<0.002	<0.002	<0.01	<0.008	<0.007	<0.005	<0.005	<0.005	<0.002	<0.003
1,2,3,4,6,7,8-HpCDF	0.012	0.010	0.008	<0.004	0.008	0.041	0.060	0.093	0.057	0.043	0.034	0.082	0.037
1,2,3,4,7,8,9-HpCDF	<0.007	<0.01	<0.007	<0.004	<0.003	0.007	<0.008	0.009	0.006	<0.009	<0.005	0.018	<0.005
OCDF	0.010	0.015	0.013	<0.004	0.010	0.043	0.055	0.104	0.055	0.057	0.041	0.072	0.048
<b>PCDD/F Homologues</b>													
TCDDs	0.021	<0.005	0.010	0.011	0.012	0.015	0.032	0.049	0.024	0.037	0.021	0.034	0.033
PeCDDs	0.041	0.010	0.011	0.017	0.028	0.030	0.034	0.070	0.034	0.043	0.038	0.107	0.048
HxCDDs	0.030	0.015	0.017	0.009	0.081	0.063	0.052	0.106	0.099	0.159	0.114	0.294	0.150
HpCDDs	0.042	0.085	0.052	0.039	0.194	0.162	0.183	0.151	0.296	0.345	0.266	0.536	0.288
OCDD	0.049	0.275	0.219	0.055	0.254	0.250	0.489	0.275	0.680	0.597	0.403	0.738	0.442
TCDFs	0.048	0.019	0.032	0.041	0.046	0.182	0.159	0.333	0.183	0.106	0.081	0.236	0.212
PeCDFs	0.027	0.011	0.020	0.012	0.012	0.122	0.232	0.231	0.160	0.107	0.076	0.243	0.107
HxCDFs	0.035	0.013	0.020	0.010	0.013	0.103	0.195	0.203	0.175	0.128	0.082	0.218	0.072
HpCDFs	0.022	0.010	0.015	<0.004	0.014	0.070	0.101	0.166	0.112	0.075	0.064	0.144	0.069
OCDF	0.010	0.015	0.013	<0.004	0.010	0.043	0.055	0.104	0.055	0.057	0.041	0.072	0.048
<b>Total</b>													
$\Sigma$ PCDDs	0.183	0.385	0.308	0.131	0.570	0.518	0.791	0.651	1.133	1.181	0.841	1.710	0.961
$\Sigma$ PCDFs	0.143	0.067	0.100	0.063	0.095	0.520	0.742	1.037	0.684	0.473	0.344	0.914	0.509
$\Sigma$ PCDD/Fs	0.326	0.452	0.408	0.194	0.665	1.038	1.533	1.688	1.817	1.654	1.185	2.624	1.470
$\Sigma$ TEQ (PCDD/Fs)	0.022	0.019	0.014	0.011	0.013	0.031	0.033	0.030	0.027	0.029	0.023	0.044	0.023

Table A47. Atmospheric concentrations of PCDD/Fs (pg m<sup>-3</sup>) at NAPS urban sites in 1998 (continued)

Station Name	Toronto (Junction Triangle)													Montreal (1125)						
	1	2	3	4	5	6	7	8	9	10	11	12	13	1	2	3	4	5	6	7
Sampling Period	1/17/98	2/10/98	3/6/98	3/30/98	4/23/98	5/17/98	6/10/98	7/4/98	7/28/98	8/21/98	9/14/98	11/25/98	12/19/98	1/17/98	2/10/98	3/18/98	4/11/98	5/5/98	11/25/98	12/19/98
Sampling Date	881	856	855	859	843	810	800	782	765	727	784	912	903	1086	1044	1050	1071	984	814	997
Sampling Volume (m3)																				
<b>PCDD/F Congeners</b>																				
2,3,7,8-TCDD	<0.007	<0.007	<0.007	<0.002	<0.002	<0.005	<0.002	<0.005	<0.003	<0.003	<0.003	<0.002	<0.002	<0.006	0.005	0.012	<0.004	<0.004	<0.002	0.003
1,2,3,7,8-PeCDD	0.025	0.030	<0.012	0.007	0.009	0.006	0.007	0.008	0.009	0.010	0.010	0.010	0.007	<0.009	0.032	0.093	<0.011	0.008	0.015	0.028
1,2,3,4,7,8-HxCDD	0.023	0.031	0.009	0.005	0.009	0.003	0.013	0.005	<0.01	0.008	0.006	0.007	0.007	0.011	0.033	0.115	0.012	<0.006	<0.007	0.033
1,2,3,6,7,8-HxCDD	0.030	0.068	0.015	0.009	0.017	0.006	0.013	0.014	0.016	0.014	0.017	0.016	0.010	0.021	0.043	0.190	0.017	0.007	0.016	0.047
1,2,3,7,8,9-HxCDD	0.066	0.106	0.022	0.014	0.027	0.009	0.020	0.009	0.020	0.023	0.029	0.023	0.020	0.029	0.092	0.368	0.026	<0.006	0.026	0.085
1,2,3,4,6,7,8-HpCDD	0.436	0.614	0.141	0.193	0.166	0.090	0.163	0.091	0.101	0.128	0.161	0.164	0.199	0.235	0.505	2.721	0.231	0.094	0.159	0.689
OCDD	1.545	1.411	0.437	1.003	0.517	0.442	0.575	0.254	0.281	0.419	0.927	0.540	1.505	0.638	1.119	5.103	0.896	0.414	0.549	1.952
2,3,7,8-TCDF	0.079	0.307	0.066	0.038	0.059	0.021	0.066	0.059	0.049	0.051	0.052	0.046	0.023	0.045	0.174	0.118	0.035	0.024	0.033	0.079
1,2,3,7,8-PeCDF	0.012	0.055	0.014	0.007	0.017	0.005	0.016	0.010	0.009	0.010	0.010	0.009	0.004	0.011	0.036	0.024	0.007	<0.004	0.007	0.025
2,3,4,7,8-PeCDF	0.022	0.104	0.021	0.010	0.029	0.006	0.028	0.016	0.018	0.019	0.017	0.018	0.008	0.013	0.057	0.037	0.012	0.008	0.014	0.033
1,2,3,4,7,8-HxCDF	0.033	0.254	0.040	0.018	0.060	0.010	0.056	0.036	0.038	0.047	0.036	0.044	0.015	0.031	0.135	0.088	0.021	0.012	0.030	0.083
1,2,3,6,7,8-HxCDF	0.015	0.088	0.020	0.009	0.026	0.004	0.028	0.015	0.018	0.022	0.019	0.020	0.007	0.012	0.056	0.036	0.011	0.009	0.015	0.036
2,3,4,6,7,8-HxCDF	0.021	0.141	0.029	0.011	0.043	0.006	0.032	0.019	0.019	0.022	0.024	0.031	0.008	0.019	0.069	0.054	0.013	0.008	0.016	0.039
1,2,3,7,8,9-HxCDF	<0.007	0.023	<0.007	<0.003	0.007	<0.003	<0.005	<0.005	<0.005	<0.006	<0.004	<0.002	<0.002	<0.006	<0.006	<0.004	<0.006	<0.004	<0.005	<0.004
1,2,3,4,6,7,8-HpCDF	0.073	0.357	0.072	0.039	0.085	0.026	0.091	0.055	0.060	0.089	0.067	0.068	0.037	0.054	0.231	0.217	0.040	0.018	0.049	0.112
1,2,3,4,7,8,9-HpCDF	0.013	0.060	0.023	0.006	0.028	<0.003	0.008	0.006	0.006	0.011	<0.008	0.014	0.006	0.029	0.032	0.028	<0.011	<0.006	<0.007	0.024
OCDF	0.072	0.201	0.062	0.046	0.078	0.031	0.052	0.023	0.040	0.057	0.039	0.067	0.043	0.082	0.167	0.163	0.042	0.025	0.041	0.091
<b>PCDD/F Homologues</b>																				
TCDDs	0.073	0.327	0.097	0.051	0.085	0.020	0.067	0.047	0.054	0.048	0.075	0.034	0.031	<0.006	0.211	0.388	0.022	0.052	0.039	0.142
PeCDDs	0.177	0.581	0.097	0.064	0.178	0.028	0.070	0.050	0.107	0.091	0.082	0.093	0.051	0.064	0.297	1.205	0.012	0.053	0.101	0.340
HxCDDs	0.444	0.925	0.114	0.088	0.162	0.055	0.201	0.172	0.187	0.145	0.219	0.230	0.157	0.244	0.649	3.166	0.228	0.084	0.195	0.620
HpCDDs	0.876	1.224	0.262	0.384	0.356	0.209	0.351	0.206	0.224	0.265	0.339	0.352	0.453	0.446	1.104	6.587	0.472	0.263	0.349	1.378
OCDD	1.545	1.411	0.437	1.003	0.517	0.442	0.575	0.254	0.281	0.419	0.927	0.540	1.505	0.638	1.119	5.103	0.896	0.414	0.549	1.952
TCDFs	0.525	1.148	0.381	0.199	0.266	0.126	0.399	0.396	0.367	0.334	0.367	0.258	0.150	0.249	1.135	0.745	0.263	0.123	0.133	0.390
PeCDFs	0.162	1.273	0.160	0.129	0.281	0.061	0.304	0.182	0.199	0.198	0.218	0.221	0.085	0.090	0.697	0.462	0.154	0.108	0.154	0.429
HxCDFs	0.147	1.078	0.210	0.107	0.298	0.080	0.214	0.156	0.185	0.185	0.173	0.191	0.071	0.115	0.633	0.556	0.132	0.078	0.130	0.376
HpCDFs	0.143	0.644	0.142	0.079	0.171	0.053	0.129	0.079	0.102	0.147	0.090	0.121	0.069	0.083	0.417	0.443	0.077	0.030	0.064	0.221
OCDF	0.072	0.201	0.062	0.046	0.078	0.031	0.052	0.023	0.040	0.057	0.039	0.067	0.043	0.082	0.167	0.163	0.042	0.025	0.041	0.091
<b>Total</b>																				
∑ PCDDs	3.115	4.467	1.007	1.590	4.298	0.754	1.263	0.729	0.852	0.969	1.642	1.249	2.197	1.392	3.379	16.449	1.630	0.866	1.234	4.432
∑ PCDFs	1.048	4.344	0.954	0.559	1.093	0.351	1.099	0.837	0.893	0.921	0.887	0.858	0.418	0.620	3.050	2.370	0.668	0.364	0.521	1.507
∑ PCDD/Fs	4.163	8.811	1.961	2.149	5.391	1.105	2.362	1.566	1.745	1.890	2.529	2.107	2.615	2.012	6.429	18.819	2.298	1.230	1.755	5.939
∑ TEQ (PCDD/Fs)	0.072	0.182	0.049	0.026	0.048	0.020	0.044	0.036	0.037	0.041	0.040	0.039	0.024	0.040	0.124	0.245	0.036	0.023	0.039	0.091

Table A47. Atmospheric concentrations of PCDD/Fs (pg m<sup>-3</sup>) at NAPS urban sites in 1998 (continued)

Station Name	Winnipeg														Windsor (College)												
Sampling Period	1	2	3	4	5	6	7	8	9	10	11	12	13	14	1	2	3	4	5	6	7	8	9	10	11	12	
Sampling Date	1/17/98	2/10/98	3/6/98	3/30/98	4/23/98	5/17/98	6/10/98	7/4/98	7/28/98	8/21/98	9/14/98	10/8/98	11/25/98	12/19/98	1/17/98	3/18/98	4/11/98	6/10/98	7/4/98	7/28/98	8/21/98	9/14/98	10/8/98	11/1/98	11/25/98	12/19/98	
Sampling Volume (m3)	1009	967	954	946	890	888	855	847	850	896	978	960	934	936	921	817	803	837	745	751	722	732	749	849	801	752	
<b>PCDD/F Congeners</b>																											
2,3,7,8-TCDD	<0.006	<0.003	<0.002	<0.003	<0.005	0.003	<0.002	<0.002	<0.002	<0.007	<0.003	<0.004	<0.004	<0.004	<0.007	<0.002	0.004	<0.005	<0.008	<0.008	<0.011	<0.011	<0.005	<0.002	<0.003	0.003	
1,2,3,7,8-PeCDD	<0.01	0.007	0.021	0.011	<0.009	0.014	0.016	0.010	0.006	<0.004	0.005	<0.006	<0.011	0.007	0.014	0.011	0.031	0.007	0.007	0.018	0.021	0.016	<0.008	0.009	0.022	0.009	
1,2,3,4,7,8-HxCDD	0.009	<0.003	0.022	<0.008	<0.007	0.010	0.007	<0.007	0.002	<0.004	<0.006	<0.006	<0.013	0.005	0.020	0.017	0.045	0.008	0.012	0.014	0.013	<0.011	<0.007	0.007	0.025	0.005	
1,2,3,6,7,8-HxCDD	0.017	0.009	0.027	<0.008	<0.007	0.014	0.010	0.009	0.003	0.004	<0.006	<0.006	0.015	0.009	0.031	0.014	0.075	0.011	0.019	0.027	0.033	0.031	<0.007	0.010	0.038	0.013	
1,2,3,7,8,9-HxCDD	0.017	0.013	0.060	<0.008	<0.007	0.018	0.011	0.008	0.004	<0.004	0.004	<0.006	0.016	0.019	0.055	0.032	0.136	0.022	0.024	0.037	0.035	0.045	0.008	0.018	0.069	0.028	
1,2,3,4,6,7,8-HpCDD	0.073	0.183	0.310	0.119	0.072	0.140	0.099	0.090	0.030	0.060	0.059	0.059	0.195	0.100	0.334	0.227	1.133	0.174	0.181	0.242	0.269	0.290	0.089	0.117	0.464	0.180	
OCDD	0.192	1.905	0.643	0.419	0.351	0.643	0.551	0.321	0.144	0.222	0.306	0.348	0.641	0.298	0.962	0.356	3.224	0.631	0.780	0.923	0.811	0.870	0.336	0.425	1.512	0.676	
2,3,7,8-TCDF	0.570	0.017	0.034	0.021	0.017	0.013	0.010	0.012	0.010	0.010	0.010	0.005	0.020	0.014	0.106	0.086	0.093	0.063	0.052	0.210	0.198	0.056	0.020	0.025	0.057	0.055	
1,2,3,7,8-PeCDF	0.149	0.006	0.006	0.004	<0.007	0.008	0.006	0.004	0.004	<0.003	<0.002	<0.002	<0.006	0.002	0.021	0.012	0.018	0.010	0.010	0.027	0.028	0.014	0.006	0.006	0.012	0.011	
2,3,4,7,8-PeCDF	0.510	0.007	0.010	0.010	0.007	0.007	0.006	0.006	0.003	0.003	0.004	<0.002	<0.006	<0.002	0.033	0.025	0.033	0.019	0.012	0.052	0.044	0.025	0.007	0.008	0.023	0.017	
1,2,3,4,7,8-HxCDF	0.411	0.020	0.018	0.016	0.013	0.010	0.008	0.009	0.008	0.006	0.006	0.003	0.015	0.006	0.061	0.047	0.077	0.038	0.026	0.119	0.098	0.035	0.016	0.017	0.066	0.036	
1,2,3,6,7,8-HxCDF	0.158	0.007	0.008	0.011	0.007	0.008	0.007	0.004	0.004	<0.003	0.003	<0.003	0.006	<0.004	0.025	0.021	0.036	0.020	0.012	0.059	0.049	0.018	0.007	0.007	0.029	0.015	
2,3,4,6,7,8-HxCDF	0.282	0.013	0.009	0.012	0.007	0.009	0.006	0.005	0.004	<0.003	0.004	<0.003	<0.006	<0.004	0.038	0.028	0.048	0.025	0.012	0.060	0.050	0.020	0.009	0.008	0.040	0.019	
1,2,3,7,8,9-HxCDF	<0.016	<0.005	<0.003	<0.006	<0.004	0.007	0.004	<0.006	<0.003	<0.003	<0.002	<0.003	<0.006	<0.004	<0.007	<0.005	<0.006	<0.004	<0.007	<0.006	<0.014	<0.003	<0.002	<0.003	<0.003	<0.003	
1,2,3,4,6,7,8-HpCDF	0.305	0.043	0.033	0.035	0.029	0.029	0.029	0.018	0.023	0.017	0.015	0.013	0.024	0.011	0.113	0.090	0.154	0.074	0.062	0.247	0.219	0.088	0.036	0.034	0.153	0.059	
1,2,3,4,7,8,9-HpCDF	0.045	0.007	0.007	0.009	<0.011	0.011	0.006	<0.007	<0.005	<0.007	<0.004	<0.009	<0.006	<0.006	0.021	0.011	0.020	0.008	<0.008	0.024	0.027	<0.014	<0.008	0.006	0.023	0.010	
OCDF	0.070	0.071	0.040	0.052	0.050	0.042	0.048	0.026	0.029	0.013	0.011	0.011	0.029	0.013	0.096	0.098	0.098	0.055	0.062	0.168	0.189	0.103	0.036	0.038	0.173	0.070	
<b>PCDD/F Homologues</b>																											
TCDDs	<0.006	0.003	0.086	0.027	0.018	0.012	<0.002	0.007	0.012	<0.007	0.018	<0.004	<0.004	0.014	0.108	0.044	0.095	0.038	0.099	0.786	0.896	0.074	0.026	0.036	0.115	0.102	
PeCDDs	<0.01	0.013	0.176	0.025	0.015	0.020	0.016	0.010	0.011	0.008	0.031	<0.006	<0.011	0.030	0.161	0.111	0.412	0.070	0.017	0.245	0.582	0.080	<0.008	0.039	0.224	0.097	
HxCDDs	0.069	0.076	0.508	0.062	0.038	0.128	0.088	0.073	0.041	0.069	0.056	0.028	0.138	0.117	0.404	0.259	1.153	0.194	0.214	0.470	0.834	0.333	0.064	0.119	0.636	0.244	
HpCDDs	0.130	0.350	0.766	0.214	0.152	0.284	0.203	0.165	0.063	0.129	0.131	0.111	0.387	0.281	0.715	0.483	2.695	0.410	0.401	0.550	0.563	0.602	0.193	0.261	1.104	0.398	
OCDD	0.192	1.905	0.643	0.419	0.351	0.643	0.551	0.321	0.144	0.222	0.306	0.348	0.641	0.298	0.962	0.356	3.224	0.631	0.780	0.923	0.811	0.870	0.336	0.425	1.512	0.676	
TCDFs	2.514	0.109	0.204	0.150	0.087	0.091	0.089	0.100	0.087	0.058	0.056	0.026	0.061	0.066	0.778	0.451	0.588	0.451	0.411	1.181	1.741	0.369	0.118	0.176	0.364	0.376	
PeCDFs	2.523	0.062	0.104	0.058	0.035	0.046	0.043	0.042	0.047	0.033	0.024	0.009	0.030	0.020	0.323	0.246	0.369	0.210	0.197	0.864	0.751	0.188	0.095	0.106	0.281	0.227	
HxCDFs	1.733	0.078	0.079	0.084	0.035	0.076	0.063	0.059	0.063	0.043	0.045	0.017	0.029	0.014	0.277	0.192	0.360	0.175	0.192	0.727	0.655	0.277	0.096	0.079	0.330	0.171	
HpCDFs	0.487	0.104	0.068	0.063	0.046	0.070	0.058	0.034	0.035	0.026	0.025	0.020	0.044	0.016	0.208	0.160	0.276	0.128	0.103	0.412	0.357	0.137	0.062	0.064	0.259	0.113	
OCDF	0.070	0.071	0.040	0.052	0.050	0.042	0.048	0.026	0.029	0.013	0.011	0.011	0.029	0.013	0.096	0.098	0.098	0.055	0.062	0.168	0.189	0.103	0.036	0.038	0.173	0.070	
<b>Total</b>																											
∑ PCDDs	0.391	2.348	2.179	0.747	0.574	1.087	0.858	0.577	0.271	0.429	0.542	0.486	1.166	0.739	2.349	1.253	7.579	1.343	1.512	2.974	3.685	1.960	0.619	0.880	3.591	1.517	
∑ PCDFs	7.326	0.424	0.495	0.407	0.253	0.324	0.300	0.261	0.260	0.173	0.161	0.083	0.192	0.129	1.681	1.147	1.691	1.019	0.965	3.352	3.692	1.075	0.407	0.463	1.407	0.957	
∑ PCDD/Fs	7.717	2.772	2.674	1.154	0.827	1.411	1.158	0.838	0.531	0.602	0.703	0.569	1.358	0.868	4.030	2.400	9.270	2.362	2.477	6.326	7.377	3.035	1.026	1.343	4.998	2.474	
∑ TEQ (PCDD/Fs)	0.326	0.024	0.048	0.028	0.024	0.030	0.028	0.021	0.013	0.017	0.014	0.015	0.029	0.019	0.071	0.049	0.111	0.040	0.038	0.101	0.100	0.062	0.024	0.025	0.072	0.038	

Table A47. Atmospheric concentrations of PCDD/Fs (pg m<sup>-3</sup>) at NAPS urban sites in 1998 (continued)

Station Name	Hamilton (Elgin)											Jonquiere											
Sampling Period	1	2	3	4	5	6	7	8	9	10	11	12	1	2	3	4	5	6	7	8	9	10	11
Sampling Date	1/17/98	2/10/98	4/11/98	5/5/98	6/10/98	7/28/98	8/21/98	9/14/98	10/8/98	11/1/98	11/25/98	12/19/98	2/4/98	2/16/98	3/24/98	4/17/98	5/12/98	8/21/98	9/14/98	10/8/98	11/1/98	11/25/98	12/19/98
Sampling Volume (m3)	676	667	673	647	621	588	586	602	605	615	606	609	971	962	955	881	1030	896	794	801	849	878	856
<b>PCDD/F Congeners</b>																							
2,3,7,8-TCDD	<0.004	<0.006	<0.006	<0.006	<0.01	<0.008	<0.01	<0.005	<0.005	<0.003	0.003	<0.003	<0.004	<0.008	<0.002	<0.009	<0.004	<0.002	<0.005	<0.005	<0.005	<0.003	<0.005
1,2,3,7,8-PeCDD	0.013	0.091	0.012	0.013	0.015	<0.02	<0.02	0.011	0.005	0.008	0.027	<0.005	0.023	0.020	<0.004	0.026	0.010	<0.007	<0.006	<0.005	<0.005	0.009	0.010
1,2,3,4,7,8-HxCDD	0.011	0.086	0.013	0.004	<0.019	<0.012	<0.027	<0.013	<0.007	<0.01	0.025	0.009	0.028	0.021	0.003	0.026	<0.01	<0.009	<0.01	<0.005	<0.009	0.006	0.004
1,2,3,6,7,8-HxCDD	0.018	0.134	0.018	0.012	0.067	0.013	<0.027	0.018	0.008	<0.01	0.046	0.016	0.046	0.025	0.004	0.027	0.011	<0.009	0.013	<0.005	<0.009	0.020	0.019
1,2,3,7,8,9-HxCDD	0.040	0.282	0.034	0.020	0.064	<0.012	<0.027	0.025	<0.007	0.021	0.059	0.022	0.075	0.039	0.011	0.027	0.022	<0.009	<0.01	<0.005	<0.009	0.020	0.011
1,2,3,4,6,7,8-HpCDD	0.221	1.444	0.232	0.169	0.527	0.267	0.228	0.136	0.108	0.152	0.300	0.204	0.383	0.304	0.052	0.129	0.124	0.040	0.081	0.036	0.017	0.111	0.125
OCDD	0.678	3.290	0.924	0.635	1.772	0.852	0.793	0.519	0.348	0.411	0.824	0.704	0.728	1.163	0.215	0.614	0.411	0.106	0.199	0.135	0.078	0.530	0.602
2,3,7,8-TCDF	0.049	0.580	0.026	0.113	0.280	0.036	0.180	0.369	0.024	0.020	0.193	0.023	0.230	0.075	0.015	0.270	0.122	0.017	0.031	0.011	0.006	0.076	0.099
1,2,3,7,8-PeCDF	0.015	0.127	0.007	0.026	0.055	0.008	0.031	0.055	<0.005	<0.003	0.035	<0.005	0.037	0.017	<0.002	0.024	0.014	<0.007	0.009	<0.005	<0.005	0.014	0.013
2,3,4,7,8-PeCDF	0.022	0.235	0.009	0.036	0.077	0.012	0.059	0.063	0.007	<0.003	0.063	0.006	0.078	0.023	0.004	0.048	0.021	0.016	0.013	<0.005	<0.005	0.021	0.021
1,2,3,4,7,8-HxCDF	0.037	0.793	0.027	0.061	0.128	0.025	0.100	0.072	0.018	0.011	0.114	0.013	0.168	0.037	0.007	0.072	0.032	0.022	0.033	0.007	<0.005	0.035	0.037
1,2,3,6,7,8-HxCDF	0.017	0.252	0.010	0.024	0.058	<0.01	0.047	0.035	0.008	<0.004	0.044	0.007	0.068	0.018	0.004	0.032	0.014	0.010	0.015	<0.005	<0.005	0.014	0.014
2,3,4,6,7,8-HxCDF	0.024	0.305	0.015	0.025	0.055	<0.01	0.069	0.025	<0.005	<0.004	0.057	0.010	0.106	0.020	0.004	0.043	0.013	0.012	0.017	<0.005	<0.005	0.010	0.019
1,2,3,7,8,9-HxCDF	<0.003	<0.012	<0.004	<0.004	<0.01	<0.01	<0.02	<0.005	<0.005	<0.004	0.005	<0.003	<0.008	<0.006	<0.004	0.018	<0.005	<0.006	<0.005	<0.005	<0.005	<0.005	<0.005
1,2,3,4,6,7,8-HpCDF	0.057	1.217	0.049	0.070	0.160	0.050	0.168	0.090	0.053	0.025	0.146	0.045	0.256	0.073	0.017	0.121	0.061	0.042	0.077	<0.005	0.012	0.049	0.065
1,2,3,4,7,8,9-HpCDF	0.008	0.116	0.009	0.009	<0.016	<0.014	<0.027	<0.013	<0.007	<0.007	0.020	<0.005	0.033	0.018	<0.004	0.033	<0.006	<0.007	0.009	<0.005	<0.005	<0.007	<0.009
OCDF	0.041	0.542	0.046	0.056	0.137	0.057	0.144	0.057	0.050	0.029	0.081	0.061	0.129	0.107	0.029	0.210	0.128	0.041	0.143	0.009	0.011	0.077	0.147
<b>PCDD/F Homologues</b>																							
TCDDs	0.102	0.782	0.055	0.094	0.097	0.032	0.141	0.348	0.030	0.018	0.278	0.035	0.193	0.069	0.022	0.369	0.161	0.010	0.042	0.032	0.005	0.126	0.197
PeCDDs	0.136	1.562	0.065	0.092	0.073	0.027	<0.02	0.354	0.067	0.048	0.585	0.052	0.332	0.082	0.010	0.226	0.144	<0.007	0.057	0.012	<0.005	0.185	0.197
HxCDDs	0.207	2.431	0.216	0.138	0.585	0.181	0.167	0.346	0.087	0.106	0.698	0.215	0.600	0.296	0.049	0.263	0.173	0.023	0.129	0.013	0.015	0.176	0.157
HpCDDs	0.484	3.338	0.515	0.385	1.166	0.464	0.432	0.330	0.209	0.393	0.733	0.461	0.777	0.615	0.107	0.212	0.231	0.075	0.175	0.062	0.027	0.207	0.228
OCDD	0.678	3.290	0.924	0.635	1.772	0.852	0.793	0.519	0.348	0.411	0.824	0.704	0.728	1.163	0.215	0.614	0.411	0.106	0.199	0.135	0.078	0.530	0.602
TCDFs	0.298	3.228	0.125	0.623	1.812	0.180	1.743	2.569	0.169	0.146	1.272	0.178	1.121	0.368	0.083	1.199	0.597	0.125	0.147	0.043	0.013	0.333	0.425
PeCDFs	0.298	2.595	0.084	0.410	0.840	0.089	0.652	0.784	0.080	0.053	0.694	0.076	0.778	0.188	0.034	0.449	0.240	0.104	0.131	0.011	<0.005	0.203	0.263
HxCDFs	0.193	2.817	0.112	0.267	0.515	0.150	0.544	0.354	0.075	0.046	0.503	0.079	0.677	0.146	0.019	0.296	0.121	0.135	0.136	0.018	<0.005	0.132	0.157
HpCDFs	0.113	1.942	0.097	0.132	0.243	0.050	0.297	0.123	0.075	0.037	0.246	0.070	0.413	0.137	0.022	0.198	0.080	0.061	0.122	0.005	0.012	0.075	0.097
OCDF	0.041	0.542	0.046	0.056	0.137	0.057	0.144	0.057	0.050	0.029	0.081	0.061	0.129	0.107	0.029	0.210	0.128	0.041	0.143	0.009	0.011	0.077	0.147
<b>Total</b>																							
∑ PCDDs	1.607	11.403	1.775	1.344	3.693	1.556	1.534	1.897	0.741	0.977	3.117	1.467	2.630	2.224	0.402	1.684	1.121	0.215	0.602	0.255	0.124	1.225	1.381
∑ PCDFs	0.944	11.124	0.465	1.488	3.547	0.525	3.379	3.888	0.449	0.312	2.796	0.464	3.118	0.947	0.187	2.351	1.165	0.466	0.678	0.087	0.036	0.820	1.088
∑ PCDD/Fs	2.551	22.527	2.240	2.832	7.240	2.081	4.913	5.785	1.190	1.289	5.913	1.931	5.748	3.171	0.589	4.035	2.286	0.681	1.280	0.342	0.160	2.045	2.469
∑ TEQ (PCDD/Fs)	0.047	0.445	0.039	0.060	0.125	0.048	0.103	0.095	0.022	0.022	0.109	0.023	0.131	0.064	0.013	0.105	0.046	0.024	0.030	0.017	0.017	0.039	0.045

Table A48. Atmospheric concentrations of PCDD/Fs (pg m<sup>-3</sup>) at NAPS urban sites in 1999

Station Name	Hamilton (Confederation Park)										Hamilton (Hillyard St.)									
	1	2	3	4	5	6	7	8	9	10	1	2	3	4	5	6	7	8	9	10
Sampling Period																				
Sampling Date	8/28/99	9/9/99	9/21/99	10/3/99	10/15/99	11/8/99	11/20/99	12/2/99	12/14/99	12/26/99	8/28/99	9/9/99	9/21/99	10/3/99	10/15/99	11/8/99	11/20/99	12/2/99	12/14/99	12/26/99
Sampling Volume (m3)	621	641	715	768	826	853	868	902	882	861	498	552	711	845	839	853	877	856	842	831
<b>PCDD/F Congeners</b>																				
2,3,7,8-TCDD	<0.003	<0.004	<0.003	<0.003	0.002	<0.002	<0.002	<0.002	<0.005	<0.002	<0.008	<0.006	<0.007	<0.002	<0.002	<0.004	<0.003	<0.004	<0.002	<0.002
1,2,3,7,8-PeCDD	0.010	0.013	<0.007	<0.005	0.012	0.020	0.007	0.013	<0.007	0.009	0.032	0.022	<0.008	<0.005	0.008	0.011	0.005	0.014	0.004	0.006
1,2,3,4,7,8-HxCDD	<0.006	<0.005	<0.006	<0.007	0.013	0.017	0.006	0.012	<0.009	0.008	0.019	<0.012	<0.014	<0.006	0.010	0.007	0.005	<0.007	0.005	0.005
1,2,3,6,7,8-HxCDD	0.014	0.010	<0.006	<0.007	0.027	0.030	0.011	0.026	<0.009	0.016	0.047	0.021	<0.014	<0.006	0.014	0.019	0.010	0.012	0.008	0.009
1,2,3,7,8,9-HxCDD	<0.006	0.009	<0.006	<0.007	0.046	0.042	0.018	0.032	<0.009	0.019	0.043	0.028	<0.014	0.009	0.020	0.033	0.016	0.021	0.008	0.007
1,2,3,4,6,7,8-HpCDD	0.139	0.054	0.026	0.035	0.387	0.272	0.109	0.176	0.060	0.118	0.370	0.175	0.053	0.053	0.197	0.220	0.117	0.198	0.081	0.122
OCDD	0.874	0.211	0.076	0.083	1.002	0.761	0.346	0.516	0.168	0.419	1.002	0.630	0.208	0.119	0.911	0.541	0.319	0.571	0.253	0.422
2,3,7,8-TCDF	0.086	0.141	0.015	0.030	0.068	0.164	0.037	0.121	0.013	0.117	0.042	0.040	0.646	0.072	0.074	0.041	0.025	0.040	0.035	0.017
1,2,3,7,8-PeCDF	0.015	0.018	<0.004	0.005	0.008	0.027	0.006	0.022	<0.005	0.015	0.018	0.009	0.123	0.015	0.016	0.009	0.005	0.008	0.007	0.004
2,3,4,7,8-PeCDF	0.021	0.031	0.004	0.005	0.015	0.038	0.011	0.037	<0.005	0.028	0.027	0.015	0.153	0.018	0.022	0.013	0.010	0.016	0.010	0.006
1,2,3,4,7,8-HxCDF	0.030	0.043	0.006	0.009	0.025	0.051	0.017	0.068	0.006	0.043	0.044	0.028	0.120	0.024	0.041	0.024	0.017	0.029	0.017	0.016
1,2,3,6,7,8-HxCDF	0.014	0.023	<0.004	0.005	0.011	0.026	0.008	0.031	<0.006	0.020	0.027	0.015	0.052	0.011	0.020	0.013	0.007	0.011	0.008	0.007
2,3,4,6,7,8-HxCDF	0.015	0.021	<0.004	0.006	0.013	0.025	0.008	0.041	<0.006	0.027	0.028	0.012	0.060	0.009	0.021	0.018	0.011	0.015	0.006	0.007
1,2,3,7,8,9-HxCDF	<0.003	<0.005	<0.004	<0.003	<0.003	0.006	<0.002	0.007	<0.006	<0.005	<0.007	<0.007	<0.003	<0.004	<0.002	<0.005	<0.005	<0.004	<0.002	0.001
1,2,3,4,6,7,8-HpCDF	0.043	0.049	0.011	0.014	0.038	0.075	0.035	0.126	<0.007	0.065	0.206	0.069	0.123	0.026	0.067	0.055	0.029	0.051	0.029	0.037
1,2,3,4,7,8,9-HpCDF	0.010	0.011	<0.005	<0.005	0.008	0.015	0.005	0.023	<0.007	0.013	0.022	0.007	0.015	<0.005	0.012	<0.007	<0.005	0.005	0.005	0.005
OCDF	0.060	0.030	0.016	0.016	0.031	0.072	0.029	0.114	0.013	0.062	0.222	0.055	0.082	0.011	0.074	0.037	0.019	0.048	0.033	0.043
<b>PCDD/F Homologues</b>																				
TCDDs	0.128	0.210	0.007	0.030	0.100	0.325	0.052	0.164	0.005	0.183	0.023	0.039	<0.007	0.006	0.051	0.025	0.023	0.029	0.030	0.049
PeCDDs	0.025	0.029	<0.007	<0.005	0.113	0.422	0.051	0.238	<0.007	0.173	0.032	0.022	<0.008	<0.005	0.076	0.076	0.022	0.058	0.035	0.050
HxCDDs	0.168	0.139	0.015	0.049	0.261	0.430	0.132	0.302	0.023	0.206	0.358	0.178	0.033	0.061	0.181	0.277	0.123	0.157	0.090	0.116
HpCDDs	0.280	0.112	0.045	0.068	0.718	0.590	0.250	0.370	0.123	0.251	0.701	0.351	0.096	0.124	0.417	0.474	0.246	0.406	0.185	0.252
OCDD	0.874	0.211	0.076	0.083	1.002	0.761	0.346	0.516	0.168	0.419	1.002	0.630	0.208	0.119	0.911	0.541	0.319	0.571	0.253	0.422
TCDFs	0.566	0.918	0.063	0.195	0.479	0.934	0.207	0.694	0.017	0.726	0.361	0.242	3.304	0.444	0.475	0.192	0.137	0.249	0.185	0.095
PeCDFs	0.238	0.392	0.029	0.051	0.182	0.539	0.148	0.473	<0.005	0.316	0.300	0.168	1.070	0.187	0.219	0.103	0.065	0.128	0.103	0.072
HxCDFs	0.144	0.191	0.015	0.026	0.102	0.264	0.076	0.339	0.015	0.209	0.380	0.151	0.407	0.077	0.165	0.123	0.077	0.118	0.067	0.075
HpCDFs	0.083	0.089	0.011	0.015	0.068	0.279	0.061	0.209	<0.007	0.102	0.296	0.113	0.169	0.033	0.128	0.084	0.047	0.076	0.049	0.068
OCDF	0.060	0.030	0.016	0.016	0.031	0.072	0.029	0.114	0.013	0.062	0.222	0.055	0.082	0.011	0.074	0.037	0.019	0.048	0.033	0.043
<b>Total</b>																				
∑ PCDDs	1.475	0.701	0.143	0.230	2.194	2.528	0.831	1.590	0.319	1.232	2.116	1.221	0.337	0.310	1.636	1.393	0.733	1.221	0.593	0.889
∑ PCDFs	1.092	1.621	0.134	0.302	0.862	2.088	0.521	1.829	0.045	1.415	1.559	0.730	5.032	0.752	1.061	0.539	0.345	0.619	0.437	0.353
∑ PCDD/Fs	2.567	2.322	0.277	0.532	3.056	4.616	1.352	3.419	0.364	2.647	3.675	1.951	5.369	1.062	2.697	1.932	1.078	1.840	1.030	1.242
∑ TEQ (PCDD/Fs)	0.039	0.054	0.017	0.018	0.044	0.074	0.025	0.064	0.021	0.047	0.081	0.052	0.159	0.028	0.040	0.038	0.022	0.040	0.019	0.019

Table A48. Atmospheric concentrations of PCDD/Fs (pg m<sup>-3</sup>) at NAPS urban sites in 1999 (continued)

Station Name	Toronto (Evans)											Toronto (Junction Triangle)												
	1	2	3	4	5	6	7	8	9	10	11	12	13	1	2	3	4	5	6	7	8	9	10	11
Sampling Period	1/12/99	2/5/99	3/1/99	3/25/99	4/18/99	5/12/99	6/5/99	6/29/99	8/16/99	9/9/99	10/3/99	11/20/99	12/14/99	1/12/99	3/25/99	4/18/99	5/12/99	6/5/99	6/29/99	8/16/99	9/9/99	10/3/99	11/20/99	12/14/99
Sampling Volume (m3)	925	1055	986	1071	941	910	867	897	823.7	935.9	1002.7	888.8	875.2	919	896	922	889	897	849	876	858	911	877	880
<b>PCDD/F Congeners</b>																								
2,3,7,8-TCDD	<0.002	<0.002	<0.004	0.003	<0.003	<0.002	<0.002	<0.002	<0.005	<0.004	<0.002	<0.002	<0.005	0.003	<0.002	<0.002	<0.004	<0.002	<0.002	<0.003	<0.005	<0.002	<0.002	<0.002
1,2,3,7,8-PeCDD	0.012	0.006	0.007	0.012	0.004	0.008	0.007	0.005	<0.007	<0.004	<0.004	0.009	<0.005	0.012	<0.003	<0.004	<0.005	0.006	<0.004	0.011	0.008	<0.004	0.012	0.006
1,2,3,4,7,8-HxCDD	0.009	<0.004	<0.005	0.008	0.003	0.007	0.005	0.003	<0.007	<0.009	<0.004	0.010	<0.007	0.010	<0.007	<0.007	<0.005	0.005	<0.005	0.006	<0.007	<0.004	0.011	<0.005
1,2,3,6,7,8-HxCDD	0.016	0.006	0.011	0.013	0.006	0.014	0.011	0.009	<0.007	<0.009	<0.004	0.017	0.008	0.022	<0.007	<0.007	<0.005	0.008	0.006	0.012	<0.007	0.004	0.019	0.009
1,2,3,7,8,9-HxCDD	0.032	0.011	0.019	0.030	0.008	0.019	0.017	0.007	<0.007	<0.009	0.004	0.028	0.008	0.034	<0.007	<0.007	0.012	0.009	0.006	0.013	0.008	<0.004	0.032	0.011
1,2,3,4,6,7,8-HpCDD	0.156	0.100	0.175	0.081	0.079	0.210	0.268	0.165	0.086	0.039	0.034	0.186	0.080	0.182	0.054	0.058	0.076	0.098	0.075	0.079	0.085	0.043	0.222	0.087
OCDD	0.422	0.410	0.885	0.237	0.387	0.705	0.976	1.021	0.598	0.165	0.130	0.556	0.209	0.433	0.242	0.201	0.375	0.346	0.335	0.443	0.340	0.135	0.598	0.266
2,3,7,8-TCDF	0.094	0.020	0.050	0.090	0.028	0.015	0.022	0.027	0.030	0.020	0.048	0.033	0.013	0.131	0.018	0.022	0.026	0.027	0.017	0.085	0.034	0.012	0.047	0.022
1,2,3,7,8-PeCDF	0.017	0.003	0.009	0.021	<0.002	0.005	0.004	0.004	<0.002	<0.004	0.005	0.009	0.005	0.019	<0.003	<0.003	0.003	0.003	0.004	0.015	0.007	<0.004	0.008	0.005
2,3,4,7,8-PeCDF	0.029	0.006	0.016	0.040	0.006	0.008	0.006	0.008	0.008	0.006	0.006	0.017	0.012	0.034	0.007	<0.003	0.008	0.005	0.007	0.032	0.011	<0.004	0.014	0.006
1,2,3,4,7,8-HxCDF	0.055	0.011	0.039	0.074	0.017	0.013	0.018	0.017	0.013	0.012	0.008	0.031	0.023	0.056	0.009	0.011	0.018	0.012	0.012	0.062	0.017	0.005	0.031	0.012
1,2,3,6,7,8-HxCDF	0.023	0.007	0.017	0.035	0.006	0.007	0.008	0.011	0.007	0.005	0.004	0.015	0.009	0.021	0.006	<0.004	0.007	0.007	0.004	0.026	0.008	<0.004	0.013	0.005
2,3,4,6,7,8-HxCDF	0.027	0.008	0.024	0.041	0.008	0.009	0.013	0.012	0.007	0.005	0.004	0.018	0.013	0.029	<0.005	<0.004	0.009	0.010	0.007	0.037	0.010	<0.004	0.020	0.007
1,2,3,7,8,9-HxCDF	<0.004	<0.003	<0.003	<0.002	<0.003	<0.003	<0.002	<0.004	<0.006	<0.005	<0.002	<0.002	<0.007	<0.003	<0.005	<0.004	<0.005	<0.002	<0.004	<0.005	<0.006	<0.004	<0.003	<0.004
1,2,3,4,6,7,8-HpCDF	0.080	0.051	0.107	0.102	0.043	0.045	0.084	0.091	0.043	0.025	0.019	0.054	0.038	0.081	0.029	0.021	0.035	0.041	0.034	0.089	0.043	0.010	0.060	0.029
1,2,3,4,7,8,9-HpCDF	0.010	0.005	0.010	0.011	0.006	<0.005	0.007	0.004	<0.01	<0.006	<0.004	0.005	<0.006	0.011	<0.013	<0.009	<0.005	<0.005	<0.005	0.014	0.009	<0.004	0.007	0.007
OCDF	0.057	0.095	0.155	0.075	0.060	0.072	0.105	0.165	0.058	0.030	0.029	0.043	0.029	0.068	0.026	0.030	0.047	0.048	0.032	0.041	0.116	0.012	0.045	0.035
<b>PCDD/F Homologues</b>																								
TCDDs	0.124	0.006	0.067	0.043	0.023	0.011	0.025	0.031	0.004	0.021	0.011	0.068	0.016	0.157	0.005	0.017	0.014	0.008	0.025	0.074	<0.005	0.004	0.063	0.012
PeCDDs	0.128	0.007	0.084	0.108	0.027	0.027	0.022	0.010	<0.007	<0.004	0.007	0.099	0.016	0.175	<0.003	0.014	0.018	0.006	<0.004	0.065	0.008	<0.004	0.131	0.017
HxCDDs	0.263	0.054	0.154	0.119	0.069	0.139	0.124	0.077	0.044	0.030	0.020	0.250	0.060	0.272	0.029	0.037	0.057	0.082	0.033	0.102	0.081	0.033	0.265	0.063
HpCDDs	0.339	0.181	0.338	0.171	0.159	0.408	0.461	0.288	0.175	0.039	0.058	0.389	0.156	0.387	0.119	0.128	0.188	0.216	0.155	0.180	0.204	0.082	0.512	0.184
OCDD	0.422	0.410	0.885	0.237	0.387	0.705	0.976	1.021	0.598	0.165	0.130	0.556	0.209	0.433	0.242	0.201	0.375	0.346	0.335	0.443	0.340	0.135	0.598	0.266
TCDFs	0.544	0.124	0.252	0.446	0.154	0.128	0.124	0.205	0.131	0.205	0.114	0.283	0.158	0.811	0.078	0.144	0.156	0.203	0.162	0.625	0.259	0.050	0.278	0.133
PeCDFs	0.388	0.055	0.235	0.417	0.094	0.088	0.099	0.165	0.077	0.067	0.054	0.200	0.105	0.451	0.042	0.037	0.095	0.079	0.116	0.465	0.106	0.012	0.159	0.050
HxCDFs	0.234	0.083	0.216	0.325	0.090	0.093	0.111	0.177	0.090	0.054	0.038	0.156	0.074	0.254	0.038	0.039	0.075	0.063	0.081	0.361	0.074	0.016	0.103	0.042
HpCDFs	0.129	0.091	0.216	0.167	0.076	0.088	0.057	0.179	0.074	0.025	0.033	0.101	0.059	0.138	0.029	0.024	0.054	0.067	0.021	0.149	0.079	0.016	0.108	0.054
OCDF	0.057	0.095	0.155	0.075	0.060	0.072	0.105	0.165	0.058	0.030	0.029	0.043	0.029	0.068	0.026	0.030	0.047	0.048	0.032	0.041	0.116	0.012	0.045	0.035
<b>Total</b>																								
∑ PCDDs	1.276	0.658	1.527	0.679	0.666	1.289	1.608	1.427	0.821	0.255	0.226	1.362	0.457	1.424	0.396	0.397	0.652	0.659	0.548	0.866	0.633	0.254	1.569	0.542
∑ PCDFs	1.352	0.448	1.074	1.429	0.474	0.469	0.496	0.890	0.430	0.381	0.268	0.783	0.425	1.721	0.214	0.273	0.426	0.460	0.411	1.641	0.634	0.106	0.693	0.314
∑ PCDD/Fs	2.628	1.106	2.601	2.108	1.140	1.758	2.104	2.317	1.251	0.636	0.494	2.145	0.882	3.145	0.610	0.670	1.078	1.119	0.959	2.507	1.267	0.360	2.262	0.856
∑ TEQ (PCDD/Fs)	0.052	0.019	0.036	0.059	0.018	0.025	0.024	0.021	0.024	0.019	0.014	0.036	0.026	0.059	0.015	0.015	0.021	0.019	0.016	0.051	0.028	0.012	0.039	0.019

Table A48. Atmospheric concentrations of PCDD/Fs ( $\mu\text{g m}^{-3}$ ) at NAPS urban sites in 1999 (continued)

Station Name	Montreal (1125)												St. John's			
Sampling Period	1	2	3	4	5	6	7	8	9	10	11	12	1	2	3	4
Sampling Date	3/1/99	3/25/99	4/18/99	5/12/99	6/5/99	6/29/99	9/9/99	10/3/99	11/20/99	12/2/99	12/14/99	12/26/99	8/10/99	10/9/99	11/20/99	12/14/99
Sampling Volume (m3)	1272	1227	1193	1210	1184	1152	1112	1061	1048	927	912	1028	1282	1096	1014	815
<b>PCDD/F Congeners</b>																
2,3,7,8-TCDD	<0.002	<0.002	<0.002	<0.002	<0.002	<0.005	<0.004	<0.002	<0.002	<0.002	0.004	<0.002	<0.007	<0.009	<0.002	<0.002
1,2,3,7,8-PeCDD	0.007	0.006	0.007	0.006	0.007	0.009	0.006	0.009	0.011	0.014	0.022	0.008	<0.003	<0.007	<0.004	0.004
1,2,3,4,7,8-HxCDD	0.005	0.004	0.008	<0.003	<0.008	0.008	<0.004	0.003	0.010	0.015	0.028	0.007	<0.006	<0.009	<0.003	<0.003
1,2,3,6,7,8-HxCDD	0.009	0.007	0.015	<0.003	0.014	0.011	0.005	0.008	0.011	0.022	0.053	0.013	<0.006	<0.009	<0.003	<0.003
1,2,3,7,8,9-HxCDD	0.014	0.011	0.020	0.010	0.023	0.012	0.008	0.013	0.019	0.040	0.071	0.019	<0.006	<0.009	<0.003	<0.003
1,2,3,4,6,7,8-HpCDD	0.088	0.069	0.112	0.057	0.198	0.114	0.044	0.071	0.127	0.234	0.580	0.156	0.008	<0.004	0.016	0.036
OCDD	0.295	0.238	0.364	0.173	0.535	0.347	0.141	0.184	0.455	0.653	1.275	0.630	0.037	0.030	0.074	0.114
2,3,7,8-TCDF	0.030	0.023	0.038	0.015	0.034	0.031	0.025	0.029	0.076	0.068	0.106	0.016	0.003	<0.002	0.008	0.012
1,2,3,7,8-PeCDF	0.006	0.006	0.009	<0.003	0.006	0.007	0.004	0.006	0.013	0.014	0.043	0.004	<0.002	<0.003	<0.004	0.003
2,3,4,7,8-PeCDF	0.012	0.007	0.011	0.004	0.012	0.008	0.006	0.010	0.027	0.023	0.053	0.007	<0.002	<0.003	<0.004	0.004
1,2,3,4,7,8-HxCDF	0.015	0.014	0.023	0.011	0.017	0.017	0.012	0.023	0.026	0.033	0.179	0.015	<0.003	<0.003	<0.003	0.006
1,2,3,6,7,8-HxCDF	0.006	0.007	0.011	0.006	0.007	0.009	0.006	0.009	0.011	0.013	0.068	0.007	<0.003	<0.003	<0.003	0.003
2,3,4,6,7,8-HxCDF	0.008	0.007	0.012	0.008	0.011	0.008	0.005	0.015	0.015	0.021	0.084	0.009	<0.003	<0.003	<0.003	<0.003
1,2,3,7,8,9-HxCDF	<0.002	<0.002	<0.002	<0.003	<0.004	<0.003	<0.003	0.017	<0.005	<0.002	0.012	<0.002	<0.003	<0.003	<0.003	<0.003
1,2,3,4,6,7,8-HpCDF	0.020	0.024	0.047	0.020	0.039	0.043	0.024	0.049	0.049	0.048	0.350	0.035	0.006	<0.003	<0.006	0.012
1,2,3,4,7,8,9-HpCDF	0.003	<0.003	0.008	<0.008	<0.014	<0.007	<0.005	0.008	0.006	0.008	0.070	<0.003	<0.004	<0.003	<0.006	0.003
OCDF	0.022	0.021	0.250	0.035	0.046	0.040	0.032	0.048	0.048	0.041	0.374	0.055	0.015	0.005	<0.006	0.016
<b>PCDD/F Homologues</b>																
TCDDs	0.024	0.019	0.041	0.007	0.021	0.019	0.018	0.020	0.081	0.045	0.086	0.016	<0.007	<0.009	<0.002	0.006
PeCDDs	0.037	0.027	0.051	0.006	0.031	0.022	0.013	0.023	0.092	0.125	0.273	0.046	<0.003	<0.007	<0.004	0.010
HxCDDs	0.101	0.079	0.141	0.054	0.175	0.117	0.045	0.070	0.193	0.297	0.669	0.142	<0.006	<0.009	<0.003	0.028
HpCDDs	0.181	0.141	0.239	0.104	0.387	0.227	0.083	0.154	0.283	0.527	1.244	0.344	0.016	<0.004	0.032	0.069
OCDD	0.295	0.238	0.364	0.173	0.535	0.347	0.141	0.184	0.455	0.653	1.275	0.630	0.037	0.030	0.074	0.114
TCDFs	0.214	0.139	0.265	0.075	0.299	0.271	0.190	0.182	0.409	0.385	0.642	0.094	0.010	<0.002	0.018	0.040
PeCDFs	0.119	0.098	0.159	0.031	0.150	0.181	0.075	0.101	0.212	0.215	0.630	0.074	0.005	<0.003	<0.004	0.030
HxCDFs	0.064	0.068	0.115	0.056	0.116	0.146	0.085	0.097	0.108	0.136	0.680	0.073	0.008	<0.003	<0.003	0.026
HpCDFs	0.038	0.042	0.087	0.020	0.039	0.067	0.024	0.085	0.084	0.088	0.633	0.067	0.006	<0.003	<0.006	0.025
OCDF	0.022	0.021	0.250	0.035	0.046	0.040	0.032	0.048	0.048	0.041	0.374	0.055	0.014	0.005	<0.006	0.016
<b>Total</b>																
∑ PCDDs	0.639	0.503	0.836	0.344	1.148	0.732	0.300	0.451	1.104	1.647	3.547	1.178	0.053	0.030	0.106	0.227
∑ PCDFs	0.457	0.367	0.876	0.218	0.649	0.705	0.406	0.513	0.861	0.865	2.959	0.363	0.041	0.005	0.018	0.137
∑ PCDD/Fs	1.096	0.870	1.712	0.562	1.797	1.437	0.706	0.964	1.965	2.512	6.506	1.541	0.094	0.035	0.124	0.364
∑ TEQ (PCDD/Fs)	0.023	0.019	0.027	0.016	0.027	0.028	0.020	0.027	0.041	0.048	0.114	0.023	0.014	0.021	0.011	0.011



Table A48. Atmospheric concentrations of PCDD/Fs (pg m<sup>-3</sup>) at NAPS urban sites in 1999 (continued)

Station Name	Winnipeg												Windsor (College)														
Sampling Period	1	2	3	4	5	6	7	8	9	10	11	12	1	2	3	4	5	6	7	8	9	10	11	12	13	14	
Sampling Date	1/12/99	2/5/99	3/1/99	3/25/99	4/18/99	5/12/99	6/5/99	7/23/99	9/15/99	10/3/99	11/20/99	12/14/99	1/12/99	2/5/99	3/1/99	4/18/99	5/12/99	6/5/99	6/29/99	7/23/99	8/16/99	9/9/99	10/3/99	10/27/99	11/20/99	12/14/99	
Sampling Volume (m3)	1070	983	912	944	927	935	887	789	930	1033	941	917	810	770	795	783	804	760	732	639	724	752	742	748	785	822	
<b>PCDD/F Congeners</b>																											
2,3,7,8-TCDD	<0.002	<0.002	<0.002	<0.002	<0.002	<0.004	<0.002	<0.005	<0.002	<0.002	<0.003	0.003	<0.002	0.003	<0.003	<0.003	<0.008	<0.003	<0.003	<0.006	<0.006	<0.005	<0.004	<0.003	0.004	<0.002	
1,2,3,7,8-PeCDD	<0.003	0.007	<0.004	0.010	0.003	<0.004	<0.002	<0.008	0.004	0.006	0.011	0.024	0.020	0.017	0.008	0.008	<0.008	0.011	<0.004	0.014	0.009	<0.008	0.009	0.010	0.020	0.007	
1,2,3,4,7,8-HxCDD	0.012	<0.01	<0.008	0.010	<0.009	<0.006	<0.005	<0.01	0.002	0.004	0.009	0.033	0.016	0.014	0.008	<0.005	<0.01	<0.01	<0.005	<0.013	0.012	0.009	<0.019	0.007	0.031	0.006	
1,2,3,6,7,8-HxCDD	0.018	0.014	<0.008	0.008	<0.009	<0.006	<0.005	<0.01	0.003	0.009	0.019	0.047	0.028	0.034	0.011	0.007	<0.01	0.018	<0.005	<0.013	0.017	0.021	<0.019	0.010	0.049	0.009	
1,2,3,7,8,9-HxCDD	0.061	0.019	<0.008	0.019	<0.009	<0.006	<0.005	<0.01	0.005	0.011	0.026	0.100	0.043	0.046	0.017	<0.005	<0.01	0.042	<0.005	0.014	0.023	0.029	<0.019	0.013	0.070	0.011	
1,2,3,4,6,7,8-HpCDD	0.231	0.093	0.046	0.115	0.048	0.052	0.063	0.037	0.044	0.095	0.207	0.569	0.251	0.311	0.125	0.109	0.126	0.237	0.065	0.094	0.170	0.186	0.117	0.092	0.523	0.086	
OCDD	0.722	0.242	0.129	0.326	0.187	0.249	0.239	0.133	0.181	0.256	0.566	1.171	0.809	0.951	0.536	0.405	0.664	0.857	0.228	0.259	0.604	0.570	0.305	0.265	1.560	0.264	
2,3,7,8-TCDF	0.018	0.021	0.012	0.027	0.009	0.015	0.008	0.009	0.012	0.010	0.019	0.021	0.105	0.072	0.026	0.013	0.022	0.023	0.027	0.035	0.027	0.108	0.021	0.063	0.118	0.022	
1,2,3,7,8-PeCDF	<0.003	<0.004	<0.005	0.005	<0.002	<0.004	<0.002	<0.004	0.003	<0.003	0.004	0.004	0.021	0.016	0.005	<0.005	<0.008	0.005	<0.003	0.007	<0.006	0.022	<0.005	0.014	0.032	0.004	
2,3,4,7,8-PeCDF	0.005	0.005	<0.005	0.008	<0.002	<0.004	<0.002	<0.004	0.003	0.004	0.006	0.007	0.037	0.028	0.007	<0.005	<0.008	<0.003	0.010	0.011	0.007	0.048	<0.005	0.023	0.045	0.008	
1,2,3,4,7,8-HxCDF	0.008	0.014	<0.003	0.024	0.005	0.007	<0.005	0.006	0.006	0.005	0.011	0.013	0.082	0.070	0.011	0.005	0.013	0.016	0.013	0.024	0.017	0.130	0.012	0.030	0.174	0.014	
1,2,3,6,7,8-HxCDF	<0.005	0.007	<0.003	0.009	0.002	<0.004	0.005	<0.005	0.003	0.003	0.005	0.006	0.037	0.029	0.005	0.004	0.007	0.010	0.008	0.014	0.013	0.054	0.006	0.013	0.060	0.006	
2,3,4,6,7,8-HxCDF	<0.005	<0.006	<0.003	0.016	0.004	<0.004	<0.005	<0.005	0.003	0.003	0.004	0.006	0.048	0.036	0.007	<0.004	<0.006	<0.005	0.004	0.008	0.012	0.074	0.015	0.016	0.074	0.009	
1,2,3,7,8,9-HxCDF	<0.005	<0.006	<0.003	<0.005	<0.002	<0.004	<0.005	<0.005	<0.002	<0.002	<0.002	<0.002	0.004	<0.003	<0.003	<0.004	<0.006	<0.005	<0.004	<0.003	<0.004	<0.008	<0.006	<0.003	<0.005	<0.004	
1,2,3,4,6,7,8-HpCDF	0.018	0.022	0.013	0.048	0.015	0.021	0.013	0.022	0.019	0.013	0.020	0.034	0.141	0.153	0.024	0.027	0.043	0.086	0.045	0.078	0.073	0.264	0.026	0.043	0.368	0.027	
1,2,3,4,7,8,9-HpCDF	<0.005	<0.008	<0.004	<0.009	<0.007	<0.008	<0.005	<0.008	0.003	0.002	<0.004	0.005	0.017	0.023	0.004	<0.01	<0.01	<0.01	<0.007	<0.005	0.006	0.028	<0.026	0.008	0.039	<0.003	
OCDF	0.034	0.020	0.014	0.043	0.032	0.030	0.034	0.014	0.023	0.012	0.026	0.042	0.161	0.217	0.043	0.021	0.123	0.090	0.047	0.039	0.054	0.190	0.018	0.037	0.329	0.023	
<b>PCDD/F Homologues</b>																											
TCDDs	0.003	0.019	0.010	0.039	0.004	<0.004	0.008	0.007	0.008	0.015	0.017	0.084	0.358	0.131	0.025	0.007	0.009	0.020	0.041	0.036	0.029	0.194	0.052	0.034	0.382	0.014	
PeCDDs	<0.003	0.029	<0.004	0.043	0.004	<0.004	<0.002	0.024	0.018	0.036	0.047	0.337	0.436	0.192	0.026	0.017	0.009	0.027	0.020	<0.006	0.009	<0.008	<0.008	0.045	0.453	0.026	
HxCDDs	0.324	0.105	0.024	0.157	0.059	0.036	0.043	0.040	0.034	0.090	0.193	0.852	0.596	0.397	0.124	0.066	0.072	0.234	0.035	0.090	0.197	0.275	0.093	0.087	0.804	0.095	
HpCDDs	0.548	0.210	0.093	0.229	0.108	0.105	0.124	0.072	0.086	0.203	0.471	1.531	0.568	0.697	0.252	0.251	0.319	0.512	0.118	0.195	0.337	0.404	0.240	0.186	1.198	0.191	
OCDD	0.722	0.242	0.129	0.326	0.187	0.249	0.239	0.133	0.181	0.256	0.566	1.171	0.809	0.951	0.536	0.405	0.664	0.857	0.228	0.259	0.604	0.570	0.305	0.265	1.560	0.264	
TCDFs	0.091	0.090	0.044	0.172	0.040	0.051	0.033	0.094	0.066	0.075	0.099	0.118	0.635	0.458	0.177	0.051	0.079	0.179	0.139	0.233	0.194	0.638	0.091	0.366	0.731	0.143	
PeCDFs	0.037	0.054	0.015	0.110	0.023	0.026	0.047	0.100	0.033	0.034	0.073	0.084	0.482	0.338	0.099	0.025	0.043	0.131	0.101	0.246	0.087	0.419	0.006	0.222	0.609	0.081	
HxCDFs	0.033	0.048	0.026	0.094	0.030	0.032	0.029	0.073	0.028	0.027	0.052	0.074	0.408	0.315	0.052	0.028	0.064	0.212	0.093	0.376	0.184	0.537	0.043	0.121	0.728	0.069	
HpCDFs	0.043	0.022	0.021	0.085	0.017	0.031	0.014	0.033	0.037	0.024	0.040	0.070	0.218	0.253	0.050	0.027	0.059	0.150	0.074	0.136	0.130	0.439	0.026	0.073	0.562	0.046	
OCDF	0.034	0.020	0.014	0.043	0.032	0.030	0.034	0.014	0.023	0.012	0.026	0.042	0.161	0.217	0.043	0.021	0.123	0.090	0.047	0.039	0.054	0.190	0.018	0.037	0.329	0.023	
<b>Total</b>																											
∑ PCDDs	1.598	0.604	0.256	0.793	0.361	0.389	0.413	0.275	0.327	0.600	1.294	3.975	2.765	2.368	0.964	0.746	1.072	1.650	0.441	0.580	1.176	1.443	0.690	0.617	4.397	0.590	
∑ PCDFs	0.238	0.233	0.119	0.503	0.142	0.169	0.158	0.314	0.187	0.172	0.290	0.388	1.904	1.581	0.422	0.152	0.368	0.761	0.455	1.030	0.649	2.223	0.184	0.819	2.959	0.362	
∑ PCDD/Fs	1.836	0.837	0.375	1.296	0.503	0.558	0.571	0.589	0.514	0.772	1.584	4.363	4.669	3.949	1.386	0.898	1.440	2.411	0.896	1.610	1.825	3.666	0.874	1.436	7.356	0.952	
∑ TEQ (PCDD/Fs)	0.023	0.022	0.013	0.028	0.011	0.015	0.010	0.021	0.011	0.015	0.028	0.058	0.074	0.065	0.024	0.019	0.029	0.032	0.018	0.038	0.032	0.076	0.028	0.037	0.106	0.021	

Table A48. Atmospheric concentrations of PCDD/Fs (pg m<sup>-3</sup>) at NAPS urban sites in 1999 (continued)

Station Name	Hamilton (Elgin)												Jonquiere												
	1	2	3	4	5	6	7	8	9	10	11	12	1	2	3	4	5	6	7	8	9	10	11	12	13
Sampling Period	1/12/99	3/1/99	3/25/99	4/18/99	5/12/99	6/5/99	6/29/99	7/23/99	8/16/99	10/3/99	11/20/99	12/14/99	1/12/99	2/5/99	3/1/99	3/25/99	4/18/99	5/12/99	6/5/99	6/29/99	8/16/99	9/9/99	10/3/99	11/20/99	12/14/99
Sampling Volume (m3)	609	615	575	607	611	36316	578	557	564	574	615	583	895	869	846	859	903	859	848	802	845	866	862	863	869
<b>PCDD/F Congeners</b>																									
2,3,7,8-TCDD	<0.003	<0.003	<0.007	<0.007	<0.004	<0.003	<0.003	<0.004	<0.004	<0.004	<0.003	<0.01	<0.004	<0.005	<0.005	<0.005	<0.002	<0.002	<0.002	<0.005	<0.005	<0.002	<0.002	0.005	<0.002
1,2,3,7,8-PeCDD	0.026	0.006	0.010	0.007	0.014	0.016	0.010	<0.004	<0.007	0.007	0.010	0.011	0.008	<0.005	0.009	<0.005	0.004	<0.005	0.017	0.014	0.010	0.012	<0.004	0.025	0.012
1,2,3,4,7,8-HxCDD	0.025	<0.005	<0.007	<0.013	<0.007	0.014	0.013	<0.011	<0.011	<0.007	0.008	0.010	0.007	<0.006	<0.007	<0.005	<0.003	<0.002	0.020	<0.007	0.010	0.008	<0.005	0.031	0.010
1,2,3,6,7,8-HxCDD	0.044	0.008	0.010	<0.013	0.028	0.029	0.016	<0.011	<0.011	<0.007	0.014	0.012	0.015	0.007	<0.007	<0.005	0.004	<0.002	0.058	<0.007	0.014	0.013	<0.005	0.045	0.017
1,2,3,7,8,9-HxCDD	0.069	0.011	0.016	<0.013	0.031	0.053	0.028	<0.011	<0.011	<0.007	0.023	0.027	0.029	0.006	<0.007	<0.005	<0.003	<0.002	0.091	0.014	0.028	0.013	<0.005	0.069	0.031
1,2,3,4,6,7,8-HpCDD	0.374	0.086	0.147	0.092	0.225	0.321	0.174	0.068	0.057	0.049	0.149	0.129	0.215	0.095	0.079	0.027	0.041	0.035	0.676	0.064	0.214	0.049	0.021	0.352	0.160
OCDD	0.894	0.356	0.523	0.268	1.157	1.112	0.596	0.546	0.435	0.156	0.442	0.422	0.706	0.315	0.278	0.169	0.134	0.176	1.206	0.242	0.509	0.105	0.076	0.714	0.405
2,3,7,8-TCDF	0.153	0.022	0.047	0.024	0.161	0.255	0.021	0.044	0.027	0.026	0.032	0.056	0.036	0.036	0.099	0.007	0.004	0.003	0.024	0.060	0.032	0.123	0.005	0.193	0.081
1,2,3,7,8-PeCDF	0.023	0.003	0.011	<0.003	0.030	0.047	0.006	<0.007	0.005	0.004	0.005	0.012	0.007	0.012	0.008	<0.003	<0.002	<0.002	0.004	0.007	0.008	0.015	<0.002	0.039	0.016
2,3,4,7,8-PeCDF	0.060	0.005	0.015	0.006	0.050	0.069	0.007	<0.007	<0.004	0.007	0.009	0.014	0.012	0.018	0.021	<0.003	<0.002	<0.002	0.006	0.012	0.013	0.019	<0.002	0.063	0.032
1,2,3,4,7,8-HxCDF	0.093	0.012	0.034	0.009	0.010	0.120	0.011	<0.011	0.015	0.012	0.022	0.027	0.018	0.099	0.028	<0.005	<0.002	<0.004	0.015	0.021	0.045	0.025	<0.003	0.157	0.070
1,2,3,6,7,8-HxCDF	0.042	0.005	0.017	<0.006	0.040	0.050	<0.009	<0.011	0.007	0.006	0.011	0.014	0.007	0.031	0.010	<0.005	<0.002	<0.004	0.008	0.009	0.023	0.018	<0.003	0.063	0.029
2,3,4,6,7,8-HxCDF	0.055	0.007	0.017	<0.006	0.047	0.054	<0.009	<0.011	<0.005	<0.005	0.011	0.016	0.008	0.031	0.013	<0.005	<0.002	<0.004	0.010	0.012	0.021	0.021	<0.003	0.082	0.037
1,2,3,7,8,9-HxCDF	0.004	<0.003	<0.006	<0.006	<0.004	<0.007	<0.009	<0.011	<0.005	<0.005	<0.004	<0.003	<0.004	<0.007	<0.004	<0.005	<0.002	<0.004	<0.004	<0.005	<0.002	<0.003	<0.003	<0.005	<0.003
1,2,3,4,6,7,8-HpCDF	0.109	0.033	0.074	0.016	0.179	0.154	0.047	0.045	0.033	0.015	0.042	0.043	0.047	0.216	0.049	0.008	<0.004	0.005	0.037	0.043	0.107	0.036	0.005	0.213	0.120
1,2,3,4,7,8,9-HpCDF	0.014	0.005	<0.008	<0.009	0.018	0.021	<0.007	<0.011	<0.007	<0.003	<0.007	<0.007	<0.009	0.053	<0.007	<0.007	<0.004	<0.004	<0.005	<0.006	0.014	0.006	<0.003	0.032	0.017
OCDF	0.074	0.046	0.106	0.020	0.134	0.095	0.034	0.032	0.053	0.021	0.035	0.034	0.142	0.293	0.074	0.010	0.011	0.021	0.070	0.050	0.062	0.075	0.009	0.139	0.101
<b>PCDD/F Homologues</b>																									
TCDDs	0.248	0.048	0.106	0.100	0.254	0.246	0.042	0.024	0.022	0.017	0.037	0.263	0.064	0.014	0.159	0.006	0.004	<0.002	0.058	0.116	0.027	0.467	<0.002	0.173	0.085
PeCDDs	0.441	0.014	0.084	0.034	0.117	0.117	<0.01	<0.004	0.026	0.007	0.044	0.234	0.088	0.028	0.132	<0.005	0.008	<0.005	0.168	0.095	0.040	0.338	<0.004	0.260	0.013
HxCDDs	0.648	0.100	0.168	0.092	0.274	0.353	0.103	0.048	0.018	0.033	0.144	0.301	0.217	0.057	0.079	<0.005	0.019	0.004	0.756	0.096	0.137	0.315	0.007	0.557	0.227
HpCDDs	0.797	0.196	0.342	0.202	0.517	0.608	0.367	0.149	0.126	0.100	0.331	0.290	0.456	0.185	0.148	0.054	0.078	0.056	1.417	0.116	0.449	0.083	0.036	0.704	0.306
OCDD	0.894	0.356	0.523	0.268	1.157	1.112	0.596	0.546	0.435	0.156	0.442	0.422	0.706	0.315	0.278	0.169	0.134	0.176	1.206	0.242	0.509	0.105	0.076	0.714	0.405
TCDFs	0.941	0.165	0.405	0.080	0.966	2.071	0.171	0.129	0.208	0.148	0.208	0.284	0.165	0.167	0.409	0.010	0.016	0.003	0.149	0.338	0.178	0.628	0.005	0.916	0.422
PeCDFs	0.691	0.061	0.218	0.030	0.610	0.839	0.080	0.049	0.124	0.037	0.099	0.119	0.097	0.156	0.204	0.005	0.008	0.003	0.085	0.188	0.165	0.241	0.005	0.750	0.313
HxCDFs	0.484	0.053	0.180	0.037	0.466	0.483	0.080	0.155	0.118	0.035	0.098	0.124	0.089	0.347	0.097	<0.005	0.005	0.005	0.080	0.123	0.220	0.119	0.005	0.590	0.258
HpCDFs	0.208	0.062	0.115	0.016	0.308	0.219	0.019	0.065	0.060	0.022	0.064	0.058	0.095	0.420	0.074	0.008	0.004	0.009	0.060	0.060	0.182	0.058	0.005	0.344	0.203
OCDF	0.074	0.046	0.106	0.020	0.134	0.095	0.034	0.032	0.053	0.021	0.035	0.034	0.142	0.293	0.074	0.010	0.011	0.021	0.070	0.050	0.062	0.075	0.009	0.139	0.101
<b>Total</b>																									
∑ PCDDs	3.027	0.714	1.222	0.695	2.320	2.435	1.108	0.767	0.628	0.313	0.998	1.510	1.532	0.598	0.796	0.229	0.242	0.236	3.604	0.665	1.162	1.308	0.119	2.408	1.036
∑ PCDFs	2.398	0.387	1.024	0.183	2.484	3.707	0.384	0.431	0.563	0.263	0.504	0.619	0.588	1.382	0.858	0.033	0.043	0.042	0.444	0.759	0.806	1.121	0.029	2.739	1.297
∑ PCDD/Fs	5.425	1.101	2.246	0.878	4.804	6.142	1.492	1.198	1.191	0.576	1.502	2.129	2.120	1.980	1.654	0.262	0.285	0.278	4.048	1.424	1.968	2.429	0.148	5.147	2.333
∑ TEQ (PCDD/Fs)	0.101	0.019	0.040	0.026	0.071	0.105	0.029	0.024	0.023	0.021	0.030	0.044	0.031	0.042	0.039	0.016	0.009	0.011	0.051	0.038	0.040	0.044	0.010	0.121	0.055

Table A49. Atmospheric concentrations of PCDD/Fs ( $\mu\text{g m}^{-3}$ ) at NAPS urban sites in 2000

Station Name	Hamilton (Confederation Park)																									
Sampling Period	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26
Sampling Date	1/7/00	1/31/00	2/12/00	2/24/00	3/7/00	3/19/00	3/31/00	4/12/00	4/24/00	5/6/00	5/18/00	5/30/00	6/11/00	6/23/00	7/5/00	7/17/00	8/10/00	8/22/00	9/3/00	9/15/00	9/27/00	10/9/00	11/2/00	11/14/00	11/26/00	12/8/00
Sampling Volume (m3)	886	908	928	863	822	769	754	888	693	744	821	680	777	711	742	734	743	731	704	758	790	824	765	823	842	881
<b>PCDD/F Congeners</b>																										
2,3,7,8-TCDD	0.004	<0.002	0.003	<0.002	<0.005	<0.003	<0.005	<0.005	<0.003	0.020	<0.005	<0.006	<0.007	<0.004	<0.003	<0.004	<0.003	<0.003	<0.003	<0.005	0.026	<0.005	<0.005	0.033	<0.010	0.006
1,2,3,7,8-PeCDD	0.018	0.010	0.020	0.010	0.012	0.012	<0.005	0.006	0.010	0.081	0.018	0.014	0.034	0.018	0.008	0.023	0.014	0.007	<0.003	0.012	0.134	<0.005	<0.005	0.155	<0.012	0.020
1,2,3,4,7,8-HxCDD	0.018	0.009	0.016	0.013	0.011	0.010	<0.005	<0.007	0.009	0.042	0.011	0.011	0.018	0.015	<0.004	0.019	<0.005	0.005	<0.005	<0.008	0.108	<0.010	<0.010	0.123	0.018	0.017
1,2,3,6,7,8-HxCDD	0.032	0.015	0.027	0.019	0.023	0.022	<0.005	0.011	0.012	0.110	0.022	0.020	0.044	0.016	<0.004	0.031	0.016	0.014	<0.005	0.016	0.204	<0.010	<0.010	0.248	0.021	0.026
1,2,3,7,8,9-HxCDD	0.049	0.022	0.049	0.032	0.040	0.035	0.013	0.008	0.016	0.119	0.029	0.024	0.040	0.017	<0.004	0.032	<0.005	0.018	<0.005	0.028	0.250	<0.010	0.032	0.296	0.042	0.041
1,2,3,4,6,7,8-HpCDD	0.257	0.160	0.277	0.211	0.284	0.289	0.092	0.064	0.121	0.309	0.108	0.099	0.116	0.056	0.036	0.098	0.042	0.074	0.048	0.145	0.532	0.146	0.135	0.589	0.127	0.194
OCDD	0.569	0.430	0.566	0.564	0.926	0.768	0.336	0.173	0.219	0.705	0.288	0.428	0.237	0.126	0.111	0.185	0.117	0.294	0.153	0.366	0.460	0.378	0.433	0.525	0.341	0.459
2,3,7,8-TCDF	0.100	0.041	0.051	0.041	0.051	0.019	0.052	0.041	0.025	1.170	0.150	0.109	0.483	0.159	0.046	0.220	0.251	0.080	0.023	0.116	2.237	0.071	0.098	1.629	0.132	0.176
1,2,3,7,8-PeCDF	0.018	0.007	0.010	0.010	0.011	0.004	0.011	0.009	0.005	0.133	0.019	0.020	0.061	0.024	0.010	0.032	0.029	0.011	<0.003	0.016	0.241	0.010	0.022	0.210	0.015	0.025
2,3,4,7,8-PeCDF	0.030	0.011	0.016	0.018	0.017	0.007	0.015	0.012	0.008	0.312	0.047	0.039	0.128	0.041	0.017	0.068	0.086	0.027	0.012	0.035	0.462	0.021	0.029	0.498	0.027	0.046
1,2,3,4,7,8-HxCDF	0.068	0.021	0.031	0.048	0.039	0.017	0.030	0.027	0.015	0.382	0.056	0.055	0.143	0.055	0.032	0.118	0.067	0.057	0.013	0.049	0.753	0.033	0.070	0.733	0.033	0.083
1,2,3,6,7,8-HxCDF	0.026	0.009	0.014	0.019	0.018	0.008	0.015	0.010	0.007	0.154	0.024	0.031	0.058	0.021	0.011	0.045	0.027	0.019	0.006	0.019	0.266	0.018	0.024	0.282	0.013	0.031
2,3,4,6,7,8-HxCDF	0.032	0.013	0.017	0.025	0.024	0.011	0.016	0.014	0.007	0.200	0.032	0.038	0.081	0.025	0.021	0.068	0.047	0.031	0.007	0.030	0.333	0.018	0.035	0.416	0.016	0.038
1,2,3,7,8,9-HxCDF	<0.004	<0.002	0.003	<0.002	0.003	<0.003	<0.003	<0.007	<0.003	0.019	<0.004	0.006	0.007	<0.007	<0.004	0.007	<0.005	<0.005	<0.005	<0.008	0.019	<0.010	<0.010	0.025	<0.010	0.005
1,2,3,4,6,7,8-HpCDF	0.117	0.038	0.047	0.096	0.085	0.049	0.166	0.031	0.026	0.331	0.052	0.069	0.144	0.044	0.037	0.101	0.055	0.093	0.029	0.052	0.513	0.046	0.094	0.553	0.049	0.109
1,2,3,4,7,8,9-HpCDF	0.019	0.007	0.008	0.013	0.013	0.006	0.012	<0.005	<0.006	0.041	<0.005	0.012	0.016	<0.008	<0.008	0.022	<0.008	<0.009	<0.005	<0.008	0.064	<0.010	<0.024	0.077	<0.007	0.024
OCDF	0.091	0.042	0.037	0.069	0.100	0.066	0.495	0.031	0.028	0.124	0.020	0.071	0.039	0.024	0.019	0.047	0.016	0.062	0.035	0.041	0.113	<0.023	0.089	0.111	0.041	0.079
<b>PCDD/F Homologues</b>																										
TCDDs	0.173	0.054	0.086	0.056	0.071	0.022	0.068	0.023	0.028	1.740	0.274	0.187	0.633	0.282	0.108	0.375	0.357	0.121	<0.003	0.168	4.190	0.058	0.077	3.065	0.296	0.278
PeCDDs	0.290	0.088	0.216	0.085	0.111	0.086	0.055	0.022	0.038	2.251	0.365	0.152	0.760	0.372	0.152	0.573	0.315	0.154	0.011	0.203	4.837	0.078	0.070	4.573	0.176	0.362
HxCDDs	0.424	0.187	0.418	0.268	0.340	0.326	0.095	0.078	0.128	1.625	0.296	0.287	0.605	0.264	0.150	0.492	0.244	0.231	0.053	0.262	3.904	0.150	0.234	4.042	0.184	0.403
HpCDDs	0.546	0.350	0.612	0.468	0.652	0.683	0.213	0.137	0.244	0.710	0.249	0.237	0.267	0.098	0.087	0.220	0.089	0.205	0.085	0.285	1.142	0.308	0.358	1.340	0.318	0.416
OCDD	0.569	0.430	0.566	0.564	0.926	0.768	0.336	0.173	0.219	0.705	0.288	0.428	0.237	0.126	0.111	0.185	0.117	0.294	0.153	0.366	0.460	0.378	0.433	0.525	0.341	0.459
TCDFs	0.526	0.266	0.207	0.257	0.336	0.115	0.278	0.183	0.140	4.966	0.797	0.644	2.506	0.853	0.193	1.289	1.318	0.373	0.061	0.651	11.303	0.251	1.081	8.659	0.883	0.915
PeCDFs	0.391	0.150	0.154	0.215	0.211	0.084	0.167	0.123	0.086	3.774	0.548	0.460	1.426	0.585	0.177	0.918	0.774	0.308	0.037	0.364	6.549	0.237	0.404	6.326	0.344	0.596
HxCDFs	0.286	0.100	0.138	0.209	0.191	0.082	0.141	0.095	0.052	1.676	0.279	0.336	0.634	0.236	0.118	0.569	0.326	0.239	0.056	0.211	3.306	0.121	0.232	3.237	0.141	0.336
HpCDFs	0.190	0.063	0.088	0.155	0.164	0.092	0.242	0.036	0.040	0.564	0.062	0.159	0.226	0.059	0.037	0.191	0.057	0.126	0.029	0.077	0.932	0.046	0.094	1.024	0.077	0.183
OCDF	0.091	0.042	0.037	0.069	0.100	0.066	0.495	0.031	0.028	0.124	0.020	0.071	0.039	0.024	0.019	0.047	0.016	0.062	0.035	0.041	0.113	<0.023	0.089	0.111	0.041	0.079
<b>Total</b>																										
∑ PCDDs	2.002	1.109	1.898	1.441	2.100	1.885	0.767	0.433	0.657	7.031	1.472	1.291	2.502	1.142	0.608	1.845	1.122	1.005	0.302	1.284	14.533	0.972	1.172	13.545	1.315	1.918
∑ PCDFs	1.484	0.621	0.624	0.905	1.002	0.439	1.323	0.468	0.346	11.104	1.706	1.670	4.831	1.757	0.544	3.014	2.491	1.108	0.218	1.344	22.203	0.655	1.900	19.357	1.486	2.109
∑ PCDD/Fs	3.486	1.730	2.522	2.346	3.102	2.324	2.090	0.901	1.003	18.135	3.178	2.961	7.333	2.899	1.152	4.859	3.613	2.113	0.520	2.628	36.736	1.627	3.072	32.902	2.801	4.027
∑ TEQ (PCDD/Fs)	0.069	0.031	0.052	0.041	0.047	0.033	0.032	0.028	0.027	0.425	0.072	0.064	0.171	0.068	0.030	0.105	0.087	0.043	0.017	0.058	0.734	0.037	0.051	0.731	0.061	0.086

Table A49. Atmospheric concentrations of PCDD/Fs (pg m<sup>-3</sup>) at NAPS urban sites in 2000 (continued)

Station Name	Hamilton (Hillyard St.)																												
Sampling Period	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	
Sampling Date	1/7/00	1/19/00	1/31/00	2/12/00	2/24/00	3/7/00	3/19/00	3/31/00	4/12/00	4/24/00	5/6/00	5/18/00	5/30/00	6/11/00	6/23/00	7/5/00	7/29/00	8/10/00	8/22/00	9/3/00	9/15/00	9/27/00	10/9/00	11/2/00	11/14/00	11/26/00	12/8/00	12/20/00	
Sampling Volume (m <sup>3</sup> )	884	835	861	957	811	753	824	776	804	760	714	761	760	804	778	794	743	756	797	808	785	812	856	800	845	834	861	902	
<b>PCDD/F Congeners</b>																													
2,3,7,8-TCDD	<0.002	0.003	0.004	<0.002	<0.002	0.003	<0.002	<0.001	<0.002	<0.003	<0.001	<0.001	<0.001	<0.002	<0.003	<0.002	0.003	<0.002	0.004	<0.001	<0.002	<0.002	<0.002	<0.002	<0.003	<0.002	0.005	0.007	0.002
1,2,3,7,8-PeCDD	0.007	0.024	0.026	0.014	0.020	0.015	0.009	0.004	0.005	0.007	0.004	0.003	0.004	0.007	0.003	0.008	0.005	0.010	0.006	0.016	0.003	0.007	0.008	<0.002	0.011	0.012	0.016	0.033	0.010
1,2,3,4,7,8-HxCDD	0.006	0.026	0.026	0.017	0.022	0.013	0.012	0.004	0.003	0.004	0.002	0.002	0.003	0.003	0.003	0.005	<0.004	<0.003	0.014	<0.004	0.007	0.008	<0.002	<0.004	0.010	0.014	0.034	0.010	
1,2,3,6,7,8-HxCDD	0.011	0.048	0.045	0.031	0.039	0.026	0.016	0.010	0.009	0.007	0.005	0.004	0.007	0.007	0.009	0.010	0.009	0.007	0.035	<0.004	0.011	0.017	<0.002	0.020	0.017	0.019	0.056	0.015	
1,2,3,7,8,9-HxCDD	0.016	0.080	0.085	0.051	0.078	0.037	0.029	0.012	0.011	0.012	0.006	0.005	0.009	0.009	0.015	0.009	0.019	<0.003	0.041	0.006	0.019	0.015	<0.002	0.023	0.026	0.026	0.105	0.028	
1,2,3,4,6,7,8-HpCDD	0.142	0.513	0.546	0.417	0.468	0.282	0.181	0.073	0.088	0.087	0.044	0.019	0.033	0.054	0.081	0.053	0.099	0.044	0.171	0.034	0.147	0.148	0.111	0.215	0.124	0.137	0.311	0.174	
OCDD	0.463	1.078	1.490	0.933	1.417	0.955	0.468	0.273	0.374	0.582	0.159	0.060	0.111	0.188	0.334	0.159	0.362	0.154	0.743	0.146	0.382	0.416	0.274	0.480	0.392	0.362	0.483	0.538	
2,3,7,8-TCDF	0.019	0.070	0.028	0.033	0.066	0.434	0.069	0.018	0.011	0.097	0.016	0.026	0.037	0.031	0.052	0.022	0.194	0.017	0.206	0.035	0.014	0.058	0.006	0.097	0.046	0.042	0.338	0.046	
1,2,3,7,8-PeCDF	0.004	0.011	0.006	0.005	0.014	0.107	0.014	0.004	0.002	0.018	0.003	0.004	0.007	0.007	0.009	0.004	0.037	0.003	0.034	0.005	0.002	0.010	<0.002	0.022	0.009	0.015	0.046	0.014	
2,3,4,7,8-PeCDF	0.006	0.021	0.010	0.009	0.026	0.109	0.022	0.005	0.004	0.026	0.004	0.008	0.012	0.011	0.014	0.009	0.054	0.003	0.061	0.011	0.004	0.016	<0.002	0.032	0.014	0.022	0.120	0.016	
1,2,3,4,7,8-HxCDF	0.017	0.038	0.021	0.014	0.061	0.086	0.040	0.012	0.008	0.037	0.008	0.013	0.020	0.018	0.018	0.011	0.084	0.009	0.109	0.019	0.017	0.048	0.006	0.073	0.034	0.040	0.292	0.040	
1,2,3,6,7,8-HxCDF	0.007	0.018	0.010	0.006	0.022	0.035	0.017	0.004	0.003	0.015	0.003	0.005	0.008	0.008	0.008	0.006	0.036	0.005	0.044	0.006	0.007	0.019	<0.002	0.031	0.015	0.018	0.102	0.014	
2,3,4,6,7,8-HxCDF	0.008	0.017	0.013	0.008	0.030	0.041	0.020	0.007	0.004	0.017	0.005	0.007	0.012	0.006	0.012	0.006	0.032	<0.003	0.063	0.010	0.007	0.025	<0.002	0.034	0.018	0.020	0.163	0.019	
1,2,3,7,8,9-HxCDF	<0.002	<0.001	<0.002	<0.002	<0.002	<0.003	0.002	<0.001	<0.002	<0.003	<0.001	<0.001	<0.001	<0.001	<0.002	<0.003	<0.002	0.003	<0.003	<0.004	<0.004	<0.003	<0.003	<0.003	<0.002	<0.004	0.003	0.007	<0.002
1,2,3,4,6,7,8-HpCDF	0.036	0.066	0.048	0.036	0.125	0.137	0.059	0.025	0.019	0.040	0.018	0.015	0.024	0.029	0.026	0.017	0.084	0.022	0.123	0.024	0.035	0.089	0.013	0.105	0.053	0.041	0.399	0.070	
1,2,3,4,7,8,9-HpCDF	0.005	0.008	0.008	0.006	0.018	0.022	0.011	<0.003	<0.002	<0.005	0.002	0.002	0.003	0.004	0.006	<0.005	0.014	<0.005	0.014	<0.004	<0.005	<0.004	<0.005	<0.004	<0.005	0.007	0.034	0.012	
OCDF	0.044	0.053	0.056	0.048	0.120	0.131	0.074	0.025	0.018	0.035	0.012	0.007	0.013	0.014	0.024	0.022	0.043	0.009	0.056	0.010	0.023	0.049	<0.008	0.074	0.039	0.054	0.095	0.098	
<b>PCDD/F Homologues</b>																													
TCDDs	0.028	0.166	0.083	0.043	0.064	0.085	0.033	0.009	0.011	0.027	0.517	0.025	0.046	0.017	0.064	0.015	0.013	0.011	0.242	0.005	0.016	0.360	<0.002	0.101	0.206	0.043	0.434	0.041	
PeCDDs	0.146	0.332	0.253	0.104	0.196	0.165	0.107	0.021	0.026	0.041	0.018	0.010	0.034	0.007	0.008	0.024	0.061	0.015	0.362	0.003	0.032	0.332	<0.002	0.175	0.280	0.050	0.809	0.095	
HxCDDs	0.133	0.659	0.649	0.357	0.570	0.349	0.252	0.078	0.082	0.084	0.032	0.031	0.080	0.019	0.051	0.083	0.121	0.051	0.463	0.031	0.142	0.398	0.044	0.313	0.359	0.217	0.912	0.225	
HpCDDs	0.306	1.195	1.288	0.810	1.129	0.618	0.457	0.165	0.190	0.183	0.103	0.043	0.076	0.112	0.174	0.116	0.232	0.098	0.393	0.066	0.309	0.329	0.228	0.512	0.289	0.303	0.676	0.358	
OCDD	0.463	1.078	1.490	0.933	1.417	0.955	0.468	0.273	0.374	0.582	0.159	0.060	0.111	0.188	0.334	0.159	0.362	0.154	0.743	0.146	0.382	0.416	0.274	0.480	0.392	0.362	0.483	0.538	
TCDFs	0.146	0.392	0.194	0.190	0.399	2.288	0.361	0.115	0.068	0.597	0.122	0.135	0.174	0.275	0.359	0.152	1.398	0.130	1.166	0.162	0.095	0.368	0.018	0.487	0.199	0.215	1.526	0.235	
PeCDFs	0.087	0.272	0.128	0.102	0.289	0.988	0.229	0.060	0.039	0.293	0.081	0.100	0.154	0.122	0.198	0.091	0.669	0.060	0.796	0.112	0.047	0.235	0.012	0.409	0.158	0.141	1.372	0.161	
HxCDFs	0.079	0.194	0.112	0.084	0.254	0.372	0.171	0.054	0.043	0.156	0.056	0.057	0.086	0.093	0.092	0.047	0.322	0.056	0.454	0.068	0.065	0.214	0.018	0.276	0.145	0.142	1.290	0.156	
HpCDFs	0.071	0.127	0.099	0.087	0.209	0.254	0.110	0.043	0.033	0.073	0.033	0.025	0.040	0.048	0.049	0.017	0.137	0.032	0.192	0.031	0.049	0.128	0.013	0.105	0.070	0.063	0.599	0.128	
OCDF	0.044	0.053	0.056	0.048	0.120	0.131	0.074	0.025	0.018	0.035	0.012	0.007	0.013	0.014	0.024	0.022	0.043	0.009	0.056	0.010	0.023	0.049	<0.008	0.074	0.039	0.054	0.095	0.098	
<b>Total</b>																													
∑ PCDDs	1.076	3.430	3.763	2.247	3.376	2.172	1.317	0.546	0.683	0.917	0.829	0.169	0.347	0.343	0.631	0.397	0.789	0.329	2.203	0.251	0.881	1.835	0.546	1.581	1.526	0.975	3.314	1.257	
∑ PCDFs	0.427	1.038	0.589	0.511	1.271	4.033	0.945	0.297	0.201	1.154	0.304	0.324	0.467	0.552	0.722	0.329	2.569	0.287	2.664	0.383	0.279	0.994	0.061	1.351	0.611	0.615	4.882	0.778	
∑ PCDD/Fs	1.503	4.468	4.352	2.758	4.647	6.205	2.262	0.843	0.884	2.071	1.133	0.493	0.814	0.895	1.353	0.726	3.358	0.616	4.867	0.634	1.160	2.829	0.607	2.932	2.137	1.590	8.196	2.035	
∑ TEQ (PCDD/Fs)	0.022	0.070	0.063	0.040	0.069	0.126	0.041	0.015	0.015	0.039	0.012	0.013	0.019	0.022	0.029	0.018	0.071	0.015	0.094	0.017	0.021	0.037	0.008	0.056	0.037	0.049	0.195	0.037	

Table A49. Atmospheric concentrations of PCDD/Fs (pg m<sup>-3</sup>) at NAPS urban sites in 2000 (continued)

Station Name	Toronto (Evans)														Toronto (Junction Triangle)												
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	1	2	3	4	5	6	7	8	9	10	11	12	
Sampling Period	1/7/00	1/31/00	2/24/00	3/19/00	3/19/00	4/12/00	5/6/00	5/30/00	6/23/00	8/10/00	9/3/00	9/27/00	11/14/00	12/8/00	1/7/00	1/31/00	2/24/00	3/19/00	4/12/00	5/6/00	5/30/00	6/23/00	8/10/00	9/3/00	9/27/00	12/8/00	
Sampling Volume (m3)	947.2	983	982	836.2	836.2	864.3	781	925.4	883	981.6	940.1	892.3	973.4	1037.9	934	917	901	904	912	868	882	890	839	860	867	857	
<b>PCDD/F Congeners</b>																											
2,3,7,8-TCDD	<0.003	<0.003	<0.002	<0.002	<0.002	<0.002	<0.003	<0.004	<0.003	<0.002	<0.003	<0.003	<0.004	0.003	<0.004	<0.002	<0.004	<0.002	<0.003	<0.003	<0.005	<0.003	<0.004	<0.003	<0.002	<0.005	
1,2,3,7,8-PeCDD	0.006	0.011	0.014	0.006	0.006	0.009	0.012	0.006	0.020	0.007	0.007	0.007	<0.004	0.009	<0.004	0.010	0.014	0.006	0.007	0.011	0.009	0.005	0.009	<0.003	0.009	0.014	
1,2,3,4,7,8-HxCDD	0.005	0.012	0.012	0.006	0.006	<0.007	0.010	0.006	0.007	<0.005	<0.004	<0.009	<0.008	0.012	0.007	0.010	0.016	0.007	0.006	0.004	<0.005	<0.005	<0.005	<0.005	<0.003	0.011	
1,2,3,6,7,8-HxCDD	0.011	0.022	0.018	0.011	0.011	0.008	0.015	0.014	0.008	0.007	<0.004	0.009	<0.008	0.019	0.010	0.019	0.024	0.008	0.013	0.014	0.007	<0.005	0.008	<0.005	0.010	0.021	
1,2,3,7,8,9-HxCDD	0.016	0.035	0.035	0.015	0.015	0.016	0.019	0.016	0.015	0.009	<0.004	0.011	<0.008	0.032	0.015	0.030	0.037	0.016	0.014	0.015	0.010	<0.005	0.006	<0.005	0.013	0.033	
1,2,3,4,6,7,8-HpCDD	0.095	0.249	0.219	0.106	0.106	0.095	0.150	0.112	0.068	0.042	0.037	0.103	0.095	0.175	0.119	0.199	0.242	0.105	0.099	0.132	0.095	0.049	0.050	0.119	0.142	0.214	
OCDD	0.280	0.658	0.575	0.356	0.356	0.449	0.609	0.531	0.325	0.176	0.177	0.378	0.337	0.378	0.362	0.571	0.648	0.347	0.334	0.385	0.408	0.149	0.173	0.398	0.382	0.620	
2,3,7,8-TCDF	0.030	0.041	0.056	0.018	0.018	0.039	0.045	0.094	0.017	0.024	0.015	0.024	<0.004	0.036	0.021	0.038	0.077	0.022	0.047	0.045	0.074	0.038	0.107	0.037	0.057	0.029	
1,2,3,7,8-PeCDF	0.006	0.009	0.012	0.003	0.003	0.007	0.009	0.020	0.004	0.006	<0.002	0.005	<0.004	0.009	<0.004	0.008	0.016	0.005	0.008	0.008	0.013	0.007	0.014	0.007	0.008	0.008	
2,3,4,7,8-PeCDF	0.010	0.014	0.021	0.005	0.005	0.012	0.014	0.033	0.005	0.008	<0.002	0.008	0.007	0.013	0.006	0.011	0.028	0.007	0.017	0.010	0.029	0.013	0.043	0.010	0.015	0.010	
1,2,3,4,7,8-HxCDF	0.036	0.035	0.052	0.012	0.012	0.026	0.029	0.067	0.013	0.016	0.009	0.017	<0.008	0.029	0.015	0.025	0.068	0.015	0.033	0.018	0.044	0.019	0.058	0.019	0.027	0.028	
1,2,3,6,7,8-HxCDF	0.012	0.015	0.020	0.007	0.007	0.011	0.013	0.029	0.006	0.009	0.005	0.007	<0.008	0.012	0.009	0.012	0.027	0.006	0.012	0.008	0.018	0.009	0.021	0.007	0.014	0.013	
2,3,4,6,7,8-HxCDF	0.016	0.020	0.031	0.005	0.005	0.013	0.012	0.042	0.008	0.007	0.004	0.011	<0.008	0.018	0.012	0.015	0.032	0.009	0.019	0.009	0.025	0.010	0.022	0.015	0.014	0.019	
1,2,3,7,8,9-HxCDF	<0.003	<0.003	<0.003	<0.004	<0.004	<0.006	0.004	0.002	<0.005	<0.005	<0.003	<0.004	<0.008	<0.004	<0.006	<0.003	<0.004	<0.002	<0.002	<0.002	0.002	<0.005	<0.005	<0.005	<0.003	<0.004	
1,2,3,4,6,7,8-HpCDF	0.093	0.066	0.106	0.033	0.033	0.052	0.062	0.117	0.031	0.046	0.035	0.051	0.042	0.060	0.037	0.049	0.133	0.034	0.053	0.038	0.069	0.027	0.079	0.036	0.051	0.081	
1,2,3,4,7,8,9-HpCDF	0.007	<0.002	0.015	<0.004	<0.004	<0.006	0.008	0.013	<0.009	<0.008	<0.009	<0.009	<0.010	0.007	<0.005	0.007	0.017	0.006	0.011	<0.003	<0.005	<0.009	<0.005	<0.005	<0.007	0.012	
OCDF	0.059	0.061	0.098	0.041	0.041	0.051	0.086	0.098	0.038	0.040	0.027	0.043	<0.014	0.049	0.042	0.045	0.107	0.042	0.046	0.033	0.069	0.025	0.032	0.035	0.037	0.065	
<b>PCDD/F Homologues</b>																											
TCDDs	0.026	0.074	0.068	0.010	0.010	0.019	0.035	0.048	0.034	0.009	<0.003	0.028	<0.004	0.037	0.012	0.045	0.080	0.008	0.049	0.033	0.047	0.019	0.028	<0.003	0.079	0.013	
PeCDDs	0.046	0.129	0.116	0.018	0.018	0.049	0.058	0.046	0.076	0.007	0.013	0.024	<0.004	0.063	0.012	0.090	0.099	0.032	0.092	0.057	0.043	0.019	0.021	<0.003	0.080	0.056	
HxCDDs	0.116	0.290	0.273	0.105	0.105	0.118	0.162	0.111	0.101	0.049	0.034	0.107	<0.008	0.188	0.127	0.262	0.315	0.132	0.161	0.129	0.050	0.036	0.058	0.064	0.157	0.249	
HpCDDs	0.207	0.542	0.483	0.234	0.234	0.235	0.312	0.239	0.126	0.081	0.069	0.228	0.184	0.357	0.250	0.456	0.533	0.242	0.235	0.292	0.220	0.085	0.115	0.220	0.292	0.423	
OCDD	0.280	0.658	0.575	0.356	0.356	0.449	0.609	0.531	0.325	0.176	0.177	0.378	0.337	0.378	0.362	0.571	0.648	0.347	0.334	0.385	0.408	0.149	0.173	0.398	0.382	0.620	
TCDFs	0.150	0.258	0.357	0.096	0.096	0.190	0.336	0.510	0.105	0.177	0.085	0.158	<0.004	0.188	0.117	0.266	0.535	0.121	0.242	0.298	0.479	0.247	0.521	0.294	0.334	0.117	
PeCDFs	0.135	0.181	0.259	0.050	0.050	0.142	0.187	0.498	0.073	0.128	0.075	0.093	0.014	0.123	0.037	0.140	0.366	0.069	0.168	0.173	0.340	0.147	0.352	0.137	0.164	0.053	
HxCDFs	0.143	0.168	0.244	0.048	0.048	0.114	0.234	0.365	0.068	0.112	0.081	0.100	<0.008	0.142	0.072	0.118	0.307	0.065	0.127	0.125	0.231	0.098	0.186	0.098	0.121	0.138	
HpCDFs	0.143	0.113	0.188	0.060	0.060	0.073	0.121	0.208	0.031	0.059	0.052	0.086	0.042	0.105	0.057	0.081	0.224	0.061	0.101	0.065	0.112	0.043	0.079	0.036	0.079	0.149	
OCDF	0.059	0.061	0.098	0.041	0.041	0.051	0.086	0.098	0.038	0.040	0.027	0.043	<0.014	0.049	0.042	0.045	0.107	0.042	0.046	0.033	0.069	0.025	0.032	0.035	0.037	0.065	
<b>Total</b>																											
∑ PCDDs	0.675	1.693	1.515	0.723	0.723	0.870	1.176	0.975	0.662	0.322	0.293	0.765	0.521	1.023	0.763	1.424	1.675	0.761	0.871	0.896	0.768	0.308	0.395	0.682	0.990	1.361	
∑ PCDFs	0.630	0.781	1.146	0.295	0.295	0.570	0.964	1.679	0.315	0.516	0.320	0.480	0.056	0.607	0.325	0.650	1.539	0.358	0.684	0.694	1.231	0.560	1.170	0.600	0.735	0.522	
∑ PCDD/Fs	1.305	2.474	2.661	1.018	1.018	1.440	2.140	2.654	0.977	0.838	0.613	1.245	0.577	1.630	1.088	2.074	3.214	1.119	1.555	1.590	1.999	0.868	1.565	1.282	1.725	1.883	
∑ TEQ (PCDD/Fs)	0.027	0.040	0.049	0.019	0.019	0.029	0.037	0.050	0.034	0.021	0.016	0.024	0.018	0.035	0.021	0.033	0.060	0.020	0.032	0.031	0.043	0.023	0.051	0.021	0.032	0.041	

Table A49. Atmospheric concentrations of PCDD/Fs ( $\mu\text{g m}^{-3}$ ) at NAPS urban sites in 2000 (continued)

Station Name	Montreal (1125)													St. John's										
Sampling Period	1	2	3	4	5	6	7	8	9	10	11	12	13	1	2	3	4	5	6	7	8	9	10	11
Sampling Date	1/7/00	2/12/00	3/7/00	3/19/00	3/31/00	4/12/00	5/6/00	5/30/00	6/23/00	8/10/00	9/3/00	12/8/00	12/20/00	1/7/00	1/31/00	2/24/00	4/12/00	5/30/00	6/23/00	8/10/00	9/3/00	9/27/00	11/14/00	12/8/00
Sampling Volume (m <sup>3</sup> )	1004	1	1173	1187	1044	1040	1022	984	928	951	970	995	905	929	860	965	876	858	824	841	832	811	849	834
<b>PCDD/F Congeners</b>																								
2,3,7,8-TCDD	<0.002	<0.004	<0.002	<0.003	<0.003	<0.003	0.003	<0.002	<0.004	<0.003	<0.002	0.005	<0.004	<0.002	<0.003	<0.004	<0.002	<0.005	<0.005	<0.002	<0.004	<0.002	<0.005	<0.002
1,2,3,7,8-PeCDD	0.008	<0.004	0.010	0.010	0.005	0.004	0.010	0.007	0.005	<0.002	0.010	0.017	0.010	<0.003	<0.005	0.005	0.004	<0.005	<0.005	<0.003	<0.004	<0.002	0.006	0.002
1,2,3,4,7,8-HxCDD	0.008	<0.004	0.012	0.011	<0.003	<0.003	0.017	<0.005	<0.006	<0.002	0.009	0.016	0.014	<0.002	<0.005	<0.004	<0.005	<0.005	<0.007	<0.008	<0.005	<0.004	<0.007	<0.005
1,2,3,6,7,8-HxCDD	0.014	<0.004	0.018	0.022	0.005	0.004	0.028	0.013	0.011	<0.002	0.019	0.030	0.017	<0.002	<0.005	0.009	<0.005	<0.005	<0.007	<0.008	<0.005	<0.004	<0.007	<0.005
1,2,3,7,8,9-HxCDD	0.022	<0.004	0.029	0.034	0.003	0.006	0.052	0.011	0.008	<0.002	0.020	0.048	0.026	<0.002	<0.005	0.013	<0.005	<0.005	<0.007	<0.008	<0.005	<0.004	<0.007	<0.005
1,2,3,4,6,7,8-HpCDD	0.140	0.017	0.196	0.210	0.051	0.049	0.407	0.174	0.053	0.032	0.236	0.282	0.144	0.022	0.022	0.119	0.021	0.016	0.010	<0.008	<0.006	0.014	0.036	0.036
OCDD	0.582	0.060	0.551	0.563	0.201	0.240	1.201	0.635	0.151	0.106	0.754	0.754	0.557	0.075	0.067	0.281	0.084	0.038	0.026	0.032	<0.014	0.042	0.133	0.170
2,3,7,8-TCDF	0.036	<0.004	0.044	0.029	0.023	0.013	0.050	0.024	0.022	0.019	0.026	0.076	0.019	0.011	0.012	0.008	0.009	0.003	<0.002	0.003	<0.004	0.004	0.024	0.009
1,2,3,7,8-PeCDF	0.008	<0.002	0.008	0.008	0.005	0.003	0.010	0.004	0.004	<0.002	<0.002	0.011	0.004	<0.002	0.003	<0.002	0.003	<0.002	<0.002	<0.003	<0.003	<0.002	0.005	<0.002
2,3,4,7,8-PeCDF	0.013	<0.002	0.013	0.016	0.007	0.004	0.016	0.008	0.006	0.005	0.007	0.019	0.005	<0.002	0.004	<0.002	0.004	<0.002	<0.002	<0.003	<0.003	<0.002	0.006	<0.002
1,2,3,4,7,8-HxCDF	0.027	<0.004	0.021	0.042	0.010	0.008	0.052	0.022	0.009	0.008	0.025	0.043	0.013	0.003	0.008	<0.004	0.007	<0.002	0.002	<0.006	<0.005	<0.004	0.017	<0.004
1,2,3,6,7,8-HxCDF	0.011	<0.004	0.008	0.017	0.005	0.003	0.017	0.009	0.004	<0.002	0.008	0.015	0.007	<0.002	0.004	<0.004	0.003	<0.002	<0.002	<0.006	<0.005	<0.004	0.008	<0.004
2,3,4,6,7,8-HxCDF	0.016	<0.004	0.009	0.023	0.007	0.005	0.024	0.011	0.009	<0.002	0.008	0.027	0.009	<0.002	0.004	<0.004	0.004	<0.002	<0.002	<0.006	<0.005	<0.004	0.014	<0.004
1,2,3,7,8,9-HxCDF	<0.004	<0.004	<0.002	<0.003	<0.002	<0.002	<0.003	<0.004	<0.004	<0.002	<0.004	0.004	<0.004	<0.002	<0.002	<0.004	<0.002	<0.002	<0.002	<0.006	<0.005	<0.004	<0.007	<0.004
1,2,3,4,6,7,8-HpCDF	0.048	<0.007	0.039	0.105	0.020	0.021	0.115	0.051	0.025	0.024	0.080	0.070	0.047	0.008	0.012	0.011	0.010	0.005	<0.006	<0.008	<0.006	<0.006	0.019	0.011
1,2,3,4,7,8,9-HpCDF	0.006	<0.007	0.006	0.018	0.005	<0.002	0.012	<0.005	<0.002	<0.004	<0.006	0.009	0.005	<0.002	<0.005	<0.004	<0.003	<0.005	<0.006	<0.008	<0.006	<0.006	<0.012	<0.002
OCDF	0.057	<0.007	0.043	0.171	0.030	0.026	0.108	0.054	0.013	0.015	0.070	0.056	0.083	0.006	0.010	0.018	0.008	<0.005	<0.005	0.010	<0.009	<0.005	<0.012	0.016
<b>PCDD/F Homologues</b>																								
TCDDs	0.035	<0.004	0.041	0.025	0.013	0.006	0.056	0.011	<0.004	<0.003	<0.002	0.060	0.016	0.009	0.004	<0.004	0.005	0.005	<0.005	<0.002	<0.004	<0.002	<0.005	<0.002
PeCDDs	0.070	<0.004	0.105	0.078	0.012	0.012	0.072	0.015	0.008	<0.002	0.038	0.152	0.038	0.009	<0.005	0.013	0.004	<0.005	<0.005	<0.003	<0.004	<0.002	0.006	0.005
HxCDDs	0.157	<0.004	0.235	0.252	0.033	0.033	0.432	0.120	0.019	0.014	0.185	0.318	0.143	0.022	0.024	0.075	0.007	<0.005	<0.007	<0.008	<0.005	<0.004	0.009	<0.005
HpCDDs	0.315	0.027	0.421	0.456	0.098	0.085	0.954	0.380	0.100	0.074	0.474	0.571	0.298	0.026	0.040	0.223	0.042	0.016	0.010	<0.008	<0.006	0.032	0.065	0.058
OCDD	0.582	0.060	0.551	0.563	0.201	0.240	1.201	0.635	0.151	0.106	0.754	0.754	0.557	0.075	0.067	0.281	0.084	0.038	0.026	0.032	<0.014	0.042	0.133	0.170
TCDFs	0.235	<0.004	0.228	0.172	0.173	0.057	0.317	0.186	0.059	0.112	0.086	0.476	0.087	0.037	0.048	0.046	0.044	0.008	<0.002	0.013	<0.004	0.007	0.082	0.024
PeCDFs	0.140	<0.002	0.138	0.146	0.087	0.046	0.234	0.114	0.048	0.084	0.087	0.216	0.053	0.012	0.028	0.018	0.032	0.014	0.012	0.016	0.009	0.011	0.040	0.009
HxCDFs	0.123	<0.004	0.093	0.199	0.055	0.045	0.221	0.109	0.071	0.045	0.112	0.186	0.068	0.012	0.028	0.011	0.018	0.016	0.011	0.014	<0.005	0.007	0.038	0.008
HpCDFs	0.087	<0.007	0.076	0.176	0.043	0.043	0.190	0.082	0.028	0.024	0.097	0.123	0.086	0.009	0.016	0.020	0.010	0.005	<0.006	0.000	<0.006	<0.006	0.019	0.018
OCDF	0.057	<0.007	0.043	0.171	0.030	0.026	0.108	0.054	0.013	0.015	0.070	0.056	0.083	0.006	0.010	0.018	0.008	<0.005	<0.005	0.010	<0.009	<0.005	<0.012	0.016
<b>Total</b>																								
∑ PCDDs	1.159	0.087	1.353	1.374	0.357	0.376	2.715	1.161	0.278	0.194	1.451	1.855	1.052	0.141	0.135	0.592	0.142	0.059	0.036	0.032	0.000	0.074	0.213	0.233
∑ PCDFs	0.642	0.000	0.578	0.864	0.388	0.217	1.070	0.545	0.219	0.280	0.452	1.057	0.377	0.076	0.130	0.113	0.112	0.043	0.023	0.053	0.009	0.025	0.179	0.075
∑ PCDD/Fs	1.801	0.087	1.931	2.238	0.745	0.593	3.785	1.706	0.497	0.474	1.903	2.912	1.429	0.217	0.265	0.705	0.254	0.102	0.059	0.085	0.009	0.099	0.392	0.308
∑ TEQ (PCDD/Fs)	0.030	0.012	0.033	0.040	0.017	0.013	0.048	0.024	0.019	0.011	0.030	0.058	0.029	0.009	0.014	0.016	0.012	0.014	0.014	0.011	0.013	0.008	0.023	0.009

Table A49. Atmospheric concentrations of PCDD/Fs ( $\mu\text{g m}^{-3}$ ) at NAPS urban sites in 2000 (continued)

Station Name	Windsor (College)														
Sampling Period	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
Sampling Date	1/7/00	1/31/00	2/24/00	3/19/00	4/12/00	5/6/00	5/30/00	6/23/00	7/17/00	7/11/00	8/10/00	9/3/00	9/27/00	11/14/00	12/8/00
Sampling Volume (m3)	786	772	741	728	732	687	703	682	671	674	678	658	722	769	759
<b>PCDD/F Congeners</b>															
2,3,7,8-TCDD	<0.003	<0.006	<0.003	<0.003	<0.005	<0.006	<0.003	<0.005	<0.005	<0.005	<0.006	<0.006	<0.004	<0.005	0.006
1,2,3,7,8-PeCDD	0.011	0.021	0.010	0.011	0.009	0.023	0.010	<0.004	<0.004	<0.003	<0.006	0.015	<0.004	0.015	0.031
1,2,3,4,7,8-HxCDD	0.010	0.022	0.009	0.011	<0.007	0.024	<0.006	0.013	<0.007	<0.004	<0.009	<0.009	<0.008	<0.013	0.034
1,2,3,6,7,8-HxCDD	0.019	0.038	0.015	0.021	0.014	0.040	0.010	0.018	<0.007	<0.004	<0.009	<0.009	<0.008	0.016	0.043
1,2,3,7,8,9-HxCDD	0.027	0.070	0.024	0.031	0.022	0.058	0.011	0.021	<0.007	<0.004	<0.009	<0.009	<0.008	0.022	0.082
1,2,3,4,6,7,8-HpCDD	0.157	0.307	0.202	0.238	0.137	0.401	0.092	0.129	0.225	0.063	0.104	0.159	0.121	0.190	0.337
OCDD	0.513	0.783	0.675	0.829	0.446	1.617	0.405	0.402	0.844	0.256	0.445	0.545	0.459	0.641	0.880
2,3,7,8-TCDF	0.085	0.214	0.037	0.029	0.038	0.129	0.017	0.035	0.064	0.014	0.054	0.046	0.039	0.030	0.188
1,2,3,7,8-PeCDF	0.022	0.048	0.007	0.007	0.007	0.027	0.003	0.006	<0.004	<0.003	0.009	<0.006	0.007	0.007	0.039
2,3,4,7,8-PeCDF	0.035	0.097	0.010	0.012	0.011	0.038	<0.003	0.013	0.017	<0.003	0.021	0.017	0.013	0.014	0.077
1,2,3,4,7,8-HxCDF	0.093	0.261	0.025	0.028	0.019	0.133	0.014	0.040	0.026	0.017	0.031	0.031	0.029	0.025	0.223
1,2,3,6,7,8-HxCDF	0.036	0.098	0.011	0.013	0.009	0.052	0.007	0.019	0.017	0.006	0.017	0.016	0.016	0.019	0.080
2,3,4,6,7,8-HxCDF	0.042	0.124	0.014	0.017	0.011	0.058	0.010	0.017	0.018	0.008	<0.009	0.028	0.019	0.019	0.098
1,2,3,7,8,9-HxCDF	0.005	0.012	<0.003	<0.004	<0.003	<0.006	<0.006	<0.009	<0.007	<0.004	<0.009	<0.009	<0.008	<0.01	0.008
1,2,3,4,6,7,8-HpCDF	0.177	0.463	0.067	0.063	0.038	0.325	0.038	0.106	0.063	0.039	0.068	0.098	0.069	0.081	0.325
1,2,3,4,7,8,9-HpCDF	0.026	0.071	0.009	0.008	<0.005	0.034	<0.009	<0.012	<0.012	<0.007	<0.009	<0.009	<0.008	<0.01	0.031
OCDF	0.214	0.424	0.065	0.057	0.037	0.216	0.047	0.053	0.084	0.043	0.053	0.072	0.084	0.120	0.135
<b>PCDD/F Homologues</b>															
TCDDs	0.105	0.218	0.078	0.032	0.013	0.334	<0.003	0.034	0.151	<0.005	0.057	0.080	0.054	0.027	0.182
PeCDDs	0.170	0.338	0.059	0.077	0.055	0.312	0.010	0.030	0.055	0.021	0.031	0.050	<0.004	0.031	0.335
HxCDDs	0.309	0.565	0.220	0.220	0.138	0.669	0.072	0.165	0.077	0.020	0.069	0.115	0.070	0.125	0.575
HpCDDs	0.355	0.650	0.478	0.530	0.304	0.941	0.202	0.204	0.417	0.129	0.214	0.342	0.236	0.367	0.691
OCDD	0.513	0.783	0.675	0.829	0.446	1.617	0.405	0.402	0.844	0.256	0.445	0.545	0.459	0.641	0.880
TCDFs	0.447	1.096	0.286	0.203	0.194	0.830	0.098	0.155	0.451	0.053	0.329	0.300	0.175	0.117	0.892
PeCDFs	0.422	1.065	0.165	0.136	0.116	0.592	0.106	0.187	0.255	0.053	0.193	0.232	0.109	0.086	0.871
HxCDFs	0.438	1.091	0.148	0.137	0.088	0.718	0.128	0.260	0.112	0.085	0.156	0.324	0.133	0.136	0.827
HpCDFs	0.311	0.782	0.127	0.104	0.038	0.503	0.068	0.158	0.007	0.039	0.068	0.098	0.069	0.149	0.528
OCDF	0.214	0.424	0.065	0.057	0.037	0.216	0.047	0.053	0.084	0.043	0.053	0.072	0.084	0.120	0.135
<b>Total</b>															
∑ PCDDs	1.452	2.554	1.510	1.688	0.956	3.873	0.689	0.835	1.544	0.426	0.816	1.132	0.819	1.191	2.663
∑ PCDFs	1.832	4.458	0.791	0.637	0.473	2.859	0.447	0.813	0.909	0.273	0.799	1.026	0.570	0.608	3.253
∑ PCDD/Fs	3.284	7.012	2.301	2.325	1.429	6.732	1.136	1.648	2.453	0.699	1.615	2.158	1.389	1.799	5.916
∑ TEQ (PCDD/Fs)	0.061	0.150	0.033	0.037	0.032	0.099	0.024	0.033	0.033	0.016	0.035	0.045	0.028	0.043	0.144

Table A49. Atmospheric concentrations of PCDD/Fs (pg m<sup>-3</sup>) at NAPS urban sites in 2000 (continued)

Station Name	Winnipeg												Hamilton (Elgin)											
Sampling Period	1	2	3	4	5	6	7	8	9	10	11	1	2	3	4	5	6	7	8	9	10	11	12	
Sampling Date	1/7/00	1/31/00	2/24/00	3/19/00	4/12/00	5/6/00	5/30/00	6/23/00	9/27/00	11/14/00	12/8/00	1/7/00	1/31/00	2/24/00	3/19/00	4/12/00	5/6/00	6/23/00	8/10/00	9/3/00	9/27/00	11/14/00	12/8/00	
Sampling Volume (m3)	994	951	897	1005	897	851	896	883	936	951	1006	611	604	581	586	579	568	586	568	568	570	579	588	
<b>PCDD/F Congeners</b>																								
2,3,7,8-TCDD	<0.004	<0.002	<0.002	<0.003	<0.004	<0.004	<0.004	<0.003	<0.003	0.005	<0.002	<0.007	0.006	0.006	<0.005	<0.005	<0.004	<0.006	<0.005	<0.004	<0.010	0.005		
1,2,3,7,8-PeCDD	0.008	0.011	0.008	0.004	0.004	<0.005	<0.004	<0.003	<0.002	0.025	0.008	<0.007	0.034	0.028	0.012	<0.003	<0.004	0.012	0.008	0.013	0.008	<0.007	0.024	
1,2,3,4,7,8-HxCDD	0.006	0.011	0.005	0.003	<0.007	<0.004	<0.004	<0.005	<0.003	0.028	0.006	0.004	0.036	0.032	0.016	<0.006	<0.007	<0.007	<0.006	<0.007	<0.005	<0.014	0.022	
1,2,3,6,7,8-HxCDD	0.011	0.021	0.008	0.005	<0.007	0.004	0.005	0.006	<0.003	0.057	0.011	0.014	0.063	0.054	0.023	<0.006	<0.007	0.021	<0.006	<0.007	<0.005	<0.014	0.031	
1,2,3,7,8,9-HxCDD	0.017	0.036	0.014	0.011	<0.007	<0.004	0.004	<0.005	<0.003	0.085	0.016	0.020	0.117	0.096	0.035	0.008	<0.007	<0.007	<0.006	0.015	<0.005	<0.014	0.052	
1,2,3,4,6,7,8-HpCDD	0.122	0.253	0.075	0.070	0.046	0.039	0.049	0.033	0.042	0.637	0.114	0.166	0.760	0.553	0.250	0.101	0.135	0.088	0.037	0.109	0.131	0.134	0.288	
OCDD	0.312	0.550	0.247	0.230	0.199	0.179	0.186	0.108	0.121	1.634	0.281	0.586	2.108	1.475	0.716	0.442	0.617	0.315	0.240	0.360	0.539	0.368	0.590	
2,3,7,8-TCDF	0.017	0.007	0.038	0.006	0.006	0.008	0.007	0.009	0.008	0.024	0.011	0.024	0.036	0.150	0.082	0.020	0.037	0.070	0.026	0.174	0.018	0.024	0.089	
1,2,3,7,8-PeCDF	0.004	<0.002	0.009	<0.002	<0.002	<0.002	<0.002	<0.003	<0.002	0.005	0.002	0.005	0.009	0.029	0.013	<0.003	0.011	0.018	0.015	0.024	0.014	<0.007	0.015	
2,3,4,7,8-PeCDF	0.006	0.002	0.014	<0.002	0.002	<0.002	0.003	<0.003	0.002	0.010	0.003	0.008	0.012	0.050	0.024	<0.003	0.011	0.020	0.007	0.054	0.004	0.013	0.026	
1,2,3,4,7,8-HxCDF	0.012	0.004	0.035	0.005	0.003	0.003	0.007	0.007	0.006	0.019	0.006	0.025	0.029	0.118	0.042	0.011	0.011	0.030	0.016	0.063	0.015	0.015	0.054	
1,2,3,6,7,8-HxCDF	0.005	0.003	0.015	<0.002	<0.002	<0.003	<0.002	<0.005	<0.003	0.011	0.003	0.010	0.017	0.046	0.018	0.005	0.011	0.014	0.006	0.030	<0.005	0.012	0.022	
2,3,4,6,7,8-HxCDF	0.008	<0.003	0.021	0.005	<0.002	<0.003	0.004	<0.005	<0.003	0.011	0.003	0.009	0.019	0.061	0.022	0.006	0.031	0.018	0.006	0.035	<0.005	<0.010	0.029	
1,2,3,7,8,9-HxCDF	<0.002	<0.003	<0.002	<0.002	<0.002	<0.003	<0.002	<0.005	<0.003	<0.004	<0.002	<0.005	<0.005	<0.006	<0.003	<0.003	<0.007	<0.007	<0.006	<0.007	<0.005	<0.010	0.004	
1,2,3,4,6,7,8-HpCDF	0.026	0.019	0.080	0.012	0.011	0.013	0.023	0.017	0.018	0.048	0.016	0.054	0.068	0.222	0.066	0.039	0.046	0.034	0.046	0.081	0.115	0.037	0.107	
1,2,3,4,7,8,9-HpCDF	0.004	<0.003	0.009	<0.002	<0.006	<0.007	<0.004	<0.010	<0.004	0.008	<0.004	0.010	0.011	0.028	0.009	<0.005	<0.011	<0.010	<0.007	<0.007	<0.008	<0.021	0.014	
OCDF	0.029	0.023	0.061	0.010	0.011	0.016	0.025	<0.012	0.014	0.047	0.014	0.067	0.084	0.167	0.100	0.068	0.046	0.033	0.072	0.053	0.244	<0.021	0.095	
<b>PCDD/F Homologues</b>																								
TCDDs	0.030	0.013	0.031	0.011	0.004	0.010	0.012	0.006	<0.003	0.122	0.016	0.010	0.086	0.926	0.077	0.035	0.033	0.026	<0.005	0.184	0.018	<0.010	0.120	
PeCDDs	0.063	0.073	0.066	0.011	0.012	0.008	<0.004	0.005	<0.002	0.293	0.034	0.018	0.320	0.784	0.115	0.013	<0.004	0.024	0.008	0.124	0.034	<0.007	0.247	
HxCDDs	0.155	0.252	0.101	0.083	0.023	0.033	0.038	0.029	<0.003	0.655	0.122	0.126	0.876	1.144	0.285	0.066	0.119	0.101	0.017	0.181	0.082	<0.014	0.426	
HpCDDs	0.262	0.486	0.173	0.181	0.102	0.078	0.095	0.055	0.081	1.320	0.219	0.350	1.792	1.307	0.604	0.236	0.290	0.193	0.102	0.212	0.287	0.262	0.586	
OCDD	0.312	0.550	0.247	0.230	0.199	0.179	0.186	0.108	0.121	1.634	0.281	0.586	2.108	1.475	0.716	0.442	0.617	0.315	0.240	0.360	0.539	0.368	0.590	
TCDFs	0.081	0.033	0.236	0.025	0.015	0.041	0.041	0.068	<0.002	0.138	0.057	0.105	0.251	0.885	0.501	0.085	0.259	0.363	0.131	1.049	0.105	0.115	0.479	
PeCDFs	0.057	0.018	0.183	0.011	0.015	0.034	0.034	0.060	0.011	0.110	0.033	0.050	0.158	0.643	0.273	0.029	0.180	0.244	0.092	0.649	0.082	0.039	0.290	
HxCDFs	0.050	0.035	0.177	0.025	0.012	0.017	0.032	0.029	0.019	0.117	0.026	0.085	0.159	0.526	0.177	0.055	0.147	0.135	0.070	0.291	0.073	0.039	0.211	
HpCDFs	0.045	0.040	0.134	0.022	0.011	0.019	0.041	0.017	0.018	0.107	0.023	0.086	0.143	0.361	0.130	0.064	0.070	0.034	0.046	0.095	0.169	0.037	0.166	
OCDF	0.029	0.023	0.061	0.010	0.011	0.016	0.025	<0.012	0.014	0.047	0.014	0.067	0.084	0.167	0.100	0.068	0.046	0.033	0.072	0.053	0.244	<0.021	0.095	
<b>Total</b>																								
∑ PCDDs	0.822	1.374	0.618	0.516	0.340	0.308	0.331	0.203	0.202	4.024	0.672	1.090	5.182	5.636	1.797	0.792	1.059	0.659	0.367	1.061	0.960	0.630	1.969	
∑ PCDFs	0.262	0.149	0.791	0.093	0.064	0.127	0.173	0.174	0.062	0.519	0.153	0.393	0.795	2.582	1.181	0.301	0.702	0.809	0.411	2.137	0.673	0.230	1.241	
∑ PCDD/Fs	1.084	1.523	1.409	0.609	0.404	0.435	0.504	0.377	0.264	4.543	0.825	1.483	5.977	8.218	2.978	1.093	1.761	1.468	0.778	3.198	1.633	0.860	3.210	
∑ TEQ (PCDD/Fs)	0.023	0.025	0.030	0.012	0.013	0.014	0.013	0.012	0.010	0.064	0.018	0.030	0.085	0.115	0.052	0.017	0.026	0.043	0.024	0.070	0.023	0.034	0.072	



Table A49. Atmospheric concentrations of PCDD/Fs (pg m<sup>-3</sup>) at NAPS urban sites in 2000 (continued)

Station Name	Toronto (Gage Inst.)											Jonquiere										
Sampling Period	1	2	3	4	5	6	7	8	9	10	11	1	2	3	4	5	6	7	8	9	10	11
Sampling Date	3/31/00	4/24/00	5/6/00	5/30/00	6/11/00	8/22/00	9/15/00	10/9/00	11/2/00	11/26/00	12/20/00	1/7/00	1/31/00	2/24/00	3/19/00	4/12/00	5/6/00	5/30/00	6/23/00	8/10/00	9/3/00	12/8/00
Sampling Volume (m3)	893	881	829	854	876	838	822	887	899	907	1008	855	813	802	793	826	816	805	804	792	1044	1077
<b>PCDD/F Congeners</b>																						
2,3,7,8-TCDD	0.004	<0.005	<0.005	<0.005	<0.003	<0.002	<0.003	<0.003	0.006	<0.004	<0.004	<0.004	<0.005	<0.002	<0.003	<0.002	<0.004	<0.002	<0.005	<0.003	<0.002	0.004
1,2,3,7,8-PeCDD	0.018	0.004	0.008	0.009	0.006	<0.002	<0.002	<0.002	<0.006	<0.009	0.010	0.010	0.008	<0.005	0.011	0.004	0.015	<0.005	<0.005	<0.003	0.005	0.026
1,2,3,4,7,8-HxCDD	0.017	<0.005	0.005	<0.006	<0.004	<0.007	<0.005	<0.004	<0.027	0.009	0.006	0.007	0.007	<0.004	0.004	<0.004	0.034	<0.005	0.007	0.016	<0.002	0.031
1,2,3,6,7,8-HxCDD	0.028	<0.005	0.010	0.010	<0.004	<0.007	<0.005	<0.004	<0.027	0.014	0.009	0.016	0.008	<0.004	0.013	0.005	0.041	<0.005	0.016	0.034	<0.002	0.053
1,2,3,7,8,9-HxCDD	0.048	<0.005	0.010	0.011	<0.004	<0.007	<0.005	0.010	0.039	0.016	0.023	0.023	0.014	<0.004	0.017	<0.004	0.072	<0.005	0.030	0.058	0.025	0.095
1,2,3,4,6,7,8-HpCDD	0.210	0.039	0.122	0.072	0.055	0.088	0.051	0.087	0.187	0.127	0.091	0.150	0.090	0.029	0.049	0.050	0.536	0.047	0.190	0.649	0.268	0.596
OCDD	0.593	0.159	0.418	0.267	0.250	0.276	0.135	0.212	0.594	0.357	0.259	0.305	0.304	0.186	0.150	0.201	2.656	0.191	0.590	1.931	0.929	1.385
2,3,7,8-TCDF	0.215	0.018	0.041	0.055	0.020	0.025	0.032	0.008	0.083	0.025	0.034	0.063	0.106	0.009	0.138	0.008	0.021	0.031	0.011	0.016	0.008	0.077
1,2,3,7,8-PeCDF	0.034	0.002	0.008	0.012	<0.003	0.005	0.006	<0.002	0.017	<0.004	0.006	0.008	0.012	<0.003	0.012	<0.002	<0.004	<0.002	<0.003	0.003	0.013	0.013
2,3,4,7,8-PeCDF	0.065	0.005	0.011	0.021	0.007	0.007	0.010	0.003	0.028	0.009	0.012	0.016	0.022	<0.003	0.023	<0.002	0.006	0.007	0.004	<0.003	0.004	0.023
1,2,3,4,7,8-HxCDF	0.102	0.005	0.014	0.036	0.011	0.017	0.022	0.009	0.082	0.016	0.023	0.029	0.038	0.003	0.041	0.003	0.015	0.013	0.010	<0.002	0.007	0.038
1,2,3,6,7,8-HxCDF	0.043	0.002	0.008	0.015	0.005	0.011	0.010	<0.003	0.032	<0.009	0.013	0.011	0.014	<0.003	0.015	0.002	0.005	0.004	0.004	<0.002	0.005	0.016
2,3,4,6,7,8-HxCDF	0.055	<0.002	0.007	0.022	0.005	0.010	0.014	<0.003	0.030	<0.009	0.014	0.014	0.019	<0.003	0.017	<0.002	0.008	0.002	0.005	<0.002	0.006	0.021
1,2,3,7,8,9-HxCDF	<0.003	<0.002	<0.002	<0.004	<0.004	<0.007	<0.004	<0.003	<0.018	<0.009	<0.002	<0.002	<0.002	<0.003	<0.003	<0.002	<0.003	<0.002	<0.002	<0.002	<0.002	0.004
1,2,3,4,6,7,8-HpCDF	0.108	0.013	0.037	0.057	0.019	0.047	0.030	0.010	0.114	0.037	0.032	0.049	0.067	0.009	0.066	0.013	0.036	0.030	0.022	0.026	0.022	0.051
1,2,3,4,7,8,9-HpCDF	0.014	<0.003	<0.005	0.006	<0.007	<0.01	<0.005	<0.005	<0.022	<0.009	<0.005	0.007	0.006	<0.003	0.006	<0.003	<0.005	<0.005	<0.007	<0.005	<0.004	0.009
OCDF	0.039	0.018	0.036	0.061	0.025	0.039	0.027	0.009	0.058	0.046	0.022	0.072	0.135	0.014	0.169	0.022	0.067	0.044	0.018	0.028	0.018	0.032
<b>PCDD/F Homologues</b>																						
TCDDs	0.142	0.006	0.041	0.048	0.007	0.011	0.010	<0.003	0.106	<0.004	0.011	0.065	0.099	0.009	0.136	<0.002	0.034	0.029	<0.005	<0.003	<0.002	0.110
PeCDDs	0.254	0.011	0.039	0.047	0.012	0.011	0.015	<0.002	0.126	<0.009	0.043	0.057	0.091	<0.005	0.204	0.004	0.089	<0.005	<0.005	<0.003	0.005	0.314
HxCDDs	0.391	0.023	0.107	0.078	0.047	0.072	0.061	0.058	0.255	0.143	0.121	0.191	0.121	0.007	0.170	0.023	0.586	0.029	0.148	0.430	0.145	0.812
HpCDDs	0.456	0.083	0.258	0.152	0.127	0.181	0.105	0.161	0.461	0.282	0.195	0.300	0.175	0.059	0.094	0.090	1.305	0.093	0.403	1.333	0.637	1.489
OCDD	0.593	0.159	0.418	0.267	0.250	0.276	0.135	0.212	0.594	0.357	0.259	0.305	0.304	0.186	0.150	0.201	2.656	0.191	0.590	1.931	0.929	1.385
TCDFs	1.265	0.101	0.305	0.337	0.164	0.106	0.176	0.021	0.339	0.100	0.154	0.323	0.497	0.014	0.554	0.020	0.118	0.112	0.022	0.045	0.022	0.334
PeCDFs	0.712	0.039	0.223	0.287	0.060	0.069	0.118	0.015	0.341	0.037	0.092	0.166	0.247	0.005	0.276	0.008	0.065	0.063	0.024	0.020	0.035	0.246
HxCDFs	0.443	0.026	0.132	0.158	0.051	0.063	0.090	0.018	0.246	0.037	0.097	0.119	0.153	0.009	0.153	0.014	0.089	0.051	0.055	0.020	0.041	0.184
HpCDFs	0.183	0.020	0.061	0.091	0.019	0.047	0.049	0.010	0.184	0.056	0.049	0.080	0.110	0.014	0.103	0.016	0.070	0.037	0.037	0.056	0.042	0.110
OCDF	0.039	0.018	0.036	0.061	0.025	0.039	0.027	0.009	0.058	0.046	0.022	0.072	0.135	0.014	0.169	0.022	0.067	0.044	0.018	0.028	0.018	0.032
<b>Total</b>																						
∑ PCDDs	1.836	0.282	0.863	0.592	0.443	0.551	0.326	0.431	1.542	0.782	0.629	0.918	0.790	0.261	0.754	0.318	4.670	0.342	1.141	3.694	1.716	4.110
∑ PCDFs	2.642	0.204	0.757	0.934	0.319	0.324	0.460	0.073	1.168	0.276	0.414	0.760	1.142	0.056	1.255	0.080	0.409	0.307	0.156	0.169	0.158	0.906
∑ PCDD/Fs	4.478	0.486	1.620	1.526	0.762	0.875	0.786	0.504	2.710	1.058	1.043	1.678	1.932	0.317	2.009	0.398	5.079	0.649	1.297	3.863	1.874	5.016
∑ TEQ (PCDD/Fs)	0.097	0.016	0.028	0.038	0.018	0.017	0.019	0.011	0.058	0.028	0.032	0.038	0.043	0.012	0.047	0.010	0.047	0.017	0.022	0.028	0.017	0.078

Table A50. Atmospheric concentrations of PCDD/Fs (pg m<sup>-3</sup>) at NAPS urban sites in 2001

Station Name	Hamilton (Confederation Park)																							
Sampling Period	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
Sampling Date	1/1/01	1/13/01	1/25/01	2/6/01	3/2/01	3/14/01	3/26/01	4/7/01	4/19/01	5/1/01	5/13/01	5/25/01	6/18/01	6/30/01	7/24/01	8/5/01	8/17/01	8/29/01	9/10/01	9/22/01	10/4/01	10/28/01	11/9/01	11/21/01
Sampling Volume (m3)	816	806	823	791	705	736	723	780	730	716	785	708	925	854	969	919	974	956	997	1029	1025	917	1018	1097
<b>PCDD/F Congeners</b>																								
2,3,7,8-TCDD	<0.005	<0.002	0.005	<0.011	<0.013	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.002	<0.002	0.003	0.013	<0.001	0.001	0.001	0.004	<0.001	0.007	0.007	0.002
1,2,3,7,8-PeCDD	0.014	0.012	0.017	0.008	0.010	0.010	0.006	0.006	0.010	0.012	0.009	<0.003	0.006	0.046	0.011	0.051	0.003	0.007	0.005	0.014	0.005	0.033	0.033	0.008
1,2,3,4,7,8-HxCDD	0.017	0.010	0.008	0.010	0.013	<0.005	<0.006	0.011	0.012	0.013	<0.007	<0.006	<0.004	0.020	0.007	0.030	0.001	0.003	0.003	0.014	0.004	0.026	0.028	0.007
1,2,3,6,7,8-HxCDD	0.021	0.018	0.016	0.012	0.026	0.010	<0.006	0.010	0.013	0.021	0.008	<0.006	0.007	0.037	0.012	0.062	0.001	0.005	0.005	0.029	0.005	0.051	0.057	0.013
1,2,3,7,8,9-HxCDD	0.037	0.025	0.021	0.022	0.034	0.006	<0.006	0.024	0.018	0.025	0.012	<0.006	0.007	0.056	0.016	0.071	0.001	0.005	<0.002	0.048	0.010	0.088	0.084	0.022
1,2,3,4,6,7,8-HpCDD	0.186	0.139	0.075	0.168	0.224	0.130	0.065	0.220	0.198	0.206	0.126	0.030	0.088	0.168	0.087	0.141	0.010	0.065	0.029	0.305	0.055	0.377	0.180	0.139
OCDD	0.458	0.299	0.154	0.412	0.985	0.343	0.195	0.601	0.764	0.689	0.420	0.105	0.251	0.359	0.208	0.202	0.032	0.184	0.166	0.903	0.188	0.849	0.353	0.374
2,3,7,8-TCDF	0.123	0.048	0.223	0.038	0.072	0.060	0.031	0.020	0.026	0.046	0.023	0.012	0.024	0.564	0.102	1.098	0.004	0.033	0.027	0.117	0.067	0.343	0.350	0.056
1,2,3,7,8-PeCDF	0.019	0.012	0.019	0.005	0.015	0.007	0.003	0.003	0.005	0.012	0.005	<0.003	0.002	0.064	0.015	0.122	0.001	0.006	0.006	0.011	0.009	0.039	0.050	0.010
2,3,4,7,8-PeCDF	0.040	0.017	0.056	0.015	0.026	0.011	0.007	0.006	0.012	0.018	0.008	<0.003	0.007	0.128	0.027	0.222	0.001	0.011	0.009	0.026	0.016	0.090	0.125	0.017
1,2,3,4,7,8-HxCDF	0.093	0.040	0.070	0.024	0.060	0.021	0.018	0.014	0.015	0.034	0.015	0.005	0.014	0.153	0.036	0.257	0.002	0.017	0.015	0.032	0.024	0.137	0.197	0.028
1,2,3,6,7,8-HxCDF	0.032	0.014	0.031	0.011	0.021	0.009	0.007	0.004	0.009	0.017	0.006	<0.003	0.009	0.070	0.017	0.115	0.001	0.009	0.009	0.015	0.011	0.061	0.083	0.013
2,3,4,6,7,8-HxCDF	0.047	0.016	0.036	0.007	0.024	<0.005	0.011	0.007	0.005	0.021	0.008	<0.003	0.007	0.063	0.014	0.141	0.001	0.003	0.006	0.017	0.011	0.076	0.125	0.014
1,2,3,7,8,9-HxCDF	<0.002	<0.002	<0.004	<0.007	<0.009	<0.005	<0.006	<0.004	<0.003	<0.007	<0.006	<0.003	<0.005	0.005	0.002	0.007	<0.001	0.001	<0.002	0.001	0.001	0.004	0.007	0.003
1,2,3,4,6,7,8-HpCDF	0.085	0.053	0.063	0.053	0.089	0.034	0.027	0.036	0.039	0.087	0.020	0.012	0.029	0.134	0.042	0.214	0.005	0.031	0.026	0.043	0.034	0.141	0.200	0.044
1,2,3,4,7,8,9-HpCDF	0.010	0.010	0.007	<0.011	0.023	<0.01	<0.008	<0.008	<0.007	0.024	<0.007	<0.005	<0.004	0.019	0.006	0.027	0.000	0.002	0.006	0.005	0.005	0.020	0.028	0.011
OCDF	0.033	0.051	0.020	0.036	0.068	0.024	0.020	0.036	0.033	0.094	0.032	0.010	0.028	0.059	0.023	0.059	0.004	0.022	0.030	0.035	0.025	0.071	0.050	0.044
<b>PCDD/F Homologues</b>																								
TCDDs	0.089	0.021	0.361	0.047	0.014	0.050	0.022	0.014	0.014	0.061	0.032	0.003	0.043	1.036	0.164	2.151	0.004	0.045	0.039	0.213	0.114	0.627	0.650	0.107
PeCDDs	0.223	0.094	0.436	0.033	0.067	0.076	0.054	0.046	0.079	0.113	0.043	<0.003	0.013	1.081	0.176	1.688	0.008	0.091	0.065	0.242	0.100	0.749	0.908	0.135
HxCDDs	0.314	0.227	0.276	0.137	0.241	0.150	<0.006	0.180	0.191	0.256	0.115	<0.006	0.073	0.649	0.198	1.037	0.013	0.113	0.061	0.402	0.101	0.842	1.024	0.218
HpCDDs	0.412	0.321	0.165	0.345	0.398	0.278	0.111	0.458	0.442	0.468	0.260	0.062	0.192	0.362	0.169	0.276	0.018	0.135	0.057	0.570	0.112	0.765	0.371	0.283
OCDD	0.458	0.299	0.154	0.412	0.985	0.343	0.195	0.601	0.764	0.689	0.420	0.105	0.251	0.359	0.208	0.202	0.032	0.184	0.166	0.903	0.188	0.849	0.353	0.374
TCDFs	0.470	0.227	1.084	0.205	0.255	0.250	0.121	0.095	0.099	0.240	0.132	0.048	0.125	3.440	0.686	7.020	0.029	0.205	0.174	0.719	0.486	2.066	1.975	0.344
PeCDFs	0.463	0.179	0.654	0.186	0.257	0.135	0.068	0.051	0.088	0.186	0.090	0.003	0.101	1.968	0.390	3.151	0.017	0.139	0.108	0.319	0.238	1.075	1.352	0.223
HxCDFs	0.336	0.139	0.330	0.081	0.206	0.056	0.062	0.055	0.082	0.164	0.039	0.005	0.077	0.758	0.210	1.310	0.015	0.075	0.087	0.178	0.132	0.686	0.952	0.138
HpCDFs	0.129	0.087	0.102	0.066	0.128	0.038	0.027	0.059	0.047	0.149	0.037	0.012	0.043	0.228	0.070	0.344	0.008	0.046	0.054	0.085	0.057	0.251	0.337	0.082
OCDF	0.033	0.051	0.020	0.036	0.068	0.024	0.020	0.036	0.033	0.094	0.032	0.010	0.028	0.059	0.023	0.059	0.004	0.022	0.030	0.035	0.025	0.071	0.050	0.044
<b>Total</b>																								
∑ PCDDs	1.496	0.962	1.392	0.974	1.705	0.897	0.382	1.299	1.490	1.587	0.870	0.170	0.572	3.487	0.915	5.353	0.075	0.569	0.387	2.330	0.615	3.831	3.305	1.117
∑ PCDFs	1.431	0.683	2.190	0.574	0.914	0.503	0.298	0.296	0.349	0.833	0.330	0.078	0.374	6.453	1.379	11.884	0.073	0.487	0.452	1.336	0.938	4.148	4.665	0.830
∑ PCDD/Fs	2.927	1.645	3.582	1.548	2.619	1.400	0.680	1.595	1.839	2.420	1.200	0.248	0.946	9.940	2.293	17.238	0.148	1.056	0.840	3.666	1.553	7.980	7.970	1.947
∑ TEQ (PCDD/Fs)	0.072	0.039	0.082	0.039	0.061	0.030	0.021	0.023	0.030	0.043	0.025	0.012	0.019	0.188	0.044	0.316	0.005	0.019	0.016	0.057	0.025	0.152	0.176	0.033

Table A50. Atmospheric concentrations of PCDD/Fs (pg m<sup>-3</sup>) at NAPS urban sites in 2001 (continued)

Station Name	Hamilton (Hillyard St.)																						
Sampling Period	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23
Sampling Date	1/1/01	1/13/01	1/25/01	2/6/01	3/2/01	3/14/01	3/26/01	4/7/01	4/19/01	5/1/01	5/13/01	5/25/01	6/6/01	6/18/01	6/30/01	7/24/01	8/5/01	8/17/01	8/29/01	9/22/01	10/4/01	11/9/01	11/21/01
Sampling Volume (m3)	1373	937	833	786	800	798	869	838	831	756	843	762	752	769	752	747	751	793	785	985	877	937	886
<b>PCDD/F Congeners</b>																							
2,3,7,8-TCDD	<0.001	<0.002	0.001	0.002	<0.001	<0.001	<0.001	<0.001	0.002	0.004	<0.001	<0.001	<0.002	<0.004	0.001	0.003	0.002	0.000	0.001	0.002	0.001	<0.001	0.002
1,2,3,7,8-PeCDD	0.004	0.007	0.005	0.006	0.010	0.004	0.008	0.008	0.020	0.013	0.007	0.008	0.004	0.007	0.010	0.016	0.007	0.002	0.005	0.009	0.005	0.004	0.010
1,2,3,4,7,8-HxCDD	0.005	0.005	0.003	0.006	0.011	<0.004	0.005	0.008	0.021	0.013	0.006	0.007	<0.003	<0.003	0.006	0.007	0.004	0.002	0.005	0.007	0.003	0.004	0.013
1,2,3,6,7,8-HxCDD	0.008	0.007	0.007	0.016	0.017	0.009	0.007	0.012	0.042	0.021	0.012	0.010	0.005	0.004	0.012	0.017	0.008	0.003	0.007	0.017	0.005	0.007	0.026
1,2,3,7,8,9-HxCDD	0.014	0.016	0.007	0.029	0.032	0.004	0.008	0.023	0.062	0.033	0.017	0.013	0.005	0.014	0.009	0.014	0.010	0.003	0.009	0.026	0.011	0.004	0.043
1,2,3,4,6,7,8-HpCDD	0.098	0.090	0.072	0.187	0.193	0.097	0.082	0.160	0.404	0.241	0.128	0.075	0.054	0.115	0.107	0.104	0.075	0.039	0.057	0.159	0.056	0.093	0.301
OCDD	0.260	0.229	0.278	0.479	0.524	0.344	0.332	0.463	1.415	0.755	0.248	0.354	0.184	0.432	0.459	0.402	0.317	0.122	0.218	0.486	0.255	0.588	1.442
2,3,7,8-TCDF	0.013	0.031	0.037	0.108	0.047	0.021	0.031	0.050	0.025	0.044	0.018	0.068	0.047	0.041	0.024	0.021	0.043	0.006	0.022	0.015	0.016	0.021	0.081
1,2,3,7,8-PeCDF	0.003	0.007	0.005	0.015	0.014	0.003	0.006	0.011	0.006	0.009	0.003	0.013	0.007	0.007	0.005	0.004	0.006	0.001	0.004	0.003	0.004	0.004	0.014
2,3,4,7,8-PeCDF	0.005	0.010	0.009	0.026	0.018	0.006	0.009	0.019	0.010	0.013	0.004	0.022	0.013	0.010	0.007	0.005	0.010	0.001	0.007	0.004	0.005	0.008	0.037
1,2,3,4,7,8-HxCDF	0.009	0.025	0.012	0.043	0.054	0.019	0.011	0.032	0.026	0.034	0.009	0.033	0.019	0.018	0.012	0.014	0.018	0.003	0.013	0.008	0.008	0.020	0.129
1,2,3,6,7,8-HxCDF	0.004	0.010	0.005	0.014	0.017	0.006	0.004	0.013	0.011	0.015	0.004	0.017	0.009	0.009	0.006	0.006	0.009	0.001	0.006	0.004	0.004	0.006	0.046
2,3,4,6,7,8-HxCDF	0.005	0.011	0.006	0.018	0.019	0.009	0.006	0.016	0.013	0.014	0.005	0.014	0.009	0.011	0.005	0.006	0.008	0.001	0.008	0.005	0.005	0.011	0.074
1,2,3,7,8,9-HxCDF	<0.001	<0.001	<0.001	<0.001	0.003	<0.004	<0.002	<0.005	<0.004	<0.003	<0.002	0.003	<0.003	<0.003	<0.003	<0.003	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	0.004
1,2,3,4,6,7,8-HpCDF	0.014	0.035	0.026	0.090	0.092	0.033	0.019	0.044	0.052	0.077	0.017	0.041	0.030	0.048	0.029	0.034	0.032	0.008	0.035	0.018	0.020	0.038	0.270
1,2,3,4,7,8,9-HpCDF	0.002	0.006	0.002	0.011	0.015	0.008	<0.003	0.011	0.009	0.011	<0.002	0.010	0.004	<0.004	<0.003	<0.003	0.004	<0.001	0.003	0.003	0.001	0.005	0.048
OCDF	0.009	0.028	0.017	0.059	0.078	0.021	0.019	0.053	0.036	0.068	0.014	0.061	0.030	0.022	0.025	0.031	0.025	0.006	0.031	0.014	0.019	0.028	0.223
<b>PCDD/F Homologues</b>																							
TCDDs	0.015	0.029	0.036	0.050	0.042	0.011	0.015	0.037	0.064	0.090	0.016	0.056	0.054	0.035	0.023	0.041	0.050	0.003	0.026	0.035	0.027	0.024	0.095
PeCDDs	0.040	0.071	0.049	0.088	0.118	0.036	0.033	0.052	0.213	0.111	0.039	0.059	0.036	0.044	0.040	0.052	0.067	0.012	0.040	0.079	0.035	0.047	0.164
HxCDDs	0.106	0.126	0.089	0.228	0.280	0.069	0.081	0.185	0.573	0.287	0.142	0.088	0.072	0.033	0.085	0.111	0.096	0.042	0.080	0.230	0.082	0.095	0.390
HpCDDs	0.223	0.197	0.146	0.432	0.456	0.210	0.175	0.344	0.925	0.596	0.254	0.156	0.109	0.245	0.230	0.210	0.141	0.076	0.117	0.321	0.119	0.176	0.580
OCDD	0.260	0.229	0.278	0.479	0.524	0.344	0.332	0.463	1.415	0.755	0.248	0.354	0.184	0.432	0.459	0.402	0.317	0.122	0.218	0.486	0.255	0.588	1.442
TCDFs	0.071	0.160	0.178	0.566	0.209	0.084	0.149	0.252	0.125	0.273	0.091	0.499	0.302	0.225	0.195	0.111	0.289	0.024	0.147	0.105	0.125	0.115	0.475
PeCDFs	0.050	0.102	0.077	0.283	0.186	0.028	0.060	0.173	0.102	0.186	0.062	0.265	0.163	0.115	0.127	0.151	0.160	0.011	0.091	0.058	0.064	0.086	0.419
HxCDFs	0.043	0.094	0.055	0.151	0.184	0.068	0.043	0.118	0.120	0.169	0.040	0.131	0.083	0.103	0.114	0.137	0.109	0.014	0.078	0.050	0.051	0.083	0.540
HpCDFs	0.028	0.060	0.043	0.164	0.154	0.057	0.027	0.075	0.094	0.145	0.033	0.067	0.046	0.062	0.051	0.058	0.053	0.011	0.054	0.034	0.032	0.060	0.453
OCDF	0.009	0.028	0.017	0.059	0.078	0.021	0.019	0.053	0.036	0.068	0.014	0.061	0.030	0.022	0.025	0.031	0.025	0.006	0.031	0.014	0.019	0.028	0.223
<b>Total</b>																							
∑ PCDDs	0.644	0.652	0.598	1.277	1.420	0.670	0.636	1.081	3.190	1.839	0.699	0.713	0.455	0.789	0.837	0.816	0.670	0.255	0.481	1.150	0.518	0.930	2.672
∑ PCDFs	0.201	0.444	0.370	1.223	0.811	0.258	0.298	0.671	0.477	0.841	0.240	1.023	0.624	0.527	0.512	0.488	0.636	0.067	0.401	0.261	0.291	0.372	2.110
∑ PCDD/Fs	0.845	1.096	0.968	2.500	2.231	0.928	0.934	1.752	3.667	2.680	0.939	1.736	1.079	1.316	1.349	1.304	1.306	0.322	0.882	1.411	0.810	1.302	4.782
∑ TEQ (PCDD/Fs)	0.014	0.024	0.018	0.043	0.040	0.016	0.020	0.033	0.051	0.042	0.018	0.034	0.021	0.026	0.022	0.031	0.023	0.006	0.016	0.023	0.014	0.016	0.071

Table A50. Atmospheric concentrations of PCDD/Fs (pg m<sup>-3</sup>) at NAPS urban sites in 2001 (continued)

Station Name	Toronto (Judson)										Toronto (Junction Triangle)											
	1	2	3	4	5	6	7	8	9	10	1	2	3	4	5	6	7	8	9	10	11	12
Sampling Period	4/13/01	5/7/01	5/31/01	6/24/01	7/18/01	8/11/01	9/28/01	10/22/01	11/15/01	1/7/01	1/31/01	2/24/01	3/20/01	5/7/01	5/31/01	6/24/01	7/18/01	9/28/01	10/22/01	11/15/01	12/9/01	
Sampling Volume (m3)	917	879	875	878	899	870	917	949	896	778	827	798	818	807	797	800	768	815	787	770	822	
<b>PCDD/F Congeners</b>																						
2,3,7,8-TCDD	<0.002	<0.005	<0.002	<0.002	0.001	0.001	0.003	0.001	0.002	<0.003	<0.002	<0.005	<0.004	<0.003	<0.004	<0.004	0.001	0.001	0.010	0.003	0.003	
1,2,3,7,8-PeCDD	0.007	0.006	0.009	0.006	0.007	0.006	0.012	0.010	0.010	0.016	<0.002	0.016	0.008	0.009	0.007	0.007	0.006	0.005	0.050	0.011	0.017	
1,2,3,4,7,8-HxCDD	<0.004	<0.007	<0.007	<0.003	0.003	0.003	0.007	0.008	0.011	0.010	0.006	0.011	0.007	<0.007	0.008	<0.003	<0.001	0.003	0.037	0.012	0.018	
1,2,3,6,7,8-HxCDD	0.007	0.010	<0.007	0.006	0.005	0.004	0.014	0.012	0.015	0.024	0.012	0.020	0.014	0.011	0.009	0.006	0.006	0.004	0.069	0.020	0.037	
1,2,3,7,8,9-HxCDD	<0.004	0.017	0.012	0.005	0.006	0.006	0.031	0.014	0.028	0.037	0.012	0.031	0.021	0.016	0.010	0.007	0.008	0.006	0.130	0.017	0.071	
1,2,3,4,6,7,8-HpCDD	0.046	0.163	0.100	0.083	0.041	0.038	0.085	0.104	0.219	0.202	0.104	0.179	0.118	0.164	0.093	0.071	0.058	0.041	0.249	0.212	0.509	
OCDD	0.176	0.541	0.388	0.255	0.143	0.132	0.270	0.373	0.603	0.503	0.309	0.581	0.368	0.539	0.318	0.244	0.204	0.185	0.445	0.655	1.164	
2,3,7,8-TCDF	0.017	0.029	0.014	0.010	0.014	0.016	0.133	0.046	0.064	0.051	0.050	0.060	0.024	0.031	0.140	0.024	0.025	0.052	0.383	0.076	0.066	
1,2,3,7,8-PeCDF	<0.002	0.006	0.004	<0.002	0.003	0.003	0.023	0.012	0.011	0.009	0.009	0.011	0.007	0.005	0.028	0.005	0.004	0.008	0.104	0.012	0.012	
2,3,4,7,8-PeCDF	0.006	0.009	0.005	0.005	0.004	0.005	0.047	0.020	0.020	0.017	0.013	0.021	0.010	0.010	0.105	0.007	0.007	0.013	0.203	0.024	0.022	
1,2,3,4,7,8-HxCDF	0.008	0.025	0.014	0.007	0.007	0.008	0.093	0.043	0.035	0.039	0.019	0.036	0.016	0.019	0.069	0.011	0.011	0.018	0.402	0.043	0.035	
1,2,3,6,7,8-HxCDF	0.005	0.012	0.006	0.004	0.004	0.004	0.038	0.021	0.016	0.014	0.007	0.016	0.007	0.011	0.024	0.006	0.005	0.010	0.173	0.021	0.014	
2,3,4,6,7,8-HxCDF	0.006	0.013	0.007	<0.004	0.004	0.003	0.043	0.020	0.021	0.016	0.009	0.014	0.010	0.014	0.051	0.005	0.004	0.009	0.199	0.027	0.014	
1,2,3,7,8,9-HxCDF	<0.002	<0.007	<0.005	<0.004	<0.001	<0.001	0.003	0.003	<0.001	<0.006	<0.002	<0.011	<0.007	<0.007	<0.008	<0.004	<0.001	<0.001	0.017	0.002	0.001	
1,2,3,4,6,7,8-HpCDF	0.022	0.055	0.030	0.016	0.017	0.020	0.088	0.058	0.063	0.057	0.035	0.055	0.031	0.041	0.057	0.025	0.025	0.025	0.418	0.075	0.056	
1,2,3,4,7,8,9-HpCDF	<0.004	<0.008	<0.007	<0.003	0.001	<0.002	0.014	0.010	0.007	0.011	<0.003	0.014	<0.01	<0.005	0.010	<0.003	0.002	0.001	0.073	0.012	0.010	
OCDF	0.031	0.064	0.043	0.013	0.014	0.017	0.029	0.033	0.045	0.041	0.019	0.072	0.047	0.040	0.033	0.020	0.017	0.015	0.152	0.061	0.045	
<b>PCDD/F Homologues</b>																						
TCDDs	0.005	0.012	0.010	0.005	0.018	0.010	0.103	0.056	0.072	0.054	0.017	0.036	0.018	0.006	0.041	0.017	0.027	0.033	0.539	0.102	0.074	
PeCDDs	0.007	0.046	0.018	0.017	0.036	0.027	0.163	0.136	0.102	0.096	0.036	0.056	0.035	0.026	0.083	0.011	0.036	0.042	1.089	0.163	0.188	
HxCDDs	0.007	0.147	0.080	0.042	0.070	0.063	0.224	0.206	0.276	0.230	0.113	0.176	0.105	0.106	0.085	0.032	0.083	0.061	1.250	0.309	0.532	
HpCDDs	0.087	0.353	0.219	0.163	0.088	0.088	0.166	0.200	0.442	0.436	0.205	0.358	0.239	0.316	0.176	0.150	0.119	0.077	0.501	0.442	0.967	
OCDD	0.176	0.541	0.388	0.255	0.143	0.132	0.270	0.373	0.603	0.503	0.309	0.581	0.368	0.539	0.318	0.244	0.204	0.185	0.445	0.655	1.164	
TCDFs	0.066	0.145	0.077	0.061	0.108	0.123	0.782	0.245	0.416	0.278	0.246	0.234	0.138	0.178	0.567	0.160	0.198	0.359	1.907	0.553	0.404	
PeCDFs	0.032	0.101	0.059	0.057	0.071	0.072	0.483	0.181	0.224	0.166	0.111	0.165	0.063	0.098	0.593	0.084	0.107	0.142	1.821	0.286	0.241	
HxCDFs	0.047	0.096	0.064	0.036	0.056	0.062	0.372	0.193	0.163	0.139	0.062	0.122	0.062	0.088	0.285	0.049	0.073	0.073	1.583	0.209	0.158	
HpCDFs	0.047	0.093	0.048	0.021	0.028	0.029	0.133	0.097	0.102	0.092	0.050	0.091	0.052	0.072	0.089	0.032	0.043	0.040	0.654	0.131	0.111	
OCDF	0.031	0.064	0.043	0.013	0.014	0.017	0.029	0.033	0.045	0.041	0.019	0.072	0.047	0.040	0.033	0.020	0.017	0.015	0.152	0.061	0.045	
<b>Total</b>																						
∑ PCDDs	0.282	1.099	0.715	0.482	0.354	0.320	0.926	0.970	1.494	1.319	0.680	1.207	0.765	0.993	0.703	0.454	0.469	0.398	3.826	1.670	2.925	
∑ PCDFs	0.223	0.499	0.291	0.188	0.277	0.303	1.800	0.749	0.949	0.716	0.488	0.684	0.362	0.476	1.567	0.345	0.438	0.629	6.116	1.240	0.959	
∑ PCDD/Fs	0.505	1.598	1.006	0.670	0.631	0.623	2.726	1.719	2.443	2.035	1.168	1.891	1.127	1.469	2.270	0.799	0.908	1.027	9.942	2.910	3.884	
∑ TEQ (PCDD/Fs)	0.017	0.028	0.021	0.015	0.014	0.013	0.067	0.036	0.040	0.047	0.021	0.050	0.028	0.029	0.077	0.021	0.016	0.021	0.272	0.046	0.059	

Table A50. Atmospheric concentrations of PCDD/Fs (pg m<sup>-3</sup>) at NAPS urban sites in 2001 (continued)

Station Name	Montreal (1125)																										
Sampling Period	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27
Sampling Date	1/1/01	1/13/01	1/25/01	2/6/01	3/2/01	3/14/01	3/26/01	2/18/01	4/7/01	4/19/01	5/1/01	5/13/01	5/25/01	6/6/01	6/18/01	8/17/01	7/24/01	8/5/01	8/29/01	9/10/01	9/22/01	10/4/01	10/28/01	11/9/01	11/21/01	12/3/01	12/15/01
Sampling Volume (m3)	970	938	937	909	996	920	971	904	920	981	958	890	852	922	903	892	884	899	891	832	812	772	733	728	735	694	716
<b>PCDD/F Congeners</b>																											
2,3,7,8-TCDD	<0.002	0.005	<0.002	<0.002	0.003	<0.007	<0.004	<0.004	<0.004	<0.003	<0.004	<0.002	<0.005	<0.003	<0.004	<0.002	0.001	0.002	0.001	0.001	<0.002	<0.002	<0.004	0.002	<0.001	0.001	0.001
1,2,3,7,8-PeCDD	0.007	0.019	0.009	0.008	0.018	<0.007	0.008	0.005	0.006	0.007	0.016	0.006	0.013	0.007	0.010	0.007	0.006	0.014	0.005	0.006	0.008	0.006	0.015	0.007	0.008	0.010	0.007
1,2,3,4,7,8-HxCDD	<0.004	0.018	0.008	0.005	0.018	<0.007	<0.006	<0.004	<0.007	<0.006	0.007	<0.003	<0.007	<0.006	<0.009	<0.003	0.004	0.020	0.002	0.003	<0.003	<0.004	<0.007	0.005	0.003	0.010	0.006
1,2,3,6,7,8-HxCDD	<0.004	0.030	0.011	0.015	0.026	<0.007	<0.006	0.010	<0.007	0.010	0.013	<0.003	0.013	<0.006	<0.009	0.004	0.006	0.032	0.005	0.005	0.007	0.005	0.020	0.011	0.009	0.016	0.009
1,2,3,7,8,9-HxCDD	0.008	0.042	0.018	0.021	0.053	0.011	<0.006	<0.004	<0.007	0.011	0.016	<0.003	0.011	<0.006	0.011	0.005	0.007	0.058	0.005	0.005	0.011	0.008	0.032	0.020	0.014	0.016	0.015
1,2,3,4,6,7,8-HpCDD	0.058	0.255	0.083	0.166	0.320	0.063	0.073	0.082	0.083	0.092	0.127	0.044	0.095	0.043	0.073	0.041	0.050	0.556	0.044	0.056	0.075	0.065	0.336	0.133	0.078	0.194	0.109
OCDD	0.194	0.605	0.216	0.523	0.862	0.152	0.180	0.205	0.265	0.281	0.378	0.140	0.293	0.140	0.201	0.190	0.224	1.799	0.160	0.256	0.274	0.314	1.045	0.387	0.345	0.533	0.304
2,3,7,8-TCDF	0.013	0.048	0.026	0.029	0.045	0.014	0.026	0.015	0.026	0.014	0.045	0.009	0.024	0.016	0.021	0.014	0.018	0.025	0.013	0.019	0.025	0.015	0.027	0.033	0.019	0.034	0.021
1,2,3,7,8-PeCDF	0.003	0.009	0.006	0.005	0.010	<0.004	0.008	<0.002	0.003	0.003	0.010	0.003	<0.005	<0.003	<0.005	0.004	0.005	0.003	0.003	0.003	0.003	0.004	0.004	0.008	0.003	0.005	0.004
2,3,4,7,8-PeCDF	0.003	0.016	0.008	0.010	0.017	0.004	0.009	<0.002	0.008	0.005	0.015	0.003	0.008	0.003	0.009	<0.002	0.005	0.007	0.004	0.004	0.007	0.006	<0.005	0.014	0.006	0.011	0.006
1,2,3,4,7,8-HxCDF	0.006	0.027	0.017	0.019	0.037	0.007	0.016	0.010	0.017	0.010	0.021	0.006	0.017	0.011	0.012	0.006	0.010	0.017	0.009	0.007	0.012	0.009	0.018	0.044	0.008	0.030	0.010
1,2,3,6,7,8-HxCDF	0.003	0.011	0.006	0.007	0.014	<0.004	0.008	0.006	0.008	0.004	0.011	0.003	0.009	<0.007	<0.008	0.004	0.005	0.010	0.004	0.004	0.006	0.004	0.006	0.015	0.004	0.014	0.005
2,3,4,6,7,8-HxCDF	0.004	0.015	0.010	0.009	0.024	<0.004	0.005	<0.004	<0.004	0.006	0.012	<0.003	0.012	<0.007	<0.008	<0.003	0.004	0.011	0.005	0.003	0.007	0.004	0.006	0.016	0.006	0.019	0.004
1,2,3,7,8,9-HxCDF	<0.002	<0.004	0.002	<0.004	<0.004	<0.004	<0.004	<0.004	<0.004	<0.004	<0.008	<0.003	<0.008	<0.007	<0.008	<0.003	0.001	<0.001	0.000	0.000	<0.003	<0.002	<0.003	0.002	<0.001	<0.002	<0.001
1,2,3,4,6,7,8-HpCDF	0.016	0.056	0.029	0.036	0.064	0.018	0.035	0.012	0.037	0.028	0.056	0.014	0.052	0.017	0.031	0.021	0.028	0.058	0.019	0.022	0.035	0.022	0.020	0.076	0.025	0.064	0.021
1,2,3,4,7,8,9-HpCDF	<0.002	<0.004	<0.006	0.006	<0.004	<0.010	0.014	<0.004	<0.007	<0.006	0.010	<0.004	<0.008	<0.009	<0.013	<0.004	0.003	0.007	0.002	0.002	<0.003	<0.003	<0.007	0.012	0.002	0.007	0.003
OCDF	0.021	0.046	0.026	0.037	0.054	<0.016	0.080	0.017	0.048	0.036	0.055	0.028	0.050	0.018	0.041	0.034	0.020	0.059	0.016	0.025	0.034	0.016	0.020	0.072	0.039	0.065	0.028
<b>PCDD/F Homologues</b>																											
TCDDs	0.003	0.086	0.018	0.016	0.055	<0.007	<0.004	<0.004	<0.004	0.004	0.030	<0.002	0.015	0.007	0.004	<0.002	0.019	0.044	0.020	0.026	0.028	0.015	0.020	0.035	0.019	0.052	0.031
PeCDDs	0.021	0.182	0.062	0.048	0.170	0.021	0.013	0.009	<0.004	0.024	0.058	0.009	0.047	0.033	0.020	0.011	0.038	0.119	0.032	0.039	0.054	0.028	0.067	0.071	0.052	0.113	0.053
HxCDDs	0.031	0.373	0.139	0.159	0.378	0.023	0.033	0.032	0.046	0.076	0.110	0.011	0.096	0.028	0.061	0.030	0.072	0.482	0.067	0.068	0.098	0.076	0.258	0.160	0.109	0.261	0.122
HpCDDs	0.106	0.568	0.175	0.328	0.593	0.130	0.104	0.174	0.161	0.191	0.298	0.079	0.198	0.092	0.145	0.087	0.105	1.176	0.088	0.111	0.143	0.134	0.561	0.256	0.144	0.394	0.199
OCDD	0.194	0.605	0.216	0.523	0.862	0.152	0.180	0.205	0.265	0.281	0.378	0.140	0.293	0.140	0.201	0.190	0.224	1.799	0.160	0.256	0.274	0.314	1.045	0.387	0.345	0.533	0.304
TCDFs	0.061	0.247	0.139	0.138	0.226	0.075	0.096	0.039	0.119	0.055	0.431	0.052	0.128	0.090	0.110	0.101	0.161	0.217	0.084	0.150	0.173	0.122	0.127	0.186	0.125	0.217	0.128
PeCDFs	0.022	0.158	0.094	0.088	0.174	0.031	0.072	0.008	0.070	0.027	0.221	0.031	0.085	0.056	0.103	0.064	0.129	0.173	0.059	0.081	0.092	0.061	0.041	0.147	0.055	0.135	0.082
HxCDFs	0.029	0.115	0.072	0.068	0.150	0.033	0.054	0.031	0.057	0.039	0.144	0.024	0.103	0.046	0.066	0.066	0.107	0.172	0.054	0.068	0.079	0.063	0.071	0.153	0.049	0.144	0.046
HpCDFs	0.027	0.092	0.043	0.063	0.111	0.031	0.056	0.022	0.056	0.050	0.099	0.022	0.079	0.017	0.031	0.035	0.051	0.115	0.031	0.042	0.052	0.034	0.041	0.125	0.044	0.107	0.042
OCDF	0.021	0.046	0.026	0.037	0.054	<0.016	0.080	0.017	0.048	0.036	0.055	0.028	0.050	0.018	0.041	0.034	0.020	0.059	0.016	0.025	0.034	0.016	0.020	0.072	0.039	0.065	0.028
<b>Total</b>																											
∑ PCDDs	0.355	1.814	0.610	1.074	2.058	0.326	0.330	0.420	0.472	0.576	0.874	0.239	0.649	0.300	0.431	0.318	0.458	3.620	0.366	0.500	0.598	0.566	1.951	0.908	0.669	1.354	0.709
∑ PCDFs	0.160	0.658	0.374	0.394	0.715	0.170	0.358	0.117	0.350	0.207	0.950	0.157	0.445	0.227	0.351	0.300	0.469	0.735	0.243	0.367	0.431	0.295	0.300	0.683	0.312	0.667	0.326
∑ PCDD/Fs	0.515	2.472	0.984	1.468	2.773	0.496	0.688	0.537	0.822	0.783	1.824	0.396	1.094	0.527	0.782	0.618	0.926	4.355	0.609	0.867	1.028	0.861	2.250	1.591	0.981	2.021	1.035
∑ TEQ (PCDD/Fs)	0.015	0.052	0.025	0.026	0.053	0.022	0.024	0.016	0.022	0.019	0.040	0.013	0.032	0.018	0.027	0.015	0.015	0.043	0.012	0.013	0.021	0.016	0.036	0.030	0.018	0.031	0.018

Table A50. Atmospheric concentrations of PCDD/Fs ( $\mu\text{g m}^{-3}$ ) at NAPS urban sites in 2001 (continued)

Station Name	St. John's						Winnipeg									
	1	2	3	4	5	6	1	2	3	4	5	6	7	8	9	10
Sampling Period																
Sampling Date	3/14/01	4/7/01	5/1/01	8/5/01	11/9/01	12/3/01	1/1/01	1/25/01	3/14/01	4/7/01	5/1/01	5/25/01	6/18/01	8/29/01	9/22/01	11/9/01
Sampling Volume (m3)	835	871	804	835	913	880	953	804	866	791	817	868	849	845	900	852
<b>PCDD/F Congeners</b>																
2,3,7,8-TCDD	<0.003	<0.004	<0.002	<0.003	0.001	<0.001	0.003	<0.002	0.003	<0.003	<0.002	<0.002	<0.002	<0.001	<0.002	0.003
1,2,3,7,8-PeCDD	<0.003	0.005	<0.004	0.004	0.004	0.004	0.021	0.015	0.012	0.008	0.010	0.005	<0.003	0.005	0.006	0.019
1,2,3,4,7,8-HxCDD	<0.005	<0.004	<0.005	<0.005	0.001	0.003	0.024	0.014	<0.005	<0.004	<0.005	<0.004	<0.005	<0.002	0.004	0.023
1,2,3,6,7,8-HxCDD	<0.005	<0.004	<0.005	<0.005	0.003	0.005	0.039	0.028	0.011	0.012	0.007	0.005	<0.005	0.002	0.006	0.038
1,2,3,7,8,9-HxCDD	<0.005	0.009	<0.005	<0.005	0.002	0.007	0.069	0.043	0.017	0.011	0.010	0.005	<0.005	0.007	0.013	0.064
1,2,3,4,6,7,8-HpCDD	0.011	0.081	0.031	0.013	0.026	0.055	0.335	0.309	0.129	0.111	0.063	0.063	0.050	0.048	0.079	0.576
OCDD	0.025	0.205	0.074	0.041	0.068	0.150	0.713	0.689	0.301	0.298	0.188	0.408	0.205	0.171	0.260	1.306
2,3,7,8-TCDF	0.005	0.009	0.010	0.006	0.021	0.016	0.052	0.011	0.023	0.012	0.010	0.012	0.010	0.006	0.005	0.020
1,2,3,7,8-PeCDF	<0.003	0.003	<0.002	<0.003	0.004	0.003	0.013	<0.002	0.005	<0.003	<0.002	<0.002	<0.002	0.001	0.002	0.005
2,3,4,7,8-PeCDF	<0.003	0.004	<0.002	<0.003	0.009	0.006	0.024	0.005	0.011	<0.003	0.002	0.007	<0.002	0.002	0.003	0.010
1,2,3,4,7,8-HxCDF	<0.005	0.010	0.005	<0.004	0.013	0.014	0.045	0.011	0.011	0.005	0.008	0.010	0.008	0.004	0.005	0.028
1,2,3,6,7,8-HxCDF	<0.005	0.003	<0.002	<0.004	0.005	0.006	0.019	0.004	0.007	<0.005	<0.004	0.006	0.004	0.002	0.002	0.011
2,3,4,6,7,8-HxCDF	<0.005	0.003	<0.002	<0.004	0.007	0.008	0.025	0.008	0.009	<0.005	<0.004	0.005	0.005	0.001	0.003	0.014
1,2,3,7,8,9-HxCDF	<0.005	<0.002	<0.002	<0.004	0.001	0.004	<0.003	<0.002	<0.005	<0.005	<0.004	<0.003	<0.004	<0.001	<0.002	<0.003
1,2,3,4,6,7,8-HpCDF	<0.010	0.031	0.016	0.011	0.016	0.024	0.073	0.029	0.026	0.014	0.029	0.024	0.030	0.013	0.014	0.056
1,2,3,4,7,8,9-HpCDF	<0.010	0.037	<0.005	<0.007	0.001	0.004	0.008	0.003	<0.007	<0.005	<0.005	<0.006	<0.002	<0.002	<0.003	0.008
OCDF	0.016	0.139	0.019	<0.010	0.009	0.016	0.047	0.025	0.041	0.014	0.019	0.045	0.031	0.014	0.015	0.057
<b>PCDD/F Homologues</b>																
TCDDs	<0.003	0.004	0.010	<0.003	0.023	0.036	0.124	0.010	0.003	0.015	0.016	0.006	0.015	0.011	0.006	0.058
PeCDDs	<0.003	0.005	<0.004	0.016	0.023	0.058	0.384	0.089	0.056	0.020	0.021	0.014	<0.003	0.025	0.006	0.183
HxCDDs	<0.005	0.009	<0.005	0.005	0.040	0.100	0.728	0.274	0.148	0.109	0.065	0.038	<0.005	0.059	0.094	0.562
HpCDDs	0.011	0.142	0.056	0.024	0.047	0.103	0.849	0.576	0.274	0.208	0.129	0.134	0.095	0.091	0.166	1.092
OCDD	0.025	0.205	0.074	0.041	0.068	0.150	0.713	0.689	0.301	0.298	0.188	0.408	0.205	0.171	0.260	1.306
TCDFs	0.005	0.073	0.038	0.048	0.137	0.108	0.211	0.039	0.088	0.037	0.037	0.047	0.038	0.063	0.045	0.123
PeCDFs	<0.003	0.040	0.012	0.048	0.086	0.071	0.205	0.007	0.058	0.022	0.030	0.045	0.038	0.049	0.021	0.111
HxCDFs	<0.005	0.039	0.021	0.024	0.053	0.063	0.198	0.053	0.050	0.008	0.013	0.044	0.044	0.043	0.026	0.151
HpCDFs	<0.010	0.068	0.016	0.011	0.026	0.037	0.122	0.058	0.034	0.014	0.029	0.024	0.030	0.021	0.022	0.125
OCDF	0.016	0.139	0.019	<0.010	0.009	0.016	0.047	0.025	0.041	0.014	0.019	0.045	0.031	0.014	0.015	0.057
<b>Total</b>																
∑ PCDDs	0.036	0.365	0.140	0.086	0.202	0.447	2.798	1.638	0.782	0.650	0.419	0.600	0.315	0.358	0.531	3.201
∑ PCDFs	0.021	0.359	0.106	0.131	0.310	0.295	0.783	0.182	0.271	0.095	0.128	0.205	0.181	0.190	0.129	0.567
∑ PCDD/Fs	0.057	0.724	0.246	0.217	0.511	0.741	3.581	1.820	1.053	0.745	0.547	0.805	0.496	0.548	0.660	3.768
∑ TEQ (PCDD/Fs)	0.011	0.016	0.011	0.012	0.014	0.014	0.064	0.034	0.029	0.019	0.019	0.015	0.011	0.009	0.013	0.052

Table A50. Atmospheric concentrations of PCDD/Fs ( $\mu\text{g m}^{-3}$ ) at NAPS urban sites in 2001 (continued)

Station Name	Windsor (College)								Hamilton (Elgin)													
	1	2	3	4	5	6	7	8	1	2	3	4	5	6	7	8	9	10	11	12	13	14
Sampling Period	1/13/01	2/24/01	3/20/01	4/13/01	5/7/01	5/31/01	6/24/01	7/18/01	1/7/01	1/31/01	2/24/01	3/20/01	4/13/01	5/7/01	5/31/01	6/24/01	8/11/01	7/18/01	9/4/01	10/22/01	11/15/01	12/9/01
Sampling Volume (m3)	696	822	851	827	797	815	794	781	557	548	576	554	588	576	597	563	569	563	538	521	517	529
<b>PCDD/F Congeners</b>																						
2,3,7,8-TCDD	0.006	<0.005	<0.003	<0.005	<0.003	<0.002	<0.005	<0.003	0.005	<0.005	<0.007	<0.004	<0.01	<0.003	<0.004	<0.004	<0.004	0.002	0.001	0.004	0.002	0.004
1,2,3,7,8-PeCDD	0.017	0.010	0.007	0.009	0.008	0.016	0.021	0.010	0.019	0.010	0.026	0.045	0.010	0.014	0.007	0.026	0.017	0.010	<0.002	0.017	0.009	0.025
1,2,3,4,7,8-HxCDD	0.016	0.012	0.005	0.005	0.010	0.018	0.029	<0.003	0.024	<0.005	<0.028	0.050	<0.007	<0.007	0.009	0.031	0.010	0.005	<0.004	0.013	0.013	0.029
1,2,3,6,7,8-HxCDD	0.029	0.013	0.013	0.011	0.013	0.026	0.049	<0.003	0.036	0.011	0.042	0.073	<0.007	<0.007	0.013	0.060	0.020	0.010	<0.004	0.029	0.016	0.049
1,2,3,7,8,9-HxCDD	0.041	0.016	0.015	0.010	0.012	0.038	0.100	0.006	0.046	0.020	0.101	0.117	0.012	<0.007	0.015	0.089	0.019	0.007	0.004	0.045	0.026	0.092
1,2,3,4,6,7,8-HpCDD	0.243	0.148	0.118	0.134	0.099	0.236	0.886	0.050	0.345	0.101	0.352	0.734	0.084	0.112	0.109	0.936	0.285	0.076	0.060	0.301	0.219	0.488
OCDD	0.685	0.499	0.326	0.533	0.359	0.600	3.450	0.150	0.788	0.274	0.661	1.181	0.207	0.678	0.279	2.315	0.760	0.295	0.264	0.825	0.624	0.989
2,3,7,8-TCDF	0.083	0.019	0.028	0.020	0.030	0.014	0.063	0.022	0.052	0.021	0.058	0.088	0.021	0.061	0.024	0.034	0.118	0.103	0.045	0.140	0.038	0.031
1,2,3,7,8-PeCDF	0.015	<0.002	0.008	0.005	0.009	0.005	0.008	0.006	0.011	0.004	0.011	0.021	<0.005	0.009	0.005	0.007	0.013	0.020	0.054	0.026	0.008	0.006
2,3,4,7,8-PeCDF	0.027	<0.002	0.011	0.006	0.013	0.006	0.014	0.005	0.019	0.007	0.022	0.034	<0.005	0.018	0.005	0.009	0.020	0.029	0.011	0.049	0.012	0.013
1,2,3,4,7,8-HxCDF	0.082	0.016	0.018	0.015	0.027	0.018	0.043	0.015	0.054	0.012	0.043	0.092	0.009	0.032	0.016	0.021	0.036	0.046	0.010	0.083	0.025	0.030
1,2,3,6,7,8-HxCDF	0.027	0.009	0.011	0.005	0.013	0.008	0.014	0.007	0.018	0.007	0.010	0.038	<0.007	0.016	0.005	0.009	0.015	0.020	0.009	0.038	0.011	0.015
2,3,4,6,7,8-HxCDF	0.041	0.010	0.013	0.008	0.013	0.007	0.019	0.010	0.024	0.009	<0.007	0.040	<0.007	0.012	0.010	0.011	0.017	0.015	0.025	0.029	0.008	0.015
1,2,3,7,8,9-HxCDF	0.004	<0.005	<0.005	<0.005	<0.004	<0.002	<0.005	<0.003	0.004	<0.004	<0.007	<0.007	<0.007	<0.007	<0.005	<0.007	<0.007	<0.001	0.001	<0.003	<0.002	<0.003
1,2,3,4,6,7,8-HpCDF	0.168	0.050	0.034	0.034	0.054	0.088	0.115	0.039	0.092	0.031	0.056	0.155	0.021	0.685	0.077	0.066	0.063	0.060	0.266	0.121	0.060	0.067
1,2,3,4,7,8,9-HpCDF	0.017	<0.005	<0.008	<0.01	<0.005	0.012	0.016	<0.005	0.009	<0.009	0.006	0.029	<0.01	<0.007	<0.013	0.011	0.012	0.009	<0.003	0.019	0.007	0.008
OCDF	0.130	0.070	0.039	0.037	0.044	0.314	0.138	0.036	0.084	0.019	0.049	0.159	0.023	1.344	0.080	0.062	0.067	0.038	0.448	0.086	0.058	0.046
<b>PCDD/F Homologues</b>																						
TCDDs	0.200	<0.005	0.016	0.020	0.049	<0.002	0.218	0.031	0.062	0.013	0.094	0.188	<0.01	0.087	0.033	0.072	0.122	0.095	0.036	0.158	0.062	0.088
PeCDDs	0.235	0.010	0.032	0.027	0.063	0.093	0.159	0.046	0.148	0.053	0.314	0.528	0.024	0.051	0.068	0.187	0.101	0.106	0.040	0.243	0.093	0.317
HxCDDs	0.406	0.122	0.108	0.059	0.110	0.417	0.597	0.082	0.416	0.104	1.151	1.092	0.057	0.081	0.141	0.834	0.196	0.147	0.105	0.449	0.261	0.896
HpCDDs	0.536	0.299	0.242	0.270	0.228	0.623	1.914	0.099	0.687	0.222	0.816	1.679	0.173	0.244	0.272	2.281	0.527	0.166	0.112	0.615	0.456	1.181
OCDD	0.685	0.499	0.326	0.533	0.359	0.600	3.450	0.150	0.788	0.274	0.661	1.181	0.207	0.678	0.279	2.315	0.760	0.295	0.264	0.825	0.624	0.989
TCDFs	0.538	0.058	0.150	0.117	0.196	0.086	0.435	0.157	0.259	0.098	0.329	0.466	0.080	0.364	0.125	0.205	0.906	0.688	0.403	0.819	0.311	0.208
PeCDFs	0.342	0.040	0.097	0.050	0.163	0.082	0.239	0.176	0.193	0.044	0.183	0.326	0.027	0.169	0.080	0.167	0.306	0.380	0.255	0.484	0.181	0.144
HxCDFs	0.337	0.068	0.099	0.075	0.164	0.086	0.232	0.158	0.192	0.065	0.156	0.315	0.026	0.151	0.062	0.137	0.170	0.218	0.168	0.365	0.121	0.168
HpCDFs	0.276	0.050	0.034	0.067	0.090	0.149	0.197	0.039	0.141	0.046	0.085	0.284	0.031	1.090	0.115	0.138	0.106	0.101	0.383	0.199	0.105	0.124
OCDF	0.130	0.070	0.039	0.037	0.044	0.314	0.138	0.036	0.084	0.019	0.049	0.159	0.023	1.344	0.080	0.062	0.067	0.038	0.448	0.086	0.058	0.046
<b>Total</b>																						
∑ PCDDs	2.062	0.930	0.724	0.909	0.809	1.733	6.338	0.408	2.101	0.666	3.036	4.668	0.461	1.141	0.793	5.689	1.706	0.810	0.557	2.290	1.496	3.471
∑ PCDFs	1.623	0.286	0.419	0.346	0.657	0.717	1.241	0.566	0.869	0.272	0.802	1.550	0.187	3.118	0.462	0.709	1.555	1.424	1.657	1.953	0.776	0.690
∑ PCDD/Fs	3.685	1.216	1.143	1.255	1.466	2.450	7.579	0.974	2.970	0.938	3.838	6.218	0.648	4.259	1.255	6.398	3.261	2.235	2.214	4.243	2.272	4.161
∑ TEQ (PCDD/Fs)	0.068	0.028	0.026	0.026	0.029	0.037	0.074	0.023	0.061	0.028	0.074	0.120	0.031	0.046	0.024	0.070	0.055	0.043	0.021	0.079	0.032	0.066

Table A50. Atmospheric concentrations of PCDD/Fs (pg m<sup>-3</sup>) at NAPS urban sites in 2001 (continued)

Station Name	Toronto (Gage Inst.)													Jonquiere														
	1	2	3	4	5	6	7	8	9	10	11	12	13	1	2	3	4	5	6	7	8	9	10	11	12	13	14	
Sampling Period	1/13/01	2/6/01	3/2/01	3/26/01	4/19/01	5/13/01	6/6/01	6/30/01	8/17/01	10/4/01	10/28/01	11/21/01	9/10/01	1/1/01	1/25/01	2/6/01	3/2/01	3/14/01	3/26/01	4/7/01	5/1/01	5/25/01	6/18/01	8/5/01	9/22/01	12/3/01	12/27/01	
Sampling Volume (m3)	869	828	927	867	917	914	839	780	792	889	908	994	849	1064	1069	1049	1105	1114	1077	1098	1097	1056	1079	1024	1011	1107	1194	
<b>PCDD/F Congeners</b>																												
2,3,7,8-TCDD	<0.002	<0.005	<0.004	<0.003	<0.003	<0.003	<0.002	<0.003	0.001	0.001	0.002	0.002	<0.001	<0.002	0.002	<0.002	<0.002	<0.002	<0.004	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	0.002	0.001
1,2,3,7,8-PeCDD	0.012	0.012	0.009	0.004	0.006	0.007	<0.002	0.009	0.005	0.005	0.011	0.007	0.005	<0.004	0.011	0.006	0.013	0.003	<0.003	0.008	0.009	0.013	0.004	0.006	0.008	0.011	0.008	
1,2,3,4,7,8-HxCDD	0.012	0.012	<0.003	<0.006	0.007	<0.007	<0.006	0.003	0.003	0.003	0.010	0.005	0.001	<0.006	0.012	0.004	0.018	<0.004	<0.005	0.007	0.011	0.005	0.003	0.012	0.004	0.010	0.006	
1,2,3,6,7,8-HxCDD	0.014	0.023	0.008	<0.006	0.013	<0.007	<0.006	0.005	0.004	0.004	0.016	0.009	0.003	<0.006	0.014	0.006	0.021	0.004	<0.005	0.014	0.008	0.013	0.005	0.014	0.007	0.021	0.009	
1,2,3,7,8,9-HxCDD	0.032	0.034	<0.003	<0.006	0.017	<0.007	<0.006	0.008	0.003	0.007	0.028	0.013	0.003	0.005	0.023	0.012	0.041	0.004	<0.005	0.016	0.016	0.019	0.004	0.022	0.005	0.023	0.017	
1,2,3,4,6,7,8-HpCDD	0.150	0.262	0.067	0.041	0.102	0.052	0.048	0.075	0.041	0.043	0.181	0.079	0.030	0.027	0.092	0.075	0.164	0.043	0.026	0.100	0.091	0.104	0.053	0.240	0.039	0.159	0.096	
OCDD	0.434	0.456	0.163	0.162	0.580	0.160	0.167	0.240	0.182	0.164	0.354	0.219	0.209	0.124	0.167	0.239	0.280	0.187	0.099	0.302	0.266	0.323	0.222	0.821	0.163	0.375	0.238	
2,3,7,8-TCDF	0.046	0.035	0.024	0.014	0.049	0.012	0.030	0.024	0.024	0.026	0.043	0.033	0.014	0.004	0.071	0.021	0.076	0.011	0.003	0.158	0.065	0.093	0.011	0.028	0.060	0.087	0.034	
1,2,3,7,8-PeCDF	0.013	0.005	0.004	<0.004	0.008	0.003	0.007	<0.003	0.004	0.005	0.006	0.005	0.002	<0.002	0.015	0.004	0.014	0.003	<0.002	0.015	0.007	0.009	0.002	0.007	0.007	0.014	0.006	
2,3,4,7,8-PeCDF	0.021	0.016	0.006	<0.004	0.012	0.004	0.009	0.005	0.004	0.006	0.015	0.009	0.005	<0.002	0.027	0.007	0.025	0.002	<0.002	0.034	0.015	0.027	0.003	0.005	0.012	0.026	0.010	
1,2,3,4,7,8-HxCDF	0.039	0.025	0.016	<0.006	0.030	0.009	0.013	0.013	0.009	0.011	0.022	0.014	0.006	0.002	0.068	0.027	0.064	0.006	<0.002	0.061	0.037	0.039	0.007	0.014	0.023	0.056	0.018	
1,2,3,6,7,8-HxCDF	0.020	0.012	0.005	<0.006	0.014	<0.004	0.007	0.007	0.004	0.005	0.010	0.006	0.003	<0.002	0.027	0.009	0.023	<0.004	<0.002	0.016	0.013	0.016	0.003	0.010	0.010	0.021	0.007	
2,3,4,6,7,8-HxCDF	0.024	0.015	0.006	<0.006	0.023	<0.004	0.010	0.007	0.003	0.005	0.012	0.009	0.003	0.003	0.034	0.012	0.037	<0.004	<0.002	0.025	0.020	0.017	0.003	0.012	0.008	0.020	0.010	
1,2,3,7,8,9-HxCDF	<0.005	<0.007	<0.004	<0.006	<0.003	<0.004	<0.006	<0.003	<0.001	<0.002	<0.001	0.002	<0.001	<0.002	0.004	<0.003	<0.005	<0.004	<0.002	<0.004	<0.006	<0.006	<0.003	<0.004	<0.002	0.002	0.001	
1,2,3,4,6,7,8-HpCDF	0.075	0.049	0.026	0.020	0.047	0.017	0.035	0.041	0.020	0.019	0.029	0.023	0.016	0.011	0.101	0.056	0.118	0.018	0.008	0.115	0.061	0.077	0.029	0.041	0.041	0.088	0.033	
1,2,3,4,7,8,9-HpCDF	0.010	<0.015	<0.006	<0.008	0.010	<0.007	0.014	<0.004	<0.002	0.002	0.004	0.002	<0.001	<0.004	0.012	0.008	0.020	<0.004	<0.004	0.012	<0.007	<0.004	<0.004	0.011	<0.002	0.014	0.006	
OCDF	0.048	0.058	0.012	0.030	0.036	<0.014	0.061	0.023	0.012	0.016	0.027	0.023	0.013	0.018	0.117	0.050	0.191	0.030	0.017	0.215	0.065	0.097	0.056	0.108	0.055	0.099	0.099	
<b>PCDD/F Homologues</b>																												
TCDDs	0.041	0.007	0.008	0.008	0.015	<0.003	0.013	0.014	0.021	0.026	0.061	0.052	0.012	<0.002	0.030	0.008	0.075	0.014	<0.004	0.061	0.054	0.064	0.004	0.013	0.038	0.069	0.041	
PeCDDs	0.111	0.051	0.025	0.006	0.038	0.007	0.018	0.021	0.022	0.028	0.134	0.068	0.016	<0.004	0.091	0.027	0.144	0.020	<0.003	0.094	0.090	0.050	0.008	0.018	0.052	0.125	0.054	
HxCDDs	0.240	0.227	0.062	<0.006	0.117	0.046	<0.006	0.040	0.050	0.059	0.261	0.117	0.032	0.016	0.179	0.077	0.323	0.035	0.008	0.103	0.155	0.091	0.020	0.143	0.082	0.253	0.125	
HpCDDs	0.383	0.486	0.133	0.079	0.231	0.113	0.087	0.150	0.083	0.091	0.341	0.155	0.059	0.050	0.183	0.142	0.382	0.081	0.043	0.181	0.197	0.185	0.102	0.513	0.080	0.287	0.172	
OCDD	0.434	0.456	0.163	0.162	0.580	0.160	0.167	0.240	0.182	0.164	0.354	0.219	0.209	0.124	0.167	0.239	0.280	0.187	0.099	0.302	0.266	0.323	0.222	0.821	0.163	0.375	0.238	
TCDFs	0.236	0.133	0.101	0.033	0.179	0.040	0.188	0.182	0.173	0.176	0.269	0.227	0.120	0.004	0.245	0.072	0.403	0.052	<0.002	0.618	0.339	0.405	0.051	0.119	0.337	0.396	0.194	
PeCDFs	0.208	0.083	0.054	0.014	0.112	0.031	0.091	0.107	0.080	0.083	0.148	0.105	0.057	0.002	0.225	0.069	0.283	0.022	<0.002	0.370	0.225	0.276	0.041	0.089	0.166	0.271	0.111	
HxCDFs	0.182	0.101	0.054	0.007	0.110	0.009	0.059	0.094	0.055	0.055	0.103	0.064	0.046	0.006	0.213	0.098	0.271	0.019	0.003	0.204	0.133	0.177	0.035	0.073	0.105	0.208	0.071	
HpCDFs	0.123	0.070	0.038	0.020	0.084	0.017	0.066	0.041	0.032	0.034	0.051	0.040	0.025	0.017	0.170	0.097	0.217	0.030	0.008	0.185	0.098	0.113	0.042	0.077	0.054	0.140	0.057	
OCDF	0.048	0.058	0.012	0.030	0.036	<0.014	0.061	0.023	0.012	0.016	0.027	0.023	0.013	0.018	0.117	0.050	0.191	0.030	0.017	0.215	0.065	0.097	0.056	0.108	0.055	0.099	0.099	
<b>Total</b>																												
∑ PCDDs	1.209	1.227	0.391	0.255	0.981	0.326	0.285	0.465	0.357	0.368	1.150	0.611	0.328	0.190	0.650	0.493	1.204	0.337	0.150	0.741	0.762	0.713	0.356	1.508	0.414	1.109	0.630	
∑ PCDFs	0.797	0.445	0.259	0.104	0.521	0.097	0.465	0.447	0.351	0.364	0.599	0.458	0.260	0.047	0.970	0.386	1.365	0.153	0.028	1.592	0.860	1.068	0.225	0.466	0.717	1.114	0.533	
∑ PCDD/Fs	2.006	1.672	0.650	0.359	1.502	0.423	0.750	0.912	0.709	0.732	1.749	1.069	0.588	0.237	1.620	0.879	2.569	0.490	0.178	2.333	1.622	1.781	0.581	1.974	1.130	2.222	1.162	
∑ TEQ (PCDD/Fs)	0.042	0.042	0.023	0.015	0.030	0.018	0.016	0.022	0.013	0.014	0.034	0.022	0.011	0.010	0.049	0.021	0.055	0.011	0.011	0.053	0.035	0.046	0.012	0.025	0.026	0.048	0.024	



Table A51. Atmospheric concentrations of PCDD/Fs ( $\mu\text{g m}^{-3}$ ) at NAPS urban sites in 2002

Station Name	Hamilton (Confederation Park)																							
Sampling Period	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
Sampling Date	1/8/02	1/20/02	2/1/02	2/25/02	3/21/02	4/2/02	4/14/02	4/26/02	5/8/02	5/20/02	6/1/02	6/13/02	6/25/02	7/7/02	7/19/02	7/31/02	8/24/02	9/5/02	9/17/02	9/29/02	10/23/02	11/4/02	11/16/02	11/28/02
Sampling Volume (m3)	1009	981	963	1025	981	975	976	1060	880	1115	994	916	977	1	769	934	929	735	690	1033	795	794	752	920
<b>PCDD/F Congeners</b>																								
2,3,7,8-TCDD	0.004	0.017	0.017	0.005	0.002	0.003	0.002	0.002	0.002	0.002	0.021	0.001	0.004	<0.001	0.001	0.003	0.001	0.002	0.005	0.002	<0.001	0.014	0.001	0.003
1,2,3,7,8-PeCDD	0.017	0.035	0.050	0.018	0.007	0.009	0.006	0.006	0.006	0.006	0.062	0.007	0.010	0.002	0.006	0.010	0.004	0.005	0.014	0.017	0.004	0.059	0.012	0.014
1,2,3,4,7,8-HxCDD	0.014	0.024	0.036	0.012	0.004	0.009	0.003	0.005	0.005	0.006	0.042	0.003	0.006	<0.001	0.001	0.005	0.002	0.003	0.008	0.022	0.002	0.041	0.012	0.012
1,2,3,6,7,8-HxCDD	0.025	0.041	0.078	0.022	0.008	0.011	0.005	0.008	0.005	0.009	0.080	0.005	0.012	<0.001	0.004	0.008	0.003	0.004	0.015	0.042	0.003	0.088	0.019	0.021
1,2,3,7,8,9-HxCDD	0.050	0.089	0.046	0.023	0.012	0.027	0.012	0.011	0.004	0.015	0.110	0.004	0.007	<0.001	0.004	0.007	0.004	0.005	0.027	0.053	0.002	0.059	0.023	0.018
1,2,3,4,6,7,8-HpCDD	0.254	0.255	0.212	0.173	0.073	0.157	0.057	0.087	0.026	0.089	0.256	0.023	0.051	0.004	0.020	0.056	0.029	0.034	0.121	0.573	0.033	0.369	0.106	0.142
OCDD	0.626	0.584	0.318	0.618	0.215	0.426	0.177	0.306	0.060	0.224	0.382	0.064	0.217	0.014	0.078	0.204	0.098	0.115	0.447	1.554	0.106	0.723	0.177	0.417
2,3,7,8-TCDF	0.093	0.441	0.681	0.210	0.059	0.058	0.046	0.046	0.059	0.060	0.869	0.057	0.137	0.001	0.051	0.110	0.035	0.033	0.160	0.076	0.021	0.686	0.037	0.161
1,2,3,7,8-PeCDF	0.012	0.057	0.083	0.032	0.009	0.010	0.006	0.007	0.008	0.010	0.113	0.009	0.021	<0.001	0.009	0.017	0.005	0.006	0.022	0.017	0.004	0.079	0.006	0.017
2,3,4,7,8-PeCDF	0.020	0.104	0.195	0.050	0.014	0.015	0.009	0.011	0.016	0.015	0.242	0.017	0.034	<0.001	0.014	0.028	0.007	0.009	0.040	0.030	0.007	0.195	0.014	0.039
1,2,3,4,7,8-HxCDF	0.038	0.168	0.315	0.076	0.025	0.024	0.015	0.021	0.024	0.027	0.338	0.026	0.048	<0.001	0.023	0.048	0.014	0.019	0.071	0.067	0.013	0.261	0.032	0.057
1,2,3,6,7,8-HxCDF	0.017	0.072	0.124	0.035	0.010	0.010	0.006	0.008	0.010	0.011	0.139	0.011	0.021	<0.001	0.010	0.021	0.006	0.007	0.030	0.032	0.005	0.113	0.015	0.024
2,3,4,6,7,8-HxCDF	0.018	0.079	0.177	0.035	0.012	0.011	0.008	0.010	0.011	0.012	0.188	0.012	0.020	<0.001	0.010	0.029	0.008	0.008	0.041	0.028	0.006	0.127	0.016	0.024
1,2,3,7,8,9-HxCDF	0.002	<0.001	0.006	0.004	<0.001	<0.001	0.001	0.001	<0.001	<0.001	0.007	<0.001	0.003	<0.001	0.001	0.002	0.001	<0.001	0.003	0.004	0.001	0.010	0.001	0.002
1,2,3,4,6,7,8-HpCDF	0.051	0.139	0.274	0.095	0.029	0.031	0.020	0.022	0.020	0.024	0.297	0.022	0.042	0.002	0.023	0.055	0.019	0.021	0.084	0.117	0.016	0.239	0.058	0.065
1,2,3,4,7,8,9-HpCDF	0.011	0.018	0.031	0.015	0.004	0.003	0.002	0.003	0.002	0.004	0.036	0.002	0.007	<0.001	0.002	0.014	0.002	0.003	0.011	0.019	0.003	0.035	0.007	0.010
OCDF	0.048	0.052	0.063	0.072	0.023	0.019	0.014	0.017	0.005	0.013	0.075	0.011	0.039	<0.002	0.011	0.034	0.012	0.014	0.047	0.082	0.011	0.072	0.018	0.033
<b>PCDD/F Homologues</b>																								
TCDDs	0.230	0.961	1.391	0.404	0.106	0.119	0.092	0.085	0.111	0.105	1.718	0.095	0.259	<0.001	0.096	0.209	0.050	0.050	0.358	0.132	0.027	1.260	0.076	0.317
PeCDDs	0.274	0.920	1.528	0.401	0.128	0.130	0.091	0.107	0.138	0.120	1.823	0.120	0.267	0.002	0.118	0.190	0.055	0.067	0.343	0.236	0.034	1.460	0.134	0.335
HxCDDs	0.523	0.862	1.167	0.349	0.132	0.218	0.097	0.160	0.119	0.160	1.300	0.078	0.202	0.001	0.088	0.131	0.059	0.081	0.331	0.651	0.049	1.369	0.260	0.343
HpCDDs	0.623	0.523	0.435	0.370	0.154	0.321	0.117	0.227	0.054	0.184	0.501	0.044	0.102	0.005	0.041	0.107	0.055	0.077	0.236	1.172	0.062	0.731	0.190	0.297
OCDD	0.626	0.584	0.318	0.618	0.215	0.426	0.177	0.306	0.060	0.224	0.382	0.064	0.217	0.014	0.078	0.204	0.098	0.115	0.447	1.554	0.106	0.723	0.177	0.417
TCDFs	0.662	2.995	3.914	1.345	0.392	0.394	0.312	0.299	0.362	0.420	5.123	0.310	0.877	0.001	0.322	0.776	0.223	0.231	1.039	0.502	0.128	4.170	0.212	1.003
PeCDFs	0.289	1.570	2.392	0.716	0.211	0.216	0.142	0.158	0.216	0.223	2.964	0.219	0.474	<0.001	0.224	0.431	0.120	0.132	0.590	0.380	0.077	2.340	0.152	0.504
HxCDFs	0.190	0.876	1.502	0.369	0.117	0.115	0.079	0.101	0.122	0.132	1.665	0.121	0.276	<0.001	0.119	0.281	0.071	0.089	0.360	0.329	0.053	1.289	0.142	0.276
HpCDFs	0.090	0.214	0.436	0.160	0.049	0.050	0.033	0.039	0.031	0.042	0.479	0.033	0.073	0.002	0.034	0.104	0.030	0.034	0.143	0.207	0.027	0.407	0.087	0.110
OCDF	0.048	0.052	0.063	0.072	0.023	0.019	0.014	0.017	0.005	0.013	0.075	0.011	0.039	<0.002	0.011	0.034	0.012	0.014	0.047	0.082	0.011	0.072	0.018	0.033
<b>Total</b>																								
∑ PCDDs	2.275	3.850	4.838	2.142	0.734	1.214	0.572	0.884	0.483	0.792	5.724	0.401	1.046	0.023	0.421	0.841	0.317	0.390	1.714	3.745	0.278	5.543	0.837	1.708
∑ PCDFs	1.279	5.707	8.308	2.662	0.793	0.794	0.581	0.614	0.736	0.829	10.307	0.694	1.739	0.003	0.710	1.626	0.456	0.501	2.178	1.499	0.296	8.277	0.610	1.926
∑ PCDD/Fs	3.554	9.557	13.146	4.804	1.526	2.008	1.153	1.497	1.218	1.620	16.030	1.095	2.785	0.026	1.130	2.467	0.772	0.890	3.892	5.243	0.574	13.820	1.447	3.634
∑ TEQ (PCDD/Fs)	0.057	0.181	0.279	0.084	0.028	0.033	0.021	0.023	0.025	0.027	0.342	0.026	0.051	0.003	0.023	0.045	0.015	0.018	0.069	0.069	0.013	0.278	0.035	0.064

Table A51. Atmospheric concentrations of PCDD/Fs ( $\mu\text{g m}^{-3}$ ) at NAPS urban sites in 2002 (continued)

Station Name	Hamilton (Hillyard St.)					Toronto (Judson)															
Sampling Period	1	2	3	4	5	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Sampling Date	1/8/02	1/20/02	2/1/02	2/25/02	3/21/02	1/2/02	1/26/02	2/19/02	3/15/02	4/8/02	5/2/02	5/26/02	6/19/02	7/13/02	8/6/02	8/30/02	9/23/02	10/17/02	11/10/02	12/4/02	12/28/02
Sampling Volume (m <sup>3</sup> )	931	822	847	912	909	958	852	899	900	908	870	773	779	743	578	573	634	752	678	826	689
<b>PCDD/F Congeners</b>																					
2,3,7,8-TCDD	0.001	0.002	0.002	0.004	0.001	0.002	0.001	0.004	<0.001	0.003	0.001	0.002	0.001	0.002	0.001	0.002	0.001	0.001	0.002	0.001	0.003
1,2,3,7,8-PeCDD	0.007	0.010	0.006	0.019	0.004	0.005	0.008	0.015	0.005	0.012	0.003	0.007	0.007	0.009	0.008	0.011	0.008	0.006	0.008	0.008	0.014
1,2,3,4,7,8-HxCDD	0.007	0.012	0.005	0.020	0.003	0.004	0.010	0.014	0.004	0.018	0.003	0.005	0.005	0.006	0.005	0.006	0.004	0.002	0.005	0.008	0.015
1,2,3,6,7,8-HxCDD	0.012	0.021	0.009	0.035	0.006	0.006	0.014	0.023	0.006	0.027	0.004	0.005	0.008	0.012	0.009	0.009	0.008	0.003	0.008	0.014	0.024
1,2,3,7,8,9-HxCDD	0.012	0.018	0.011	0.062	0.008	0.009	0.035	0.021	0.007	0.051	0.004	0.008	0.010	0.013	0.016	0.011	0.007	0.002	0.009	0.015	0.026
1,2,3,4,6,7,8-HpCDD	0.172	0.293	0.114	0.458	0.096	0.061	0.211	0.235	0.094	0.456	0.047	0.061	0.082	0.110	0.063	0.092	0.068	0.023	0.108	0.152	0.260
OCDD	0.746	0.883	0.539	1.842	0.615	0.165	0.721	0.656	0.379	1.289	0.178	0.212	0.292	0.438	0.229	0.373	0.255	0.090	0.467	0.527	0.800
2,3,7,8-TCDF	0.019	0.021	0.030	0.067	0.010	0.025	0.023	0.075	0.021	0.027	0.015	0.043	0.017	0.030	0.024	0.060	0.017	0.024	0.030	0.026	0.053
1,2,3,7,8-PeCDF	0.005	0.005	0.006	0.011	0.002	0.004	0.004	0.014	0.004	0.006	0.002	0.007	0.004	0.005	0.005	0.011	0.004	0.004	0.004	0.006	0.011
2,3,4,7,8-PeCDF	0.006	0.008	0.008	0.017	0.003	0.006	0.007	0.026	0.005	0.010	0.004	0.013	0.006	0.007	0.008	0.017	0.007	0.008	0.007	0.012	0.018
1,2,3,4,7,8-HxCDF	0.017	0.022	0.016	0.034	0.007	0.012	0.018	0.051	0.011	0.023	0.007	0.023	0.017	0.021	0.020	0.042	0.013	0.014	0.012	0.027	0.039
1,2,3,6,7,8-HxCDF	0.006	0.008	0.006	0.014	0.002	0.006	0.009	0.020	0.004	0.009	0.003	0.008	0.007	0.008	0.010	0.016	0.007	0.005	0.006	0.012	0.017
2,3,4,6,7,8-HxCDF	0.008	0.011	0.008	0.017	0.003	0.006	0.011	0.027	0.006	0.012	0.003	0.011	0.011	0.015	0.010	0.020	0.005	0.006	0.005	0.011	0.016
1,2,3,7,8,9-HxCDF	0.001	0.001	<0.001	0.001	<0.001	0.002	<0.001	0.002	0.001	<0.001	<0.001	0.001	0.001	<0.001	0.001	0.001	0.001	<0.001	<0.001	<0.001	0.001
1,2,3,4,6,7,8-HpCDF	0.035	0.039	0.022	0.070	0.015	0.015	0.035	0.060	0.022	0.041	0.014	0.025	0.046	0.053	<0.008	0.067	0.027	0.019	0.026	0.053	0.062
1,2,3,4,7,8,9-HpCDF	0.003	0.004	0.003	0.010	0.001	<0.002	0.006	0.007	0.002	0.006	<0.002	<0.003	0.005	0.002	<0.008	0.005	0.001	0.003	0.003	0.009	0.008
OCDF	0.047	0.044	0.023	0.063	0.016	0.014	0.037	0.038	0.020	0.030	0.007	0.016	0.033	0.037	0.049	0.044	0.020	0.014	0.021	0.058	0.036
<b>PCDD/F Homologues</b>																					
TCDDs	0.046	0.056	0.035	0.101	0.012	0.029	0.051	0.114	0.034	0.064	0.021	0.057	0.028	0.078	0.050	0.056	0.023	0.024	0.051	0.041	0.064
PeCDDs	0.079	0.118	0.048	0.187	0.026	0.045	0.086	0.228	0.049	0.148	0.025	0.095	0.053	0.085	0.074	0.097	0.052	0.042	0.066	0.089	0.136
HxCDDs	0.198	0.353	0.102	0.548	0.074	0.104	0.273	0.391	0.108	0.583	0.063	0.132	0.116	0.148	0.132	0.161	0.101	0.045	0.126	0.223	0.355
HpCDDs	0.352	0.631	0.204	0.905	0.180	0.123	0.454	0.491	0.196	1.117	0.087	0.127	0.162	0.234	0.120	0.188	0.145	0.042	0.233	0.319	0.539
OCDD	0.746	0.883	0.539	1.842	0.615	0.165	0.721	0.656	0.379	1.289	0.178	0.212	0.292	0.438	0.229	0.373	0.255	0.090	0.467	0.527	0.800
TCDFs	0.125	0.149	0.222	0.491	0.070	0.169	0.172	0.389	0.152	0.210	0.120	0.302	0.133	0.213	0.132	0.344	0.118	0.135	0.219	0.151	0.321
PeCDFs	0.084	0.109	0.117	0.202	0.034	0.065	0.089	0.324	0.081	0.135	0.056	0.168	0.080	0.115	0.100	0.269	0.066	0.075	0.080	0.108	0.183
HxCDFs	0.079	0.110	0.080	0.174	0.035	0.054	0.091	0.255	0.054	0.135	0.036	0.117	0.116	0.149	0.122	0.224	0.074	0.057	0.067	0.121	0.173
HpCDFs	0.064	0.072	0.045	0.120	0.031	0.027	0.064	0.103	0.038	0.075	0.022	0.040	0.080	0.083	0.024	0.105	0.045	0.032	0.044	0.089	0.101
OCDF	0.047	0.044	0.023	0.063	0.016	0.014	0.037	0.038	0.020	0.030	0.007	0.016	0.033	0.037	0.049	0.044	0.020	0.014	0.021	0.058	0.036
<b>Total</b>																					
∑ PCDDs	1.420	2.041	0.929	3.582	0.907	0.466	1.585	1.879	0.766	3.200	0.375	0.623	0.650	0.982	0.604	0.875	0.576	0.243	0.942	1.199	1.894
∑ PCDFs	0.397	0.484	0.488	1.049	0.186	0.329	0.453	1.108	0.345	0.586	0.241	0.642	0.442	0.597	0.427	0.985	0.323	0.312	0.430	0.527	0.813
∑ PCDD/Fs	1.818	2.525	1.417	4.631	1.093	0.795	2.038	2.987	1.111	3.786	0.615	1.265	1.092	1.579	1.031	1.860	0.899	0.555	1.373	1.725	2.707
∑ TEQ (PCDD/Fs)	0.020	0.029	0.020	0.059	0.011	0.017	0.026	0.053	0.014	0.040	0.011	0.024	0.019	0.026	0.022	0.036	0.018	0.015	0.021	0.027	0.044

Table A51. Atmospheric concentrations of PCDD/Fs ( $\mu\text{g m}^{-3}$ ) at NAPS urban sites in 2002 (continued)

Station Name	Toronto (Junction Triangle)														St. John's				
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	1	2	3	4	5
Sampling Period	1/26/02	3/15/02	4/8/02	5/2/02	5/26/02	6/19/02	7/13/02	8/6/02	8/30/02	9/23/02	10/17/02	11/10/02	12/4/02	12/28/02	4/2/02	4/26/02	6/13/02	7/31/02	9/17/02
Sampling Volume (m3)	778	830	794	792	759	810	783	628	593	697	604	697	695	728	822	868	796	790	756
<b>PCDD/F Congeners</b>																			
2,3,7,8-TCDD	0.004	0.001	0.004	0.001	0.001	0.003	0.004	0.001	0.002	0.002	0.001	0.001	0.003	0.002	<0.001	<0.001	0.001	0.003	0.001
1,2,3,7,8-PeCDD	0.011	0.005	0.014	0.005	0.006	0.008	0.014	0.006	0.011	0.009	0.007	0.010	0.014	0.016	0.003	0.004	0.004	0.011	0.004
1,2,3,4,7,8-HxCDD	0.015	0.005	0.017	0.002	0.004	0.005	0.010	0.003	0.007	0.006	0.004	0.006	0.015	0.017	<0.001	0.001	0.004	0.010	0.002
1,2,3,6,7,8-HxCDD	0.018	0.006	0.025	0.004	0.008	0.007	0.014	0.004	0.012	0.014	0.008	0.011	0.029	0.032	0.001	0.002	0.005	0.017	0.003
1,2,3,7,8,9-HxCDD	0.034	0.010	0.033	0.003	0.012	0.010	0.023	0.003	0.023	0.021	0.011	0.012	0.028	0.034	0.001	0.002	0.004	0.037	0.003
1,2,3,4,6,7,8-HpCDD	0.251	0.105	0.383	0.045	0.075	0.074	0.110	0.041	0.119	0.078	0.068	0.140	0.285	0.369	0.012	0.029	0.109	0.226	0.030
OCDD	0.723	0.491	1.089	0.142	0.200	0.310	0.333	0.197	0.401	0.210	0.158	0.546	0.811	1.001	0.042	0.072	0.462	0.458	0.086
2,3,7,8-TCDF	0.029	0.032	0.079	0.026	0.042	0.257	0.186	0.035	0.147	0.103	0.033	0.049	0.046	0.057	0.005	0.011	0.009	0.065	0.011
1,2,3,7,8-PeCDF	0.006	0.006	0.013	0.004	0.006	0.042	0.042	0.007	0.031	0.027	0.008	0.009	0.010	0.011	0.001	0.002	0.002	0.011	0.003
2,3,4,7,8-PeCDF	0.008	0.008	0.021	0.006	0.010	0.065	0.073	0.011	0.051	0.053	0.011	0.012	0.018	0.019	0.001	0.002	0.002	0.017	0.003
1,2,3,4,7,8-HxCDF	0.024	0.018	0.042	0.010	0.019	0.067	0.230	0.023	0.117	0.084	0.025	0.020	0.049	0.044	0.002	0.006	0.006	0.047	0.007
1,2,3,6,7,8-HxCDF	0.009	0.007	0.017	0.004	0.008	0.033	0.056	0.011	0.043	0.039	0.012	0.008	0.019	0.018	0.001	0.002	0.002	0.017	0.003
2,3,4,6,7,8-HxCDF	0.013	0.009	0.020	0.006	0.010	0.034	0.123	0.010	0.053	0.036	0.012	0.009	0.021	0.020	0.001	0.002	0.003	0.030	0.003
1,2,3,7,8,9-HxCDF	0.007	<0.001	<0.001	<0.001	0.001	0.004	0.003	<0.001	0.003	0.006	0.002	0.001	0.002	0.002	<0.001	<0.001	<0.001	<0.002	0.001
1,2,3,4,6,7,8-HpCDF	0.055	0.033	0.055	0.016	0.023	0.092	0.433	0.032	0.138	0.093	0.038	0.035	0.087	0.073	0.005	0.008	0.017	0.072	0.016
1,2,3,4,7,8,9-HpCDF	0.006	<0.003	0.005	0.002	0.002	0.016	0.024	0.006	0.014	0.021	0.015	0.005	0.019	0.009	<0.001	0.000	0.002	0.008	0.002
OCDF	0.047	0.024	0.045	0.011	0.012	0.045	0.096	0.024	0.057	0.045	0.031	0.028	0.088	0.047	0.003	0.005	0.015	0.021	0.012
<b>PCDD/F Homologues</b>																			
TCDDs	0.083	0.046	0.110	0.031	0.043	0.066	0.269	0.033	0.089	0.093	0.085	0.080	0.087	0.067	0.010	0.024	0.020	0.164	0.019
PeCDDs	0.115	0.055	0.165	0.040	0.068	0.067	0.328	0.046	0.139	0.161	0.119	0.098	0.175	0.158	0.011	0.030	0.020	0.157	0.025
HxCDDs	0.329	0.126	0.508	0.048	0.115	0.097	0.304	0.064	0.220	0.224	0.208	0.168	0.450	0.488	0.011	0.040	0.074	0.331	0.037
HpCDDs	0.543	0.218	0.923	0.086	0.151	0.148	0.240	0.081	0.244	0.155	0.139	0.300	0.620	0.763	0.022	0.053	0.234	0.446	0.053
OCDD	0.723	0.491	1.089	0.142	0.200	0.310	0.333	0.197	0.401	0.210	0.158	0.546	0.811	1.001	0.042	0.072	0.462	0.458	0.086
TCDFs	0.193	0.236	0.550	0.183	0.290	2.135	1.060	0.207	0.790	0.871	0.197	0.351	0.285	0.352	0.041	0.077	0.074	0.478	0.095
PeCDFs	0.112	0.126	0.286	0.069	0.126	0.755	0.610	0.119	0.647	0.523	0.116	0.136	0.178	0.198	0.014	0.034	0.048	0.279	0.040
HxCDFs	0.120	0.088	0.206	0.049	0.093	0.459	0.996	0.106	0.494	0.421	0.109	0.104	0.207	0.198	0.011	0.028	0.038	0.231	0.039
HpCDFs	0.098	0.048	0.095	0.027	0.038	0.171	0.575	0.055	0.208	0.163	0.070	0.059	0.153	0.121	0.007	0.014	0.034	0.107	0.025
OCDF	0.047	0.024	0.045	0.011	0.012	0.045	0.096	0.024	0.057	0.045	0.031	0.028	0.088	0.047	0.003	0.005	0.015	0.021	0.012
<b>Total</b>																			
∑ PCDDs	1.793	0.936	2.795	0.347	0.578	0.688	1.475	0.420	1.093	0.842	0.709	1.193	2.143	2.476	0.096	0.218	0.810	1.557	0.219
∑ PCDFs	0.570	0.521	1.181	0.339	0.559	3.565	3.337	0.510	2.196	2.022	0.523	0.677	0.910	0.914	0.076	0.159	0.208	1.116	0.210
∑ PCDD/Fs	2.364	1.457	3.976	0.686	1.136	4.252	4.812	0.930	3.289	2.865	1.233	1.870	3.053	3.390	0.172	0.377	1.018	2.673	0.429
∑ TEQ (PCDD/Fs)	0.036	0.019	0.053	0.014	0.022	0.075	0.111	0.020	0.073	0.060	0.024	0.028	0.048	0.051	0.005	0.008	0.010	0.045	0.009

Table A51. Atmospheric concentrations of PCDD/Fs ( $\mu\text{g m}^{-3}$ ) at NAPS urban sites in 2002 (continued)

Station Name	Montreal (1125)												Winnipeg						
Sampling Period	1	2	3	4	5	6	7	8	9	10	11	12	1	2	3	4	5	6	7
Sampling Date	1/20/02	2/1/02	2/25/02	3/9/02	3/21/02	4/2/02	4/26/02	5/20/02	6/13/02	7/31/02	8/24/02	9/17/02	1/20/02	3/9/02	4/26/02	5/20/02	6/13/02	7/31/02	8/24/02
Sampling Volume (m3)	710	699	705	695	719	693	670	687	685	639	577	612	876	981	845	899	860	870	769
<b>PCDD/F Congeners</b>																			
2,3,7,8-TCDD	0.004	0.002	0.008	0.003	0.001	0.002	0.001	0.001	0.001	0.002	0.001	0.001	0.002	0.001	<0.001	0.001	0.001	0.001	<0.001
1,2,3,7,8-PeCDD	0.019	0.010	0.025	0.010	0.005	0.009	0.006	0.007	0.007	0.008	0.008	0.007	0.010	0.006	0.005	0.008	0.004	0.005	0.006
1,2,3,4,7,8-HxCDD	0.021	0.012	0.024	0.006	0.004	0.008	0.003	0.007	0.005	0.004	0.004	0.004	0.010	0.006	0.004	0.008	0.004	0.002	0.004
1,2,3,6,7,8-HxCDD	0.038	0.018	0.040	0.014	0.007	0.013	0.005	0.011	0.007	0.006	0.009	0.006	0.014	0.008	0.005	0.013	0.005	0.003	0.008
1,2,3,7,8,9-HxCDD	0.068	0.031	0.072	0.013	0.011	0.029	0.008	0.014	0.007	0.008	0.004	0.007	0.028	0.022	0.008	0.016	0.010	0.003	0.008
1,2,3,4,6,7,8-HpCDD	0.466	0.254	0.534	0.245	0.131	0.168	0.070	0.166	0.090	0.055	0.111	0.075	0.191	0.122	0.078	0.185	0.060	0.028	0.194
OCDD	1.094	1.043	1.886	1.338	0.782	0.601	0.245	0.483	0.326	0.172	0.399	0.235	0.512	0.552	0.242	0.465	0.149	0.097	0.805
2,3,7,8-TCDF	0.050	0.038	0.109	0.059	0.022	0.016	0.019	0.018	0.030	0.022	0.021	0.015	0.019	0.010	0.011	0.010	0.037	0.007	0.009
1,2,3,7,8-PeCDF	0.013	0.008	0.016	0.018	0.005	0.005	0.004	0.004	0.006	0.004	0.004	0.003	0.004	0.003	0.002	0.002	0.015	0.001	0.002
2,3,4,7,8-PeCDF	0.019	0.014	0.026	0.022	0.006	0.006	0.006	0.005	0.008	0.005	0.006	0.005	0.006	0.003	0.003	0.003	0.024	0.002	0.003
1,2,3,4,7,8-HxCDF	0.045	0.039	0.054	0.042	0.016	0.008	0.012	0.010	0.018	0.011	0.013	0.011	0.012	0.006	0.007	0.007	0.069	0.005	0.008
1,2,3,6,7,8-HxCDF	0.017	0.013	0.021	0.022	0.006	0.003	0.005	0.005	0.008	0.006	0.006	0.006	0.005	0.002	0.003	0.003	0.034	0.002	0.004
2,3,4,6,7,8-HxCDF	0.023	0.015	0.027	0.019	0.009	0.004	0.006	0.005	0.011	0.005	0.006	0.005	0.006	0.002	0.004	0.004	0.044	0.003	0.005
1,2,3,7,8,9-HxCDF	<0.002	<0.001	0.001	0.003	<0.001	0.001	<0.001	0.000	<0.001	<0.002	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
1,2,3,4,6,7,8-HpCDF	0.074	0.082	0.088	0.083	0.038	0.022	0.027	0.024	0.048	0.035	0.035	0.033	0.030	0.018	0.015	0.021	0.147	0.017	0.036
1,2,3,4,7,8,9-HpCDF	0.020	0.008	0.011	0.017	0.003	0.002	0.003	0.004	0.004	<0.002	0.002	0.003	<0.002	0.001	0.002	0.002	0.025	<0.002	<0.002
OCDF	0.094	0.119	0.058	0.100	0.051	0.023	0.024	0.023	0.031	0.015	0.034	0.030	0.019	0.013	0.013	0.019	0.081	0.013	0.057
<b>PCDD/F Homologues</b>																			
TCDDs	0.092	0.056	0.142	0.103	0.029	0.031	0.030	0.023	0.039	0.028	0.030	0.028	0.042	0.020	0.022	0.034	0.026	0.012	0.016
PeCDDs	0.201	0.107	0.295	0.105	0.039	0.090	0.048	0.050	0.052	0.049	0.051	0.048	0.102	0.064	0.041	0.070	0.038	0.020	0.037
HxCDDs	0.570	0.292	0.740	0.238	0.090	0.246	0.094	0.169	0.097	0.077	0.121	0.092	0.262	0.170	0.103	0.222	0.094	0.044	0.119
HpCDDs	0.905	0.495	1.098	0.436	0.239	0.374	0.138	0.312	0.166	0.106	0.208	0.140	0.383	0.255	0.166	0.374	0.120	0.053	0.344
OCDD	1.094	1.043	1.886	1.338	0.782	0.601	0.245	0.483	0.326	0.172	0.399	0.235	0.512	0.552	0.242	0.465	0.149	0.097	0.805
TCDFs	0.295	0.218	0.485	0.536	0.161	0.121	0.129	0.163	0.239	0.183	0.163	0.122	0.109	0.075	0.069	0.093	0.332	0.073	0.097
PeCDFs	0.195	0.162	0.266	0.344	0.082	0.062	0.076	0.082	0.169	0.177	0.107	0.094	0.070	0.044	0.041	0.053	0.349	0.070	0.076
HxCDFs	0.183	0.187	0.247	0.262	0.083	0.048	0.060	0.066	0.137	0.151	0.093	0.082	0.068	0.034	0.036	0.043	0.467	0.055	0.064
HpCDFs	0.134	0.155	0.153	0.166	0.065	0.040	0.044	0.045	0.077	0.053	0.058	0.054	0.046	0.031	0.029	0.040	0.257	0.025	0.064
OCDF	0.094	0.119	0.058	0.100	0.051	0.023	0.024	0.023	0.031	0.015	0.034	0.030	0.019	13.200	0.013	0.019	0.081	0.013	0.057
<b>Total</b>																			
∑ PCDDs	2.862	1.991	4.161	2.220	1.178	1.342	0.555	1.036	0.679	0.432	0.810	0.542	1.301	1.060	0.572	1.164	0.428	0.227	1.320
∑ PCDFs	0.901	0.841	1.209	1.408	0.441	0.294	0.333	0.378	0.652	0.579	0.454	0.382	0.312	0.184	0.187	0.248	1.487	0.235	0.359
∑ PCDD/Fs	3.762	2.832	5.370	3.628	1.620	1.635	0.888	1.414	1.332	1.010	1.264	0.924	1.613	1.244	0.759	1.412	1.914	0.462	1.679
∑ TEQ (PCDD/Fs)	0.061	0.037	0.083	0.042	0.018	0.023	0.016	0.019	0.021	0.019	0.018	0.017	0.026	0.015	0.012	0.018	0.036	0.009	0.015

Table A51. Atmospheric concentrations of PCDD/Fs (pg m<sup>-3</sup>) at NAPS urban sites in 2002 (continued)

Station Name	Windsor (College)												Hamilton (Elgin)											
Sampling Period	1	2	3	4	5	6	7	8	9	10	1	2	3	4	5	6	7	8	9	10	11	12	13	
Sampling Date	1/26/02	2/19/02	5/26/02	6/19/02	7/13/02	8/6/02	8/30/02	9/23/02	10/17/02	12/4/02	1/2/02	1/8/02	2/1/02	2/25/02	5/8/02	6/1/02	6/25/02	7/19/02	8/12/02	9/29/02	10/23/02	11/16/02	12/10/02	
Sampling Volume (m3)	835	873	841	751	750	593	614	674	736	760	540	504	484	530	478	506	495	482	397	715	778	829	736	
<b>PCDD/F Congeners</b>																								
2,3,7,8-TCDD	0.002	0.003	0.002	0.001	0.001	0.001	0.002	0.002	0.002	0.003	0.003	0.002	0.001	0.001	0.002	0.001	0.004	0.002	0.001	0.002	0.001	0.001	0.002	
1,2,3,7,8-PeCDD	0.011	0.016	0.009	0.008	0.009	0.007	0.009	0.009	0.014	0.015	0.021	0.015	0.012	0.011	0.010	0.010	0.012	0.008	0.009	0.012	0.005	0.008	0.016	
1,2,3,4,7,8-HxCDD	0.013	0.021	0.007	0.005	0.007	0.003	0.006	0.009	0.016	0.014	0.018	0.014	0.009	0.010	0.006	0.005	0.009	0.004	0.004	0.014	0.003	0.006	0.015	
1,2,3,6,7,8-HxCDD	0.019	0.034	0.014	0.010	0.012	0.005	0.008	0.018	0.027	0.025	0.030	0.022	0.013	0.018	0.011	0.009	0.015	0.005	0.006	0.024	0.004	0.010	0.028	
1,2,3,7,8,9-HxCDD	0.041	0.044	0.019	0.009	0.018	0.008	0.012	0.032	0.026	0.029	0.062	0.041	0.018	0.023	0.016	0.009	0.017	0.004	0.005	0.042	0.005	0.008	0.036	
1,2,3,4,6,7,8-HpCDD	0.261	0.463	0.168	0.068	0.157	0.063	0.090	0.321	0.358	0.216	0.388	0.247	0.130	0.213	0.123	0.114	0.137	0.053	0.058	0.358	0.050	0.099	0.284	
OCDD	0.815	1.789	0.619	0.273	0.548	0.207	0.316	1.165	1.395	0.677	1.040	0.668	0.469	0.771	0.547	0.393	0.557	0.224	0.333	1.142	0.270	0.294	0.633	
2,3,7,8-TCDF	0.027	0.027	0.061	0.019	0.021	0.012	0.025	0.034	0.044	0.105	0.029	0.024	0.080	0.040	0.157	0.041	0.146	0.052	0.026	0.056	0.019	0.038	0.029	
1,2,3,7,8-PeCDF	0.004	0.006	0.011	0.005	0.006	0.003	0.005	0.006	0.008	0.019	0.008	0.007	0.010	0.008	0.030	0.008	0.042	0.056	0.006	0.014	0.002	0.008	0.007	
2,3,4,7,8-PeCDF	0.011	0.010	0.027	0.005	0.007	0.004	0.006	0.009	0.017	0.033	0.011	0.007	0.024	0.013	0.043	0.012	0.037	0.010	0.008	0.021	0.004	0.013	0.012	
1,2,3,4,7,8-HxCDF	0.025	0.028	0.033	0.015	0.019	0.010	0.021	0.031	0.039	0.085	0.025	0.023	0.032	0.036	0.097	0.027	0.067	0.022	0.016	0.058	0.008	0.023	0.026	
1,2,3,6,7,8-HxCDF	0.010	0.013	0.014	0.008	0.011	0.004	0.009	0.014	0.017	0.033	0.009	0.009	0.016	0.013	0.036	0.013	0.032	0.009	0.008	0.028	0.003	0.010	0.012	
2,3,4,6,7,8-HxCDF	0.015	0.016	0.016	0.006	0.011	0.006	0.011	0.016	0.016	0.034	0.015	0.012	0.018	0.018	0.039	0.018	0.040	0.009	0.009	0.021	0.006	0.009	0.011	
1,2,3,7,8,9-HxCDF	<0.002	0.001	0.001	<0.001	0.001	0.000	<0.001	0.001	0.002	0.003	<0.002	0.002	0.001	0.002	0.003	<0.002	0.003	0.001	<0.001	0.003	0.001	0.001	0.001	
1,2,3,4,6,7,8-HpCDF	0.059	0.096	0.067	0.051	0.079	0.031	0.060	0.088	0.064	0.146	0.049	0.048	0.059	0.076	0.110	0.064	0.152	0.055	0.045	0.101	0.064	0.033	0.051	
1,2,3,4,7,8,9-HpCDF	0.008	0.010	0.006	<0.002	0.004	0.002	0.006	0.008	0.010	0.019	0.006	0.003	0.004	0.012	0.015	0.011	0.006	0.003	0.003	0.015	0.003	0.004	0.009	
OCDF	0.057	0.120	0.050	0.033	0.037	0.023	0.048	0.077	0.044	0.135	0.045	0.044	0.054	0.073	0.080	0.069	0.147	0.073	0.031	0.065	0.220	0.023	0.039	
<b>PCDD/F Homologues</b>																								
TCDDs	0.040	0.078	0.219	0.056	0.040	0.028	0.044	0.094	0.057	0.140	0.074	0.048	0.101	0.051	0.078	0.063	0.185	0.056	0.035	0.068	0.029	0.034	0.050	
PeCDDs	0.099	0.161	0.157	0.057	0.070	0.045	0.069	0.104	0.128	0.201	0.209	0.152	0.171	0.116	0.092	0.087	0.214	0.061	0.056	0.117	0.037	0.060	0.153	
HxCDDs	0.346	0.501	0.262	0.110	0.162	0.092	0.129	0.301	0.362	0.360	0.545	0.356	0.203	0.271	0.152	0.136	0.260	0.078	0.083	0.352	0.078	0.131	0.442	
HpCDDs	0.594	0.921	0.318	0.132	0.277	0.122	0.171	0.590	0.674	0.426	0.836	0.521	0.248	0.446	0.266	0.219	0.287	0.100	0.119	0.690	0.099	0.182	0.586	
OCDD	0.815	1.789	0.619	0.273	0.548	0.207	0.316	1.165	1.395	0.677	1.040	0.668	0.469	0.771	0.547	0.393	0.557	0.224	0.333	1.142	0.270	0.294	0.633	
TCDFs	0.102	0.161	0.350	0.161	0.176	0.099	0.196	0.209	0.274	0.602	0.181	0.126	0.421	0.220	1.131	0.386	0.912	0.341	0.236	0.400	0.133	0.243	0.209	
PeCDFs	0.080	0.122	0.192	0.103	0.187	0.075	0.161	0.158	0.192	0.358	0.117	0.090	0.272	0.149	0.560	0.189	0.631	0.229	0.179	0.286	0.072	0.143	0.125	
HxCDFs	0.117	0.163	0.205	0.181	0.245	0.080	0.176	0.195	0.169	0.344	0.123	0.102	0.169	0.172	0.396	0.210	0.447	0.161	0.156	0.281	0.046	0.098	0.132	
HpCDFs	0.108	0.182	0.107	0.082	0.130	0.052	0.103	0.156	0.113	0.221	0.087	0.077	0.095	0.132	0.183	0.118	0.234	0.085	0.073	0.174	0.112	0.054	0.089	
OCDF	0.057	0.120	0.050	0.033	0.037	0.023	0.048	0.077	0.044	0.135	0.045	0.044	0.054	0.073	0.080	0.069	0.147	0.073	0.031	0.065	0.220	0.023	0.039	
<b>Total</b>																								
∑ PCDDs	1.894	3.450	1.575	0.627	1.097	0.494	0.728	2.254	2.616	1.804	2.704	1.745	1.193	1.655	1.135	0.898	1.503	0.519	0.626	2.368	0.512	0.702	1.865	
∑ PCDFs	0.463	0.748	0.904	0.560	0.774	0.328	0.684	0.794	0.793	1.661	0.553	0.439	1.011	0.745	2.350	0.972	2.371	0.891	0.676	1.207	0.582	0.561	0.594	
∑ PCDD/Fs	2.357	4.198	2.479	1.187	1.872	0.822	1.412	3.048	3.409	3.465	3.256	2.185	2.203	2.400	3.485	1.870	3.873	1.410	1.301	3.575	1.095	1.262	2.459	
∑ TEQ (PCDD/Fs)	0.035	0.047	0.037	0.019	0.026	0.015	0.024	0.033	0.045	0.066	0.051	0.037	0.042	0.036	0.065	0.029	0.064	0.026	0.021	0.051	0.013	0.025	0.041	

Table A51. Atmospheric concentrations of PCDD/Fs (pg m<sup>-3</sup>) at NAPS urban sites in 2002 (continued)

Station Name	Toronto (Gage Inst.)												Jonquiere														
Sampling Period	1	2	3	4	5	6	7	8	9	10	11	12	13	14	1	2	3	4	5	6	7	8	9	10	11	12	
Sampling Date	1/26/02	2/19/02	3/15/02	4/8/02	5/2/02	5/26/02	6/19/02	7/13/02	8/6/02	9/23/02	10/17/02	11/10/02	12/4/02	12/28/02	1/20/02	3/9/02	4/2/02	4/26/02	5/20/02	6/13/02	7/31/02	8/4/02	9/17/02	10/23/02	11/28/02	12/22/02	
Sampling Volume (m3)	898	903	905	855	820	845	872	678	597	710	685	722	911	725	1151	1038	1076	1060	1022	1096	860	944	998	1060	1060	1019	
<b>PCDD/F Congeners</b>																											
2,3,7,8-TCDD	0.002	0.002	0.001	0.002	0.001	0.002	0.002	0.003	0.002	0.002	0.001	0.002	0.003	0.002	0.002	0.003	0.001	<0.001	<0.001	0.001	0.001	0.004	<0.001	0.003	0.001	0.001	
1,2,3,7,8-PeCDD	0.011	0.010	0.005	0.011	0.004	0.004	0.006	0.008	0.005	0.008	0.006	0.006	0.020	0.010	0.009	0.008	0.004	0.003	0.003	0.004	0.005	0.013	0.004	0.013	0.005	0.004	
1,2,3,4,7,8-HxCDD	0.010	0.010	0.003	0.012	0.003	0.002	0.003	0.004	0.001	0.005	0.002	0.004	0.023	0.012	0.007	0.005	0.003	<0.001	0.001	0.004	0.003	0.013	0.002	0.012	0.003	0.002	
1,2,3,6,7,8-HxCDD	0.016	0.015	0.006	0.020	0.004	0.004	0.005	0.006	0.002	0.010	0.004	0.007	0.039	0.019	0.015	0.007	0.004	0.001	0.002	0.005	0.004	0.021	0.002	0.019	0.005	0.003	
1,2,3,7,8,9-HxCDD	0.023	0.022	0.009	0.040	0.007	0.008	0.003	0.009	0.003	0.007	0.007	0.008	0.050	0.023	0.014	0.010	0.004	0.001	0.001	0.006	0.004	0.024	0.001	0.021	0.004	0.003	
1,2,3,4,6,7,8-HpCDD	0.208	0.185	0.075	0.330	0.052	0.051	0.053	0.067	0.033	0.058	0.035	0.097	0.494	0.238	0.084	0.067	0.024	0.015	0.019	0.068	0.340	0.055	0.340	0.031	0.190	0.040	0.025
OCDD	0.568	0.545	0.289	0.908	0.242	0.182	0.208	0.206	0.105	0.185	0.104	0.326	1.574	0.656	0.220	0.415	0.134	0.093	0.070	0.231	0.170	0.823	0.107	0.473	0.122	0.090	
2,3,7,8-TCDF	0.025	0.055	0.027	0.036	0.024	0.032	0.102	0.134	0.026	0.050	0.046	0.026	0.036	0.046	0.106	0.247	0.014	0.006	0.005	0.013	0.012	0.077	0.017	0.149	0.017	0.026	
1,2,3,7,8-PeCDF	0.004	0.008	0.005	0.006	0.003	0.005	0.018	0.024	0.005	0.013	0.009	0.004	0.007	0.009	0.014	0.020	0.002	0.001	0.001	0.003	0.002	0.011	0.002	0.014	0.003	0.003	
2,3,4,7,8-PeCDF	0.009	0.019	0.007	0.009	0.005	0.007	0.028	0.036	0.007	0.024	0.017	0.006	0.014	0.015	0.025	0.048	0.005	0.001	0.002	0.006	0.003	0.016	0.004	0.033	0.005	0.005	
1,2,3,4,7,8-HxCDF	0.019	0.037	0.014	0.023	0.008	0.014	0.041	0.073	0.012	0.047	0.029	0.013	0.032	0.030	0.037	0.095	0.011	0.002	0.005	0.021	0.010	0.036	0.009	0.055	0.007	0.008	
1,2,3,6,7,8-HxCDF	0.008	0.014	0.006	0.009	0.003	0.005	0.018	0.027	0.004	0.020	0.013	0.006	0.013	0.012	0.013	0.025	0.004	0.001	0.002	0.008	0.003	0.014	0.003	0.019	0.003	0.003	
2,3,4,6,7,8-HxCDF	0.011	0.019	0.006	0.012	0.004	0.007	0.018	0.034	0.004	0.018	0.012	0.005	0.013	0.013	0.015	0.032	0.006	0.001	0.002	0.014	0.004	0.018	0.003	0.020	0.003	0.003	
1,2,3,7,8,9-HxCDF	0.001	0.001	<0.001	0.001	<0.001	0.000	0.003	0.003	<0.001	0.002	0.001	0.001	0.002	0.001	0.005	0.001	<0.002	<0.001	0.000	0.001	<0.001	0.001	<0.001	0.002	0.000	0.001	
1,2,3,4,6,7,8-HpCDF	0.038	0.055	0.023	0.041	0.015	0.017	0.054	0.083	0.018	0.048	0.032	0.025	0.061	0.050	0.051	0.131	0.022	0.010	0.012	0.046	0.017	0.060	0.018	0.089	0.012	0.014	
1,2,3,4,7,8,9-HpCDF	0.005	0.007	0.002	0.005	<0.001	0.002	0.013	0.007	<0.002	0.009	0.006	0.004	0.014	0.009	0.009	0.015	0.008	0.001	0.001	0.009	0.002	0.005	0.002	0.008	0.002	0.002	
OCDF	0.034	0.048	0.039	0.032	0.015	0.012	0.043	0.031	<0.002	0.019	0.011	0.021	0.079	0.033	0.175	0.151	0.024	0.032	0.018	0.048	0.013	0.078	0.030	0.173	0.021	0.019	
<b>PCDD/F Homologues</b>																											
TCDDs	0.042	0.090	0.035	0.063	0.025	0.032	0.036	0.081	0.020	0.043	0.026	0.040	0.087	0.055	0.073	0.186	0.019	0.008	0.006	0.012	0.018	0.199	0.009	0.127	0.023	0.021	
PeCDDs	0.090	0.162	0.050	0.130	0.023	0.040	0.058	0.079	0.015	0.102	0.050	0.049	0.214	0.116	0.095	0.133	0.025	0.009	0.011	0.026	0.030	0.219	0.007	0.149	0.033	0.024	
HxCDDs	0.262	0.304	0.090	0.391	0.050	0.064	0.077	0.118	0.024	0.144	0.070	0.110	0.627	0.295	0.130	0.137	0.059	0.011	0.021	0.059	0.065	0.366	0.029	0.277	0.059	0.038	
HpCDDs	0.435	0.392	0.153	0.781	0.098	0.105	0.114	0.139	0.058	0.113	0.068	0.230	1.120	0.491	0.153	0.117	0.053	0.027	0.038	0.120	0.124	0.599	0.054	0.362	0.071	0.046	
OCDD	0.568	0.545	0.289	0.908	0.242	0.182	0.208	0.206	0.105	0.185	0.104	0.326	1.574	0.656	0.220	0.415	0.134	0.093	0.070	0.231	0.170	0.823	0.107	0.473	0.122	0.090	
TCDFs	0.157	0.343	0.198	0.197	0.162	0.190	0.959	0.879	0.174	0.289	0.289	0.193	0.223	0.284	0.548	1.218	0.089	0.051	0.041	0.090	0.093	0.484	0.080	0.711	0.098	0.141	
PeCDFs	0.090	0.221	0.094	0.111	0.063	0.102	0.423	0.471	0.088	0.213	0.155	0.070	0.133	0.146	0.230	0.568	0.055	0.018	0.022	0.072	0.064	0.237	0.057	0.322	0.046	0.055	
HxCDFs	0.081	0.179	0.067	0.124	0.039	0.064	0.266	0.306	0.048	0.203	0.119	0.067	0.143	0.138	0.150	0.328	0.048	0.012	0.023	0.100	0.058	0.172	0.040	0.202	0.028	0.033	
HpCDFs	0.069	0.095	0.044	0.072	0.022	0.027	0.102	0.116	0.028	0.079	0.050	0.046	0.119	0.087	0.085	0.180	0.038	0.017	0.018	0.075	0.025	0.099	0.029	0.128	0.019	0.022	
OCDF	0.034	0.048	0.039	0.032	0.015	0.012	0.043	0.031	<0.002	0.019	0.011	0.021	0.079	0.033	0.175	0.151	0.024	0.032	0.018	0.048	0.013	0.078	0.030	0.173	0.021	0.019	
<b>Total</b>																											
∑ PCDDs	1.398	1.494	0.617	2.272	0.439	0.423	0.493	0.622	0.222	0.586	0.318	0.755	3.622	1.612	0.671	0.989	0.290	0.148	0.146	0.448	0.406	2.206	0.207	1.388	0.307	0.219	
∑ PCDFs	0.431	0.885	0.442	0.536	0.302	0.394	1.793	1.802	0.338	0.803	0.624	0.398	0.697	0.688	1.188	2.446	0.254	0.131	0.121	0.385	0.253	1.070	0.236	1.536	0.211	0.270	
∑ PCDD/Fs	1.829	2.379	1.058	2.807	0.740	0.817	2.286	2.424	0.559	1.389	0.942	1.153	4.319	2.300	1.860	3.435	0.544	0.278	0.267	0.833	0.659	3.276	0.443	2.924	0.518	0.489	
∑ TEQ (PCDD/Fs)	0.030	0.038	0.017	0.035	0.013	0.016	0.037	0.053	0.015	0.034	0.024	0.018	0.054	0.036	0.042	0.070	0.012	0.005	0.006	0.015	0.012	0.046	0.011	0.058	0.012	0.011	

Table A52. Atmospheric concentrations of PCDD/Fs ( $\mu\text{g m}^{-3}$ ) at NAPS urban sites in 2003

Station Name	Toronto (Judson)							Toronto (Junction Triangle)		Montreal (1125)						
Sampling Period	1	2	3	4	5	6	7	1	2	1	2	3	4	5	6	7
Sampling Date	1/21/03	3/10/03	4/3/03	6/14/03	8/1/03	8/25/03	9/18/03	1/21/03	3/10/03	4/27/03	5/21/03	6/14/03	8/25/03	9/18/03	11/29/03	12/23/03
Sampling Volume (m3)	829	797	762	662	630	660	689	731	782	565	556	593	656	778	806	773
<b>PCDD/F Congeners</b>																
2,3,7,8-TCDD	0.003	<0.001	<0.001	0.002	<0.001	0.002	0.001	0.004	0.001	0.003	0.001	0.002	0.002	0.001	0.003	0.005
1,2,3,7,8-PeCDD	0.012	0.005	0.005	0.008	0.007	0.010	0.007	0.018	0.005	0.007	0.006	0.009	0.012	0.006	0.012	0.024
1,2,3,4,7,8-HxCDD	0.009	0.003	0.002	0.003	0.004	0.007	0.004	0.014	0.005	0.004	0.002	0.002	0.012	0.004	0.010	0.025
1,2,3,6,7,8-HxCDD	0.017	0.005	0.004	0.008	0.005	0.010	0.005	0.024	0.007	0.006	0.002	0.005	0.019	0.007	0.015	0.042
1,2,3,7,8,9-HxCDD	0.021	0.004	0.004	0.006	<0.001	0.010	0.006	0.022	0.004	0.005	<0.001	0.005	0.025	0.007	0.018	0.049
1,2,3,4,6,7,8-HpCDD	0.174	0.061	0.054	0.068	0.023	0.073	0.049	0.203	0.062	0.085	0.031	0.051	0.298	0.063	0.167	0.495
OCDD	0.522	0.297	0.232	0.194	0.113	0.263	0.201	0.515	0.177	0.276	0.105	0.153	0.863	0.212	0.472	1.121
2,3,7,8-TCDF	0.129	0.012	0.025	0.017	0.012	0.022	0.011	0.160	0.022	0.023	0.012	0.024	0.021	0.019	0.040	0.094
1,2,3,7,8-PeCDF	0.023	0.002	0.006	0.004	0.002	0.005	0.003	0.029	0.005	0.004	0.003	0.005	0.004	0.004	0.008	0.019
2,3,4,7,8-PeCDF	0.040	0.004	0.009	0.005	0.003	0.008	0.004	0.055	0.008	0.007	0.004	0.008	0.007	0.007	0.012	0.038
1,2,3,4,7,8-HxCDF	0.086	0.004	0.014	0.010	0.005	0.014	0.008	0.109	0.012	0.012	0.003	0.013	0.013	0.018	0.028	0.081
1,2,3,6,7,8-HxCDF	0.033	0.003	0.006	0.005	0.004	0.007	0.005	0.041	0.006	0.004	0.004	0.006	0.006	0.010	0.011	0.031
2,3,4,6,7,8-HxCDF	0.030	0.002	0.005	0.005	0.002	0.007	0.004	0.041	0.004	0.005	0.003	0.005	0.006	0.007	0.013	0.034
1,2,3,7,8,9-HxCDF	0.003	<0.001	0.001	<0.001	<0.001	<0.001	0.001	0.004	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	0.002	0.002
1,2,3,4,6,7,8-HpCDF	0.096	0.012	0.022	0.029	0.019	0.033	0.019	0.116	0.019	0.022	0.018	0.026	0.032	0.036	0.053	0.130
1,2,3,4,7,8,9-HpCDF	0.016	<0.001	0.001	0.003	<0.002	0.003	0.003	0.017	0.002	0.003	0.002	0.002	0.003	0.005	0.009	0.017
OCDF	0.054	0.010	0.013	0.029	0.016	0.030	0.024	0.047	0.015	0.018	0.015	0.019	0.037	0.028	0.063	0.100
<b>PCDD/F Homologues</b>																
TCDDs	0.095	0.012	0.014	0.033	0.013	0.033	0.027	0.128	0.031	0.028	0.016	0.026	0.045	0.019	0.061	0.138
PeCDDs	0.131	0.029	0.028	0.049	0.032	0.063	0.039	0.204	0.052	0.032	0.030	0.039	0.112	0.044	0.097	0.283
HxCDDs	0.236	0.061	0.058	0.101	0.050	0.128	0.080	0.335	0.088	0.084	0.038	0.066	0.349	0.098	0.230	0.654
HpCDDs	0.322	0.125	0.100	0.135	0.064	0.149	0.105	0.394	0.122	0.154	0.059	0.094	0.652	0.127	0.321	0.943
OCDD	0.522	0.297	0.232	0.194	0.113	0.263	0.201	0.515	0.177	0.276	0.105	0.153	0.863	0.212	0.472	1.121
TCDFs	0.739	0.068	0.128	0.135	0.104	0.139	0.088	0.924	0.134	0.154	0.098	0.184	0.176	0.108	0.253	0.523
PeCDFs	0.425	0.038	0.086	0.088	0.065	0.105	0.064	0.557	0.078	0.087	0.070	0.119	0.100	0.079	0.154	0.399
HxCDFs	0.318	0.030	0.062	0.072	0.054	0.115	0.063	0.417	0.053	0.063	0.054	0.085	0.094	0.119	0.137	0.356
HpCDFs	0.151	0.019	0.036	0.045	0.028	0.057	0.036	0.180	0.029	0.038	0.030	0.043	0.064	0.063	0.092	0.217
OCDF	0.054	0.010	0.013	0.029	0.016	0.030	0.024	0.047	0.015	0.018	0.015	0.019	0.037	0.028	0.063	0.100
<b>Total</b>																
$\Sigma$ PCDDs	1.305	0.525	0.432	0.512	0.272	0.636	0.452	1.576	0.470	0.573	0.248	0.378	2.020	0.499	1.180	3.138
$\Sigma$ PCDFs	1.687	0.164	0.324	0.369	0.267	0.446	0.275	2.125	0.309	0.360	0.266	0.451	0.472	0.395	0.698	1.595
$\Sigma$ PCDD/Fs	2.992	0.688	0.756	0.881	0.539	1.082	0.727	3.701	0.779	0.932	0.514	0.829	2.493	0.894	1.878	4.733
$\Sigma$ TEQ (PCDD/Fs)	0.063	0.012	0.017	0.017	0.013	0.023	0.015	0.084	0.015	0.018	0.012	0.020	0.029	0.018	0.035	0.083

Table A52. Atmospheric concentrations of PCDD/Fs ( $\mu\text{g m}^{-3}$ ) at NAPS urban sites in 2003 (continued)

Station Name	Winnipeg						Windsor (College)					Hamilton (Elgin)	
Sampling Period	1	2	3	4	5	6	1	2	3	4	5	1	2
Sampling Date	5/21/03	6/14/03	8/1/03	8/25/03	11/5/03	12/23/03	1/21/03	3/10/03	8/1/03	8/25/03	10/12/03	1/21/03	8/25/03
Sampling Volume (m3)	769	741	841	698	946	754	697	717	665	766	700	893	733
<b>PCDD/F Congeners</b>													
2,3,7,8-TCDD	<0.001	<0.001	<0.001	0.001	0.001	<0.002	0.001	<0.001	0.003	0.005	0.002	0.002	0.001
1,2,3,7,8-PeCDD	0.005	0.009	0.005	0.008	0.007	0.009	0.008	0.010	0.015	0.022	0.009	0.012	0.007
1,2,3,4,7,8-HxCDD	<0.001	0.011	<0.002	0.005	0.005	0.005	0.006	0.007	0.011	0.019	0.010	0.013	0.005
1,2,3,6,7,8-HxCDD	0.003	0.022	0.004	0.007	0.007	0.012	0.010	0.013	0.020	0.030	0.014	0.022	0.009
1,2,3,7,8,9-HxCDD	0.003	0.019	0.004	0.007	0.006	0.013	0.013	0.012	0.014	0.027	0.019	0.026	0.010
1,2,3,4,6,7,8-HpCDD	0.036	0.288	0.034	0.059	0.093	0.132	0.122	0.111	0.149	0.262	0.198	0.228	0.163
OCDD	0.118	1.102	0.103	0.171	0.240	0.339	0.434	0.397	0.528	0.795	0.779	0.616	0.657
2,3,7,8-TCDF	0.006	0.012	0.010	0.024	0.025	0.031	0.027	0.035	0.033	0.168	0.019	0.022	0.020
1,2,3,7,8-PeCDF	0.001	0.003	0.002	0.004	0.004	0.006	0.006	0.007	0.007	0.030	0.006	0.006	0.004
2,3,4,7,8-PeCDF	0.003	0.005	0.002	0.007	0.008	0.008	0.009	0.013	0.012	0.045	0.007	0.009	0.005
1,2,3,4,7,8-HxCDF	0.003	0.011	0.007	0.013	0.013	0.016	0.019	0.036	0.030	0.145	0.015	0.022	0.012
1,2,3,6,7,8-HxCDF	0.001	0.006	0.003	0.006	0.005	0.005	0.008	0.013	0.016	0.065	0.007	0.010	0.008
2,3,4,6,7,8-HxCDF	0.002	0.007	0.003	0.007	0.005	0.004	0.008	0.014	0.010	0.067	0.007	0.008	0.006
1,2,3,7,8,9-HxCDF	<0.001	<0.001	<0.001	0.001	<0.001	<0.003	0.001	0.001	<0.003	<0.002	0.005	0.001	0.001
1,2,3,4,6,7,8-HpCDF	0.009	0.040	0.015	0.026	0.028	0.024	0.047	0.091	0.111	0.400	0.044	0.081	0.055
1,2,3,4,7,8,9-HpCDF	<0.001	0.006	0.002	0.002	0.006	<0.007	0.005	0.012	0.006	0.036	0.009	0.007	0.005
OCDF	0.006	0.065	0.015	0.016	0.047	0.022	0.047	0.092	0.066	0.277	0.069	0.198	0.081
<b>PCDD/F Homologues</b>													
TCDDs	0.012	0.033	0.037	0.144	0.036	0.033	0.049	0.082	0.064	0.409	0.044	0.050	0.030
PeCDDs	0.019	0.093	0.062	0.132	0.056	0.090	0.078	0.104	0.103	0.308	0.066	0.117	0.058
HxCDDs	0.039	0.277	0.071	0.184	0.142	0.183	0.158	0.186	0.223	0.502	0.225	0.308	0.163
HpCDDs	0.070	0.583	0.067	0.119	0.198	0.271	0.249	0.215	0.301	0.492	0.423	0.431	0.322
OCDD	0.118	1.102	0.103	0.171	0.240	0.339	0.434	0.397	0.528	0.795	0.779	0.616	0.657
TCDFs	0.050	0.111	0.094	0.166	0.329	0.163	0.171	0.206	0.275	1.222	0.151	0.128	0.159
PeCDFs	0.029	0.087	0.077	0.122	0.145	0.084	0.098	0.148	0.293	0.860	0.111	0.087	0.103
HxCDFs	0.021	0.093	0.055	0.086	0.077	0.051	0.092	0.154	0.397	0.986	0.119	0.099	0.119
HpCDFs	0.014	0.081	0.025	0.043	0.051	0.036	0.079	0.143	0.176	0.619	0.085	0.145	0.096
OCDF	0.006	0.065	0.015	0.016	0.047	0.022	0.047	0.092	0.066	0.277	0.069	0.198	0.081
<b>Total</b>													
$\Sigma$ PCDDs	0.258	2.087	0.340	0.750	0.673	0.914	0.968	0.983	1.220	2.507	1.537	1.521	1.229
$\Sigma$ PCDFs	0.120	0.437	0.265	0.432	0.648	0.354	0.486	0.744	1.207	3.963	0.534	0.657	0.558
$\Sigma$ PCDD/Fs	0.377	2.524	0.606	1.182	1.321	1.268	1.454	1.727	2.427	6.470	2.071	2.178	1.787
$\Sigma$ TEQ (PCDD/Fs)	0.009	0.025	0.011	0.019	0.018	0.024	0.023	0.031	0.038	0.101	0.026	0.033	0.019



Table A52. Atmospheric concentrations of PCDD/Fs ( $\mu\text{g m}^{-3}$ ) at NAPS urban sites in 2003 (continued)

Station Name	Toronto (Gage Inst.)									Jonquiere											
	1	2	3	4	5	6	7	8	9	1	2	3	4	5	6	7	8	9	10	11	12
Sampling Period	1/21/03	3/10/03	4/3/03	4/27/03	5/21/03	6/14/03	8/1/03	8/25/03	9/18/03	1/21/03	3/10/03	4/3/03	4/27/03	5/21/03	6/14/03	8/1/03	8/25/03	9/18/03	11/5/03	11/29/03	12/23/03
Sampling Volume (m <sup>3</sup> )	742	883	760	766	696	706	678	647	714	1100	1146	822	1054	1045	993	918	1124	1031	1071	1099	1110
<b>PCDD/F Congeners</b>																					
2,3,7,8-TCDD	0.003	0.001	0.001	0.001	0.001	0.002	<0.001	0.002	0.001	0.000	0.001	<0.001	0.002	0.000	0.002	<0.001	<0.001	0.001	0.004	0.002	0.002
1,2,3,7,8-PeCDD	0.012	0.005	0.004	0.010	0.004	0.009	0.007	0.006	0.005	0.004	0.009	0.004	0.006	0.004	0.006	0.008	0.004	0.006	0.016	0.009	0.008
1,2,3,4,7,8-HxCDD	0.009	0.002	0.001	0.009	<0.001	0.005	<0.003	0.003	0.002	0.003	0.009	0.001	0.003	0.002	0.003	0.005	0.004	0.004	0.011	0.005	0.006
1,2,3,6,7,8-HxCDD	0.015	0.003	0.003	0.020	0.004	0.009	0.004	0.005	0.004	0.005	0.014	<0.001	0.005	0.003	0.004	0.006	0.003	0.006	0.014	0.011	0.009
1,2,3,7,8,9-HxCDD	0.012	0.004	0.004	0.018	0.002	0.010	<0.003	0.004	0.003	0.009	0.012	<0.001	0.002	0.003	0.002	0.008	0.003	0.006	0.012	0.011	0.008
1,2,3,4,6,7,8-HpCDD	0.121	0.035	0.041	0.198	0.036	0.073	0.043	0.046	0.038	0.105	0.156	0.018	0.040	0.034	0.021	0.076	0.043	0.054	0.109	0.093	0.093
OCDD	0.294	0.111	0.115	0.481	0.118	0.180	0.144	0.144	0.167	0.544	0.466	0.119	0.164	0.096	0.062	0.224	0.128	0.175	0.391	0.523	0.256
2,3,7,8-TCDF	0.125	0.018	0.014	0.032	0.015	0.084	0.020	0.038	0.019	0.002	0.054	0.003	0.090	0.009	0.130	0.103	0.024	0.046	0.409	0.128	0.135
1,2,3,7,8-PeCDF	0.023	0.003	0.003	0.006	0.003	0.014	0.003	0.007	0.003	0.001	0.007	0.001	0.009	0.002	0.011	0.026	0.004	0.006	0.031	0.015	0.014
2,3,4,7,8-PeCDF	0.044	0.005	0.004	0.011	0.004	0.025	0.005	0.012	0.005	0.001	0.019	0.001	0.021	0.003	0.029	0.060	0.008	0.011	0.089	0.028	0.034
1,2,3,4,7,8-HxCDF	0.082	0.009	0.008	0.021	0.006	0.041	0.010	0.028	0.009	0.002	0.055	0.001	0.035	0.012	0.045	0.100	0.014	0.024	0.148	0.043	0.057
1,2,3,6,7,8-HxCDF	0.033	0.003	0.004	0.009	0.002	0.018	0.003	0.011	0.004	0.001	0.019	0.001	0.012	0.006	0.016	0.051	0.006	0.011	0.045	0.015	0.020
2,3,4,6,7,8-HxCDF	0.034	0.003	0.004	0.011	0.002	0.016	0.003	0.012	0.003	0.001	0.023	0.001	0.013	0.006	0.017	0.043	0.007	0.011	0.056	0.015	0.020
1,2,3,7,8,9-HxCDF	0.002	<0.001	<0.001	0.001	<0.001	<0.002	<0.002	0.002	0.000	<0.001	0.001	<0.001	0.001	<0.001	0.001	0.006	0.001	0.001	0.003	0.002	0.001
1,2,3,4,6,7,8-HpCDF	0.088	0.012	0.012	0.034	0.011	0.052	0.018	0.039	0.016	0.018	0.126	0.008	0.085	0.031	0.073	0.198	0.050	0.064	0.253	0.076	0.093
1,2,3,4,7,8,9-HpCDF	0.015	0.002	0.002	0.005	0.001	0.006	0.002	0.006	0.003	0.002	0.024	<0.001	0.009	0.004	0.006	0.039	0.005	0.007	0.019	0.007	0.010
OCDF	0.031	0.009	0.009	0.022	0.013	0.029	0.020	0.025	0.018	0.037	0.454	0.021	0.266	0.065	0.092	0.172	0.121	0.115	0.427	0.173	0.147
<b>PCDD/F Homologues</b>																					
TCDDs	0.090	0.021	0.016	0.042	0.009	0.079	0.022	0.035	0.039	0.005	0.056	0.003	0.049	0.010	0.069	0.042	0.017	0.032	0.252	0.205	0.077
PeCDDs	0.147	0.033	0.023	0.110	0.020	0.093	0.027	0.054	0.046	0.016	0.099	0.006	0.051	0.020	0.063	0.060	0.024	0.052	0.243	0.169	0.098
HxCDDs	0.226	0.056	0.048	0.289	0.043	0.134	0.043	0.083	0.069	0.062	0.199	0.010	0.060	0.043	0.061	0.100	0.045	0.088	0.258	0.170	0.137
HpCDDs	0.230	0.073	0.072	0.443	0.068	0.148	0.086	0.094	0.083	0.184	0.293	0.030	0.071	0.062	0.037	0.141	0.075	0.101	0.208	0.166	0.175
OCDD	0.294	0.111	0.115	0.481	0.118	0.180	0.144	0.144	0.167	0.544	0.466	0.119	0.164	0.096	0.062	0.224	0.128	0.175	0.391	0.523	0.256
TCDFs	0.684	0.100	0.083	0.170	0.102	0.542	0.157	0.208	0.141	0.018	0.259	0.011	0.385	0.055	0.601	1.143	0.148	0.210	1.854	0.653	0.623
PeCDFs	0.450	0.050	0.045	0.097	0.044	0.291	0.077	0.123	0.068	0.008	0.196	0.007	0.198	0.043	0.289	1.057	0.082	0.117	0.876	0.301	0.312
HxCDFs	0.319	0.035	0.035	0.089	0.027	0.180	0.053	0.131	0.048	0.020	0.209	0.008	0.128	0.055	0.168	0.883	0.073	0.129	0.539	0.176	0.208
HpCDFs	0.135	0.020	0.021	0.058	0.020	0.078	0.034	0.066	0.029	0.037	0.214	0.013	0.121	0.047	0.102	0.407	0.074	0.098	0.347	0.118	0.134
OCDF	0.031	0.009	0.009	0.022	0.013	0.029	0.020	0.025	0.018	0.037	0.454	0.021	0.266	0.065	0.092	0.172	0.121	0.115	0.427	0.173	0.147
<b>Total</b>																					
∑ PCDDs	0.988	0.293	0.274	1.364	0.258	0.634	0.322	0.409	0.403	0.812	1.112	0.168	0.395	0.231	0.293	0.567	0.289	0.448	1.351	1.232	0.744
∑ PCDFs	1.619	0.214	0.193	0.436	0.207	1.119	0.340	0.553	0.303	0.120	1.332	0.059	1.098	0.265	1.252	3.662	0.498	0.668	4.043	1.421	1.423
∑ PCDD/Fs	2.607	0.507	0.467	1.800	0.465	1.753	0.662	0.962	0.706	0.932	2.443	0.226	1.492	0.496	1.546	4.228	0.786	1.116	5.394	2.653	2.167
∑ TEQ (PCDD/Fs)	0.063	0.012	0.010	0.029	0.010	0.039	0.015	0.023	0.012	0.008	0.038	0.005	0.031	0.010	0.040	0.063	0.014	0.023	0.121	0.045	0.048

Table A53. Atmospheric concentrations of PCDD/Fs ( $\mu\text{g m}^{-3}$ ) at NAPS urban sites in 2004

Station Name	Toronto (Judson)						Toronto (Junction Triangle)				Montreal (1125)										
Sampling Period	1	2	3	4	5	6	1	2	1	2	3	4	5	6	7	8	9	10	11		
Sampling Date	1/16/04	6/8/04	7/26/04	10/6/04	11/23/04	12/17/04	6/8/04	7/26/04	1/16/04	3/4/04	3/28/04	4/21/04	5/15/04	7/26/04	8/19/04	9/12/04	10/6/04	11/23/04	12/17/04		
Sampling Volume (m3)	841	824	710	756	771	849	949	780	769	661	683	643	655	701	651	763	693	600	731		
<b>PCDD/F Congeners</b>																					
2,3,7,8-TCDD	0.001	0.003	0.002	0.001	0.003	0.001	0.002	<0.001	0.001	0.002	<0.001	0.001	0.002	<0.001	0.002	<0.001	0.001	0.002	0.002		
1,2,3,7,8-PeCDD	0.007	0.008	0.005	0.008	0.012	0.005	0.008	0.007	0.005	0.011	0.008	0.007	0.012	0.009	0.008	0.004	0.007	0.008	0.006		
1,2,3,4,7,8-HxCDD	0.006	0.006	0.004	0.008	0.010	0.004	0.005	0.002	0.004	0.010	0.004	0.005	0.008	0.008	0.005	<0.001	0.007	0.006	0.004		
1,2,3,6,7,8-HxCDD	0.009	0.008	0.006	0.012	0.014	0.005	0.007	0.005	0.007	0.016	0.008	0.009	0.019	0.009	0.008	<0.001	0.011	0.009	0.007		
1,2,3,7,8,9-HxCDD	0.009	0.007	0.006	0.012	0.023	0.007	0.010	0.006	0.007	0.016	0.011	0.009	0.014	0.006	0.008	0.001	0.015	0.011	0.006		
1,2,3,4,6,7,8-HpCDD	0.096	0.097	0.065	0.185	0.235	0.092	0.101	0.055	0.090	0.156	0.097	0.105	0.132	0.126	0.114	0.010	0.121	0.148	0.087		
OCDD	0.221	0.421	0.357	0.619	0.700	0.364	0.391	0.240	0.602	0.382	0.304	0.432	0.316	0.432	0.460	0.035	0.377	0.483	0.325		
2,3,7,8-TCDF	0.023	0.018	0.006	0.005	0.007	0.005	0.012	0.010	0.012	0.035	0.020	0.036	0.062	0.023	0.007	0.002	0.004	0.007	0.005		
1,2,3,7,8-PeCDF	0.003	0.004	0.005	0.005	0.008	0.004	0.007	0.005	0.002	0.006	0.005	0.010	0.014	0.005	0.004	0.000	0.005	0.006	0.007		
2,3,4,7,8-PeCDF	0.006	0.005	0.008	0.006	0.012	0.007	0.009	0.008	0.003	0.011	0.006	0.015	0.019	0.007	0.005	<0.001	0.008	0.009	0.009		
1,2,3,4,7,8-HxCDF	0.012	0.011	0.014	0.013	0.029	0.014	0.016	0.010	0.006	0.026	0.014	0.036	0.058	0.016	0.009	0.002	0.029	0.022	0.023		
1,2,3,6,7,8-HxCDF	0.004	0.007	0.006	0.007	0.011	0.005	0.007	0.005	0.003	0.011	0.006	0.015	0.023	0.008	0.003	0.001	0.010	0.008	0.007		
2,3,4,6,7,8-HxCDF	0.005	0.005	0.006	0.007	0.012	0.006	0.006	0.004	0.003	0.013	0.005	0.014	0.025	0.007	0.003	0.001	0.014	0.011	0.010		
1,2,3,7,8,9-HxCDF	0.000	0.002	0.001	<0.001	0.001	0.001	0.001	0.001	0.000	0.001	<0.001	0.002	0.003	0.001	<0.002	<0.001	0.001	<0.001	<0.001		
1,2,3,4,6,7,8-HpCDF	0.021	0.027	0.026	0.036	0.043	0.026	0.033	0.022	0.028	0.050	0.025	0.089	0.149	0.043	0.022	0.005	0.075	0.044	0.043		
1,2,3,4,7,8,9-HpCDF	0.003	0.006	0.003	0.004	0.006	0.003	0.004	0.003	0.003	0.008	0.004	0.016	0.025	0.004	0.003	<0.001	0.008	0.005	0.007		
OCDF	0.027	0.026	0.022	0.038	0.031	0.029	0.021	0.016	0.057	0.037	0.024	0.099	0.142	0.024	0.027	0.002	0.062	0.031	0.037		
<b>PCDD/F Homologues</b>																					
TCDDs	0.047	0.037	0.028	0.037	0.067	0.039	0.048	0.025	0.017	0.090	0.027	0.027	0.304	0.031	0.033	<0.001	0.051	0.061	0.041		
PeCDDs	0.070	0.049	0.040	0.080	0.112	0.056	0.075	0.045	0.030	0.116	0.073	0.048	0.258	0.056	0.049	0.014	0.097	0.088	0.056		
HxCDDs	0.141	0.123	0.088	0.199	0.265	0.094	0.116	0.066	0.069	0.272	0.139	0.115	0.296	0.170	0.112	0.007	0.183	0.179	0.111		
HpCDDs	0.182	0.202	0.173	0.368	0.467	0.168	0.198	0.111	0.153	0.324	0.206	0.201	0.247	0.259	0.234	0.017	0.242	0.287	0.155		
OCDD	0.221	0.421	0.357	0.619	0.700	0.364	0.391	0.240	0.602	0.382	0.304	0.432	0.316	0.432	0.460	0.035	0.377	0.483	0.325		
TCDFs	0.160	0.168	0.195	0.188	0.255	0.141	0.315	0.227	0.058	0.227	0.123	0.406	0.454	0.205	0.174	0.009	0.176	0.204	0.217		
PeCDFs	0.071	0.118	0.111	0.097	0.154	0.078	0.170	0.109	0.029	0.139	0.092	0.206	0.292	0.156	0.103	0.003	0.108	0.113	0.124		
HxCDFs	0.051	0.106	0.079	0.081	0.129	0.059	0.116	0.068	0.039	0.121	0.071	0.206	0.274	0.136	0.071	0.006	0.132	0.098	0.098		
HpCDFs	0.035	0.050	0.047	0.064	0.075	0.044	0.058	0.036	0.056	0.083	0.042	0.159	0.239	0.069	0.040	0.005	0.113	0.071	0.074		
OCDF	0.027	0.026	0.022	0.038	0.031	0.029	0.021	0.016	0.057	0.037	0.024	0.099	0.142	0.024	0.027	0.002	0.062	0.031	0.037		
<b>Total</b>																					
∑ PCDDs	0.660	0.833	0.685	1.304	1.610	0.720	0.827	0.487	0.872	1.183	0.749	0.823	1.421	0.948	0.888	0.072	0.949	1.098	0.687		
∑ PCDFs	0.344	0.468	0.453	0.469	0.643	0.351	0.680	0.457	0.237	0.606	0.351	1.075	1.401	0.591	0.416	0.024	0.591	0.517	0.550		
∑ PCDD/Fs	1.004	1.301	1.138	1.772	2.253	1.070	1.507	0.943	1.109	1.789	1.101	1.897	2.821	1.539	1.303	0.097	1.540	1.615	1.237		
∑ TEQ (PCDD/Fs)	0.018	0.020	0.015	0.021	0.032	0.014	0.020	0.016	0.012	0.031	0.019	0.028	0.045	0.022	0.017	0.005	0.022	0.023	0.018		

Table A53. Atmospheric concentrations of PCDD/Fs ( $\mu\text{g m}^{-3}$ ) at NAPS urban sites in 2004 (continued)

Station Name	Winnipeg									Hamilton (Elgin)			
	1	2	3	4	5	6	7	8	9	1	2	3	4
Sampling Period													
Sampling Date	1/16/04	3/4/04	5/15/04	6/8/04	7/26/04	9/12/04	10/6/04	11/23/04	12/17/04	5/15/04	6/8/04	7/26/04	8/19/04
Sampling Volume (m3)	685	713	836	734	690	717	765	841	771	744	943	785	806
<b>PCDD/F Congeners</b>													
2,3,7,8-TCDD	<0.002	0.001	<0.002	<0.002	0.001	0.001	0.002	0.002	0.001	0.002	0.001	0.001	<0.001
1,2,3,7,8-PeCDD	0.009	0.009	0.007	<0.003	0.007	0.006	0.011	0.009	0.004	0.007	0.006	0.005	0.005
1,2,3,4,7,8-HxCDD	0.006	0.006	0.007	0.003	0.003	0.003	0.009	0.008	0.004	0.006	0.005	0.003	0.003
1,2,3,6,7,8-HxCDD	0.007	0.010	0.009	<0.002	0.005	0.004	0.011	0.012	0.005	0.008	0.009	0.005	0.004
1,2,3,7,8,9-HxCDD	0.016	0.006	0.009	<0.002	0.003	0.005	0.014	0.020	0.009	0.010	0.009	0.004	0.003
1,2,3,4,6,7,8-HpCDD	0.109	0.105	0.102	0.022	0.057	0.057	0.113	0.222	0.071	0.141	0.116	0.077	0.049
OCDD	0.339	0.280	0.411	0.099	0.190	0.246	0.329	0.592	0.228	0.491	0.521	0.582	0.168
2,3,7,8-TCDF	0.014	0.020	0.011	0.002	0.048	0.031	0.018	0.002	0.002	0.018	0.023	0.010	0.004
1,2,3,7,8-PeCDF	0.003	0.004	0.002	<0.002	0.013	0.005	0.004	0.003	0.003	0.004	0.005	0.006	0.003
2,3,4,7,8-PeCDF	0.004	0.006	<0.002	<0.002	0.023	0.010	0.006	0.004	0.004	0.005	0.007	0.008	0.003
1,2,3,4,7,8-HxCDF	0.009	0.014	0.011	0.003	0.039	0.033	0.019	0.009	0.012	0.008	0.013	0.012	0.007
1,2,3,6,7,8-HxCDF	0.002	0.006	0.003	<0.002	0.021	0.011	0.008	0.004	0.004	0.004	0.007	0.006	0.004
2,3,4,6,7,8-HxCDF	0.003	0.006	0.004	0.001	0.018	0.015	0.009	0.004	0.005	0.004	0.006	0.005	0.004
1,2,3,7,8,9-HxCDF	0.001	0.001	<0.002	<0.002	0.004	<0.001	<0.002	0.001	<0.001	<0.001	<0.001	<0.001	<0.002
1,2,3,4,6,7,8-HpCDF	0.020	0.024	0.028	0.010	0.072	0.069	0.042	0.016	0.021	0.017	0.039	0.027	0.019
1,2,3,4,7,8,9-HpCDF	<0.004	0.004	0.004	<0.002	0.019	0.005	0.007	0.003	0.003	0.003	0.003	0.003	0.001
OCDF	0.027	0.024	0.032	0.007	0.067	0.037	0.036	0.017	0.021	0.013	0.035	0.035	0.009
<b>PCDD/F Homologues</b>													
TCDDs	0.023	0.045	0.021	0.003	0.027	0.033	0.052	0.033	0.016	0.027	0.038	0.028	0.019
PeCDDs	0.066	0.083	0.083	0.011	0.030	0.052	0.129	0.070	0.039	0.059	0.070	0.033	0.031
HxCDDs	0.159	0.166	0.112	0.029	0.056	0.071	0.210	0.198	0.087	0.130	0.134	0.067	0.069
HpCDDs	0.238	0.207	0.183	0.040	0.100	0.101	0.226	0.383	0.135	0.267	0.235	0.180	0.099
OCDD	0.339	0.280	0.411	0.099	0.190	0.246	0.329	0.592	0.228	0.491	0.521	0.582	0.168
TCDFs	0.073	0.138	0.107	0.025	0.549	0.202	0.126	0.094	0.064	0.124	0.185	0.251	0.106
PeCDFs	0.042	0.081	0.059	0.018	0.385	0.138	0.097	0.060	0.052	0.073	0.152	0.114	0.072
HxCDFs	0.038	0.067	0.062	0.023	0.338	0.139	0.106	0.050	0.047	0.051	0.127	0.074	0.058
HpCDFs	0.033	0.043	0.055	0.015	0.167	0.099	0.070	0.034	0.035	0.032	0.066	0.055	0.029
OCDF	0.027	0.024	0.032	0.007	0.067	0.037	0.036	0.017	0.021	0.013	0.035	0.035	0.009
<b>Total</b>													
$\Sigma$ PCDDs	0.824	0.781	0.810	0.183	0.403	0.503	0.945	1.276	0.506	0.974	0.997	0.890	0.385
$\Sigma$ PCDFs	0.213	0.353	0.315	0.089	1.507	0.614	0.436	0.254	0.218	0.292	0.565	0.529	0.273
$\Sigma$ PCDD/Fs	1.037	1.134	1.125	0.272	1.910	1.117	1.381	1.530	0.724	1.266	1.562	1.419	0.658
$\Sigma$ TEQ (PCDD/Fs)	0.019	0.020	0.016	0.007	0.030	0.022	0.026	0.021	0.011	0.017	0.019	0.014	0.011

Table A53. Atmospheric concentrations of PCDD/Fs (pg m<sup>-3</sup>) at NAPS urban sites in 2004 (continued)

Station Name	Toronto (Gage Inst.)											Jonquiere										
	1	2	3	4	5	6	7	8	9	10	11	1	2	3	4	5	6	7	8	9	10	11
Sampling Period	3/4/04	3/28/04	4/21/04	5/15/04	6/8/04	7/26/04	8/19/04	9/12/04	10/6/04	11/23/04	12/17/04	3/4/04	3/28/04	4/21/04	5/15/04	6/8/04	7/26/04	8/19/04	9/12/04	10/6/04	11/23/04	12/17/04
Sampling Volume (m3)	782	954	659	612	592	674	700	654	726	669	808	1035	1007	1014	967	961	939	947	742	765	808	851
<b>PCDD/F Congeners</b>																						
2,3,7,8-TCDD	0.002	0.001	0.002	0.003	0.002	0.002	0.002	0.002	0.002	0.004	0.001	0.001	0.002	0.001	0.001	<0.001	0.003	0.001	0.003	0.002	<0.002	
1,2,3,7,8-PeCDD	0.007	0.004	0.007	0.010	0.008	0.006	0.007	0.007	0.008	0.014	0.005	0.004	0.006	0.005	0.006	0.008	0.004	0.029	0.005	0.033	0.011	<0.005
1,2,3,4,7,8-HxCDD	0.007	0.003	0.006	0.007	0.004	0.004	0.003	0.006	0.007	0.013	0.003	0.002	0.003	0.003	0.002	0.003	0.002	0.054	0.002	0.090	0.010	0.010
1,2,3,6,7,8-HxCDD	0.012	0.003	0.010	0.012	0.007	0.005	0.006	0.010	0.011	0.019	0.004	0.004	0.005	0.006	0.004	0.005	0.003	0.070	0.003	0.217	0.015	0.015
1,2,3,7,8,9-HxCDD	0.013	0.004	0.008	0.014	0.004	0.007	0.005	0.011	0.006	0.041	0.005	0.004	0.005	0.005	0.004	0.005	0.003	0.109	0.005	0.218	0.023	0.026
1,2,3,4,6,7,8-HpCDD	0.139	0.043	0.091	0.125	0.087	0.046	0.059	0.164	0.147	0.250	0.050	0.042	0.028	0.044	0.035	0.046	0.051	1.719	0.049	6.793	0.175	0.310
OCDD	0.399	0.129	0.313	0.393	0.377	0.150	0.208	0.474	0.415	0.676	0.183	0.164	0.112	0.176	0.108	0.152	0.455	6.554	0.143	70.695	0.516	1.148
2,3,7,8-TCDF	0.045	0.014	0.035	0.112	0.016	0.006	0.013	0.020	0.009	0.010	0.008	0.035	0.140	0.029	0.013	0.020	0.002	0.007	0.004	0.019	0.013	<0.003
1,2,3,7,8-PeCDF	0.008	0.002	0.006	0.017	0.005	0.004	0.008	0.008	0.006	0.011	0.006	0.005	0.012	0.005	0.002	0.004	0.001	0.005	0.003	0.032	0.015	<0.002
2,3,4,7,8-PeCDF	0.015	0.004	0.011	0.031	0.006	0.005	0.013	0.010	0.008	0.015	0.008	0.010	0.030	0.008	0.003	0.004	0.001	0.009	0.005	0.109	0.026	0.003
1,2,3,4,7,8-HxCDF	0.027	0.007	0.018	0.040	0.010	0.009	0.023	0.016	0.017	0.033	0.015	0.023	0.057	0.014	0.006	0.010	0.002	0.028	0.010	0.415	0.089	0.009
1,2,3,6,7,8-HxCDF	0.010	0.003	0.008	0.016	0.005	0.004	0.009	0.007	0.006	0.014	0.006	0.008	0.016	0.007	0.003	0.004	0.001	0.012	0.004	0.149	0.033	0.004
2,3,4,6,7,8-HxCDF	0.013	0.003	0.008	0.016	0.004	0.005	0.010	0.006	0.007	0.016	0.006	0.009	0.017	0.008	0.003	0.005	0.001	0.016	0.004	0.264	0.040	0.005
1,2,3,7,8,9-HxCDF	<0.001	<0.001	0.001	0.002	<0.002	0.002	<0.002	<0.001	<0.001	0.002	0.001	0.001	0.001	0.001	0.001	<0.001	<0.001	0.002	<0.001	0.018	0.002	<0.004
1,2,3,4,6,7,8-HpCDF	0.044	0.014	0.036	0.038	0.022	0.014	0.036	0.029	0.036	0.054	0.023	0.065	0.093	0.034	0.012	0.034	0.015	0.096	0.021	1.382	0.178	0.046
1,2,3,4,7,8,9-HpCDF	0.005	0.002	0.006	0.006	0.004	<0.002	0.006	0.004	0.006	0.008	0.004	0.007	0.008	0.005	0.002	0.004	0.001	0.022	0.003	0.195	0.025	0.005
OCDF	0.037	0.012	0.048	0.016	0.024	0.020	0.019	0.023	0.031	0.035	0.023	0.304	0.182	0.103	0.016	0.073	0.023	0.131	0.020	2.059	0.216	0.084
<b>PCDD/F Homologues</b>																						
TCDDs	0.053	0.017	0.043	0.084	0.042	0.022	0.040	0.041	0.044	0.066	0.037	0.036	0.100	0.059	0.022	0.043	0.005	0.120	0.025	0.048	0.083	0.036
PeCDDs	0.098	0.031	0.078	0.141	0.047	0.030	0.058	0.056	0.077	0.206	0.045	0.048	0.082	0.076	0.036	0.064	0.012	0.272	0.040	0.346	0.143	0.064
HxCDDs	0.198	0.054	0.140	0.172	0.103	0.065	0.092	0.152	0.186	0.336	0.066	0.076	0.074	0.087	0.049	0.067	0.033	0.995	0.059	2.414	0.283	0.243
HpCDDs	0.306	0.082	0.177	0.240	0.182	0.088	0.117	0.313	0.293	0.489	0.089	0.079	0.051	0.079	0.060	0.078	0.087	2.946	0.087	11.820	0.319	0.515
OCDD	0.399	0.129	0.313	0.393	0.377	0.150	0.208	0.474	0.415	0.676	0.183	0.164	0.112	0.176	0.108	0.152	0.455	6.554	0.143	70.695	0.516	1.148
TCDFs	0.262	0.079	0.231	0.704	0.283	0.130	0.311	0.356	0.242	0.293	0.183	0.179	0.646	0.163	0.087	0.143	0.031	0.197	0.104	0.249	0.308	0.097
PeCDFs	0.145	0.040	0.106	0.346	0.102	0.060	0.148	0.150	0.111	0.172	0.095	0.108	0.318	0.090	0.039	0.097	0.033	0.138	0.054	0.596	0.290	0.036
HxCDFs	0.138	0.034	0.090	0.162	0.075	0.045	0.098	0.099	0.076	0.155	0.061	0.090	0.197	0.073	0.033	0.075	0.035	0.198	0.044	1.855	0.358	0.064
HpCDFs	0.074	0.024	0.065	0.062	0.045	0.021	0.056	0.053	0.067	0.091	0.039	0.101	0.127	0.057	0.021	0.057	0.032	0.226	0.032	3.394	0.287	0.097
OCDF	0.037	0.012	0.048	0.016	0.024	0.020	0.019	0.023	0.031	0.035	0.023	0.304	0.182	0.103	0.016	0.073	0.023	0.131	0.020	2.059	0.216	0.084
<b>Total</b>																						
∑ PCDDs	1.054	0.313	0.752	1.029	0.750	0.355	0.516	1.036	1.014	1.772	0.419	0.404	0.419	0.476	0.274	0.404	0.592	10.887	0.354	85.322	1.344	2.006
∑ PCDFs	0.654	0.189	0.540	1.290	0.529	0.276	0.632	0.680	0.527	0.746	0.401	0.781	1.471	0.486	0.196	0.445	0.154	0.889	0.254	8.153	1.459	0.379
∑ PCDD/Fs	1.708	0.502	1.292	2.319	1.279	0.631	1.147	1.716	1.541	2.518	0.821	1.185	1.890	0.962	0.470	0.848	0.746	11.776	0.608	93.475	2.803	2.384
∑ TEQ (PCDD/Fs)	0.028	0.011	0.024	0.046	0.018	0.014	0.021	0.022	0.021	0.041	0.014	0.018	0.043	0.017	0.011	0.016	0.007	0.086	0.011	0.314	0.048	0.020

Table A54. Atmospheric concentrations of PCDD/Fs ( $\mu\text{g m}^{-3}$ ) at NAPS urban sites in 2005

Station Name	Toronto (Judson)		Montreal (1125)											
	1	2	1	2	3	4	5	6	7	8	9	10	11	12
Sampling Period	1/10/05	2/3/05	1/10/05	3/23/05	4/16/05	5/10/05	6/3/05	6/27/05	7/21/05	8/14/05	9/7/05	10/1/05	11/18/05	12/12/05
Sampling Volume (m3)	807	798	681	742	615	598	654	656	697	705	645	630	695	772
<b>PCDD/F Congeners</b>														
2,3,7,8-TCDD	0.001	0.003	0.002	0.001	0.004	0.002	0.002	0.002	0.001	0.002	0.001	0.001	0.001	0.001
1,2,3,7,8-PeCDD	0.007	0.014	0.008	0.005	0.025	0.009	0.008	0.011	0.007	0.010	0.008	0.007	0.009	0.006
1,2,3,4,7,8-HxCDD	0.006	0.011	0.008	0.002	0.030	0.005	0.004	0.006	0.004	0.009	0.006	0.003	0.005	0.005
1,2,3,6,7,8-HxCDD	0.009	0.019	0.011	0.004	0.059	0.008	0.007	0.011	0.006	0.016	0.008	0.006	0.011	0.008
1,2,3,7,8,9-HxCDD	0.010	0.022	0.015	0.004	0.065	0.007	0.008	0.010	0.006	0.017	0.011	0.006	0.011	0.008
1,2,3,4,6,7,8-HpCDD	0.117	0.171	0.152	0.040	0.742	0.101	0.081	0.127	0.056	0.275	0.096	0.060	0.114	0.095
OCDD	0.399	0.421	0.477	0.184	1.882	0.426	0.311	0.671	0.188	0.762	0.292	0.238	0.303	0.255
2,3,7,8-TCDF	0.022	0.097	0.007	0.024	0.043	0.042	0.032	0.036	0.018	0.027	0.029	0.019	0.018	0.020
1,2,3,7,8-PeCDF	0.004	0.019	0.007	0.005	0.009	0.007	0.006	0.007	0.003	0.005	0.007	0.004	0.004	0.003
2,3,4,7,8-PeCDF	0.007	0.030	0.012	0.008	0.017	0.012	0.009	0.011	0.005	0.008	0.010	0.005	0.006	0.006
1,2,3,4,7,8-HxCDF	0.015	0.052	0.031	0.018	0.045	0.020	0.018	0.021	0.014	0.027	0.022	0.013	0.011	0.013
1,2,3,6,7,8-HxCDF	0.006	0.022	0.012	0.007	0.020	0.010	0.009	0.012	0.008	0.011	0.009	0.005	0.005	0.005
2,3,4,6,7,8-HxCDF	0.005	0.023	0.011	0.008	0.019	0.007	0.008	0.009	0.006	0.013	0.009	0.005	0.005	0.005
1,2,3,7,8,9-HxCDF	<0.001	0.002	0.001	0.001	0.002	<0.001	<0.001	<0.001	0.001	0.001	<0.001	<0.001	0.001	0.001
1,2,3,4,6,7,8-HpCDF	0.023	0.072	0.050	0.033	0.098	0.042	0.046	0.048	0.029	0.072	0.043	0.026	0.025	0.023
1,2,3,4,7,8,9-HpCDF	0.003	0.010	0.005	0.005	0.013	0.006	0.005	0.005	0.005	0.014	0.009	0.003	0.004	0.003
OCDF	0.023	0.050	0.044	0.043	0.098	0.033	0.041	0.035	0.023	0.076	0.031	0.022	0.028	0.018
<b>PCDD/F Homologues</b>														
TCDDs	0.032	0.113	0.039	0.017	0.089	0.052	0.043	0.040	0.015	0.028	0.029	0.020	0.029	0.035
PeCDDs	0.058	0.169	0.075	0.031	0.232	0.071	0.065	0.078	0.038	0.068	0.064	0.040	0.073	0.050
HxCDDs	0.143	0.305	0.174	0.054	0.835	0.118	0.100	0.137	0.079	0.229	0.150	0.079	0.149	0.114
HpCDDs	0.238	0.342	0.284	0.075	1.440	0.199	0.172	0.242	0.112	0.535	0.218	0.108	0.214	0.179
OCDD	0.399	0.421	0.477	0.184	1.882	0.426	0.311	0.671	0.188	0.762	0.292	0.238	0.303	0.255
TCDFs	0.156	0.589	0.186	0.090	0.327	0.294	0.283	0.285	0.089	0.134	0.286	0.136	0.098	0.121
PeCDFs	0.084	0.337	0.134	0.066	0.240	0.173	0.177	0.244	0.043	0.077	0.185	0.076	0.061	0.070
HxCDFs	0.069	0.228	0.130	0.071	0.251	0.124	0.133	0.189	0.065	0.116	0.161	0.073	0.056	0.057
HpCDFs	0.043	0.113	0.077	0.059	0.176	0.071	0.078	0.081	0.053	0.130	0.085	0.042	0.043	0.039
OCDF	0.023	0.050	0.044	0.043	0.098	0.033	0.041	0.035	0.023	0.076	0.031	0.022	0.028	0.018
<b>Total</b>														
∑ PCDDs	0.870	1.350	1.049	0.360	4.478	0.866	0.691	1.168	0.431	1.621	0.753	0.485	0.767	0.634
∑ PCDFs	0.374	1.318	0.570	0.329	1.092	0.695	0.711	0.833	0.273	0.534	0.748	0.349	0.286	0.305
∑ PCDD/Fs	1.244	2.668	1.619	0.689	5.571	1.560	1.401	2.002	0.704	2.155	1.501	0.833	1.052	0.939
∑ TEQ (PCDD/Fs)	0.019	0.054	0.025	0.016	0.071	0.027	0.022	0.028	0.017	0.030	0.023	0.016	0.021	0.017

Table A54. Atmospheric concentrations of PCDD/Fs (pg m<sup>-3</sup>) at NAPS urban sites in 2005 (continued)

Station Name	Winnipeg												Hamilton (Elgin)										
Sampling Period	1	2	3	4	5	6	7	8	9	10	11	12	13	1	2	3	4	5	6	7	8	9	10
Sampling Date	1/10/05	2/3/05	3/23/05	4/16/05	5/10/05	6/3/05	6/27/05	7/21/05	8/14/05	9/7/05	10/1/05	11/18/05	12/12/05	3/23/05	4/16/05	5/10/05	6/3/05	6/27/05	7/21/05	8/14/05	10/1/05	11/18/05	12/12/05
Sampling Volume (m3)	904	817	760	709	665	702	727	689	765	743	784	815	783	745	572	855	843	817	849	859	803	897	893
<b>PCDD/F Congeners</b>																							
2,3,7,8-TCDD	0.001	0.001	0.001	0.001	<0.001	0.002	0.001	0.001	0.001	0.001	0.001	0.002	0.001	0.001	0.002	0.002	0.001	0.002	0.001	0.005	0.001	0.002	0.001
1,2,3,7,8-PeCDD	0.005	0.005	0.005	0.007	0.004	0.010	0.005	0.006	0.005	0.005	0.006	0.014	0.006	0.006	0.011	0.013	0.005	0.009	0.007	0.022	0.006	0.010	0.006
1,2,3,4,7,8-HxCDD	0.005	0.003	0.003	0.006	<0.001	0.004	0.001	0.004	0.002	0.003	0.004	0.015	0.005	0.004	0.011	0.012	0.003	0.007	0.004	0.024	0.005	0.008	0.005
1,2,3,6,7,8-HxCDD	0.007	0.004	0.006	0.010	0.001	0.009	0.002	0.009	0.004	0.004	0.006	0.032	0.008	0.007	0.020	0.025	0.004	0.013	0.007	0.049	0.007	0.013	0.008
1,2,3,7,8,9-HxCDD	0.013	0.007	0.006	0.012	0.001	0.009	0.003	0.009	0.004	0.003	0.006	0.032	0.008	0.007	0.021	0.022	0.004	0.010	0.006	0.057	0.005	0.013	0.009
1,2,3,4,6,7,8-HpCDD	0.091	0.057	0.060	0.131	0.014	0.072	0.021	0.073	0.058	0.047	0.077	0.385	0.087	0.114	0.267	0.242	0.066	0.119	0.055	0.702	0.092	0.112	0.105
OCDD	0.209	0.150	0.173	0.318	0.071	0.264	0.110	0.247	0.265	0.204	0.273	0.847	0.290	0.747	1.201	0.816	0.283	0.435	0.181	1.266	0.355	0.271	0.270
2,3,7,8-TCDF	0.009	0.004	0.011	0.010	0.004	0.016	0.008	0.010	0.009	0.015	0.012	0.016	0.018	0.026	0.054	0.116	0.026	0.100	0.020	0.027	0.014	0.020	0.022
1,2,3,7,8-PeCDF	0.010	0.003	0.002	0.002	0.001	0.004	0.002	0.002	0.002	0.003	0.003	0.003	0.005	0.004	0.010	0.020	0.005	0.017	0.005	0.005	0.005	0.006	0.005
2,3,4,7,8-PeCDF	0.026	0.006	0.002	0.004	0.001	0.005	0.002	0.003	0.002	0.005	0.004	0.006	0.009	0.008	0.013	0.040	0.006	0.025	0.007	0.007	0.007	0.009	0.008
1,2,3,4,7,8-HxCDF	0.020	0.011	0.006	0.008	0.002	0.017	0.004	0.006	0.007	0.012	0.011	0.015	0.032	0.012	0.028	0.126	0.011	0.045	0.015	0.015	0.016	0.020	0.015
1,2,3,6,7,8-HxCDF	0.007	0.004	0.002	0.004	0.001	0.007	0.002	0.003	0.003	0.005	0.005	0.006	0.012	0.005	0.012	0.044	0.005	0.021	0.009	0.008	0.007	0.009	0.006
2,3,4,6,7,8-HxCDF	0.009	0.004	0.003	0.004	0.001	0.007	0.002	0.004	0.004	0.007	0.003	0.007	0.011	0.006	0.012	0.064	0.004	0.016	0.007	0.006	0.008	0.012	0.007
1,2,3,7,8,9-HxCDF	0.000	<0.001	<0.001	0.000	<0.001	0.001	<0.001	<0.001	<0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.003	<0.001	0.002	0.001	0.001	<0.002	0.003	0.001
1,2,3,4,6,7,8-HpCDF	0.016	0.016	0.010	0.020	0.006	0.035	0.013	0.019	0.018	0.025	0.021	0.039	0.069	0.032	0.063	0.189	0.024	0.078	0.044	0.037	0.035	0.041	0.031
1,2,3,4,7,8,9-HpCDF	0.002	0.002	0.002	0.002	<0.002	0.004	<0.001	0.002	0.003	0.004	0.003	0.006	0.012	0.004	0.008	0.017	0.002	0.008	0.004	0.007	0.007	0.007	0.004
OCDF	0.010	0.013	0.010	0.015	0.007	0.030	0.013	0.020	0.017	0.021	0.019	0.049	0.068	0.052	0.078	0.119	0.022	0.046	0.041	0.026	0.034	0.028	0.022
<b>PCDD/F Homologues</b>																							
TCDDs	0.041	0.025	0.028	0.020	0.004	0.046	0.018	0.021	0.016	0.028	0.039	0.048	0.030	0.029	0.074	0.137	0.035	0.112	0.027	0.094	0.015	0.032	0.030
PeCDDs	0.066	0.044	0.047	0.063	0.010	0.079	0.032	0.041	0.031	0.044	0.066	0.111	0.051	0.040	0.112	0.259	0.045	0.133	0.048	0.203	0.026	0.065	0.050
HxCDDs	0.145	0.080	0.085	0.194	0.016	0.130	0.040	0.112	0.061	0.080	0.119	0.319	0.114	0.085	0.297	0.485	0.072	0.207	0.097	0.742	0.102	0.167	0.131
HpCDDs	0.182	0.112	0.117	0.290	0.026	0.135	0.042	0.136	0.117	0.096	0.157	0.615	0.159	0.218	0.544	0.534	0.136	0.274	0.112	1.326	0.188	0.216	0.225
OCDD	0.209	0.150	0.173	0.318	0.071	0.264	0.110	0.247	0.265	0.204	0.273	0.847	0.290	0.747	1.201	0.816	0.283	0.435	0.181	1.266	0.355	0.271	0.270
TCDFs	0.161	0.108	0.070	0.061	0.030	0.135	0.075	0.086	0.071	0.107	0.084	0.106	0.109	0.157	0.511	0.617	0.188	0.691	0.177	0.216	0.145	0.110	0.131
PeCDFs	0.142	0.062	0.036	0.045	0.015	0.100	0.050	0.056	0.047	0.069	0.054	0.070	0.090	0.084	0.197	0.535	0.097	0.353	0.134	0.120	0.137	0.083	0.079
HxCDFs	0.077	0.045	0.029	0.045	0.010	0.093	0.035	0.050	0.044	0.068	0.062	0.081	0.118	0.068	0.164	0.550	0.066	0.275	0.136	0.104	0.110	0.088	0.063
HpCDFs	0.026	0.026	0.019	0.035	0.010	0.058	0.019	0.035	0.033	0.044	0.037	0.084	0.116	0.067	0.130	0.288	0.041	0.125	0.066	0.067	0.062	0.066	0.048
OCDF	0.010	0.013	0.010	0.015	0.007	0.030	0.013	0.020	0.017	0.021	0.019	0.049	0.068	0.052	0.078	0.119	0.022	0.046	0.041	0.026	0.034	0.028	0.022
<b>Total</b>																							
∑ PCDDs	0.642	0.410	0.450	0.885	0.128	0.654	0.241	0.556	0.490	0.450	0.653	1.940	0.644	1.119	2.228	2.230	0.571	1.161	0.465	3.631	0.685	0.751	0.705
∑ PCDFs	0.417	0.253	0.165	0.201	0.072	0.416	0.192	0.247	0.212	0.309	0.257	0.391	0.501	0.427	1.079	2.108	0.413	1.489	0.555	0.534	0.487	0.374	0.344
∑ PCDD/Fs	1.059	0.663	0.615	1.085	0.199	1.070	0.433	0.803	0.702	0.760	0.910	2.330	1.145	1.546	3.307	4.338	0.985	2.650	1.020	4.165	1.172	1.125	1.050
∑ TEQ (PCDD/Fs)	0.023	0.013	0.011	0.016	0.006	0.023	0.009	0.013	0.010	0.013	0.014	0.035	0.021	0.018	0.037	0.074	0.015	0.043	0.018	0.056	0.017	0.026	0.018

Table A54. Atmospheric concentrations of PCDD/Fs (pg m<sup>-3</sup>) at NAPS urban sites in 2005 (continued)

Station Name	Toronto (Gage Inst.)												Jonquiere										Cornerbrook		
Sampling Period	1	2	3	4	5	6	7	8	9	10	11	12	1	2	3	4	5	6	7	8	9	10	11	1	2
Sampling Date	1/10/05	2/3/05	3/23/05	4/16/05	5/10/05	6/3/05	6/27/05	8/14/05	9/7/05	10/25/05	11/18/05	12/12/05	1/10/05	2/3/05	3/23/05	4/16/05	5/10/05	6/27/05	7/21/05	8/14/05	9/7/05	10/1/05	12/12/05	12/12/05	12/24/05
Sampling Volume (m3)	753	744	750	768	673	700	694	702	570	739	811	839	766	707	707	699	626	757	754	815	789	756	1125	677	935
<b>PCDD/F Congeners</b>																									
2,3,7,8-TCDD	0.001	0.005	0.001	0.002	0.002	0.004	0.002	0.001	0.002	0.001	0.001	0.001	0.001	0.002	0.001	0.001	0.001	0.002	0.001	0.001	0.001	0.001	0.000	0.002	0.002
1,2,3,7,8-PeCDD	0.005	0.013	0.004	0.008	0.007	0.014	0.006	0.006	0.007	0.004	0.007	0.005	0.005	0.007	0.004	0.004	0.006	0.008	0.007	0.004	0.006	0.004	0.003	0.012	0.008
1,2,3,4,7,8-HxCDD	0.005	0.015	0.002	0.008	0.006	0.011	0.002	0.002	0.003	0.002	0.007	0.003	0.003	0.004	0.002	0.001	0.003	0.004	0.003	0.003	0.003	0.002	0.002	0.009	0.005
1,2,3,6,7,8-HxCDD	0.009	0.021	0.003	0.011	0.008	0.013	0.005	0.003	0.006	0.002	0.012	0.004	0.005	0.006	0.003	0.003	0.005	0.007	0.006	0.004	0.005	0.003	0.002	0.022	0.009
1,2,3,7,8,9-HxCDD	0.015	0.034	0.002	0.016	0.010	0.013	0.004	0.003	0.006	0.005	0.011	0.004	0.005	0.009	0.002	0.003	0.003	0.008	0.005	0.003	0.004	0.003	0.003	0.019	0.016
1,2,3,4,6,7,8-HpCDD	0.150	0.299	0.032	0.159	0.144	0.075	0.046	0.045	0.080	0.029	0.125	0.046	0.060	0.090	0.026	0.043	0.035	0.061	0.054	0.046	0.037	0.030	0.032	0.308	0.108
OCDD	0.477	0.621	0.123	0.460	0.586	0.280	0.218	0.141	0.268	0.082	0.310	0.117	0.274	0.354	0.157	0.177	0.178	0.195	0.188	0.129	0.116	0.109	0.106	0.669	0.373
2,3,7,8-TCDF	0.009	0.025	0.013	0.029	0.039	0.019	0.025	0.020	0.039	0.014	0.023	0.016	0.008	0.007	0.017	0.004	0.024	0.029	0.013	0.019	0.014	0.019	0.003	0.033	0.057
1,2,3,7,8-PeCDF	0.005	0.017	0.002	0.004	0.007	0.009	0.005	0.004	0.005	0.003	0.004	0.003	0.008	0.006	0.003	0.001	0.005	0.006	0.002	0.003	0.003	0.003	0.001	0.007	0.011
2,3,4,7,8-PeCDF	0.007	0.027	0.003	0.007	0.010	0.012	0.006	0.005	0.010	0.004	0.007	0.006	0.010	0.009	0.005	0.001	0.006	0.007	0.003	0.005	0.004	0.003	0.001	0.013	0.018
1,2,3,4,7,8-HxCDF	0.016	0.057	0.006	0.015	0.018	0.019	0.012	0.008	0.025	0.012	0.017	0.014	0.028	0.029	0.009	0.002	0.014	0.012	0.011	0.011	0.008	0.009	0.003	0.032	0.046
1,2,3,6,7,8-HxCDF	0.006	0.020	0.003	0.007	0.009	0.013	0.005	0.004	0.009	0.004	0.007	0.005	0.009	0.010	0.004	0.001	0.006	0.006	0.010	0.004	0.003	0.003	0.001	0.013	0.016
2,3,4,6,7,8-HxCDF	0.005	0.021	0.003	0.007	0.007	0.013	0.004	0.003	0.009	0.005	0.008	0.005	0.007	0.011	0.004	<0.001	0.004	0.004	0.003	0.005	0.002	0.003	0.002	0.013	0.020
1,2,3,7,8,9-HxCDF	<0.002	0.001	<0.001	0.001	0.001	0.011	0.001	<0.001	<0.001	<0.001	0.002	0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.002	<0.001	0.000	0.001	0.001
1,2,3,4,6,7,8-HpCDF	0.035	0.094	0.011	0.034	0.034	0.030	0.023	0.017	0.043	0.019	0.035	0.023	0.042	0.104	0.019	0.016	0.025	0.021	0.030	0.025	0.018	0.018	0.010	0.057	0.097
1,2,3,4,7,8,9-HpCDF	0.004	0.012	<0.001	0.005	0.004	0.014	0.003	<0.002	0.005	0.003	0.005	0.003	0.006	0.009	0.003	0.001	0.004	0.002	0.002	0.003	0.002	0.002	0.001	0.006	0.013
OCDF	0.041	0.065	0.008	0.035	0.028	0.042	0.018	0.013	0.037	0.011	0.027	0.017	0.056	0.705	0.057	0.038	0.049	0.021	0.032	0.017	0.016	0.019	0.007	0.033	0.090
<b>PCDD/F Homologues</b>																									
TCDDs	0.054	0.123	0.022	0.037	0.044	0.022	0.029	0.024	0.039	0.020	0.039	0.021	0.048	0.040	0.016	0.006	0.051	0.074	0.019	0.012	0.012	0.031	0.003	0.048	0.067
PeCDDs	0.064	0.177	0.029	0.073	0.063	0.041	0.037	0.027	0.063	0.029	0.064	0.031	0.060	0.065	0.024	0.016	0.048	0.076	0.037	0.021	0.036	0.032	0.010	0.100	0.105
HxCDDs	0.162	0.400	0.038	0.196	0.155	0.092	0.061	0.051	0.117	0.045	0.153	0.063	0.082	0.100	0.023	0.036	0.056	0.093	0.060	0.045	0.067	0.053	0.033	0.270	0.159
HpCDDs	0.282	0.561	0.059	0.330	0.324	0.141	0.096	0.090	0.159	0.053	0.231	0.085	0.098	0.161	0.046	0.079	0.067	0.107	0.088	0.077	0.070	0.055	0.065	0.514	0.188
OCDD	0.477	0.621	0.123	0.460	0.586	0.280	0.218	0.141	0.268	0.082	0.310	0.117	0.274	0.354	0.157	0.177	0.178	0.195	0.188	0.129	0.116	0.109	0.106	0.669	0.373
TCDFs	0.264	0.618	0.087	0.200	0.304	0.126	0.198	0.168	0.165	0.092	0.140	0.095	0.201	0.203	0.100	0.032	0.173	0.200	0.069	0.074	0.061	0.121	0.016	0.203	0.338
PeCDFs	0.096	0.318	0.038	0.097	0.141	0.075	0.102	0.074	0.066	0.054	0.080	0.062	0.128	0.111	0.056	0.017	0.089	0.132	0.035	0.032	0.032	0.061	0.013	0.151	0.228
HxCDFs	0.079	0.248	0.028	0.080	0.094	0.088	0.077	0.049	0.082	0.050	0.078	0.054	0.104	0.105	0.035	0.020	0.076	0.091	0.062	0.038	0.036	0.045	0.016	0.135	0.186
HpCDFs	0.057	0.155	0.018	0.058	0.057	0.054	0.041	0.030	0.072	0.029	0.060	0.039	0.065	0.151	0.029	0.026	0.046	0.040	0.048	0.041	0.031	0.028	0.015	0.092	0.154
OCDF	0.041	0.065	0.008	0.035	0.028	0.042	0.018	0.013	0.037	0.011	0.027	0.017	0.056	0.705	0.057	0.038	0.049	0.021	0.032	0.017	0.016	0.019	0.007	0.033	0.090
<b>Total</b>																									
∑ PCDDs	1.040	1.882	0.271	1.097	1.172	0.577	0.440	0.332	0.646	0.228	0.796	0.317	0.562	0.720	0.265	0.314	0.398	0.545	0.392	0.285	0.301	0.279	0.217	1.601	0.892
∑ PCDFs	0.536	1.404	0.179	0.470	0.623	0.385	0.436	0.333	0.422	0.236	0.385	0.267	0.554	1.274	0.277	0.132	0.434	0.484	0.246	0.203	0.176	0.273	0.066	0.614	0.996
∑ PCDD/Fs	1.576	3.285	0.450	1.567	1.796	0.961	0.876	0.665	1.068	0.464	1.181	0.584	1.116	1.994	0.542	0.445	0.832	1.029	0.638	0.488	0.477	0.552	0.283	2.215	1.888
∑ TEQ (PCDD/Fs)	0.017	0.050	0.009	0.024	0.023	0.034	0.016	0.013	0.024	0.011	0.021	0.013	0.017	0.022	0.011	0.007	0.016	0.020	0.015	0.012	0.013	0.011	0.005	0.036	0.035

Table A55. Atmospheric concentrations of PCDD/Fs (pg m<sup>-3</sup>) at NAPS urban sites in 2006

Station Name	Calgary				Toronto (Judson)							Montreal (1125)												
Sampling Period	1	2	3	4	1	2	3	4	5	6	7	1	2	3	4	5	6	7	8	9	10	11	12	13
Sampling Date	10/20/06	11/13/06	12/7/06	12/31/06	7/16/06	8/9/06	9/2/06	9/26/06	10/20/06	12/7/06	12/31/06	1/5/06	1/29/06	3/18/06	4/11/06	5/5/06	5/29/06	6/22/06	7/16/06	8/9/06	9/2/06	9/26/06	11/13/06	12/7/06
Sampling Volume (m3)	810	802	774	884	910	942	1024	981	1145	1174	1027	742	763	782	676	676	679	671	660	739	781	734	824	810
<b>PCDD/F Congeners</b>																								
2,3,7,8-TCDD	0.001	0.002	0.001	0.002	0.003	0.001	0.001	0.001	0.001	0.000	0.001	0.002	0.002	0.001	0.001	<0.001	0.001	0.001	0.003	<0.001	0.001	0.001	0.001	0.001
1,2,3,7,8-PeCDD	0.003	0.011	0.004	0.012	0.008	0.005	0.006	0.005	0.005	0.003	0.008	0.010	0.009	0.004	0.007	0.006	0.008	0.007	0.009	0.003	0.006	0.004	0.005	0.006
1,2,3,4,7,8-HxCDD	0.001	0.011	0.002	0.014	0.007	0.003	0.003	0.003	0.004	0.002	0.008	0.005	0.008	0.002	0.004	0.002	0.003	0.004	0.004	0.005	0.005	0.001	0.003	0.006
1,2,3,6,7,8-HxCDD	0.002	0.022	0.003	0.020	0.010	0.005	0.005	0.005	0.007	0.003	0.014	0.011	0.020	0.004	0.008	0.005	0.007	0.005	0.006	0.006	0.008	0.002	0.004	0.008
1,2,3,7,8,9-HxCDD	0.003	0.024	0.004	0.026	0.014	0.004	0.005	0.005	0.007	0.004	0.014	0.012	0.020	0.003	0.011	0.005	0.006	0.006	0.007	0.008	0.002	0.004	0.011	0.011
1,2,3,4,6,7,8-HpCDD	0.025	0.261	0.039	0.236	0.110	0.044	0.056	0.064	0.057	0.041	0.173	0.123	0.186	0.046	0.110	0.059	0.080	0.070	0.063	0.091	0.107	0.020	0.047	0.107
OCDD	0.085	0.560	0.113	0.518	0.393	0.205	0.190	0.231	0.118	0.126	0.487	0.411	0.631	0.152	0.392	0.199	0.301	0.226	0.233	0.299	0.339	0.077	0.136	0.301
2,3,7,8-TCDF	0.009	0.017	0.010	0.015	0.021	0.026	0.011	0.011	0.031	0.009	0.023	0.051	0.052	0.016	0.024	0.020	0.031	0.016	0.042	0.021	0.024	0.012	0.023	0.021
1,2,3,7,8-PeCDF	0.001	0.004	0.001	0.003	0.004	0.005	0.003	0.002	0.006	0.002	0.006	0.007	0.006	0.004	0.005	0.004	0.006	0.003	0.007	0.003	0.004	0.002	0.004	0.005
2,3,4,7,8-PeCDF	0.002	0.007	0.002	0.005	0.006	0.006	0.003	0.003	0.009	0.003	0.009	0.017	0.013	0.005	0.007	0.005	0.007	0.004	0.010	0.004	0.006	0.003	0.006	0.008
1,2,3,4,7,8-HxCDF	0.003	0.013	0.004	0.010	0.012	0.010	0.006	0.007	0.013	0.005	0.027	0.033	0.054	0.015	0.015	0.015	0.016	0.009	0.019	0.012	0.013	0.006	0.014	0.021
1,2,3,6,7,8-HxCDF	0.001	0.007	0.002	0.005	0.004	0.005	0.003	0.003	0.005	0.002	0.010	0.012	0.015	0.005	0.006	0.005	0.007	0.003	0.008	0.004	0.006	0.003	0.005	0.008
2,3,4,6,7,8-HxCDF	0.001	0.006	0.001	0.005	0.005	0.004	0.003	0.003	0.005	0.002	0.010	0.015	0.025	0.005	0.006	0.006	0.006	0.004	0.008	0.004	0.005	0.003	0.006	0.010
1,2,3,7,8,9-HxCDF	<0.001	0.001	<0.001	0.001	<0.002	0.000	0.000	<0.001	0.001	<0.001	0.001	0.001	0.001	0.001	<0.002	0.001	0.001	<0.001	<0.001	<0.003	0.001	0.000	0.001	0.001
1,2,3,4,6,7,8-HpCDF	0.006	0.028	0.007	0.025	0.038	0.019	0.018	0.014	0.018	0.011	0.046	0.060	0.103	0.027	0.034	0.032	0.035	0.028	0.037	0.031	0.030	0.011	0.023	0.041
1,2,3,4,7,8,9-HpCDF	0.001	0.004	<0.001	0.003	0.003	0.002	0.002	0.001	0.002	0.002	0.006	0.008	0.011	0.006	0.004	0.004	0.005	0.002	0.005	0.002	0.004	0.001	0.004	0.006
OCDF	0.006	0.023	0.006	0.024	0.036	0.017	0.014	0.011	0.011	0.011	0.043	0.040	0.072	0.028	0.027	0.028	0.027	0.017	0.024	0.022	0.020	0.009	0.019	0.031
<b>PCDD/F Homologues</b>																								
TCDDs	0.007	0.032	0.012	0.055	0.034	0.020	0.019	0.015	0.028	0.013	0.037	0.095	0.080	0.018	0.041	0.021	0.030	0.018	0.055	0.030	0.020	0.014	0.030	0.035
PeCDDs	0.012	0.089	0.015	0.130	0.077	0.038	0.036	0.029	0.057	0.022	0.070	0.122	0.165	0.032	0.066	0.039	0.061	0.036	0.085	0.041	0.040	0.020	0.041	0.061
HxCDDs	0.026	0.281	0.044	0.366	0.158	0.072	0.070	0.071	0.113	0.046	0.179	0.223	0.296	0.057	0.143	0.074	0.101	0.076	0.111	0.108	0.103	0.029	0.070	0.141
HpCDDs	0.044	0.446	0.078	0.510	0.245	0.095	0.105	0.131	0.109	0.078	0.326	0.260	0.358	0.085	0.229	0.119	0.166	0.132	0.131	0.190	0.195	0.034	0.080	0.216
OCDD	0.085	0.560	0.113	0.518	0.393	0.205	0.190	0.231	0.118	0.126	0.487	0.411	0.631	0.152	0.392	0.199	0.301	0.226	0.233	0.299	0.339	0.077	0.136	0.301
TCDFs	0.059	0.113	0.082	0.093	0.204	0.175	0.095	0.093	0.178	0.057	0.151	0.304	0.248	0.082	0.172	0.143	0.263	0.142	0.332	0.170	0.263	0.088	0.153	0.143
PeCDFs	0.020	0.071	0.026	0.059	0.140	0.103	0.061	0.051	0.095	0.034	0.109	0.168	0.208	0.057	0.099	0.084	0.164	0.099	0.223	0.098	0.131	0.047	0.085	0.098
HxCDFs	0.013	0.069	0.016	0.055	0.122	0.076	0.049	0.040	0.057	0.027	0.113	0.142	0.239	0.060	0.081	0.075	0.124	0.079	0.155	0.083	0.091	0.034	0.067	0.097
HpCDFs	0.011	0.051	0.010	0.045	0.062	0.033	0.030	0.024	0.027	0.020	0.074	0.093	0.164	0.046	0.059	0.050	0.059	0.044	0.061	0.047	0.051	0.018	0.037	0.067
OCDF	0.006	0.023	0.006	0.024	0.036	0.017	0.014	0.011	0.011	0.011	0.043	0.040	0.072	0.028	0.027	0.028	0.027	0.017	0.024	0.022	0.020	0.009	0.019	0.031
<b>Total</b>																								
∑ PCDDs	0.174	1.409	0.262	1.578	0.906	0.429	0.419	0.477	0.425	0.285	1.099	1.111	1.529	0.344	0.871	0.452	0.658	0.488	0.614	0.668	0.698	0.174	0.356	0.754
∑ PCDFs	0.108	0.327	0.140	0.276	0.564	0.403	0.249	0.219	0.369	0.149	0.491	0.749	0.931	0.273	0.438	0.379	0.637	0.381	0.794	0.421	0.557	0.197	0.361	0.436
∑ PCDD/Fs	0.282	1.736	0.402	1.854	1.470	0.833	0.669	0.697	0.793	0.434	1.590	1.860	2.460	0.617	1.309	0.831	1.295	0.869	1.409	1.089	1.255	0.370	0.718	1.190
∑ TEQ (PCDD/Fs)	0.007	0.028	0.008	0.028	0.022	0.015	0.013	0.011	0.017	0.008	0.025	0.033	0.038	0.012	0.020	0.015	0.020	0.015	0.026	0.013	0.017	0.009	0.015	0.020



Table A55. Atmospheric concentrations of PCDD/Fs ( $\mu\text{g m}^{-3}$ ) at NAPS urban sites in 2006 (continued)

Station Name	Edmonton (89th St.)				Winnipeg													Windsor (College)			
Sampling Period	1	2	3	4	1	2	3	4	5	6	7	8	9	10	11	12	13	1	2	3	4
Sampling Date	9/26/06	11/13/06	12/7/06	12/31/06	1/5/06	1/29/06	3/18/06	4/11/06	5/29/06	6/22/06	8/9/06	9/2/06	9/26/06	10/20/06	11/13/06	12/7/06	12/31/06	9/2/06	11/13/06	12/7/06	12/31/06
Sampling Volume (m3)	865	757	737	855	800	653	731	633	668	673	740	785	865	892	867	911	857	866	901	858	892
<b>PCDD/F Congeners</b>																					
2,3,7,8-TCDD	0.000	0.001	0.001	0.006	0.001	0.001	0.001	0.001	0.000	0.001	0.002	0.001	0.000	0.001	0.001	0.001	0.002	0.002	0.001	0.001	0.001
1,2,3,7,8-PeCDD	0.004	0.007	0.008	0.039	0.006	0.004	0.007	0.008	0.004	0.007	0.008	0.011	0.003	0.005	0.005	0.006	0.008	0.010	0.006	0.007	0.010
1,2,3,4,7,8-HxCDD	0.001	0.006	0.007	0.046	0.004	0.002	0.005	0.004	0.001	0.004	0.009	0.012	0.001	0.004	0.003	0.004	0.005	0.009	0.005	0.005	0.011
1,2,3,6,7,8-HxCDD	0.003	0.009	0.012	0.082	0.007	0.004	0.008	0.006	0.003	0.003	0.009	0.025	0.002	0.006	0.005	0.007	0.009	0.019	0.009	0.007	0.017
1,2,3,7,8,9-HxCDD	0.002	0.011	0.015	0.101	0.011	0.005	0.008	0.007	0.002	0.004	0.013	0.025	0.002	0.007	0.006	0.008	0.012	0.018	0.009	0.008	0.020
1,2,3,4,6,7,8-HpCDD	0.019	0.127	0.141	1.114	0.094	0.050	0.094	0.076	0.023	0.036	0.156	0.332	0.019	0.040	0.075	0.078	0.089	0.231	0.096	0.084	0.249
OCDD	0.066	0.368	0.295	2.637	0.253	0.168	0.286	0.244	0.113	0.131	0.588	0.818	0.073	0.125	0.283	0.337	0.273	0.712	0.292	0.288	0.733
2,3,7,8-TCDF	0.007	0.008	0.013	0.034	0.014	0.009	0.016	0.017	0.008	0.011	0.010	0.044	0.008	0.022	0.007	0.011	0.033	0.018	0.029	0.032	0.032
1,2,3,7,8-PeCDF	0.001	0.001	0.003	0.007	0.003	0.002	0.003	0.003	0.002	0.003	0.002	0.008	0.001	0.004	0.001	0.002	0.005	0.004	0.006	0.005	0.007
2,3,4,7,8-PeCDF	0.002	0.002	0.004	0.013	0.005	0.037	0.005	0.005	0.002	0.004	0.003	0.014	0.002	0.007	0.002	0.003	0.007	0.005	0.010	0.008	0.011
1,2,3,4,7,8-HxCDF	0.003	0.005	0.011	0.034	0.009	0.003	0.013	0.009	0.004	0.008	0.007	0.031	0.005	0.014	0.005	0.007	0.012	0.011	0.019	0.015	0.033
1,2,3,6,7,8-HxCDF	0.001	0.002	0.004	0.013	0.003	0.002	0.005	0.004	0.002	0.004	0.003	0.012	0.002	0.007	0.002	0.003	0.005	0.006	0.008	0.005	0.014
2,3,4,6,7,8-HxCDF	0.002	0.002	0.005	0.017	0.006	0.002	0.006	0.003	0.001	0.002	0.003	0.015	0.002	0.007	0.002	0.003	0.005	0.006	0.009	0.006	0.017
1,2,3,7,8,9-HxCDF	0.000	<0.001	0.000	0.002	<0.001	<0.001	<0.001	<0.002	<0.001	0.003	<0.003	0.001	<0.001	0.002	0.000	0.001	0.001	0.001	0.001	0.001	0.001
1,2,3,4,6,7,8-HpCDF	0.007	0.015	0.022	0.094	0.020	0.008	0.031	0.020	0.011	0.017	0.025	0.068	0.011	0.019	0.012	0.018	0.024	0.031	0.030	0.029	0.072
1,2,3,4,7,8,9-HpCDF	0.001	0.002	0.003	0.014	0.003	<0.001	0.003	<0.003	<0.002	0.003	<0.005	0.009	0.001	0.003	0.001	0.002	0.003	0.005	0.005	0.004	0.009
OCDF	0.007	0.020	0.016	0.095	0.011	0.014	0.024	0.019	0.012	0.016	0.020	0.055	0.010	0.017	0.013	0.027	0.069	0.026	0.019	0.030	0.048
<b>PCDD/F Homologues</b>																					
TCDDs	0.012	0.018	0.031	0.127	0.041	0.021	0.030	0.036	0.015	0.016	0.035	0.087	0.013	0.033	0.017	0.037	0.046	0.051	0.062	0.040	0.074
PeCDDs	0.017	0.053	0.064	0.348	0.053	0.024	0.054	0.051	0.030	0.032	0.084	0.137	0.021	0.051	0.030	0.058	0.076	0.105	0.077	0.049	0.102
HxCDDs	0.034	0.156	0.190	1.198	0.148	0.054	0.121	0.113	0.040	0.056	0.217	0.349	0.030	0.083	0.079	0.110	0.136	0.262	0.140	0.105	0.287
HpCDDs	0.035	0.253	0.258	2.165	0.199	0.092	0.185	0.160	0.044	0.067	0.338	0.633	0.034	0.076	0.145	0.145	0.188	0.416	0.190	0.154	0.517
OCDD	0.066	0.368	0.295	2.637	0.253	0.168	0.286	0.244	0.113	0.131	0.588	0.818	0.073	0.125	0.283	0.337	0.273	0.712	0.292	0.288	0.733
TCDFs	0.045	0.043	0.086	0.208	0.086	0.064	0.100	0.126	0.074	0.072	0.103	0.297	0.062	0.126	0.048	0.069	0.203	0.140	0.198	0.281	0.252
PeCDFs	0.022	0.024	0.050	0.154	0.057	0.061	0.058	0.065	0.043	0.058	0.088	0.184	0.039	0.080	0.025	0.040	0.085	0.095	0.129	0.101	0.151
HxCDFs	0.016	0.026	0.049	0.177	0.045	0.017	0.056	0.049	0.035	0.045	0.077	0.160	0.028	0.059	0.022	0.035	0.054	0.091	0.102	0.070	0.159
HpCDFs	0.012	0.029	0.037	0.182	0.036	0.015	0.046	0.030	0.019	0.028	0.037	0.119	0.020	0.031	0.022	0.035	0.039	0.058	0.052	0.051	0.113
OCDF	0.007	0.020	0.016	0.095	0.011	0.014	0.024	0.019	0.012	0.016	0.020	0.055	0.010	0.017	0.013	0.027	0.069	0.026	0.019	0.030	0.048
<b>Total</b>																					
∑ PCDDs	0.165	0.847	0.838	6.474	0.693	0.358	0.676	0.603	0.241	0.302	1.262	2.022	0.172	0.368	0.553	0.687	0.719	1.545	0.761	0.636	1.713
∑ PCDFs	0.103	0.142	0.237	0.816	0.235	0.170	0.284	0.289	0.182	0.219	0.325	0.815	0.158	0.313	0.131	0.205	0.450	0.409	0.500	0.534	0.722
∑ PCDD/Fs	0.267	0.989	1.075	7.290	0.929	0.528	0.960	0.892	0.424	0.521	1.587	2.837	0.330	0.681	0.684	0.892	1.169	1.954	1.261	1.170	2.434
∑ TEQ (PCDD/Fs)	0.007	0.014	0.019	0.095	0.015	0.019	0.017	0.016	0.008	0.013	0.018	0.037	0.007	0.016	0.010	0.013	0.022	0.024	0.021	0.020	0.033

Table A55. Atmospheric concentrations of PCDD/Fs ( $\mu\text{g m}^{-3}$ ) at NAPS urban sites in 2006 (continued)

Station Name	Hamilton (Elgin)												Toronto (Gage Inst.)											
	1	2	3	4	5	6	7	8	9	10	11	12	1	2	3	4	5	6	7	8	9	10	11	12
Sampling Period	1/5/06	1/29/06	3/18/06	4/11/06	6/22/06	7/16/06	8/9/06	9/2/06	9/26/06	10/20/06	12/7/06	12/31/06	1/29/06	3/18/06	4/11/06	5/5/06	5/29/06	6/22/06	7/16/06	8/9/06	9/2/06	9/26/06	10/20/06	12/7/06
Sampling Volume (m <sup>3</sup> )	1050	871	837	751	800	850	788	922	770	1013	1211	949	684	626	933	610	589	647	669	763	915	770	815	886
<b>PCDD/F Congeners</b>																								
2,3,7,8-TCDD	0.001	0.003	0.001	0.002	0.001	0.001	0.001	0.001	0.004	0.001	0.001	0.002	0.002	<0.001	0.002	<0.002	0.002	0.001	0.002	0.001	0.001	0.001	0.001	0.001
1,2,3,7,8-PeCDD	0.005	0.016	0.005	0.014	0.006	0.007	0.006	0.006	0.036	0.004	0.003	0.010	0.012	0.005	0.007	0.005	0.007	0.005	0.007	0.005	0.004	0.005	0.004	0.005
1,2,3,4,7,8-HxCDD	0.004	0.017	0.002	0.016	0.003	0.006	0.004	0.003	0.068	0.003	0.002	0.010	0.012	0.001	0.007	0.002	0.003	0.003	0.004	0.002	0.002	0.003	0.002	0.003
1,2,3,6,7,8-HxCDD	0.007	0.034	0.003	0.025	0.005	0.010	0.007	0.006	0.141	0.006	0.004	0.017	0.022	0.001	0.012	0.004	0.005	0.005	0.007	0.005	0.003	0.004	0.004	0.005
1,2,3,7,8,9-HxCDD	0.009	0.042	0.005	0.027	0.005	0.010	0.006	0.005	0.150	0.005	0.005	0.019	0.024	0.002	0.014	0.005	0.007	0.005	0.007	0.004	0.003	0.005	0.004	0.006
1,2,3,4,6,7,8-HpCDD	0.088	0.424	0.040	0.329	0.081	0.094	0.071	0.057	2.347	0.055	0.045	0.235	0.290	0.020	0.145	0.041	0.069	0.063	0.099	0.036	0.048	0.052	0.027	0.079
OCDD	0.243	1.133	0.119	1.231	0.319	0.297	0.209	0.211	5.102	0.138	0.139	0.792	0.824	0.076	0.404	0.142	0.291	0.232	0.353	0.122	0.157	0.159	0.074	0.229
2,3,7,8-TCDF	0.015	0.067	0.012	0.070	0.017	0.025	0.025	0.074	0.023	0.010	0.023	0.058	0.038	0.013	0.025	0.026	0.035	0.023	0.031	0.036	0.011	0.029	0.028	0.011
1,2,3,7,8-PeCDF	0.003	0.015	0.002	0.014	0.006	0.006	0.005	0.012	0.007	0.002	0.005	0.010	0.008	0.003	0.005	0.004	0.005	0.004	0.005	0.006	0.002	0.005	0.005	0.002
2,3,4,7,8-PeCDF	0.004	0.030	0.004	0.026	0.004	0.006	0.006	0.018	0.012	0.003	0.009	0.017	0.015	0.004	0.007	0.007	0.007	0.005	0.006	0.010	0.003	0.008	0.008	0.003
1,2,3,4,7,8-HxCDF	0.008	0.055	0.005	0.043	0.010	0.011	0.010	0.022	0.023	0.005	0.021	0.036	0.038	0.008	0.016	0.011	0.014	0.011	0.012	0.018	0.006	0.014	0.013	0.008
1,2,3,6,7,8-HxCDF	0.003	0.022	0.002	0.019	0.004	0.006	0.005	0.011	0.013	0.002	0.008	0.014	0.014	0.003	0.007	0.005	0.008	0.005	0.005	0.007	0.002	0.006	0.005	0.003
2,3,4,6,7,8-HxCDF	0.004	0.022	0.002	0.013	0.004	0.006	0.004	0.008	0.012	0.002	0.010	0.014	0.018	0.004	0.005	0.007	0.008	0.006	0.005	0.008	0.002	0.006	0.006	0.003
1,2,3,7,8,9-HxCDF	0.000	0.001	<0.001	0.002	<0.001	0.002	0.001	0.001	0.002	0.000	0.001	0.002	0.001	<0.002	0.001	0.001	<0.003	<0.002	0.001	<0.001	0.000	0.000	0.001	0.000
1,2,3,4,6,7,8-HpCDF	0.027	0.100	0.011	0.078	0.027	0.034	0.022	0.025	0.149	0.010	0.038	0.061	0.079	0.015	0.030	0.027	0.041	0.024	0.029	0.026	0.014	0.024	0.018	0.014
1,2,3,4,7,8,9-HpCDF	0.002	0.014	<0.002	0.010	0.002	0.003	0.002	0.004	0.020	0.001	0.006	0.011	0.011	0.003	<0.003	0.003	0.005	0.004	0.003	0.004	0.002	0.004	0.003	0.002
OCDF	0.044	0.072	0.008	0.069	0.037	0.027	0.014	0.016	0.203	0.008	0.035	0.048	0.053	0.009	0.023	0.038	0.033	0.020	0.023	0.016	0.012	0.016	0.011	0.014
<b>PCDD/F Homologues</b>																								
TCDDs	0.029	0.109	0.016	0.093	0.038	0.049	0.026	0.106	0.092	0.017	0.021	0.082	0.060	0.010	0.033	0.023	0.039	0.036	0.039	0.030	0.018	0.040	0.022	0.018
PeCDDs	0.041	0.189	0.032	0.148	0.073	0.065	0.047	0.083	0.377	0.030	0.030	0.117	0.103	0.016	0.076	0.035	0.054	0.037	0.057	0.049	0.029	0.044	0.027	0.033
HxCDDs	0.097	0.516	0.070	0.418	0.105	0.135	0.097	0.088	2.128	0.076	0.059	0.264	0.321	0.028	0.194	0.053	0.095	0.079	0.117	0.073	0.055	0.073	0.050	0.083
HpCDDs	0.165	0.837	0.093	0.716	0.166	0.189	0.129	0.113	4.570	0.103	0.086	0.468	0.578	0.039	0.327	0.079	0.152	0.140	0.225	0.071	0.090	0.098	0.050	0.156
OCDD	0.243	1.133	0.119	1.231	0.319	0.297	0.209	0.211	5.102	0.138	0.139	0.792	0.824	0.076	0.404	0.142	0.291	0.232	0.353	0.122	0.157	0.159	0.074	0.229
TCDFs	0.110	0.450	0.079	0.537	0.160	0.237	0.191	0.517	0.164	0.067	0.145	0.384	0.263	0.080	0.178	0.172	0.292	0.194	0.275	0.227	0.086	0.217	0.177	0.071
PeCDFs	0.053	0.278	0.034	0.264	0.107	0.167	0.103	0.222	0.129	0.034	0.100	0.199	0.171	0.042	0.096	0.075	0.139	0.099	0.124	0.123	0.042	0.101	0.087	0.037
HxCDFs	0.041	0.242	0.022	0.208	0.097	0.128	0.077	0.109	0.245	0.025	0.093	0.156	0.169	0.029	0.079	0.051	0.117	0.076	0.090	0.090	0.031	0.069	0.059	0.034
HpCDFs	0.047	0.162	0.013	0.135	0.044	0.054	0.035	0.045	0.390	0.016	0.063	0.103	0.133	0.024	0.051	0.039	0.067	0.046	0.050	0.045	0.023	0.039	0.030	0.025
OCDF	0.044	0.072	0.008	0.069	0.037	0.027	0.014	0.016	0.203	0.008	0.035	0.048	0.053	0.009	0.023	0.038	0.033	0.020	0.023	0.016	0.012	0.016	0.011	0.014
<b>Total</b>																								
∑ PCDDs	0.575	2.784	0.330	2.605	0.700	0.735	0.508	0.600	12.270	0.365	0.334	1.723	1.885	0.168	1.032	0.331	0.631	0.524	0.791	0.345	0.349	0.414	0.223	0.519
∑ PCDFs	0.294	1.204	0.155	1.212	0.444	0.613	0.420	0.908	1.131	0.150	0.436	0.890	0.788	0.184	0.427	0.375	0.648	0.435	0.562	0.501	0.193	0.441	0.364	0.182
∑ PCDD/Fs	0.869	3.988	0.485	3.817	1.144	1.347	0.927	1.508	13.400	0.515	0.770	2.613	2.673	0.352	1.458	0.706	1.280	0.958	1.353	0.845	0.541	0.855	0.587	0.701
∑ TEQ (PCDD/Fs)	0.014	0.060	0.011	0.050	0.015	0.019	0.016	0.026	0.114	0.010	0.015	0.037	0.039	0.010	0.021	0.015	0.020	0.015	0.020	0.018	0.009	0.016	0.013	0.012

Table A55. Atmospheric concentrations of PCDD/Fs (pg m<sup>-3</sup>) at NAPS urban sites in 2006 (continued)

Station Name	Jonquiere														Comerbrook												
Sampling Period	1	2	3	4	5	6	7	8	9	10	11	12	13	14	1	2	3	4	5	6	7	8	9	10	11	12	13
Sampling Date	1/5/06	1/29/06	3/18/06	4/11/06	5/5/06	5/29/06	6/22/06	7/16/06	8/9/06	9/2/06	9/26/06	11/13/06	12/7/06	12/31/06	1/5/06	1/17/06	5/29/06	6/10/06	6/22/06	7/4/06	7/16/06	9/14/06	9/26/06	11/25/06	12/7/06	12/19/06	12/31/06
Sampling Volume (m3)	1101	1015	674	945	822	975	906	913	1031	1134	1149	1094	1156	1207	735	677	667	704	638	520	537	690	679	844	748	845	842
<b>PCDD/F Congeners</b>																											
2,3,7,8-TCDD	0.003	0.001	0.001	0.001	<0.001	0.001	0.001	<0.001	<0.001	0.001	0.000	0.001	0.001	0.001	0.002	0.001	0.001	0.001	0.001	0.001	0.000	0.001	0.001	0.000	0.001	<0.001	0.000
1,2,3,7,8-PeCDD	0.008	0.003	0.004	0.008	0.004	0.007	0.006	0.005	0.003	0.007	0.003	0.006	0.005	0.003	0.007	0.006	0.005	0.007	0.007	0.007	0.008	0.008	0.005	0.003	0.003	0.004	0.005
1,2,3,4,7,8-HxCDD	0.003	0.001	0.001	0.010	<0.002	0.005	0.002	0.003	<0.002	0.010	0.001	0.003	0.005	0.001	0.003	0.005	0.002	0.003	0.002	0.002	0.002	0.002	0.001	0.001	0.001	0.002	0.004
1,2,3,6,7,8-HxCDD	0.007	0.003	0.002	0.015	0.001	0.009	0.003	0.005	0.002	0.019	0.003	0.006	0.008	0.003	0.006	0.006	0.005	0.006	0.003	0.005	0.003	0.004	0.003	0.002	0.002	0.002	0.006
1,2,3,7,8,9-HxCDD	0.007	0.004	0.003	0.017	0.002	0.009	0.003	0.004	0.003	0.022	0.002	0.007	0.009	0.003	0.010	0.006	0.003	0.007	0.004	0.004	0.004	0.004	0.003	0.002	0.002	0.003	0.008
1,2,3,4,6,7,8-HpCDD	0.048	0.029	0.022	0.257	0.016	0.109	0.023	0.032	0.024	0.265	0.019	0.051	0.093	0.037	0.039	0.098	0.034	0.083	0.032	0.037	0.020	0.027	0.019	0.017	0.018	0.031	0.083
OCDD	0.119	0.120	0.106	0.733	0.066	0.311	0.093	0.091	0.091	0.637	0.051	0.124	0.340	0.101	0.087	0.292	0.090	0.220	0.111	0.130	0.058	0.077	0.047	0.055	0.052	0.171	0.218
2,3,7,8-TCDF	0.207	0.008	0.006	0.024	0.021	0.043	0.026	0.038	0.014	0.019	0.015	0.022	0.023	0.013	0.071	0.004	0.010	0.027	0.009	0.008	0.006	0.013	0.016	0.008	0.010	0.007	0.007
1,2,3,7,8-PeCDF	0.190	0.002	0.002	0.008	0.006	0.016	0.008	0.014	0.006	0.005	0.004	0.005	0.008	0.002	0.010	0.001	0.002	0.004	0.002	0.002	0.001	0.003	0.003	0.001	0.001	0.002	0.002
2,3,4,7,8-PeCDF	0.054	0.002	0.002	0.008	0.004	0.012	0.005	0.009	0.003	0.005	0.004	0.006	0.007	0.003	0.019	0.001	0.003	0.006	0.003	0.002	0.002	0.003	0.005	0.002	0.002	0.002	0.003
1,2,3,4,7,8-HxCDF	0.279	0.006	0.003	0.017	0.008	0.038	0.011	0.014	0.009	0.012	0.010	0.011	0.021	0.006	0.027	0.002	0.007	0.018	0.007	0.006	0.003	0.007	0.008	0.003	0.002	0.003	0.005
1,2,3,6,7,8-HxCDF	0.079	0.002	0.001	0.007	0.003	0.013	0.005	0.006	0.004	0.005	0.004	0.005	0.008	0.003	0.011	0.002	0.003	0.007	0.004	0.004	0.003	0.003	0.004	0.001	0.002	0.002	0.003
2,3,4,6,7,8-HxCDF	0.016	0.002	0.001	0.007	0.002	0.010	0.004	0.004	0.003	0.005	0.004	0.005	0.007	0.003	0.013	0.003	0.003	0.008	0.004	0.003	0.002	0.004	0.004	0.002	0.001	0.002	0.003
1,2,3,7,8,9-HxCDF	0.018	<0.001	<0.001	0.001	0.001	0.003	0.000	<0.002	<0.002	0.001	0.001	0.000	0.001	0.000	0.001	0.001	0.001	0.001	<0.001	<0.002	<0.001	0.000	<0.001	<0.001	<0.001	<0.001	0.000
1,2,3,4,6,7,8-HpCDF	0.134	0.013	0.010	0.039	0.013	0.058	0.019	0.019	0.021	0.033	0.018	0.017	0.032	0.011	0.034	0.028	0.018	0.031	0.020	0.019	0.010	0.015	0.012	0.006	0.009	0.012	0.028
1,2,3,4,7,8,9-HpCDF	0.088	0.003	<0.002	0.007	0.003	0.006	0.002	0.002	0.002	0.005	0.003	0.004	0.006	0.001	0.004	0.003	<0.003	0.006	<0.002	<0.003	<0.003	0.001	0.001	0.001	0.001	0.001	0.002
OCDF	0.152	0.033	0.015	0.070	0.012	0.035	0.035	0.022	0.020	0.044	0.017	0.023	0.038	0.008	0.012	0.034	0.009	0.026	0.016	0.013	0.006	0.010	0.007	0.005	0.007	0.008	0.023
<b>PCDD/F Homologues</b>																											
TCDDs	0.081	0.007	0.009	0.049	0.022	0.063	0.042	0.038	0.019	0.030	0.044	0.051	0.052	0.012	0.126	0.004	0.018	0.038	0.033	0.030	0.017	0.046	0.028	0.010	0.011	0.007	0.009
PeCDDs	0.086	0.013	0.013	0.078	0.020	0.075	0.041	0.076	0.077	0.081	0.047	0.067	0.070	0.022	0.127	0.015	0.030	0.066	0.062	0.044	0.051	0.066	0.041	0.014	0.013	0.011	0.018
HxCDDs	0.105	0.030	0.018	0.226	0.023	0.117	0.051	0.072	0.043	0.237	0.046	0.083	0.122	0.041	0.140	0.055	0.048	0.100	0.066	0.067	0.051	0.065	0.041	0.019	0.021	0.026	0.055
HpCDDs	0.099	0.051	0.037	0.499	0.030	0.188	0.048	0.059	0.047	0.468	0.034	0.085	0.169	0.068	0.076	0.143	0.058	0.158	0.055	0.064	0.037	0.047	0.032	0.028	0.029	0.049	0.126
OCDD	0.119	0.120	0.106	0.733	0.066	0.311	0.093	0.091	0.091	0.637	0.051	0.124	0.340	0.101	0.087	0.292	0.090	0.220	0.111	0.130	0.058	0.077	0.047	0.055	0.052	0.171	0.218
TCDFs	1.065	0.052	0.035	0.151	0.159	0.288	0.166	0.257	0.099	0.135	0.102	0.144	0.135	0.079	0.433	0.024	0.084	0.198	0.137	0.107	0.098	0.123	0.117	0.051	0.072	0.045	0.047
PeCDFs	0.683	0.020	0.017	0.103	0.084	0.179	0.101	0.148	0.087	0.081	0.063	0.076	0.088	0.038	0.220	0.023	0.062	0.140	0.149	0.115	0.106	0.108	0.079	0.025	0.029	0.027	0.035
HxCDFs	0.589	0.019	0.013	0.083	0.054	0.158	0.063	0.084	0.059	0.078	0.048	0.054	0.087	0.028	0.117	0.046	0.049	0.105	0.088	0.069	0.056	0.062	0.049	0.014	0.020	0.024	0.049
HpCDFs	0.275	0.024	0.015	0.080	0.024	0.085	0.031	0.028	0.031	0.063	0.031	0.033	0.057	0.016	0.051	0.053	0.023	0.052	0.032	0.029	0.010	0.023	0.019	0.010	0.013	0.018	0.045
OCDF	0.152	0.033	0.015	0.070	0.012	0.035	0.035	0.022	0.020	0.044	0.017	0.023	0.038	0.008	0.012	0.034	0.009	0.026	0.016	0.013	0.006	0.010	0.007	0.005	0.007	0.008	0.023
<b>Total</b>																											
∑ PCDDs	0.490	0.220	0.183	1.585	0.161	0.755	0.274	0.335	0.277	1.453	0.221	0.410	0.752	0.242	0.555	0.508	0.244	0.582	0.327	0.335	0.214	0.300	0.190	0.125	0.126	0.263	0.426
∑ PCDFs	2.763	0.149	0.095	0.497	0.333	0.745	0.396	0.538	0.296	0.401	0.260	0.329	0.404	0.169	0.832	0.179	0.227	0.521	0.421	0.333	0.276	0.326	0.271	0.105	0.141	0.122	0.199
∑ PCDD/Fs	3.253	0.368	0.278	2.081	0.494	1.499	0.670	0.874	0.573	1.854	0.481	0.739	1.156	0.411	1.387	0.687	0.471	1.103	0.748	0.668	0.489	0.626	0.461	0.231	0.267	0.386	0.626
∑ TEQ (PCDD/Fs)	0.097	0.007	0.007	0.025	0.011	0.027	0.014	0.018	0.009	0.023	0.010	0.015	0.018	0.008	0.030	0.011	0.011	0.019	0.013	0.013	0.011	0.014	0.012	0.006	0.007	0.007	0.011

Table A56. Atmospheric concentrations of PCDD/Fs ( $\mu\text{g m}^{-3}$ ) at NAPS urban sites in 2007

Station Name	Calgary												Toronto (Judson)														
	1	2	3	4	5	6	7	8	9	10	11	12	1	2	3	4	5	6	7	8	9	10	11	12	13	14	
Sampling Period	1/24/07	3/13/07	4/6/07	4/30/07	5/24/07	6/17/07	8/4/07	8/28/07	9/21/07	11/8/07	12/2/07	12/26/07	1/24/07	3/13/07	4/6/07	4/30/07	5/24/07	6/17/07	7/11/07	8/4/07	8/28/07	9/21/07	10/15/07	11/8/07	12/2/07	12/26/07	
Sampling Volume (m3)	785	907	846	911	829	606	744	725	786	960	925	861	1048	846	1023	1034	1074	836	670	1063	563	901	927	1078	1006	948	
<b>PCDD/F Congeners</b>																											
2,3,7,8-TCDD	0.001	<0.001	0.000	0.001	0.001	<0.001	<0.001	<0.002	0.001	0.001	0.002	0.000	0.002	0.002	<0.001	0.001	0.003	0.001	0.001	0.001	0.002	0.002	0.001	0.001	0.001	0.001	0.001
1,2,3,7,8-PeCDD	0.005	0.002	0.003	0.003	0.008	0.004	0.004	0.005	0.004	0.006	0.011	0.003	0.011	0.009	0.003	0.005	0.009	0.011	0.005	0.005	0.008	0.006	0.008	0.007	0.006	0.006	
1,2,3,4,7,8-HxCDD	0.003	0.001	0.001	0.001	0.008	<0.002	<0.003	<0.002	0.001	0.003	0.008	0.001	0.011	0.010	0.002	0.003	0.006	0.006	0.002	0.003	0.004	0.004	0.006	0.006	0.006	0.004	
1,2,3,6,7,8-HxCDD	0.005	0.001	0.002	<0.001	0.016	0.001	<0.002	0.003	0.002	0.006	0.018	0.002	0.019	0.015	0.002	0.006	0.009	0.012	0.004	0.004	0.006	0.005	0.011	0.010	0.010	0.007	
1,2,3,7,8,9-HxCDD	0.005	0.002	0.002	0.001	0.027	<0.001	<0.002	0.003	0.001	0.006	0.020	0.002	0.021	0.020	0.003	0.007	0.011	0.013	0.006	0.004	0.006	0.006	0.011	0.010	0.012	0.007	
1,2,3,4,6,7,8-HpCDD	0.057	0.019	0.027	0.030	0.281	0.016	0.018	0.035	0.026	0.084	0.186	0.031	0.239	0.232	0.029	0.076	0.110	0.137	0.056	0.039	0.048	0.058	0.099	0.108	0.143	0.099	
OCDD	0.129	0.061	0.077	0.103	0.563	0.045	0.065	0.124	0.129	0.238	0.411	0.167	0.611	0.818	0.105	0.257	0.451	0.460	0.205	0.129	0.157	0.257	0.380	0.325	0.792	0.327	
2,3,7,8-TCDF	0.019	0.011	0.004	0.008	0.007	0.007	0.009	0.011	0.011	0.011	0.011	0.006	0.040	0.036	0.004	0.011	0.034	0.016	0.014	0.011	0.013	0.023	0.047	0.022	0.013	0.015	
1,2,3,7,8-PeCDF	0.004	0.001	0.001	0.002	0.001	0.001	<0.001	0.002	0.002	0.002	0.002	0.001	0.006	0.008	0.001	0.002	0.007	0.003	0.002	0.002	0.003	0.005	0.010	0.005	0.003	0.003	
2,3,4,7,8-PeCDF	0.008	0.002	0.001	0.002	0.002	0.002	0.001	0.003	0.002	0.002	0.003	0.002	0.009	0.011	0.001	0.003	0.009	0.004	0.003	0.002	0.005	0.006	0.022	0.010	0.005	0.005	
1,2,3,4,7,8-HxCDF	0.030	0.002	0.002	0.003	0.003	0.002	0.003	0.006	0.003	0.005	0.007	0.005	0.019	0.031	0.003	0.005	0.024	0.010	0.007	0.007	0.012	0.014	0.043	0.021	0.013	0.010	
1,2,3,6,7,8-HxCDF	0.010	0.001	0.001	0.001	0.001	0.001	0.001	0.002	0.001	0.002	0.003	0.002	0.007	0.012	0.001	0.002	0.011	0.005	0.003	0.003	0.005	0.006	0.017	0.010	0.005	0.004	
2,3,4,6,7,8-HxCDF	0.013	0.001	0.001	0.001	0.001	0.001	0.001	0.002	0.002	0.002	0.003	0.001	0.007	0.015	0.000	0.002	0.010	0.003	0.004	0.003	0.008	0.006	0.016	0.010	0.005	0.004	
1,2,3,7,8,9-HxCDF	0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.002	<0.003	<0.002	<0.001	<0.001	<0.001	0.001	<0.001	<0.001	<0.001	0.001	0.000	<0.002	0.000	0.001	0.001	0.002	0.001	0.001	<0.001	
1,2,3,4,6,7,8-HpCDF	0.062	0.007	0.004	0.008	0.012	0.004	0.008	0.010	0.008	0.011	0.015	0.014	0.028	0.066	0.005	0.019	0.059	0.030	0.017	0.016	0.027	0.031	0.058	0.031	0.033	0.018	
1,2,3,4,7,8,9-HpCDF	0.012	0.001	<0.001	0.001	0.001	<0.002	<0.003	<0.003	<0.002	0.001	0.002	0.003	0.004	0.007	<0.002	0.002	0.005	0.003	0.002	0.001	0.002	0.003	0.008	0.005	0.004	0.002	
OCDF	0.037	0.014	0.005	0.009	0.012	0.004	0.005	0.009	0.006	0.010	0.011	0.020	0.036	0.057	0.008	0.026	0.045	0.030	0.016	0.012	0.013	0.024	0.036	0.019	0.045	0.011	
<b>PCDD/F Homologues</b>																											
TCDDs	0.017	0.003	0.004	0.009	0.024	0.001	0.005	0.012	0.012	0.014	0.064	0.009	0.083	0.055	0.004	0.021	0.043	0.031	0.014	0.018	0.027	0.026	0.061	0.034	0.026	0.035	
PeCDDs	0.033	0.008	0.012	0.017	0.079	0.011	0.007	0.012	0.008	0.026	0.093	0.014	0.125	0.098	0.013	0.036	0.075	0.077	0.058	0.027	0.051	0.037	0.090	0.065	0.043	0.051	
HxCDDs	0.066	0.017	0.030	0.026	0.270	0.018	0.019	0.043	0.030	0.072	0.244	0.028	0.288	0.262	0.031	0.082	0.161	0.200	0.182	0.061	0.108	0.084	0.153	0.151	0.132	0.121	
HpCDDs	0.102	0.033	0.052	0.058	0.533	0.028	0.037	0.066	0.047	0.141	0.338	0.055	0.467	0.496	0.054	0.146	0.263	0.293	0.108	0.085	0.104	0.126	0.176	0.224	0.291	0.189	
OCDD	0.129	0.061	0.077	0.103	0.563	0.045	0.065	0.124	0.129	0.238	0.411	0.167	0.611	0.818	0.105	0.257	0.451	0.460	0.205	0.129	0.157	0.257	0.380	0.325	0.792	0.327	
TCDFs	0.153	0.073	0.026	0.061	0.057	0.048	0.062	0.086	0.079	0.066	0.074	0.038	0.250	0.285	0.031	0.085	0.281	0.145	0.108	0.093	0.101	0.183	0.286	0.151	0.094	0.109	
PeCDFs	0.083	0.022	0.011	0.024	0.023	0.017	0.022	0.036	0.034	0.028	0.048	0.020	0.117	0.170	0.019	0.045	0.197	0.118	0.054	0.062	0.095	0.122	0.217	0.116	0.063	0.059	
HxCDFs	0.114	0.012	0.008	0.015	0.022	0.008	0.018	0.026	0.019	0.024	0.041	0.023	0.087	0.155	0.015	0.037	0.168	0.107	0.048	0.054	0.092	0.105	0.185	0.104	0.065	0.048	
HpCDFs	0.099	0.014	0.006	0.014	0.023	0.007	0.008	0.015	0.013	0.021	0.029	0.024	0.055	0.103	0.011	0.035	0.092	0.052	0.031	0.025	0.046	0.056	0.094	0.055	0.063	0.029	
OCDF	0.037	0.014	0.005	0.009	0.012	0.004	0.005	0.009	0.006	0.010	0.011	0.020	0.036	0.057	0.008	0.026	0.045	0.030	0.016	0.012	0.013	0.024	0.036	0.019	0.045	0.011	
<b>Total</b>																											
∑ PCDDs	0.346	0.122	0.174	0.213	1.469	0.102	0.134	0.256	0.226	0.491	1.149	0.272	1.573	1.729	0.208	0.542	0.992	1.060	0.567	0.320	0.447	0.530	0.860	0.799	1.284	0.722	
∑ PCDFs	0.486	0.134	0.056	0.123	0.137	0.084	0.115	0.172	0.150	0.149	0.203	0.125	0.545	0.770	0.083	0.227	0.784	0.452	0.256	0.246	0.347	0.490	0.818	0.444	0.331	0.256	
∑ PCDD/Fs	0.832	0.256	0.231	0.336	1.607	0.186	0.248	0.428	0.376	0.641	1.352	0.397	2.117	2.500	0.291	0.769	1.776	1.513	0.823	0.566	0.794	1.020	1.678	1.244	1.615	0.977	
∑ TEQ (PCDD/Fs)	0.018	0.005	0.005	0.006	0.019	0.007	0.008	0.011	0.009	0.012	0.023	0.006	0.031	0.032	0.006	0.011	0.027	0.022	0.011	0.011	0.018	0.017	0.033	0.021	0.017	0.014	

Table A56. Atmospheric concentrations of PCDD/Fs ( $\mu\text{g m}^{-3}$ ) at NAPS urban sites in 2007 (continued)

Station Name	Montreal (1125)										Edmonton (89th St.)											
Sampling Period	1	2	3	4	5	6	7	8	9	10	1	2	3	4	5	6	7	8	9	10	11	12
Sampling Date	1/24/07	3/13/07	4/6/07	4/30/07	7/11/07	8/4/07	8/28/07	9/21/07	12/2/07	12/26/07	1/24/07	3/13/07	4/6/07	4/30/07	5/24/07	6/17/07	7/11/07	8/4/07	8/28/07	9/21/07	12/2/07	12/26/07
Sampling Volume (m3)	662	563	648	539	742	750	753	659	752	733	760	743	734	793	761	764	724	700	668	717	870	892
<b>PCDD/F Congeners</b>																						
2,3,7,8-TCDD	0.001	0.002	0.001	0.001	0.001	0.001	0.002	0.001	0.001	0.001	0.003	0.001	<0.002	0.000	0.001	0.001	<0.001	0.001	0.001	0.002	0.001	0.006
1,2,3,7,8-PeCDD	0.006	0.009	0.004	0.006	0.007	0.006	0.006	0.008	0.007	0.007	0.016	0.004	0.003	0.004	0.005	0.005	0.004	0.004	0.006	0.010	0.008	0.035
1,2,3,4,7,8-HxCDD	0.004	0.007	0.002	0.003	0.003	0.003	0.006	0.005	0.006	0.006	0.014	0.001	<0.003	0.002	0.004	0.004	0.002	0.001	0.004	0.008	0.007	0.037
1,2,3,6,7,8-HxCDD	0.006	0.010	0.003	0.004	0.006	0.007	0.010	0.009	0.010	0.009	0.022	0.002	0.002	0.003	0.004	0.004	0.002	0.002	0.007	0.021	0.014	0.079
1,2,3,7,8,9-HxCDD	0.006	0.013	0.004	0.007	0.006	0.006	0.012	0.009	0.012	0.015	0.033	0.004	0.005	0.003	0.006	0.006	0.004	0.002	0.009	0.023	0.015	0.087
1,2,3,4,6,7,8-HpCDD	0.086	0.149	0.043	0.060	0.074	0.064	0.137	0.102	0.113	0.142	0.329	0.032	0.038	0.044	0.080	0.049	0.033	0.019	0.087	0.174	0.162	1.017
OCDD	0.287	0.435	0.145	0.195	0.357	0.197	0.688	0.311	0.292	0.426	0.759	0.085	0.108	0.147	0.183	0.148	0.119	0.068	0.220	0.439	0.384	2.700
2,3,7,8-TCDF	0.020	0.026	0.009	0.017	0.024	0.013	0.032	0.023	0.020	0.019	0.031	0.005	0.003	0.006	0.006	0.008	0.006	0.005	0.020	0.012	0.011	0.036
1,2,3,7,8-PeCDF	0.004	0.006	0.002	0.004	0.005	0.003	0.005	0.004	0.004	0.004	0.005	0.001	0.000	0.002	0.001	0.002	0.001	0.001	0.006	0.002	0.002	0.007
2,3,4,7,8-PeCDF	0.006	0.008	0.002	0.005	0.005	0.003	0.009	0.005	0.007	0.007	0.008	0.001	0.001	0.002	<0.001	0.003	0.001	0.001	0.010	0.004	0.006	0.013
1,2,3,4,7,8-HxCDF	0.014	0.021	0.006	0.014	0.011	0.007	0.019	0.014	0.017	0.017	0.015	0.003	0.001	0.004	0.003	0.005	0.003	0.002	0.034	0.010	0.006	0.030
1,2,3,6,7,8-HxCDF	0.005	0.008	0.002	0.005	0.006	0.004	0.009	0.006	0.007	0.006	0.007	0.001	0.001	0.002	0.001	0.004	0.001	0.001	0.013	0.004	0.003	0.013
2,3,4,6,7,8-HxCDF	0.006	0.009	0.003	0.006	0.005	0.004	0.010	0.007	0.007	0.007	0.007	0.001	0.001	0.001	0.001	0.003	0.002	0.001	0.015	0.003	0.003	0.013
1,2,3,7,8,9-HxCDF	0.000	0.001	0.000	<0.001	<0.001	<0.001	<0.002	<0.002	0.001	<0.001	0.001	<0.001	<0.002	<0.001	<0.001	<0.002	<0.001	0.000	0.002	0.001	0.000	0.002
1,2,3,4,6,7,8-HpCDF	0.022	0.042	0.021	0.026	0.029	0.024	0.046	0.029	0.037	0.029	0.025	0.007	0.005	0.012	0.015	0.013	0.010	0.007	0.068	0.015	0.012	0.077
1,2,3,4,7,8,9-HpCDF	0.003	0.007	0.001	0.002	0.003	0.001	0.004	0.002	0.004	0.005	0.004	<0.001	<0.002	<0.001	<0.001	0.003	<0.002	<0.001	0.011	0.001	0.001	0.010
OCDF	0.025	0.033	0.025	0.017	0.033	0.014	0.038	0.021	0.040	0.025	0.023	0.006	0.006	0.014	0.015	0.012	0.006	0.004	0.039	0.011	0.011	0.144
<b>PCDD/F Homologues</b>																						
TCDDs	0.029	0.042	0.011	0.027	0.024	0.016	0.035	0.032	0.033	0.029	0.080	0.013	0.003	0.013	0.014	0.015	0.009	0.008	0.020	0.021	0.029	0.130
PeCDDs	0.048	0.078	0.021	0.046	0.043	0.029	0.048	0.060	0.058	0.056	0.155	0.025	0.015	0.028	0.040	0.026	0.023	0.015	0.044	0.079	0.063	0.311
HxCDDs	0.099	0.173	0.037	0.071	0.074	0.062	0.115	0.143	0.133	0.139	0.397	0.058	0.040	0.047	0.104	0.073	0.055	0.026	0.109	0.250	0.195	0.973
HpCDDs	0.163	0.296	0.074	0.112	0.146	0.115	0.262	0.222	0.201	0.265	0.580	0.080	0.076	0.082	0.177	0.093	0.066	0.033	0.153	0.330	0.314	1.787
OCDD	0.287	0.435	0.145	0.195	0.357	0.197	0.688	0.311	0.292	0.426	0.759	0.085	0.108	0.147	0.183	0.148	0.119	0.068	0.220	0.439	0.384	2.700
TCDFs	0.132	0.190	0.057	0.135	0.197	0.111	0.253	0.196	0.127	0.131	0.307	0.042	0.018	0.054	0.031	0.061	0.050	0.034	0.117	0.086	0.056	0.213
PeCDFs	0.068	0.105	0.032	0.082	0.122	0.106	0.178	0.142	0.081	0.083	0.103	0.017	0.005	0.035	0.013	0.032	0.029	0.020	0.108	0.045	0.041	0.157
HxCDFs	0.060	0.093	0.033	0.061	0.098	0.077	0.148	0.109	0.080	0.072	0.083	0.013	0.005	0.028	0.017	0.024	0.021	0.014	0.133	0.044	0.033	0.170
HpCDFs	0.038	0.070	0.038	0.036	0.056	0.038	0.082	0.050	0.063	0.054	0.047	0.011	0.007	0.019	0.024	0.022	0.012	0.009	0.104	0.027	0.022	0.169
OCDF	0.025	0.033	0.025	0.017	0.033	0.014	0.038	0.021	0.040	0.025	0.023	0.006	0.006	0.014	0.015	0.012	0.006	0.004	0.039	0.011	0.011	0.144
<b>Total</b>																						
∑ PCDDs	0.626	1.023	0.287	0.451	0.644	0.419	1.147	0.769	0.716	0.914	1.970	0.261	0.242	0.316	0.518	0.354	0.272	0.149	0.546	1.119	0.985	5.900
∑ PCDFs	0.323	0.490	0.184	0.332	0.506	0.345	0.699	0.518	0.391	0.365	0.562	0.089	0.040	0.150	0.100	0.150	0.119	0.081	0.501	0.212	0.164	0.853
∑ PCDD/Fs	0.949	1.513	0.472	0.782	1.151	0.765	1.846	1.287	1.107	1.278	2.532	0.350	0.282	0.466	0.618	0.504	0.390	0.230	1.047	1.331	1.148	6.753
∑ TEQ (PCDD/Fs)	0.017	0.025	0.009	0.016	0.017	0.013	0.023	0.020	0.020	0.021	0.038	0.007	0.007	0.008	0.009	0.011	0.008	0.007	0.022	0.023	0.019	0.086

Table A56. Atmospheric concentrations of PCDD/Fs ( $\mu\text{g m}^{-3}$ ) at NAPS urban sites in 2007 (continued)

Station Name	Winnipeg										Windsor (College)										
	1	2	3	4	5	6	7	8	9	10	1	2	3	4	5	6	7	8	9	10	11
Sampling Period	1/24/07	3/13/07	4/6/07	4/30/07	5/24/07	6/17/07	7/11/07	8/4/07	8/28/07	11/8/07	1/24/07	4/6/07	4/30/07	6/17/07	7/11/07	8/4/07	8/28/07	9/21/07	10/15/07	11/8/07	12/2/07
Sampling Volume (m <sup>3</sup> )	845	723	844	813	851	840	834	796	802	840	830	931	1074	778	835	989	881	945	1044	996	1023
<b>PCDD/F Congeners</b>																					
2,3,7,8-TCDD	0.002	0.001	0.003	0.001	<0.001	0.001	<0.001	<0.001	0.001	0.001	0.002	0.001	0.002	0.002	0.001	0.002	0.002	0.001	0.001	0.001	0.002
1,2,3,7,8-PeCDD	0.010	0.004	0.019	0.004	0.004	0.005	0.004	0.004	0.005	0.008	0.011	0.004	0.007	0.010	0.006	0.008	0.007	0.007	0.006	0.010	0.020
1,2,3,4,7,8-HxCDD	0.010	0.001	0.023	0.002	<0.001	0.002	0.002	0.002	0.006	0.003	0.009	0.002	0.006	0.009	0.002	0.008	0.007	0.007	0.005	0.013	0.013
1,2,3,6,7,8-HxCDD	0.012	0.002	0.034	0.003	0.001	0.005	0.004	0.003	0.011	0.006	0.025	0.003	0.010	0.015	0.004	0.013	0.009	0.011	0.009	0.021	0.022
1,2,3,7,8,9-HxCDD	0.018	0.001	0.042	0.002	0.002	0.006	0.004	0.005	0.014	0.007	0.021	0.003	0.015	0.018	0.003	0.014	0.013	0.013	0.014	0.023	0.019
1,2,3,4,6,7,8-HpCDD	0.140	0.020	0.517	0.041	0.024	0.063	0.048	0.039	0.109	0.072	0.253	0.039	0.144	0.259	0.042	0.164	0.169	0.170	0.123	0.233	0.265
OCDD	0.316	0.055	1.190	0.186	0.077	0.257	0.173	0.143	0.238	0.318	0.740	0.160	0.435	0.926	0.193	0.431	0.537	0.565	0.331	0.745	0.840
2,3,7,8-TCDF	0.016	0.009	0.005	0.009	0.007	0.013	0.008	0.008	0.023	0.013	0.038	0.014	0.032	0.027	0.015	0.024	0.034	0.026	0.029	0.042	0.042
1,2,3,7,8-PeCDF	0.003	0.002	0.001	0.002	0.002	0.003	0.001	0.002	0.004	0.003	0.006	0.002	0.005	0.005	0.003	0.005	0.007	0.005	0.005	0.010	0.008
2,3,4,7,8-PeCDF	0.004	0.003	0.002	0.003	0.002	0.004	0.001	0.003	0.007	0.005	0.010	0.004	0.008	0.007	0.004	0.008	0.011	0.007	0.008	0.021	0.014
1,2,3,4,7,8-HxCDF	0.009	0.005	0.004	0.007	0.003	0.009	0.004	0.007	0.045	0.008	0.021	0.009	0.021	0.018	0.009	0.016	0.026	0.018	0.021	0.033	0.032
1,2,3,6,7,8-HxCDF	0.004	0.002	0.001	0.003	0.001	0.003	0.002	0.002	0.015	0.004	0.008	0.002	0.008	0.006	0.004	0.008	0.011	0.008	0.009	0.014	0.016
2,3,4,6,7,8-HxCDF	0.004	0.003	0.002	0.003	0.001	0.004	0.003	0.003	0.025	0.004	0.008	0.004	0.009	0.008	0.003	0.007	0.013	0.007	0.010	0.016	0.015
1,2,3,7,8,9-HxCDF	0.001	<0.001	<0.002	<0.001	<0.001	<0.002	<0.001	<0.003	<0.004	<0.001	0.001	<0.001	<0.001	<0.001	<0.002	0.001	0.001	<0.001	0.001	0.001	0.002
1,2,3,4,6,7,8-HpCDF	0.015	0.008	0.014	0.017	0.007	0.023	0.016	0.018	0.091	0.014	0.040	0.015	0.041	0.044	0.021	0.044	0.059	0.035	0.043	0.054	0.065
1,2,3,4,7,8,9-HpCDF	0.002	<0.001	0.001	0.002	0.001	<0.003	0.001	<0.003	0.009	0.002	0.006	0.002	0.004	0.003	0.004	0.004	0.008	0.004	0.005	0.008	0.009
OCDF	0.014	0.006	0.013	0.028	0.007	0.030	0.024	0.019	0.044	0.015	0.042	0.017	0.041	0.030	0.016	0.028	0.040	0.024	0.025	0.043	0.055
<b>PCDD/F Homologues</b>																					
TCDDs	0.047	0.013	0.074	0.020	0.013	0.025	0.010	0.015	0.161	0.018	0.083	0.016	0.074	0.065	0.033	0.040	0.054	0.036	0.059	0.065	0.073
PeCDDs	0.106	0.019	0.230	0.035	0.019	0.042	0.021	0.022	0.220	0.041	0.120	0.027	0.093	0.106	0.038	0.075	0.071	0.080	0.073	0.109	0.129
HxCDDs	0.230	0.031	0.723	0.053	0.033	0.065	0.049	0.067	0.382	0.096	0.295	0.047	0.178	0.315	0.100	0.231	0.180	0.200	0.172	0.314	0.318
HpCDDs	0.307	0.040	1.137	0.084	0.046	0.124	0.100	0.084	0.248	0.135	0.471	0.075	0.271	0.548	0.088	0.357	0.331	0.332	0.270	0.469	0.507
OCDD	0.316	0.055	1.190	0.186	0.077	0.257	0.173	0.143	0.238	0.318	0.740	0.160	0.435	0.926	0.193	0.431	0.537	0.565	0.331	0.745	0.840
TCDFs	0.095	0.067	0.035	0.080	0.044	0.098	0.054	0.073	0.155	0.049	0.244	0.103	0.233	0.234	0.128	0.201	0.250	0.262	0.232	0.248	0.298
PeCDFs	0.054	0.032	0.027	0.054	0.028	0.074	0.035	0.071	0.134	0.040	0.119	0.062	0.138	0.150	0.091	0.162	0.176	0.163	0.130	0.188	0.212
HxCDFs	0.040	0.022	0.041	0.039	0.015	0.052	0.029	0.058	0.208	0.041	0.100	0.036	0.111	0.133	0.066	0.147	0.148	0.122	0.118	0.156	0.226
HpCDFs	0.028	0.011	0.031	0.028	0.012	0.036	0.027	0.032	0.129	0.026	0.076	0.025	0.066	0.076	0.033	0.074	0.096	0.059	0.070	0.093	0.125
OCDF	0.014	0.006	0.013	0.028	0.007	0.030	0.024	0.019	0.044	0.015	0.042	0.017	0.041	0.030	0.016	0.028	0.040	0.024	0.025	0.043	0.055
<b>Total</b>																					
∑ PCDDs	1.005	0.158	3.354	0.378	0.187	0.513	0.353	0.330	1.248	0.609	1.708	0.324	1.051	1.959	0.452	1.134	1.173	1.214	0.904	1.702	1.868
∑ PCDFs	0.231	0.138	0.148	0.228	0.106	0.290	0.169	0.253	0.669	0.169	0.581	0.243	0.587	0.622	0.334	0.611	0.710	0.629	0.574	0.727	0.917
∑ PCDD/Fs	1.236	0.296	3.502	0.606	0.293	0.803	0.522	0.583	1.917	0.778	2.290	0.567	1.638	2.582	0.786	1.744	1.883	1.843	1.478	2.428	2.785
∑ TEQ (PCDD/Fs)	0.022	0.008	0.040	0.009	0.007	0.012	0.009	0.009	0.025	0.016	0.032	0.010	0.024	0.028	0.012	0.024	0.026	0.022	0.022	0.037	0.046

Table A56. Atmospheric concentrations of PCDD/Fs (pg m<sup>-3</sup>) at NAPS urban sites in 2007 (continued)

Station Name	Hamilton (Elgin)												Toronto (Gage Inst.)														
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	1	2	3	4	5	6	7	8	9	10	11	12	
Sampling Period	1/24/07	3/13/07	4/6/07	4/30/07	5/24/07	6/17/07	7/11/07	8/4/07	8/28/07	9/21/07	10/15/07	11/8/07	12/2/07	12/26/07	1/24/07	3/13/07	4/6/07	4/30/07	5/24/07	6/17/07	8/4/07	9/21/07	10/15/07	11/8/07	12/2/07	12/26/07	
Sampling Volume (m3)	998	851	979	1045	1076	949	803	943	885	898	975	957	952	1024	909	858	839	928	781	611	845	700	833	950	805	832	
<b>PCDD/F Congeners</b>																											
2,3,7,8-TCDD	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.002	0.002	0.002	0.001	0.003	0.002	0.001	0.001	0.002	0.000	0.001	0.002	0.001	0.001	0.002	0.002	0.001	0.001	0.001	
1,2,3,7,8-PeCDD	0.006	0.008	0.004	0.004	0.006	0.006	0.004	0.007	0.008	0.008	0.007	0.012	0.013	0.010	0.005	0.008	0.003	0.005	0.005	0.006	0.003	0.008	0.007	0.005	0.006	0.007	
1,2,3,4,7,8-HxCDD	0.004	0.008	0.003	0.003	0.004	0.006	0.002	0.003	0.004	0.005	0.007	0.013	0.011	0.010	0.003	0.009	0.001	0.003	0.004	0.005	0.002	0.003	0.003	0.004	0.005	0.004	
1,2,3,6,7,8-HxCDD	0.008	0.012	0.004	0.004	0.006	0.008	0.004	0.007	0.006	0.009	0.012	0.020	0.021	0.019	0.006	0.012	0.002	0.006	0.007	0.007	0.002	0.004	0.007	0.006	0.008	0.007	
1,2,3,7,8,9-HxCDD	0.009	0.017	0.005	0.004	0.007	0.014	0.003	0.006	0.006	0.009	0.017	0.024	0.027	0.022	0.006	0.016	0.003	0.007	0.006	0.014	0.003	0.005	0.009	0.008	0.008	0.008	
1,2,3,4,6,7,8-HpCDD	0.090	0.203	0.040	0.049	0.087	0.109	0.038	0.042	0.063	0.068	0.142	0.271	0.233	0.225	0.058	0.184	0.016	0.080	0.082	0.111	0.029	0.052	0.072	0.071	0.094	0.099	
OCDD	0.249	0.697	0.213	0.171	0.335	0.324	0.154	0.160	0.224	0.241	0.375	0.900	0.866	0.600	0.146	0.607	0.055	0.223	0.318	0.375	0.090	0.312	0.229	0.213	0.347	0.341	
2,3,7,8-TCDF	0.157	0.031	0.006	0.018	0.051	0.020	0.010	0.076	0.050	0.079	0.039	0.184	0.067	0.036	0.012	0.043	0.010	0.013	0.037	0.021	0.010	0.056	0.043	0.015	0.013	0.016	
1,2,3,7,8-PeCDF	0.030	0.006	0.003	0.003	0.010	0.005	0.002	0.017	0.011	0.027	0.012	0.015	0.016	0.006	0.003	0.007	0.002	0.002	0.007	0.004	0.002	0.012	0.007	0.003	0.003	0.003	
2,3,4,7,8-PeCDF	0.030	0.009	0.002	0.004	0.012	0.005	0.002	0.023	0.015	0.030	0.017	0.017	0.023	0.011	0.004	0.010	0.002	0.003	0.008	0.003	0.002	0.019	0.014	0.005	0.005	0.005	
1,2,3,4,7,8-HxCDF	0.041	0.024	0.005	0.011	0.028	0.012	0.006	0.043	0.030	0.085	0.049	0.026	0.047	0.024	0.008	0.025	0.004	0.006	0.019	0.002	0.005	0.034	0.028	0.010	0.011	0.012	
1,2,3,6,7,8-HxCDF	0.016	0.010	0.003	0.004	0.012	0.007	0.003	0.019	0.014	0.036	0.022	0.012	0.020	0.010	0.003	0.011	0.002	0.002	0.008	0.004	0.002	0.015	0.011	0.004	0.005	0.006	
2,3,4,6,7,8-HxCDF	0.011	0.011	0.004	0.005	0.011	0.005	0.003	0.011	0.010	0.022	0.013	0.010	0.015	0.009	0.004	0.011	0.002	0.003	0.008	0.003	0.001	0.016	0.012	0.003	0.003	0.005	
1,2,3,7,8,9-HxCDF	0.001	<0.001	0.002	<0.001	<0.002	<0.002	<0.002	0.001	0.001	0.003	0.002	0.001	0.002	0.001	0.001	0.001	0.000	<0.001	<0.002	<0.003	0.000	0.002	0.001	0.001	0.001	0.001	
1,2,3,4,6,7,8-HpCDF	0.053	0.053	0.009	0.026	0.054	0.033	0.024	0.045	0.045	0.089	0.056	0.037	0.062	0.039	0.015	0.053	0.008	0.013	0.045	0.019	0.011	0.048	0.040	0.016	0.024	0.019	
1,2,3,4,7,8,9-HpCDF	0.008	0.006	0.003	0.002	0.004	0.003	0.002	0.007	0.006	0.019	0.013	0.007	0.009	0.007	0.003	0.007	<0.001	0.001	0.005	<0.004	0.001	0.010	0.004	0.003	0.003	0.002	
OCDF	0.039	0.043	0.023	0.033	0.045	0.027	0.018	0.016	0.028	0.050	0.048	0.028	0.051	0.028	0.012	0.044	0.009	0.011	0.032	0.025	0.009	0.034	0.024	0.014	0.021	0.015	
<b>PCDD/F Homologues</b>																											
TCDDs	0.060	0.048	0.015	0.027	0.077	0.047	0.036	0.154	0.069	0.077	0.038	0.145	0.097	0.072	0.021	0.056	0.010	0.018	0.032	0.061	0.012	0.036	0.058	0.023	0.026	0.031	
PeCDDs	0.077	0.087	0.023	0.036	0.084	0.066	0.056	0.171	0.087	0.099	0.059	0.119	0.134	0.109	0.032	0.085	0.014	0.037	0.053	0.076	0.017	0.053	0.078	0.040	0.042	0.050	
HxCDDs	0.134	0.216	0.049	0.062	0.123	0.170	0.164	0.118	0.108	0.135	0.200	0.316	0.280	0.290	0.076	0.209	0.023	0.087	0.100	0.172	0.034	0.077	0.140	0.096	0.109	0.126	
HpCDDs	0.186	0.431	0.074	0.101	0.184	0.236	0.073	0.089	0.127	0.145	0.295	0.549	0.430	0.456	0.112	0.389	0.029	0.166	0.184	0.242	0.063	0.106	0.143	0.143	0.180	0.191	
OCDD	0.249	0.697	0.213	0.171	0.335	0.324	0.154	0.160	0.224	0.241	0.375	0.900	0.866	0.600	0.146	0.607	0.055	0.223	0.318	0.375	0.090	0.312	0.229	0.213	0.347	0.341	
TCDFs	0.860	0.264	0.027	0.121	0.385	0.174	0.100	0.430	0.300	0.481	0.256	1.155	0.394	0.235	0.081	0.323	0.068	0.092	0.296	0.164	0.089	0.593	0.285	0.105	0.088	0.112	
PeCDFs	0.301	0.143	0.019	0.062	0.229	0.108	0.066	0.304	0.199	0.391	0.200	0.271	0.276	0.135	0.042	0.145	0.027	0.040	0.147	0.077	0.043	0.314	0.166	0.059	0.059	0.061	
HxCDFs	0.148	0.125	0.024	0.052	0.164	0.099	0.052	0.199	0.172	0.334	0.190	0.122	0.199	0.116	0.035	0.125	0.018	0.031	0.104	0.059	0.029	0.221	0.125	0.045	0.057	0.056	
HpCDFs	0.084	0.087	0.019	0.041	0.081	0.052	0.036	0.070	0.074	0.148	0.100	0.069	0.107	0.069	0.024	0.085	0.011	0.021	0.070	0.029	0.019	0.091	0.062	0.029	0.044	0.033	
OCDF	0.039	0.043	0.023	0.033	0.045	0.027	0.018	0.016	0.028	0.050	0.048	0.028	0.051	0.028	0.012	0.044	0.009	0.011	0.032	0.025	0.009	0.034	0.024	0.014	0.021	0.015	
<b>Total</b>																											
∑ PCDDs	0.706	1.478	0.374	0.397	0.803	0.844	0.484	0.692	0.615	0.696	0.966	2.029	1.808	1.526	0.386	1.346	0.131	0.531	0.688	0.925	0.214	0.584	0.648	0.516	0.704	0.740	
∑ PCDFs	1.432	0.662	0.113	0.309	0.903	0.460	0.271	1.019	0.773	1.405	0.794	1.644	1.027	0.583	0.194	0.722	0.133	0.195	0.649	0.353	0.189	1.253	0.641	0.252	0.269	0.276	
∑ PCDD/Fs	2.137	2.140	0.486	0.706	1.706	1.304	0.755	1.711	1.388	2.101	1.760	3.673	2.835	2.110	0.580	2.068	0.264	0.726	1.337	1.278	0.403	1.836	1.290	0.768	0.973	1.016	
∑ TEQ (PCDD/Fs)	0.043	0.026	0.010	0.012	0.024	0.017	0.010	0.034	0.027	0.046	0.032	0.052	0.046	0.031	0.012	0.029	0.007	0.012	0.020	0.016	0.008	0.030	0.026	0.013	0.015	0.017	

Table A56. Atmospheric concentrations of PCDD/Fs (pg m<sup>-3</sup>) at NAPS urban sites in 2007 (continued)

Station Name	Jonquiere										Comerbrook														
Sampling Period	1	2	3	4	5	6	7	8	9	10	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
Sampling Date	1/24/07	3/13/07	4/6/07	4/30/07	5/24/07	8/4/07	8/28/07	11/8/07	12/2/07	12/26/07	1/12/07	2/5/07	3/1/07	3/25/07	6/5/07	7/11/07	7/23/07	8/4/07	8/16/07	8/28/07	10/3/07	10/27/07	11/8/07	11/20/07	12/2/07
Sampling Volume (m3)	1224	1125	987	977	976	918	907	995	917	937	844	741.9	748.4	727.6	833.3	681.5	813.4	628.5	623	597.8	758.3	837.5	845.6	889.9	811
<b>PCDD/F Congeners</b>																									
2,3,7,8-TCDD	0.001	0.001	0.001	0.001	0.002	<0.001	0.001	0.002	0.002	0.001	0.001	<0.0007	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.000	0.001	0.001
1,2,3,7,8-PeCDD	0.005	0.005	0.003	0.004	0.008	0.004	0.006	0.009	0.007	0.005	0.006	0.004	0.006	0.004	0.007	0.006	0.009	0.008	0.006	0.008	0.005	0.006	0.004	0.007	0.005
1,2,3,4,7,8-HxCDD	0.005	0.003	0.001	0.001	0.006	<0.001	0.003	0.006	0.006	0.003	0.004	0.002	0.004	0.001	0.002	0.001	0.003	0.003	0.004	0.003	0.002	0.002	0.002	0.004	0.002
1,2,3,6,7,8-HxCDD	0.008	0.005	0.001	0.002	0.008	0.001	0.005	0.010	0.011	0.006	0.006	0.004	0.006	0.002	0.005	0.003	0.005	0.005	0.006	0.003	0.003	0.007	0.003	0.007	0.005
1,2,3,7,8,9-HxCDD	0.010	0.007	0.001	0.003	0.014	0.002	0.006	0.011	0.012	0.005	0.007	0.004	0.007	0.003	0.007	0.004	0.007	0.006	0.007	0.004	0.003	0.003	0.003	0.008	0.006
1,2,3,4,6,7,8-HpCDD	0.135	0.056	0.017	0.023	0.093	0.013	0.075	0.058	0.119	0.065	0.053	0.045	0.065	0.028	0.046	0.023	0.036	0.042	0.045	0.025	0.022	0.037	0.024	0.056	0.056
OCDD	0.530	0.136	0.052	0.065	0.372	0.044	0.281	0.141	0.291	0.183	0.148	0.115	0.137	0.083	0.105	0.074	0.083	0.110	0.104	0.049	0.066	0.082	0.063	0.131	0.129
2,3,7,8-TCDF	0.016	0.020	0.010	0.018	0.027	0.008	0.022	0.057	0.045	0.013	0.036	0.011	0.028	0.009	0.009	0.007	0.011	0.009	0.013	0.032	0.009	0.018	0.007	0.041	0.015
1,2,3,7,8-PeCDF	0.005	0.003	0.002	0.003	0.006	0.002	0.004	0.010	0.006	0.003	0.008	0.001	0.004	0.002	0.002	0.001	0.003	0.002	0.002	0.007	0.002	0.003	0.001	0.008	0.003
2,3,4,7,8-PeCDF	0.005	0.004	0.003	0.004	0.005	0.002	0.005	0.019	0.010	0.004	0.013	0.002	0.005	0.002	0.002	0.002	0.004	0.003	0.003	0.010	0.002	0.005	0.002	0.015	0.004
1,2,3,4,7,8-HxCDF	0.017	0.010	0.006	0.007	0.013	0.003	0.013	0.031	0.014	0.007	0.030	0.004	0.008	0.005	0.004	0.004	0.010	0.005	0.010	0.014	0.004	0.014	0.003	0.032	0.006
1,2,3,6,7,8-HxCDF	0.006	0.004	0.003	0.003	0.006	0.001	0.005	0.012	0.006	0.003	0.012	0.002	0.003	0.002	0.003	0.002	0.006	0.004	0.004	0.006	0.002	0.005	0.002	0.012	0.003
2,3,4,6,7,8-HxCDF	0.005	0.004	0.002	0.003	0.005	<0.001	0.005	0.013	0.005	0.003	0.013	0.003	0.003	0.002	0.002	0.002	0.005	0.003	0.007	0.006	0.002	0.006	0.001	0.015	0.003
1,2,3,7,8,9-HxCDF	0.001	0.000	0.001	<0.001	<0.001	<0.001	<0.001	0.001	0.000	<0.001	0.001	<0.001	<0.001	<0.001	<0.001	<0.001	0.001	<0.001	<0.002	<0.002	<0.001	0.000	<0.001	0.001	0.000
1,2,3,4,6,7,8-HpCDF	0.033	0.020	0.010	0.011	0.032	0.011	0.027	0.031	0.023	0.012	0.042	0.018	0.015	0.013	0.014	0.014	0.032	0.021	0.028	0.022	0.013	0.023	0.010	0.041	0.015
1,2,3,4,7,8,9-HpCDF	0.004	0.003	0.002	<0.002	0.002	<0.002	0.004	0.002	0.003	0.002	0.004	0.001	0.002	0.001	<0.002	0.001	0.001	0.001	<0.003	<0.003	0.001	0.003	0.001	0.005	0.002
OCDF	0.070	0.046	0.012	0.016	0.034	0.005	0.023	0.016	0.041	0.018	0.018	0.010	0.008	0.008	0.007	0.009	0.014	0.008	0.013	0.007	0.008	0.011	0.006	0.020	0.009
<b>PCDD/F Homologues</b>																									
TCDDs	0.030	0.078	0.014	0.038	0.072	0.010	0.033	0.106	0.051	0.022	0.053	0.012	0.031	0.010	0.041	0.018	0.037	0.024	0.048	0.032	0.021	0.077	0.011	0.061	0.021
PeCDDs	0.049	0.079	0.032	0.025	0.085	0.044	0.055	0.155	0.065	0.038	0.071	0.019	0.054	0.015	0.068	0.032	0.078	0.049	0.067	0.052	0.028	0.089	0.017	0.083	0.030
HxCDDs	0.113	0.093	0.016	0.030	0.170	0.028	0.083	0.208	0.132	0.078	0.102	0.044	0.082	0.028	0.093	0.057	0.110	0.102	0.101	0.062	0.035	0.129	0.032	0.123	0.060
HpCDDs	0.234	0.109	0.028	0.036	0.264	0.021	0.137	0.111	0.196	0.113	0.100	0.074	0.117	0.049	0.083	0.038	0.064	0.070	0.080	0.045	0.039	0.073	0.038	0.100	0.091
OCDD	0.530	0.136	0.052	0.065	0.372	0.044	0.281	0.141	0.291	0.183	0.148	0.115	0.137	0.083	0.105	0.074	0.083	0.110	0.104	0.049	0.066	0.082	0.063	0.131	0.129
TCDFs	0.102	0.134	0.083	0.125	0.227	0.057	0.166	0.288	0.278	0.088	0.213	0.071	0.193	0.066	0.135	0.075	0.147	0.115	0.135	0.287	0.104	0.142	0.057	0.241	0.105
PeCDFs	0.055	0.057	0.047	0.057	0.144	0.044	0.115	0.207	0.113	0.043	0.158	0.033	0.080	0.034	0.116	0.063	0.178	0.128	0.153	0.218	0.093	0.086	0.038	0.159	0.055
HxCDFs	0.067	0.047	0.040	0.035	0.100	0.051	0.087	0.132	0.064	0.032	0.130	0.034	0.040	0.027	0.059	0.041	0.111	0.077	0.097	0.100	0.048	0.071	0.031	0.129	0.041
HpCDFs	0.064	0.031	0.019	0.019	0.047	0.015	0.042	0.047	0.038	0.022	0.060	0.026	0.023	0.020	0.020	0.022	0.044	0.030	0.037	0.030	0.019	0.035	0.016	0.064	0.024
OCDF	0.070	0.046	0.012	0.016	0.034	0.005	0.023	0.016	0.041	0.018	0.018	0.010	0.008	0.008	0.007	0.009	0.014	0.008	0.013	0.007	0.008	0.011	0.006	0.020	0.009
<b>Total</b>																									
∑ PCDDs	0.956	0.495	0.142	0.194	0.963	0.147	0.589	0.722	0.735	0.433	0.474	0.264	0.421	0.184	0.390	0.219	0.373	0.356	0.400	0.239	0.189	0.450	0.160	0.498	0.331
∑ PCDFs	0.358	0.316	0.201	0.253	0.550	0.171	0.433	0.690	0.534	0.202	0.579	0.173	0.343	0.155	0.336	0.209	0.493	0.359	0.435	0.642	0.272	0.344	0.148	0.613	0.235
∑ PCDD/Fs	1.314	0.810	0.342	0.447	1.513	0.318	1.023	1.413	1.269	0.635	1.053	0.437	0.764	0.339	0.726	0.428	0.865	0.715	0.835	0.881	0.461	0.795	0.308	1.111	0.566
∑ TEQ (PCDD/Fs)	0.016	0.014	0.007	0.010	0.021	0.007	0.016	0.032	0.023	0.011	0.023	0.009	0.016	0.008	0.013	0.010	0.017	0.014	0.014	0.020	0.010	0.014	0.007	0.026	0.012



Table A57. Atmospheric concentrations of PCDD/Fs ( $\mu\text{g m}^{-3}$ ) at NAPS urban sites in 2008

Station Name	Calgary								Toronto (Judson)						Montreal (1125)	
	1	2	3	4	5	6	7	8	1	2	3	4	5	6	1	2
Sampling Period																
Sampling Date	1/19/08	4/24/08	5/18/08	7/5/08	8/22/08	9/15/08	10/9/08	11/2/08	1/19/08	3/7/08	3/31/08	7/5/08	7/29/08	8/22/08	1/19/08	3/7/08
Sampling Volume (m3)	1021	1057	733	715	602	663	770	929	1030	990	1149	893	906	815	823	796
<b>PCDD/F Congeners</b>																
2,3,7,8-TCDD	0.003	0.001	0.001	0.000	0.001	0.002	0.006	0.001	0.001	0.001	0.001	0.001	0.002	0.001	<0.001	0.002
1,2,3,7,8-PeCDD	0.017	0.005	0.005	0.005	0.005	0.012	0.029	0.007	0.007	0.008	0.007	0.005	0.007	0.008	0.005	0.009
1,2,3,4,7,8-HxCDD	0.016	0.004	0.001	0.002	0.001	0.028	0.027	0.007	0.005	0.006	0.005	0.003	0.003	0.004	0.004	0.007
1,2,3,6,7,8-HxCDD	0.035	0.006	0.003	0.003	0.004	0.047	0.042	0.013	0.007	0.009	0.008	0.006	0.006	0.007	0.006	0.011
1,2,3,7,8,9-HxCDD	0.035	0.006	0.003	0.002	0.005	0.070	0.075	0.016	0.010	0.014	0.010	0.005	0.006	0.007	0.009	0.013
1,2,3,4,6,7,8-HpCDD	0.414	0.066	0.040	0.039	0.042	0.472	0.438	0.195	0.086	0.129	0.111	0.060	0.044	0.093	0.085	0.128
OCDD	0.888	0.163	0.158	0.106	0.137	0.804	1.033	0.581	0.308	0.574	0.358	0.196	0.141	0.416	0.227	0.382
2,3,7,8-TCDF	0.019	0.015	0.010	0.012	0.015	0.053	0.145	0.018	0.010	0.026	0.012	0.025	0.022	0.020	0.012	0.066
1,2,3,7,8-PeCDF	0.004	0.003	0.001	0.002	0.004	0.012	0.044	0.003	0.002	0.005	0.002	0.005	0.004	0.004	0.002	0.014
2,3,4,7,8-PeCDF	0.006	0.004	0.001	0.003	0.004	0.032	0.086	0.006	0.003	0.008	0.004	0.008	0.006	0.006	0.003	0.018
1,2,3,4,7,8-HxCDF	0.016	0.008	0.003	0.004	0.008	0.172	0.325	0.006	0.008	0.015	0.011	0.017	0.011	0.015	0.008	0.036
1,2,3,6,7,8-HxCDF	0.006	0.003	0.001	0.002	0.004	0.055	0.121	0.002	0.003	0.007	0.004	0.007	0.005	0.007	0.003	0.015
2,3,4,6,7,8-HxCDF	0.006	0.003	0.002	0.002	0.003	0.074	0.135	0.003	0.003	0.007	0.005	0.007	0.005	0.006	0.003	0.016
1,2,3,7,8,9-HxCDF	0.000	<0.001	<0.001	<0.001	<0.001	0.004	0.008	<0.002	<0.001	<0.001	0.000	<0.001	<0.001	<0.001	<0.001	0.002
1,2,3,4,6,7,8-HpCDF	0.038	0.012	0.008	0.009	0.014	0.479	0.506	0.016	0.019	0.027	0.026	0.030	0.019	0.043	0.017	0.062
1,2,3,4,7,8,9-HpCDF	0.005	0.001	<0.001	<0.001	<0.002	0.058	0.048	<0.004	0.002	0.002	0.004	0.002	0.004	0.003	0.003	0.008
OCDF	0.031	0.008	0.008	0.005	0.007	0.236	0.168	0.016	0.027	0.024	0.023	0.018	0.009	0.040	0.026	0.045
<b>PCDD/F Homologues</b>																
TCDDs	0.075	0.019	0.010	0.008	0.011	0.037	0.122	0.020	0.021	0.043	0.029	0.019	0.038	0.023	0.019	0.060
PeCDDs	0.160	0.036	0.025	0.019	0.021	0.112	0.232	0.045	0.044	0.060	0.048	0.037	0.050	0.050	0.046	0.078
HxCDDs	0.453	0.071	0.038	0.039	0.048	0.518	0.590	0.201	0.106	0.138	0.134	0.075	0.080	0.111	0.094	0.163
HpCDDs	0.723	0.111	0.073	0.068	0.078	0.852	0.767	0.391	0.164	0.242	0.225	0.126	0.091	0.221	0.163	0.241
OCDD	0.888	0.163	0.158	0.106	0.137	0.804	1.033	0.581	0.308	0.574	0.358	0.196	0.141	0.416	0.227	0.382
TCDFs	0.102	0.092	0.073	0.096	0.106	0.331	0.746	0.149	0.064	0.169	0.098	0.150	0.145	0.127	0.074	0.415
PeCDFs	0.075	0.051	0.025	0.035	0.051	0.264	0.959	0.064	0.039	0.092	0.058	0.094	0.098	0.070	0.041	0.227
HxCDFs	0.084	0.035	0.017	0.023	0.039	0.584	1.240	0.060	0.036	0.071	0.054	0.095	0.077	0.104	0.034	0.161
HpCDFs	0.074	0.020	0.013	0.015	0.021	0.697	0.723	0.036	0.032	0.045	0.047	0.051	0.032	0.069	0.034	0.102
OCDF	0.031	0.008	0.008	0.005	0.007	0.236	0.168	0.016	0.027	0.024	0.023	0.018	0.009	0.040	0.026	0.045
<b>Total</b>																
∑ PCDDs	2.300	0.399	0.303	0.241	0.294	2.323	2.744	1.238	0.642	1.057	0.794	0.452	0.400	0.821	0.549	0.924
∑ PCDFs	0.367	0.206	0.135	0.173	0.224	2.113	3.835	0.324	0.197	0.401	0.279	0.408	0.362	0.410	0.209	0.950
∑ PCDD/Fs	2.667	0.605	0.438	0.414	0.517	4.437	6.579	1.562	0.839	1.458	1.073	0.860	0.762	1.231	0.757	1.874
∑ TEQ (PCDD/Fs)	0.039	0.013	0.009	0.009	0.012	0.084	0.160	0.019	0.014	0.022	0.016	0.017	0.017	0.019	0.013	0.036

Table A57. Atmospheric concentrations of PCDD/Fs (pg m<sup>-3</sup>) at NAPS urban sites in 2008 (continued)

Station Name	Edmonton (89th St.)												Winnipeg													
Sampling Period	1	2	3	4	5	6	7	8	9	10	11	12	13	14	1	2	3	4	5	6	7	8	9	10	11	12
Sampling Date	1/19/08	2/12/08	3/7/08	3/31/08	4/24/08	5/18/08	6/11/08	7/5/08	7/29/08	8/22/08	9/15/08	10/9/08	11/26/08	12/20/08	1/19/08	3/7/08	3/31/08	4/12/08	5/18/08	6/11/08	7/5/08	7/29/08	9/15/08	10/9/08	11/26/08	12/20/08
Sampling Volume (m3)	851	876	818	910	798	766	815	728	779	878	702	894	744	699	905	957	938	911	771	797	779	728	818	893	696	952
<b>PCDD/F Congeners</b>																										
2,3,7,8-TCDD	0.001	0.001	0.012	0.001	0.001	0.001	0.001	0.000	0.001	0.002	<0.001	<0.001	0.002	0.007	0.001	0.001	0.002	0.001	<0.001	0.001	0.001	0.001	0.001	0.001	0.005	0.002
1,2,3,7,8-PeCDD	0.007	0.004	0.060	0.005	0.004	0.004	0.005	0.005	0.004	0.020	0.007	0.005	0.006	0.034	0.005	0.004	0.012	0.005	0.005	0.004	0.006	0.006	0.006	0.003	0.034	0.004
1,2,3,4,7,8-HxCDD	0.004	0.002	0.053	0.003	0.002	0.004	0.002	0.001	0.004	0.055	0.005	0.003	0.005	0.038	0.002	0.002	0.014	0.003	0.004	0.002	0.004	0.001	0.005	0.001	0.057	0.008
1,2,3,6,7,8-HxCDD	0.007	0.003	0.132	0.004	0.003	0.007	0.003	0.004	0.007	0.077	0.009	0.004	0.006	0.066	0.003	0.004	0.019	0.006	0.004	0.003	0.007	0.003	0.010	0.002	0.059	0.010
1,2,3,7,8,9-HxCDD	0.009	0.004	0.145	0.005	0.002	0.006	0.004	0.002	0.006	0.118	0.007	0.004	0.015	0.089	0.005	0.003	0.029	0.006	0.005	0.003	0.007	0.003	0.014	0.002	0.079	0.020
1,2,3,4,6,7,8-HpCDD	0.084	0.036	1.663	0.050	0.037	0.066	0.039	0.025	0.093	1.389	0.112	0.053	0.069	0.745	0.039	0.043	0.239	0.058	0.064	0.028	0.073	0.021	0.120	0.023	0.932	0.119
OCDD	0.222	0.103	3.168	0.115	0.084	0.178	0.127	0.078	0.229	3.515	0.289	0.163	0.171	1.555	0.098	0.141	0.511	0.158	0.211	0.162	0.222	0.070	0.335	0.073	1.708	0.329
2,3,7,8-TCDF	0.012	0.008	0.053	0.010	0.003	0.016	0.006	0.005	0.008	0.009	0.011	0.011	0.016	0.075	0.007	0.010	0.042	0.021	0.008	0.008	0.012	0.005	0.011	0.006	0.033	0.013
1,2,3,7,8-PeCDF	0.002	0.001	0.016	0.002	0.001	0.004	0.001	0.001	0.001	0.003	0.002	0.003	0.006	0.012	0.001	0.002	0.011	0.003	0.001	0.001	0.003	0.001	0.003	0.002	0.007	<0.002
2,3,4,7,8-PeCDF	0.004	0.003	0.027	0.002	0.001	0.007	0.002	0.001	0.002	0.004	0.003	0.005	0.006	0.030	0.002	0.003	0.030	0.006	0.002	0.002	0.004	0.001	0.003	0.002	0.011	0.005
1,2,3,4,7,8-HxCDF	0.012	0.007	0.086	0.006	0.001	0.032	0.004	0.003	0.006	0.019	0.006	0.007	0.009	0.045	0.004	0.006	0.028	0.012	0.005	0.006	0.009	0.003	0.007	0.002	0.023	0.004
1,2,3,6,7,8-HxCDF	0.004	0.003	0.039	0.002	<0.001	0.011	0.002	0.002	0.003	0.008	0.003	0.003	0.003	0.024	0.002	0.003	0.011	0.004	0.002	0.002	0.004	0.002	0.002	0.002	0.009	0.002
2,3,4,6,7,8-HxCDF	0.004	0.002	0.030	0.002	0.001	0.010	0.002	0.001	0.003	0.012	0.003	0.004	0.005	0.023	0.001	0.003	0.015	0.005	0.003	0.002	0.004	0.001	0.003	0.002	0.010	0.003
1,2,3,7,8,9-HxCDF	<0.001	<0.001	<0.002	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	0.001	<0.002	<0.002	<0.003	<0.003	<0.001	<0.001	0.002	<0.001	0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.002
1,2,3,4,6,7,8-HpCDF	0.026	0.010	0.193	0.010	0.005	0.086	0.007	0.008	0.015	0.091	0.017	0.013	0.018	0.131	0.007	0.011	0.031	0.018	0.013	0.014	0.023	0.010	0.016	0.008	0.056	0.012
1,2,3,4,7,8,9-HpCDF	0.003	<0.002	0.025	0.000	<0.001	0.011	<0.003	<0.001	0.001	0.010	<0.003	0.001	<0.006	0.025	<0.001	0.001	0.006	0.002	0.002	<0.002	0.003	<0.001	0.003	0.001	<0.006	<0.002
OCDF	0.029	0.006	0.094	0.007	0.004	0.071	0.006	0.006	0.010	0.103	0.016	0.015	0.011	0.334	0.007	0.010	0.023	0.011	0.010	0.019	0.017	0.006	0.012	0.004	0.049	0.059
<b>PCDD/F Homologues</b>																										
TCDDs	0.026	0.020	0.165	0.026	0.005	0.038	0.014	0.009	0.015	0.030	0.024	0.012	0.032	0.211	0.024	0.018	0.050	0.037	0.010	0.025	0.021	0.012	0.016	0.015	0.187	0.106
PeCDDs	0.048	0.025	0.470	0.038	0.015	0.052	0.020	0.017	0.032	0.190	0.049	0.029	0.048	0.380	0.035	0.023	0.133	0.047	0.024	0.025	0.049	0.028	0.045	0.009	0.532	0.091
HxCDDs	0.103	0.049	1.700	0.082	0.038	0.098	0.042	0.031	0.080	1.170	0.152	0.056	0.108	0.878	0.067	0.048	0.397	0.085	0.062	0.034	0.102	0.037	0.130	0.023	1.659	0.153
HpCDDs	0.154	0.066	2.789	0.095	0.065	0.121	0.066	0.046	0.171	2.787	0.262	0.097	0.141	1.483	0.079	0.079	0.475	0.107	0.116	0.050	0.140	0.039	0.230	0.043	2.289	0.259
OCDD	0.222	0.103	3.168	0.115	0.084	0.178	0.127	0.078	0.229	3.515	0.289	0.163	0.171	1.555	0.098	0.141	0.511	0.158	0.211	0.162	0.222	0.070	0.335	0.073	1.708	0.329
TCDFs	0.068	0.054	0.311	0.063	0.021	0.105	0.044	0.037	0.059	0.056	0.086	0.067	0.102	0.711	0.046	0.070	0.217	0.125	0.052	0.052	0.104	0.046	0.083	0.051	0.205	0.138
PeCDFs	0.043	0.029	0.347	0.033	0.006	0.081	0.022	0.023	0.031	0.052	0.042	0.040	0.063	0.456	0.021	0.040	0.205	0.071	0.033	0.038	0.078	0.040	0.054	0.038	0.160	0.059
HxCDFs	0.042	0.024	0.448	0.025	0.006	0.114	0.019	0.020	0.031	0.130	0.038	0.031	0.051	0.329	0.015	0.029	0.142	0.050	0.029	0.028	0.068	0.033	0.046	0.027	0.226	0.058
HpCDFs	0.042	0.015	0.325	0.016	0.008	0.130	0.013	0.014	0.025	0.199	0.031	0.019	0.029	0.268	0.011	0.020	0.060	0.030	0.022	0.022	0.039	0.016	0.030	0.014	0.125	0.037
OCDF	0.029	0.006	0.094	0.007	0.004	0.071	0.006	0.006	0.010	0.103	0.016	0.015	0.011	0.334	0.007	0.010	0.023	0.011	0.010	0.019	0.017	0.006	0.012	0.004	0.049	0.059
<b>Total</b>																										
∑ PCDDs	0.553	0.263	8.291	0.356	0.208	0.487	0.270	0.181	0.527	7.692	0.776	0.357	0.499	4.507	0.303	0.309	1.565	0.433	0.423	0.295	0.534	0.186	0.757	0.164	6.374	0.937
∑ PCDFs	0.224	0.127	1.524	0.144	0.046	0.500	0.102	0.099	0.156	0.541	0.212	0.171	0.255	2.099	0.099	0.169	0.646	0.287	0.145	0.160	0.306	0.140	0.226	0.133	0.763	0.352
∑ PCDD/Fs	0.777	0.390	9.815	0.500	0.253	0.988	0.372	0.280	0.683	8.233	0.988	0.528	0.755	6.605	0.401	0.478	2.211	0.720	0.568	0.455	0.840	0.326	0.983	0.297	7.137	1.289
∑ TEQ (PCDD/Fs)	0.015	0.009	0.154	0.010	0.007	0.017	0.010	0.008	0.011	0.069	0.014	0.011	0.016	0.097	0.010	0.009	0.042	0.015	0.010	0.009	0.014	0.009	0.015	0.007	0.080	0.016

Table A57. Atmospheric concentrations of PCDD/Fs ( $\mu\text{g m}^{-3}$ ) at NAPS urban sites in 2008 (continued)

Station Name	Windsor (College)										Hamilton (Elgin)							
Sampling Period	1	2	3	4	5	6	7	8	9	10	1	2	3	4	5	6	7	8
Sampling Date	1/19/08	3/7/08	3/31/08	7/5/08	7/29/08	8/22/08	9/15/08	10/9/08	11/2/08	12/20/08	3/7/08	7/5/08	7/29/08	8/22/08	10/9/08	11/2/08	11/26/08	12/20/08
Sampling Volume (m3)	1064	1041	982	1017	1168	1144	924	1006	1071	847	1055	979	1043	634	1056	919	709	609
<b>PCDD/F Congeners</b>																		
2,3,7,8-TCDD	0.003	0.001	0.001	0.001	0.001	0.002	0.001	0.001	0.005	<0.003	0.003	0.001	0.001	0.003	0.001	0.001	0.001	0.002
1,2,3,7,8-PeCDD	0.012	0.007	0.007	0.008	0.006	0.008	0.005	0.008	0.010	0.003	0.012	0.008	0.009	0.026	0.006	0.006	0.009	0.005
1,2,3,4,7,8-HxCDD	0.010	0.006	0.005	0.011	0.004	0.008	0.002	0.006	0.009	0.005	0.011	0.007	0.013	0.026	0.004	0.004	0.004	<0.007
1,2,3,6,7,8-HxCDD	0.016	0.009	0.008	0.019	0.008	0.019	0.004	0.010	0.016	0.006	0.022	0.017	0.025	0.036	0.006	0.006	0.006	0.007
1,2,3,7,8,9-HxCDD	0.013	0.012	0.011	0.025	0.009	0.020	0.003	0.011	0.017	0.005	0.020	0.021	0.027	0.034	0.006	0.009	0.005	0.006
1,2,3,4,6,7,8-HpCDD	0.144	0.107	0.111	0.257	0.076	0.277	0.035	0.124	0.217	0.133	0.319	0.234	0.436	0.389	0.080	0.093	0.090	0.090
OCDD	0.467	0.460	0.374	0.759	0.215	0.684	0.107	0.408	0.643	0.452	0.711	0.515	1.107	1.239	0.258	0.275	0.247	0.334
2,3,7,8-TCDF	0.075	0.028	0.026	0.021	0.026	0.025	0.012	0.030	0.035	0.013	0.018	0.056	0.018	0.078	0.021	0.025	0.024	0.045
1,2,3,7,8-PeCDF	0.015	0.006	0.004	0.004	0.005	0.005	0.003	0.005	0.006	0.003	0.004	0.008	0.004	0.015	0.004	0.004	0.004	0.005
2,3,4,7,8-PeCDF	0.031	0.011	0.007	0.006	0.007	0.008	0.004	0.008	0.015	0.004	0.006	0.015	0.005	0.019	0.006	0.007	0.005	0.010
1,2,3,4,7,8-HxCDF	0.060	0.031	0.017	0.015	0.017	0.018	0.007	0.019	0.037	0.006	0.011	0.021	0.011	0.034	0.011	0.014	0.010	0.012
1,2,3,6,7,8-HxCDF	0.023	0.011	0.007	0.007	0.008	0.008	0.003	0.010	0.015	0.003	0.005	0.011	0.006	0.019	0.005	0.004	0.004	0.005
2,3,4,6,7,8-HxCDF	0.026	0.013	0.008	0.007	0.007	0.008	0.003	0.005	0.015	<0.006	0.005	0.009	0.004	0.013	0.005	0.007	0.004	0.005
1,2,3,7,8,9-HxCDF	0.002	0.001	0.001	0.001	<0.001	0.001	<0.001	0.001	<0.002	<0.007	<0.001	<0.001	<0.001	0.001	0.001	<0.002	0.000	<0.006
1,2,3,4,6,7,8-HpCDF	0.075	0.067	0.040	0.039	0.035	0.039	0.016	0.041	0.050	0.021	0.029	0.036	0.029	0.069	0.020	0.022	0.018	0.024
1,2,3,4,7,8,9-HpCDF	0.011	0.007	0.006	0.005	0.004	0.002	<0.002	0.006	0.011	0.002	0.003	0.004	0.004	0.007	0.002	<0.006	0.003	<0.003
OCDF	0.046	0.068	0.034	0.032	0.021	0.030	0.014	0.031	0.033	0.030	0.038	0.024	0.035	0.041	0.012	0.015	0.034	0.034
<b>PCDD/F Homologues</b>																		
TCDDs	0.074	0.046	0.062	0.044	0.041	0.040	0.025	0.080	0.071	0.017	0.051	0.076	0.041	0.124	0.042	0.046	0.035	0.042
PeCDDs	0.107	0.064	0.067	0.068	0.065	0.075	0.030	0.064	0.111	0.036	0.105	0.105	0.089	0.223	0.042	0.063	0.056	0.061
HxCDDs	0.226	0.137	0.140	0.236	0.122	0.246	0.050	0.178	0.299	0.096	0.318	0.221	0.341	0.508	0.115	0.141	0.127	0.098
HpCDDs	0.271	0.201	0.219	0.498	0.152	0.498	0.065	0.260	0.469	0.265	0.555	0.436	0.857	0.814	0.163	0.187	0.177	0.196
OCDD	0.467	0.460	0.374	0.759	0.215	0.684	0.107	0.408	0.643	0.452	0.711	0.515	1.107	1.239	0.258	0.275	0.247	0.334
TCDFs	0.397	0.195	0.211	0.157	0.158	0.135	0.099	0.286	0.259	0.100	0.125	0.322	0.139	0.490	0.169	0.183	0.181	0.279
PeCDFs	0.303	0.158	0.112	0.101	0.101	0.080	0.067	0.196	0.189	0.044	0.073	0.164	0.090	0.229	0.109	0.094	0.063	0.136
HxCDFs	0.232	0.153	0.087	0.102	0.113	0.098	0.047	0.154	0.214	0.037	0.064	0.125	0.083	0.205	0.090	0.076	0.054	0.076
HpCDFs	0.121	0.116	0.068	0.073	0.057	0.065	0.025	0.074	0.096	0.047	0.055	0.063	0.062	0.113	0.039	0.036	0.031	0.046
OCDF	0.046	0.068	0.034	0.032	0.021	0.030	0.014	0.031	0.033	0.030	0.038	0.024	0.035	0.041	0.012	0.015	0.034	0.034
<b>Total</b>																		
$\Sigma$ PCDDs	1.145	0.907	0.863	1.604	0.594	1.542	0.277	0.990	1.593	0.866	1.740	1.353	2.435	2.908	0.620	0.713	0.641	0.731
$\Sigma$ PCDFs	1.099	0.689	0.511	0.465	0.450	0.407	0.252	0.741	0.791	0.258	0.354	0.698	0.408	1.077	0.419	0.403	0.362	0.572
$\Sigma$ PCDD/Fs	2.244	1.596	1.373	2.069	1.044	1.949	0.529	1.731	2.384	1.123	2.094	2.051	2.843	3.986	1.038	1.115	1.004	1.303
$\Sigma$ TEQ (PCDD/Fs)	0.049	0.024	0.020	0.024	0.019	0.026	0.011	0.022	0.037	0.014	0.030	0.031	0.028	0.064	0.016	0.017	0.018	0.020

Table A57. Atmospheric concentrations of PCDD/Fs (pg m<sup>-3</sup>) at NAPS urban sites in 2008 (continued)

Station Name	Toronto (Gage Inst.)														Jonquiere									
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	1	2	3	4	5	6	7	8	9	10
Sampling Period	1/19/08	3/7/08	3/31/08	4/24/08	5/18/08	6/11/08	7/5/08	7/29/08	8/22/08	9/15/08	10/9/08	11/2/08	11/26/08	12/20/08	1/19/08	3/7/08	3/31/08	4/24/08	7/5/08	7/29/08	9/15/08	11/2/08	11/26/08	12/20/08
Sampling Volume (m3)	833	860	875	813	852	758	754	755	855	804	911	864	714	835	933	922	1005	774	1127	1009	1087	1152	1052	1026
<b>PCDD/F Congeners</b>																								
2,3,7,8-TCDD	0.001	0.001	0.001	<0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.002	<0.002	0.002	<0.001	0.000	0.002	0.001	0.000	0.002	0.001	0.001	0.002	0.002	0.012
1,2,3,7,8-PeCDD	0.007	0.006	0.008	0.003	0.007	0.005	0.005	0.004	0.005	0.005	0.006	0.005	0.007	0.002	0.004	0.010	0.006	0.005	0.007	0.004	0.007	0.008	0.005	0.038
1,2,3,4,7,8-HxCDD	0.005	0.005	0.006	<0.002	0.005	0.003	0.001	0.001	0.002	0.001	0.002	<0.005	0.004	0.004	0.002	0.003	0.003	0.002	0.005	0.001	0.001	0.006	0.002	0.039
1,2,3,6,7,8-HxCDD	0.007	0.007	0.010	<0.002	0.010	0.004	0.003	0.004	0.005	0.003	0.004	0.005	0.007	0.004	0.003	0.004	0.005	0.003	0.007	0.003	0.002	0.007	0.009	0.075
1,2,3,7,8,9-HxCDD	0.009	0.009	0.011	0.002	0.014	0.004	0.003	0.004	0.005	0.001	0.007	0.013	0.008	0.006	0.005	0.003	0.006	0.003	0.014	0.003	0.003	0.006	0.006	0.089
1,2,3,4,6,7,8-HpCDD	0.088	0.085	0.123	0.021	0.143	0.060	0.032	0.027	0.066	0.018	0.054	0.066	0.070	0.048	0.038	0.051	0.036	0.029	0.082	0.022	0.017	0.111	0.135	0.818
OCDD	0.293	0.260	0.373	0.097	0.374	0.188	0.120	0.086	0.228	0.055	0.166	0.166	0.194	0.140	0.140	0.208	0.126	0.101	0.251	0.063	0.035	0.400	0.639	1.873
2,3,7,8-TCDF	0.015	0.017	0.019	0.012	0.019	0.017	0.020	0.019	0.027	0.018	0.029	0.014	0.026	0.011	0.013	0.049	0.038	0.014	0.019	0.009	0.009	0.111	0.021	0.210
1,2,3,7,8-PeCDF	0.003	0.003	0.004	0.003	0.003	0.003	0.003	0.003	0.004	0.004	0.005	0.003	0.005	0.003	0.002	0.012	0.007	0.003	0.005	0.002	0.002	0.020	0.004	0.028
2,3,4,7,8-PeCDF	0.004	0.006	0.006	0.003	0.005	0.004	0.006	0.005	0.007	0.005	0.007	0.005	0.007	0.003	0.004	0.021	0.012	0.003	0.006	0.002	0.003	0.026	0.007	0.051
1,2,3,4,7,8-HxCDF	0.009	0.011	0.021	0.006	0.011	0.008	0.010	0.007	0.015	0.007	0.009	0.010	0.018	0.005	0.008	0.027	0.020	0.007	0.011	0.005	0.006	0.031	0.016	0.096
1,2,3,6,7,8-HxCDF	0.004	0.004	0.008	0.003	0.004	0.004	0.004	0.003	0.006	0.003	0.004	<0.002	0.008	0.003	0.003	0.014	0.008	0.003	0.005	0.002	0.003	0.010	0.005	0.036
2,3,4,6,7,8-HxCDF	0.004	0.006	0.007	0.002	0.004	0.003	0.005	0.002	0.005	0.003	0.005	0.006	0.007	0.003	0.003	0.011	0.008	0.003	0.006	0.002	0.003	0.011	0.007	0.033
1,2,3,7,8,9-HxCDF	<0.001	<0.001	0.001	<0.001	<0.001	0.000	<0.001	<0.001	<0.001	<0.001	<0.002	<0.004	0.000	<0.004	<0.001	0.004	0.001	<0.001	<0.001	<0.001	<0.001	0.002	<0.004	0.002
1,2,3,4,6,7,8-HpCDF	0.018	0.019	0.064	0.010	0.020	0.016	0.018	0.012	0.035	0.011	0.019	0.015	0.030	0.013	0.015	0.043	0.026	0.015	0.019	0.012	0.011	0.035	0.059	0.117
1,2,3,4,7,8,9-HpCDF	0.003	0.002	0.009	<0.002	0.003	0.003	0.002	0.001	0.005	<0.002	0.001	<0.005	0.004	<0.003	0.002	0.012	0.003	0.001	0.001	0.001	<0.002	0.003	<0.008	0.015
OCDF	0.023	0.013	0.077	0.007	0.018	0.011	0.010	0.006	0.032	0.007	0.015	0.012	0.025	0.010	0.022	0.052	0.029	0.015	0.012	0.004	0.005	0.087	0.249	0.126
<b>PCDD/F Homologues</b>																								
TCDDs	0.024	0.024	0.037	0.008	0.020	0.022	0.009	0.027	0.024	0.021	0.107	0.016	0.042	0.014	0.019	0.020	0.049	0.024	0.026	0.018	0.016	0.057	0.057	0.326
PeCDDs	0.051	0.045	0.058	0.011	0.045	0.035	0.019	0.032	0.039	0.030	0.049	0.032	0.054	0.025	0.030	0.037	0.095	0.091	0.108	0.109	0.026	0.094	0.066	0.535
HxCDDs	0.106	0.106	0.140	0.021	0.157	0.063	0.039	0.047	0.080	0.028	0.083	0.095	0.108	0.062	0.052	0.046	0.086	0.040	0.103	0.038	0.031	0.148	0.094	1.216
HpCDDs	0.175	0.170	0.230	0.038	0.285	0.116	0.066	0.055	0.137	0.033	0.112	0.135	0.138	0.115	0.068	0.085	0.072	0.050	0.159	0.039	0.029	0.219	0.228	1.623
OCDD	0.293	0.260	0.373	0.097	0.374	0.188	0.120	0.086	0.228	0.055	0.166	0.166	0.194	0.140	0.140	0.208	0.126	0.101	0.251	0.063	0.035	0.400	0.639	1.873
TCDFs	0.090	0.115	0.147	0.076	0.136	0.128	0.088	0.134	0.188	0.105	0.237	0.104	0.182	0.063	0.091	0.606	0.239	0.098	0.139	0.068	0.068	0.556	0.112	1.109
PeCDFs	0.052	0.062	0.077	0.036	0.062	0.067	0.046	0.066	0.093	0.052	0.109	0.061	0.096	0.043	0.047	0.375	0.136	0.056	0.098	0.059	0.049	0.253	0.058	0.568
HxCDFs	0.042	0.052	0.087	0.026	0.050	0.046	0.039	0.041	0.082	0.037	0.070	0.052	0.095	0.025	0.037	0.200	0.082	0.037	0.075	0.042	0.039	0.125	0.083	0.424
HpCDFs	0.032	0.033	0.099	0.015	0.037	0.030	0.030	0.020	0.057	0.015	0.035	0.024	0.052	0.020	0.026	0.091	0.043	0.026	0.034	0.017	0.014	0.056	0.099	0.201
OCDF	0.023	0.013	0.077	0.007	0.018	0.011	0.010	0.006	0.032	0.007	0.015	0.012	0.025	0.010	0.022	0.052	0.029	0.015	0.012	0.004	0.005	0.087	0.249	0.126
<b>Total</b>																								
∑ PCDDs	0.648	0.604	0.837	0.176	0.881	0.425	0.253	0.247	0.508	0.167	0.519	0.444	0.537	0.355	0.308	0.396	0.429	0.304	0.647	0.267	0.138	0.918	1.084	5.573
∑ PCDFs	0.237	0.274	0.486	0.160	0.303	0.281	0.213	0.268	0.452	0.216	0.466	0.252	0.451	0.160	0.223	1.324	0.528	0.233	0.357	0.190	0.174	1.078	0.601	2.428
∑ PCDD/Fs	0.886	0.878	1.323	0.335	1.183	0.706	0.465	0.515	0.960	0.383	0.985	0.696	0.987	0.515	0.530	1.719	0.957	0.537	1.004	0.457	0.312	1.996	1.684	8.001
∑ TEQ (PCDD/Fs)	0.015	0.016	0.021	0.008	0.018	0.013	0.012	0.012	0.016	0.011	0.016	0.015	0.020	0.009	0.010	0.031	0.020	0.011	0.018	0.008	0.011	0.038	0.018	0.134

Table A57. Atmospheric concentrations of PCDD/Fs (pg m<sup>-3</sup>) at NAPS urban sites in 2008 (continued)

Station Name	Montreal (St. Joseph)										Comerbrook										
	1	2	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19
Sampling Period	11/26/08	12/20/08	1/7/08	1/19/08	2/24/08	3/7/08	3/19/08	3/31/08	4/12/08	4/24/08	5/6/08	5/30/08	6/11/08	7/5/08	7/17/08	8/4/08	8/10/08	9/3/08	9/15/08	10/21/08	11/26/08
Sampling Volume (m3)	674	639	812	772	869	816	842	1006	770	968	792	735	657	613	641	742	685	663	620	540	764
<b>PCDD/F Congeners</b>																					
2,3,7,8-TCDD	<0.003	0.001	0.001	0.001	0.001	0.001	0.000	<0.005	0.001	0.001	<0.001	<0.001	0.003	0.002	0.002	0.001	0.001	0.002	0.001	0.003	0.004
1,2,3,7,8-PeCDD	<0.005	0.010	0.004	0.005	0.007	0.005	0.005	0.004	0.004	0.006	0.006	0.005	0.012	0.011	0.011	0.009	0.007	0.010	0.006	0.013	0.012
1,2,3,4,7,8-HxCDD	<0.009	0.008	0.004	0.003	0.005	0.003	0.003	0.003	0.002	0.004	0.004	<0.002	0.012	0.008	0.004	0.002	0.003	0.004	0.003	0.011	0.008
1,2,3,6,7,8-HxCDD	0.010	0.014	0.006	0.005	0.008	0.003	0.004	0.005	0.002	0.006	0.006	<0.002	0.033	0.014	0.006	0.004	0.007	0.006	0.004	0.017	0.022
1,2,3,7,8,9-HxCDD	0.018	0.016	0.008	0.004	0.013	0.003	0.004	0.007	0.002	0.007	0.006	0.001	0.027	0.015	0.005	0.004	0.004	0.005	0.004	0.020	0.016
1,2,3,4,6,7,8-HpCDD	0.095	0.099	0.075	0.063	0.091	0.048	0.052	0.064	0.021	0.036	0.067	0.010	0.270	0.224	0.037	0.017	0.022	0.028	0.036	0.175	0.193
OCDD	0.263	0.308	0.251	0.212	0.251	0.226	0.155	0.192	0.042	0.081	0.178	0.026	0.804	0.796	0.089	0.036	0.051	0.093	0.089	0.565	0.329
2,3,7,8-TCDF	0.022	0.025	0.018	0.008	0.014	0.027	0.008	0.008	0.018	0.053	0.027	0.009	0.095	0.008	0.061	0.008	0.011	0.014	0.005	0.074	0.090
1,2,3,7,8-PeCDF	0.003	0.003	0.003	0.002	0.002	0.005	0.002	0.002	0.004	0.009	0.005	0.002	0.018	0.001	0.014	0.002	0.002	0.004	0.001	0.014	0.015
2,3,4,7,8-PeCDF	0.009	0.007	0.004	0.002	0.003	0.007	0.002	0.002	0.005	0.015	0.008	0.003	0.028	0.003	0.034	0.003	0.004	0.004	0.002	0.026	0.029
1,2,3,4,7,8-HxCDF	0.023	0.015	0.008	0.003	0.004	0.012	0.004	0.004	0.010	0.031	0.024	0.006	0.027	0.005	0.064	0.005	0.008	0.008	0.004	0.056	0.076
1,2,3,6,7,8-HxCDF	0.008	0.010	0.003	0.002	0.002	0.005	0.003	0.003	0.004	0.011	0.009	0.003	0.014	0.003	0.033	0.004	0.005	0.005	0.004	0.020	0.024
2,3,4,6,7,8-HxCDF	0.009	0.006	0.004	0.002	0.001	0.005	0.004	0.003	0.004	0.011	0.009	0.002	0.011	0.004	0.035	0.003	0.003	0.004	0.003	0.023	0.024
1,2,3,7,8,9-HxCDF	<0.006	<0.003	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	0.000	0.001	<0.001	<0.002	<0.001	0.004	<0.001	<0.001	<0.001	<0.003	0.002	<0.007
1,2,3,4,6,7,8-HpCDF	0.039	0.020	0.022	0.021	0.012	0.020	0.020	0.024	0.013	0.038	0.045	0.011	0.033	0.022	0.153	0.017	0.015	0.020	0.015	0.063	0.100
1,2,3,4,7,8,9-HpCDF	<0.010	<0.003	0.004	0.002	0.001	<0.002	0.001	0.002	0.001	0.004	0.007	<0.002	0.010	<0.002	0.039	0.003	0.003	<0.001	<0.004	0.010	0.014
OCDF	<0.016	0.038	0.018	0.019	0.008	0.010	0.012	0.015	0.006	0.020	0.029	0.006	0.028	0.037	0.166	0.009	0.006	0.010	0.010	0.024	0.031
<b>PCDD/F Homologues</b>																					
TCDDs	0.017	0.039	0.024	0.015	0.017	0.016	0.012	0.009	0.021	0.068	0.045	0.013	0.062	0.028	0.036	0.028	0.024	0.038	0.020	0.130	0.133
PeCDDs	0.050	0.120	0.029	0.021	0.045	0.029	0.023	0.019	0.031	0.075	0.056	0.018	0.107	0.073	0.065	0.051	0.044	0.068	0.043	0.179	0.207
HxCDDs	0.160	0.149	0.065	0.051	0.113	0.044	0.047	0.056	0.044	0.101	0.103	0.024	0.315	0.170	0.077	0.055	0.081	0.073	0.056	0.288	0.365
HpCDDs	0.217	0.211	0.131	0.098	0.172	0.078	0.082	0.107	0.037	0.067	0.122	0.018	0.452	0.390	0.064	0.029	0.039	0.052	0.058	0.299	0.351
OCDD	0.263	0.308	0.251	0.212	0.251	0.226	0.155	0.192	0.042	0.081	0.178	0.026	0.804	0.796	0.089	0.036	0.051	0.093	0.089	0.565	0.329
TCDFs	0.104	0.170	0.119	0.051	0.098	0.180	0.057	0.055	0.121	0.314	0.223	0.085	0.968	0.096	1.028	0.122	0.104	0.171	0.088	0.475	0.502
PeCDFs	0.057	0.095	0.055	0.028	0.041	0.092	0.035	0.031	0.066	0.194	0.158	0.052	0.373	0.107	0.730	0.146	0.085	0.173	0.102	0.301	0.356
HxCDFs	0.079	0.066	0.043	0.035	0.025	0.057	0.037	0.039	0.044	0.125	0.125	0.034	0.187	0.074	0.579	0.086	0.064	0.105	0.066	0.233	0.311
HpCDFs	0.039	0.037	0.037	0.039	0.019	0.030	0.029	0.035	0.021	0.062	0.076	0.018	0.079	0.051	0.349	0.028	0.026	0.032	0.026	0.100	0.167
OCDF	0.015	0.038	0.018	0.019	0.008	0.010	0.012	0.015	0.006	0.020	0.029	0.006	0.028	0.037	0.166	0.009	0.006	0.010	0.010	0.024	0.031
<b>Total</b>																					
∑ PCDDs	0.707	0.826	0.501	0.397	0.597	0.393	0.319	0.383	0.175	0.392	0.504	0.099	1.740	1.456	0.331	0.199	0.239	0.324	0.267	1.461	1.384
∑ PCDFs	0.294	0.405	0.272	0.172	0.190	0.370	0.170	0.175	0.258	0.715	0.610	0.194	1.635	0.365	2.852	0.391	0.285	0.492	0.219	1.133	1.367
∑ PCDD/Fs	1.002	1.232	0.773	0.569	0.787	0.763	0.489	0.558	0.433	1.107	1.114	0.293	3.375	1.821	3.183	0.590	0.524	0.816	0.486	2.594	2.751
∑ TEQ (PCDD/Fs)	0.023	0.024	0.013	0.010	0.016	0.015	0.010	0.014	0.011	0.025	0.019	0.010	0.048	0.022	0.046	0.014	0.014	0.019	0.012	0.049	0.055

Table A58. Atmospheric concentrations of PCDD/Fs ( $\mu\text{g m}^{-3}$ ) at NAPS urban sites in 2009

Station Name	Calgary								Edmonton (89th St.)									
Sampling Period	1	2	3	4	1	2	3	4	5	6	7	8	9	10	11	12	13	14
Sampling Date	4/19/09	8/17/09	11/21/09	12/15/09	1/13/09	2/6/09	3/2/09	3/26/09	4/19/09	5/13/09	5/31/09	6/30/09	8/17/09	9/10/09	10/4/09	10/28/09	11/21/09	12/15/09
Sampling Volume (m3)	1067	941	531	494	646	797	975	924	826	734	881	699	596	634	615	654	580	625
<b>PCDD/F Congeners</b>																		
2,3,7,8-TCDD	0.001	0.001	0.001	0.003	<0.002	0.002	0.001	0.001	0.000	0.001	0.001	<0.001	0.001	<0.001	0.001	0.001	0.003	0.003
1,2,3,7,8-PeCDD	0.003	0.001	0.004	0.009	0.004	0.004	0.003	0.004	0.003	0.003	0.002	<0.001	0.002	<0.001	0.003	0.001	0.007	0.017
1,2,3,4,7,8-HxCDD	0.007	<0.001	0.007	0.010	0.005	0.006	0.004	0.007	0.004	0.003	0.001	0.001	0.004	<0.001	0.003	0.001	0.008	0.019
1,2,3,6,7,8-HxCDD	0.008	0.002	0.009	0.027	0.013	0.007	0.005	0.012	0.008	0.004	0.003	0.001	0.006	0.002	0.005	0.002	0.015	0.032
1,2,3,7,8,9-HxCDD	0.012	0.002	0.008	0.022	0.013	0.008	0.007	0.016	0.011	0.007	0.004	<0.002	0.007	0.002	0.004	0.003	0.011	0.033
1,2,3,4,6,7,8-HpCDD	0.132	0.022	0.151	0.259	0.131	0.075	0.050	0.186	0.095	0.032	0.038	0.014	0.104	0.022	0.077	0.028	0.180	0.372
OCDD	0.377	0.070	0.385	0.631	0.302	0.196	0.164	0.455	0.226	0.103	0.138	0.075	0.250	0.089	0.216	0.085	0.432	0.741
2,3,7,8-TCDF	0.005	0.016	0.010	0.029	0.010	0.038	0.016	0.008	0.007	0.004	0.065	0.013	0.007	0.007	0.006	0.008	0.014	0.043
1,2,3,7,8-PeCDF	0.001	0.002	0.001	0.004	0.002	0.010	0.004	0.002	0.001	0.001	0.011	0.002	0.001	0.001	0.001	0.002	0.003	0.005
2,3,4,7,8-PeCDF	0.002	0.003	0.003	0.007	0.002	0.013	0.006	0.003	0.002	0.001	0.025	0.003	0.003	0.003	0.002	0.002	0.004	0.012
1,2,3,4,7,8-HxCDF	0.005	0.004	0.004	0.012	0.007	0.023	0.010	0.006	0.004	0.001	0.037	0.005	0.005	0.004	0.004	0.005	0.006	0.026
1,2,3,6,7,8-HxCDF	0.001	0.002	0.002	0.006	0.001	0.008	0.003	0.002	0.001	<0.001	0.019	0.002	0.002	0.001	0.002	0.003	0.003	0.013
2,3,4,6,7,8-HxCDF	0.001	0.002	0.002	0.006	0.002	0.008	0.004	0.002	0.002	<0.002	0.014	0.002	0.003	0.002	0.002	0.001	0.004	0.013
1,2,3,7,8,9-HxCDF	<0.001	<0.001	<0.001	0.001	0.002	0.003	0.002	<0.001	<0.001	<0.002	0.011	<0.002	<0.002	<0.001	<0.002	<0.001	<0.001	<0.001
1,2,3,4,6,7,8-HpCDF	0.009	0.007	0.005	0.020	0.008	0.026	0.014	0.011	0.007	0.004	0.055	0.007	0.012	0.008	0.007	0.007	0.017	0.043
1,2,3,4,7,8,9-HpCDF	0.001	<0.002	<0.002	0.003	<0.003	0.007	0.003	0.001	0.001	0.001	0.013	<0.002	<0.003	<0.002	0.001	<0.002	0.002	0.004
OCDF	0.013	0.004	0.022	0.025	0.006	0.042	0.018	0.013	0.007	0.007	0.040	0.005	0.014	0.011	0.006	0.009	0.020	0.062
<b>PCDD/F Homologues</b>																		
TCDDs	0.025	0.016	0.014	0.048	0.034	0.044	0.025	0.035	0.019	0.011	0.030	0.011	0.019	0.011	0.016	0.019	0.044	0.235
PeCDDs	0.048	0.020	0.041	0.097	0.060	0.069	0.038	0.067	0.031	0.022	0.032	0.010	0.040	0.016	0.032	0.019	0.088	0.391
HxCDDs	0.156	0.019	0.089	0.248	0.143	0.096	0.071	0.179	0.101	0.038	0.049	0.014	0.118	0.021	0.070	0.031	0.165	0.352
HpCDDs	0.340	0.043	0.213	0.469	0.296	0.157	0.111	0.368	0.192	0.059	0.077	0.032	0.266	0.042	0.169	0.050	0.319	0.649
OCDD	0.377	0.070	0.385	0.631	0.302	0.196	0.164	0.455	0.226	0.103	0.138	0.075	0.250	0.089	0.216	0.085	0.432	0.741
TCDFs	0.049	0.171	0.080	0.235	0.078	0.309	0.142	0.059	0.050	0.029	0.508	0.120	0.099	0.054	0.052	0.065	0.104	0.313
PeCDFs	0.036	0.062	0.048	0.101	0.040	0.175	0.081	0.045	0.029	0.016	0.293	0.048	0.044	0.041	0.035	0.036	0.068	0.292
HxCDFs	0.032	0.028	0.038	0.099	0.037	0.138	0.061	0.037	0.025	0.014	0.231	0.026	0.037	0.032	0.028	0.030	0.058	0.202
HpCDFs	0.022	0.010	0.010	0.050	0.022	0.049	0.029	0.025	0.015	0.007	0.112	0.012	0.023	0.016	0.013	0.015	0.037	0.085
OCDF	0.013	0.004	0.022	0.025	0.006	0.042	0.018	0.013	0.007	0.007	0.040	0.005	0.014	0.011	0.006	0.009	0.020	0.062
<b>Total</b>																		
$\Sigma$ PCDDs	0.947	0.167	0.742	1.493	0.833	0.562	0.408	1.103	0.568	0.234	0.326	0.143	0.693	0.179	0.503	0.203	1.047	2.367
$\Sigma$ PCDFs	0.152	0.274	0.198	0.509	0.183	0.713	0.330	0.179	0.126	0.072	1.184	0.211	0.217	0.153	0.133	0.154	0.287	0.954
$\Sigma$ PCDD/Fs	1.099	0.441	0.940	2.002	1.016	1.275	0.739	1.282	0.694	0.306	1.510	0.353	0.910	0.331	0.636	0.357	1.334	3.321
$\Sigma$ TEQ (PCDD/Fs)	0.010	0.006	0.012	0.028	0.013	0.021	0.011	0.014	0.008	0.006	0.027	0.007	0.008	0.005	0.007	0.006	0.019	0.046

Table A58. Atmospheric concentrations of PCDD/Fs ( $\mu\text{g m}^{-3}$ ) at NAPS urban sites in 2009 (continued)

Station Name	Winnipeg										Windsor (College)			
Sampling Period	1	2	3	4	5	6	7	8	9	10	1	2	3	4
Sampling Date	1/13/09	2/6/09	3/26/09	4/19/09	6/6/09	7/24/09	8/17/09	10/4/09	11/21/09	12/15/09	1/13/09	2/6/09	3/2/09	3/26/09
Sampling Volume (m3)	1066	899	868	830	703	741	775	729	646	738	919	917	994	938
<b>PCDD/F Congeners</b>														
2,3,7,8-TCDD	0.004	0.001	<0.001	<0.001	0.001	<0.001	0.001	0.001	0.001	0.001	<0.002	0.001	0.000	0.002
1,2,3,7,8-PeCDD	0.023	0.005	0.001	0.002	0.006	0.001	0.002	0.002	0.005	0.005	0.004	0.009	<0.001	0.005
1,2,3,4,7,8-HxCDD	0.029	0.006	0.001	0.002	0.010	0.001	0.000	0.002	0.006	0.007	0.007	0.013	0.001	0.005
1,2,3,6,7,8-HxCDD	0.039	0.008	0.001	0.005	0.018	0.003	0.002	0.003	0.010	0.009	0.010	0.019	0.001	0.009
1,2,3,7,8,9-HxCDD	0.076	0.014	0.001	0.005	0.031	0.003	0.002	0.004	0.008	0.008	0.014	0.024	0.001	0.009
1,2,3,4,6,7,8-HpCDD	0.484	0.083	0.012	0.078	0.308	0.019	0.013	0.042	0.120	0.107	0.145	0.245	0.015	0.097
OCDD	0.868	0.192	0.055	0.236	1.126	0.068	0.053	0.153	0.384	0.277	0.436	0.837	0.063	0.327
2,3,7,8-TCDF	0.020	0.015	0.003	0.008	0.008	0.005	0.005	0.010	0.010	0.009	0.018	0.023	0.004	0.087
1,2,3,7,8-PeCDF	0.005	0.004	0.000	0.001	0.002	0.001	0.005	0.002	0.002	0.001	0.004	0.006	0.001	0.012
2,3,4,7,8-PeCDF	0.007	0.006	0.001	0.003	0.003	0.001	0.002	0.004	0.003	0.002	0.006	0.009	0.002	0.019
1,2,3,4,7,8-HxCDF	0.017	0.012	0.001	0.003	0.011	0.003	0.002	0.006	0.007	0.005	0.014	0.019	0.004	0.026
1,2,3,6,7,8-HxCDF	0.005	0.005	0.000	0.001	0.002	0.001	0.001	0.003	0.004	0.002	0.004	0.006	0.001	0.010
2,3,4,6,7,8-HxCDF	0.005	0.005	0.001	0.001	0.003	0.001	0.001	0.002	0.005	0.003	0.005	0.007	0.002	0.009
1,2,3,7,8,9-HxCDF	0.002	0.001	<0.001	0.001	0.001	<0.001	<0.001	<0.002	<0.001	<0.001	<0.003	<0.001	<0.001	0.003
1,2,3,4,6,7,8-HpCDF	0.025	0.015	0.004	0.005	0.025	0.008	0.005	0.006	0.020	0.012	0.021	0.030	0.008	0.026
1,2,3,4,7,8,9-HpCDF	0.004	0.003	0.001	0.001	0.003	<0.001	<0.003	<0.002	0.002	0.001	0.003	0.003	0.000	0.003
OCDF	0.021	0.012	0.005	0.008	0.039	0.007	0.006	0.009	0.036	0.020	0.020	0.024	0.007	0.026
<b>PCDD/F Homologues</b>														
TCDDs	0.170	0.042	0.009	0.011	0.026	0.009	0.010	0.028	0.030	0.028	0.072	0.051	0.007	0.082
PeCDDs	0.347	0.065	0.010	0.024	0.069	0.020	0.017	0.034	0.060	0.058	0.091	0.106	0.005	0.081
HxCDDs	0.796	0.136	0.018	0.074	0.276	0.035	0.019	0.041	0.119	0.125	0.196	0.276	0.019	0.126
HpCDDs	1.128	0.192	0.025	0.157	0.654	0.044	0.024	0.088	0.249	0.222	0.354	0.566	0.031	0.199
OCDD	0.868	0.192	0.055	0.236	1.126	0.068	0.053	0.153	0.384	0.277	0.436	0.837	0.063	0.327
TCDFs	0.140	0.135	0.021	0.088	0.070	0.063	0.056	0.091	0.084	0.066	0.143	0.164	0.037	0.583
PeCDFs	0.113	0.073	0.012	0.032	0.064	0.053	0.044	0.056	0.074	0.042	0.084	0.125	0.021	0.259
HxCDFs	0.142	0.067	0.008	0.024	0.094	0.032	0.025	0.033	0.077	0.044	0.064	0.131	0.022	0.132
HpCDFs	0.051	0.027	0.008	0.010	0.058	0.014	0.005	0.015	0.047	0.027	0.041	0.057	0.013	0.048
OCDF	0.021	0.012	0.005	0.008	0.039	0.007	0.006	0.009	0.036	0.020	0.020	0.024	0.007	0.026
<b>Total</b>														
∑ PCDDs	3.308	0.627	0.117	0.502	2.150	0.177	0.123	0.344	0.842	0.710	1.149	1.836	0.125	0.815
∑ PCDFs	0.467	0.315	0.053	0.162	0.324	0.168	0.136	0.204	0.317	0.200	0.352	0.500	0.099	1.048
∑ PCDD/Fs	3.775	0.942	0.171	0.664	2.473	0.345	0.259	0.548	1.159	0.909	1.501	2.337	0.224	1.864
∑ TEQ (PCDD/Fs)	0.054	0.015	0.003	0.007	0.020	0.004	0.005	0.007	0.013	0.012	0.017	0.028	0.003	0.030

Table A58. Atmospheric concentrations of PCDD/Fs (pg m<sup>-3</sup>) at NAPS urban sites in 2009 (continued)

Station Name	Hamilton (Elgin)														Toronto (Kipling)								
Sampling Period	1	2	3	4	5	6	7	8	9	10	11	12	13	14	1	2	3	4	5	6	7	8	9
Sampling Date	1/13/09	3/2/09	3/26/09	4/19/09	5/13/09	6/6/09	6/30/09	7/24/09	8/17/09	9/10/09	10/4/09	10/28/09	11/21/09	12/15/09	5/13/09	6/6/09	7/24/09	8/17/09	9/10/09	10/4/09	10/28/09	11/21/09	12/15/09
Sampling Volume (m3)	840	821	743	649	722	648	589	645	767	644	715	880	739	691	920	672	660	791	696	701	653	824	925
<b>PCDD/F Congeners</b>																							
2,3,7,8-TCDD	<0.001	0.001	0.002	0.001	0.001	0.001	<0.002	0.001	0.001	0.001	0.001	0.001	0.001	0.002	0.001	0.001	0.001	0.002	0.000	0.001	0.002	0.001	0.001
1,2,3,7,8-PeCDD	0.003	0.001	0.011	0.002	0.005	0.004	0.002	0.002	0.006	0.004	0.003	0.005	0.007	0.006	0.003	0.003	0.003	0.003	0.005	0.001	0.004	0.005	0.006
1,2,3,4,7,8-HxCDD	0.004	<0.002	0.019	0.003	0.007	0.006	0.001	<0.003	0.004	0.003	0.003	0.007	0.007	0.011	0.003	0.004	0.003	0.004	0.002	0.005	0.009	0.008	0.003
1,2,3,6,7,8-HxCDD	0.005	0.001	0.027	0.005	0.010	0.008	0.002	0.005	0.009	0.009	0.006	0.014	0.017	0.013	0.007	0.007	0.004	0.008	0.003	0.010	0.012	0.015	0.006
1,2,3,7,8,9-HxCDD	0.009	0.003	0.029	0.004	0.012	0.011	0.004	0.003	0.009	0.010	0.007	0.014	0.030	0.014	0.009	0.011	0.004	0.006	0.003	0.010	0.011	0.011	0.008
1,2,3,4,6,7,8-HpCDD	0.089	0.016	0.308	0.069	0.124	0.116	0.022	0.049	0.099	0.091	0.102	0.198	0.232	0.136	0.093	0.131	0.040	0.090	0.033	0.130	0.196	0.182	0.066
OCDD	0.252	0.073	0.825	0.327	0.479	0.320	0.070	0.172	0.359	0.337	0.279	0.572	0.608	0.273	0.344	0.416	0.116	0.846	0.168	0.327	0.640	0.484	0.209
2,3,7,8-TCDF	0.016	0.006	0.495	0.015	0.048	0.013	0.017	0.015	0.019	0.055	0.019	0.028	0.020	0.038	0.009	0.013	0.018	0.019	0.009	0.016	0.023	0.021	
1,2,3,7,8-PeCDF	0.003	0.001	0.115	0.004	0.008	0.003	0.002	0.003	0.004	0.009	0.003	0.009	0.005	0.005	0.002	0.002	0.003	0.003	0.002	0.003	0.016	0.003	
2,3,4,7,8-PeCDF	0.006	0.001	0.434	0.005	0.014	0.005	0.005	0.004	0.007	0.018	0.006	0.010	0.004	0.015	0.003	0.004	0.006	0.005	0.003	0.005	0.006	0.009	
1,2,3,4,7,8-HxCDF	0.010	0.002	0.308	0.011	0.024	0.008	0.007	0.006	0.011	0.024	0.011	0.022	0.015	0.026	0.008	0.009	0.008	0.009	0.006	0.011	0.012	0.015	
1,2,3,6,7,8-HxCDF	0.004	0.001	0.089	0.004	0.010	0.003	0.002	0.004	0.008	0.011	0.005	0.009	0.009	0.012	0.004	0.004	0.003	0.005	0.003	0.006	0.005	0.007	
2,3,4,6,7,8-HxCDF	0.002	<0.001	0.135	0.003	0.008	0.004	0.003	<0.002	0.005	0.013	0.005	0.009	0.014	0.014	0.004	0.005	0.004	0.004	0.005	0.008	0.005	0.007	
1,2,3,7,8,9-HxCDF	<0.002	<0.002	0.011	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	0.001	<0.001	0.001	0.002	<0.002	<0.001	<0.002	<0.001	0.000	<0.001	0.001	<0.001	<0.001	
1,2,3,4,6,7,8-HpCDF	0.016	0.004	0.227	0.018	0.033	0.018	0.007	0.009	0.029	0.039	0.031	0.044	0.028	0.041	0.020	0.023	0.016	0.021	0.013	0.021	0.029	0.028	
1,2,3,4,7,8,9-HpCDF	0.002	<0.001	0.075	0.002	0.004	0.002	0.002	0.002	<0.003	0.006	0.003	0.004	0.007	0.005	0.003	0.002	<0.001	<0.001	0.002	0.004	0.002	0.003	
OCDF	0.012	0.009	0.211	0.027	0.036	0.019	0.007	0.016	0.017	0.044	0.042	0.042	0.019	0.028	0.025	0.028	0.012	0.027	0.016	0.016	0.039	0.031	
<b>PCDD/F Homologues</b>																							
TCDDs	0.033	0.007	0.099	0.024	0.080	0.028	0.036	0.032	0.039	0.045	0.031	0.037	0.028	0.056	0.020	0.018	0.024	0.024	0.009	0.013	0.035	0.039	
PeCDDs	0.055	0.007	0.154	0.028	0.090	0.035	0.029	0.035	0.059	0.067	0.043	0.058	0.043	0.095	0.033	0.036	0.030	0.037	0.011	0.029	0.070	0.068	
HxCDDs	0.104	0.022	0.356	0.063	0.144	0.137	0.035	0.049	0.109	0.083	0.073	0.153	0.174	0.195	0.087	0.105	0.049	0.076	0.032	0.112	0.185	0.177	
HpCDDs	0.202	0.035	0.637	0.181	0.287	0.271	0.050	0.097	0.212	0.172	0.179	0.403	0.401	0.305	0.213	0.277	0.083	0.197	0.088	0.274	0.453	0.378	
OCDD	0.252	0.073	0.825	0.327	0.479	0.320	0.070	0.172	0.359	0.337	0.279	0.572	0.608	0.273	0.344	0.416	0.116	0.846	0.168	0.327	0.640	0.484	
TCDFs	0.124	0.050	1.861	0.112	0.329	0.125	0.161	0.171	0.240	0.360	0.184	0.194	0.108	0.281	0.076	0.092	0.130	0.102	0.049	0.073	0.127	0.177	
PeCDFs	0.079	0.019	2.041	0.086	0.172	0.081	0.085	0.098	0.203	0.196	0.086	0.119	0.047	0.215	0.057	0.060	0.079	0.065	0.022	0.030	0.078	0.103	
HxCDFs	0.065	0.017	1.201	0.069	0.112	0.060	0.051	0.067	0.156	0.128	0.063	0.106	0.095	0.173	0.051	0.056	0.055	0.075	0.033	0.051	0.067	0.078	
HpCDFs	0.034	0.004	0.463	0.041	0.061	0.035	0.016	0.021	0.049	0.077	0.052	0.075	0.063	0.079	0.041	0.046	0.030	0.047	0.029	0.041	0.048	0.048	
OCDF	0.012	0.009	0.211	0.027	0.036	0.019	0.007	0.016	0.017	0.044	0.042	0.042	0.019	0.028	0.025	0.028	0.012	0.027	0.016	0.016	0.039	0.031	
<b>Total</b>																							
∑ PCDDs	0.645	0.144	2.070	0.623	1.080	0.790	0.220	0.386	0.778	0.703	0.605	1.222	1.253	0.923	0.697	0.852	0.302	1.179	0.307	0.756	1.383	1.146	
∑ PCDFs	0.314	0.099	5.778	0.335	0.709	0.319	0.319	0.372	0.666	0.805	0.426	0.535	0.331	0.777	0.250	0.282	0.307	0.315	0.150	0.211	0.359	0.437	
∑ PCDD/Fs	0.959	0.243	7.848	0.958	1.789	1.109	0.539	0.758	1.444	1.508	1.032	1.757	1.584	1.700	0.947	1.134	0.609	1.494	0.457	0.967	1.742	1.583	
∑ TEQ (PCDD/Fs)	0.012	0.004	0.265	0.010	0.024	0.013	0.010	0.009	0.017	0.024	0.013	0.022	0.024	0.027	0.011	0.012	0.011	0.015	0.006	0.014	0.018	0.021	



Table A58. Atmospheric concentrations of PCDD/Fs ( $\mu\text{g m}^{-3}$ ) at NAPS urban sites in 2009 (continued)

Station Name	Toronto (Gage Inst.)												Jonquiere		
Sampling Period	1	2	3	4	5	6	7	8	9	10	11	12	1	2	3
Sampling Date	1/13/09	2/6/09	3/2/09	3/26/09	4/19/09	6/6/09	7/24/09	8/17/09	10/4/09	10/28/09	11/21/09	12/15/09	1/13/09	2/6/09	3/2/09
Sampling Volume (m3)	778	841	901	915	905	814	659	779	639	787	659	664	620	727	644
<b>PCDD/F Congeners</b>															
2,3,7,8-TCDD	0.001	0.002	0.001	0.001	0.000	<0.001	0.002	0.002	0.002	0.001	0.002	0.001	0.001	0.002	0.001
1,2,3,7,8-PeCDD	0.004	0.005	0.003	0.004	0.001	0.002	0.003	0.003	0.003	0.005	0.007	0.004	0.003	0.021	0.002
1,2,3,4,7,8-HxCDD	0.005	0.007	0.003	0.006	0.002	0.003	0.003	0.003	0.004	0.008	0.008	0.004	0.004	0.016	0.002
1,2,3,6,7,8-HxCDD	0.007	0.008	0.006	0.008	0.003	0.004	0.005	0.006	0.010	0.012	0.015	0.007	0.008	0.032	0.003
1,2,3,7,8,9-HxCDD	0.009	0.016	0.006	0.010	0.003	0.005	0.005	0.006	0.011	0.014	0.016	0.008	0.005	0.033	0.004
1,2,3,4,6,7,8-HpCDD	0.105	0.122	0.072	0.122	0.034	0.058	0.059	0.062	0.121	0.172	0.182	0.078	0.092	0.367	0.029
OCDD	0.324	0.341	0.163	0.399	0.118	0.187	0.177	0.241	0.289	0.519	0.441	0.220	0.353	0.776	0.103
2,3,7,8-TCDF	0.023	0.026	0.007	0.030	0.010	0.017	0.034	0.036	0.034	0.018	0.047	0.020	0.038	0.083	0.009
1,2,3,7,8-PeCDF	0.016	0.007	0.001	0.006	0.002	0.002	0.006	0.006	0.006	0.004	0.008	0.004	0.004	0.012	0.002
2,3,4,7,8-PeCDF	0.007	0.009	0.002	0.009	0.003	0.004	0.008	0.008	0.010	0.007	0.013	0.007	0.010	0.018	0.003
1,2,3,4,7,8-HxCDF	0.010	0.017	0.004	0.016	0.005	0.007	0.013	0.011	0.025	0.014	0.020	0.013	0.021	0.024	0.004
1,2,3,6,7,8-HxCDF	0.005	0.004	0.002	0.006	0.001	0.002	0.005	0.006	0.009	0.006	0.009	0.006	0.014	0.009	0.002
2,3,4,6,7,8-HxCDF	0.006	0.006	0.002	0.006	0.002	0.003	0.004	0.006	0.011	0.005	0.009	0.005	0.012	0.012	0.001
1,2,3,7,8,9-HxCDF	<0.003	<0.004	<0.001	<0.001	0.001	<0.001	<0.001	<0.002	<0.002	<0.001	0.001	0.000	<0.004	<0.002	<0.001
1,2,3,4,6,7,8-HpCDF	0.026	0.021	0.006	0.026	0.008	0.013	0.018	0.023	0.061	0.030	0.030	0.021	0.040	0.030	0.008
1,2,3,4,7,8,9-HpCDF	0.003	0.004	0.001	0.004	0.001	0.002	0.002	0.003	0.004	0.004	0.004	0.003	0.004	0.003	0.001
OCDF	0.022	0.017	0.006	0.023	0.009	0.014	0.017	0.016	0.044	0.031	0.022	0.018	0.097	0.041	0.016
<b>PCDD/F Homologues</b>															
TCDDs	0.057	0.032	0.022	0.046	0.015	0.017	0.039	0.035	0.030	0.032	0.052	0.033	0.070	0.160	0.013
PeCDDs	0.035	0.068	0.035	0.055	0.017	0.025	0.041	0.044	0.047	0.058	0.079	0.047	0.081	0.250	0.019
HxCDDs	0.094	0.153	0.076	0.127	0.035	0.054	0.067	0.067	0.105	0.173	0.181	0.094	0.119	0.461	0.031
HpCDDs	0.218	0.270	0.145	0.265	0.071	0.125	0.122	0.133	0.227	0.416	0.368	0.158	0.232	0.790	0.055
OCDD	0.324	0.341	0.163	0.399	0.118	0.187	0.177	0.241	0.289	0.519	0.441	0.220	0.353	0.776	0.103
TCDFs	0.151	0.207	0.058	0.256	0.087	0.155	0.323	0.340	0.278	0.143	0.351	0.157	0.250	0.555	0.065
PeCDFs	0.111	0.103	0.030	0.137	0.052	0.067	0.147	0.172	0.130	0.085	0.176	0.086	0.125	0.239	0.025
HxCDFs	0.122	0.093	0.022	0.080	0.037	0.042	0.096	0.108	0.104	0.064	0.117	0.064	0.105	0.116	0.017
HpCDFs	0.054	0.039	0.013	0.048	0.016	0.024	0.033	0.041	0.093	0.051	0.056	0.039	0.065	0.055	0.014
OCDF	0.022	0.017	0.006	0.023	0.009	0.014	0.017	0.016	0.044	0.031	0.022	0.018	0.097	0.041	0.016
<b>Total</b>															
$\Sigma$ PCDDs	0.729	0.864	0.441	0.892	0.257	0.408	0.446	0.518	0.698	1.198	1.120	0.553	0.855	2.436	0.222
$\Sigma$ PCDFs	0.461	0.460	0.129	0.544	0.201	0.302	0.616	0.676	0.650	0.375	0.721	0.364	0.641	1.006	0.136
$\Sigma$ PCDD/Fs	1.189	1.324	0.570	1.436	0.458	0.710	1.062	1.194	1.348	1.572	1.841	0.917	1.497	3.442	0.358
$\Sigma$ TEQ (PCDD/Fs)	0.016	0.020	0.008	0.018	0.005	0.009	0.015	0.016	0.021	0.018	0.029	0.015	0.019	0.054	0.007

Table A58. Atmospheric concentrations of PCDD/Fs ( $\mu\text{g m}^{-3}$ ) at NAPS urban sites in 2009 (continued)

Station Name	Montreal (St. Joseph)										Comerbrook										
Sampling Period	1	2	3	4	5	6	7	8	9	10	11	1	2	3	4	5	6	7	8	9	10
Sampling Date	1/13/09	2/6/09	3/26/09	4/19/09	5/13/09	6/6/09	7/24/09	8/17/09	9/10/09	10/4/09	11/21/09	4/7/09	7/12/09	8/5/09	8/29/09	9/9/09	9/22/09	10/4/09	11/9/09	11/21/09	12/15/09
Sampling Volume (m <sup>3</sup> )	612	633	754	635	716	633	609	635	584	518	611	639	551	526	589	644	742	602	796	804	562
<b>PCDD/F Congeners</b>																					
2,3,7,8-TCDD	0.002	<0.003	0.003	0.001	0.001	0.001	0.001	0.002	0.002	0.001	0.001	0.001	0.001	<0.001	0.000	0.001	0.001	0.001	<0.001	0.001	0.003
1,2,3,7,8-PeCDD	0.006	0.005	0.011	0.005	0.006	0.005	0.004	0.008	0.008	0.005	0.003	0.006	0.005	0.008	0.004	0.002	0.004	0.002	0.001	0.003	0.007
1,2,3,4,7,8-HxCDD	0.006	<0.008	0.012	0.005	0.007	0.005	0.002	0.006	0.009	0.005	0.002	0.002	0.003	0.004	0.002	0.001	0.001	0.001	0.001	0.003	0.006
1,2,3,6,7,8-HxCDD	0.014	0.009	0.018	0.008	0.011	0.008	0.005	0.009	0.013	0.008	0.003	0.011	0.004	0.006	0.003	0.002	0.003	0.001	0.002	0.004	0.011
1,2,3,7,8,9-HxCDD	0.021	0.006	0.017	0.005	0.014	0.009	0.003	0.009	0.009	0.007	0.004	0.012	0.003	0.008	0.005	0.002	0.003	0.002	0.003	0.004	0.007
1,2,3,4,6,7,8-HpCDD	0.221	0.094	0.135	0.063	0.132	0.093	0.024	0.064	0.088	0.078	0.041	0.178	0.028	0.034	0.033	0.016	0.019	0.008	0.032	0.036	0.054
OCDD	0.732	0.278	0.486	0.204	0.440	0.299	0.077	0.240	0.256	0.236	0.160	0.391	0.087	0.098	0.088	0.057	0.061	0.032	0.421	0.093	0.090
2,3,7,8-TCDF	0.015	0.032	0.039	0.009	0.020	0.014	0.009	0.023	0.028	0.035	0.014	0.016	0.007	0.011	0.008	0.005	0.006	0.019	0.007	0.022	0.133
1,2,3,7,8-PeCDF	0.004	0.006	0.008	0.002	0.004	0.003	0.002	0.005	0.006	0.008	0.003	0.002	0.002	0.003	0.002	0.001	0.001	0.003	0.001	0.004	0.019
2,3,4,7,8-PeCDF	0.005	0.011	0.015	0.003	0.007	0.005	0.003	0.007	0.013	0.012	0.005	0.003	0.003	0.003	0.003	0.002	0.002	0.005	0.002	0.007	0.040
1,2,3,4,7,8-HxCDF	0.017	0.025	0.034	0.007	0.018	0.013	0.006	0.018	0.029	0.021	0.009	0.007	0.004	0.006	0.004	0.002	0.002	0.005	0.002	0.009	0.064
1,2,3,6,7,8-HxCDF	<0.006	0.011	0.013	0.003	0.008	0.006	0.003	0.009	0.012	0.010	0.005	0.004	0.004	0.004	0.003	0.002	0.003	0.002	0.001	0.005	0.028
2,3,4,6,7,8-HxCDF	0.004	0.007	0.015	0.003	0.007	0.005	0.003	0.008	0.018	0.011	0.002	0.003	0.003	0.005	0.002	0.001	0.001	0.002	0.001	0.005	0.030
1,2,3,7,8,9-HxCDF	<0.008	<0.006	0.001	<0.001	0.001	0.001	<0.001	0.001	0.001	0.001	<0.001	<0.002	<0.002	<0.002	<0.001	<0.001	<0.001	0.000	<0.001	0.000	0.002
1,2,3,4,6,7,8-HpCDF	0.035	0.031	0.054	0.015	0.039	0.029	0.012	0.042	0.050	0.040	0.017	0.012	0.015	0.017	0.010	0.006	0.010	0.006	0.008	0.014	0.064
1,2,3,4,7,8,9-HpCDF	<0.008	<0.004	0.009	0.002	0.006	0.003	0.001	0.003	0.008	0.006	0.002	0.002	0.001	0.001	0.001	<0.002	<0.001	0.001	<0.001	0.001	0.005
OCDF	0.054	0.040	0.064	0.018	0.046	0.027	0.006	0.020	0.047	0.033	0.020	0.008	0.010	0.007	0.007	0.005	0.007	0.004	0.011	0.009	0.024
<b>PCDD/F Homologues</b>																					
TCDDs	0.033	0.045	0.059	0.027	0.043	0.018	0.010	0.030	0.034	0.024	0.017	0.031	0.028	0.032	0.006	0.006	0.014	0.021	0.011	0.034	0.124
PeCDDs	0.071	0.071	0.102	0.043	0.079	0.044	0.024	0.054	0.074	0.047	0.024	0.055	0.052	0.080	0.018	0.014	0.031	0.022	0.013	0.036	0.146
HxCDDs	0.221	0.134	0.224	0.095	0.193	0.104	0.052	0.113	0.150	0.092	0.042	0.150	0.056	0.081	0.032	0.018	0.034	0.019	0.020	0.052	0.140
HpCDDs	0.461	0.223	0.293	0.147	0.346	0.208	0.057	0.160	0.191	0.157	0.084	0.320	0.060	0.067	0.056	0.027	0.036	0.017	0.066	0.070	0.102
OCDD	0.732	0.278	0.486	0.204	0.440	0.299	0.077	0.240	0.256	0.236	0.160	0.391	0.087	0.098	0.088	0.057	0.061	0.032	0.421	0.093	0.090
TCDFs	0.120	0.205	0.288	0.075	0.161	0.089	0.048	0.109	0.153	0.214	0.113	0.126	0.104	0.150	0.040	0.027	0.044	0.157	0.060	0.165	0.810
PeCDFs	0.085	0.128	0.173	0.041	0.110	0.069	0.033	0.074	0.138	0.136	0.068	0.057	0.089	0.135	0.031	0.016	0.030	0.062	0.032	0.099	0.497
HxCDFs	0.078	0.092	0.155	0.042	0.103	0.102	0.039	0.125	0.162	0.112	0.043	0.036	0.077	0.122	0.031	0.017	0.028	0.026	0.018	0.055	0.283
HpCDFs	0.070	0.046	0.097	0.028	0.072	0.052	0.018	0.075	0.088	0.065	0.030	0.021	0.024	0.027	0.016	0.009	0.015	0.008	0.012	0.022	0.097
OCDF	0.054	0.040	0.064	0.018	0.046	0.027	0.006	0.020	0.047	0.033	0.020	0.008	0.010	0.007	0.007	0.005	0.007	0.004	0.011	0.009	0.024
<b>Total</b>																					
∑ PCDDs	1.517	0.751	1.165	0.515	1.100	0.673	0.220	0.597	0.705	0.556	0.327	0.947	0.282	0.358	0.200	0.122	0.176	0.110	0.531	0.285	0.601
∑ PCDFs	0.407	0.512	0.777	0.204	0.492	0.339	0.145	0.403	0.588	0.560	0.273	0.247	0.303	0.441	0.125	0.074	0.123	0.258	0.133	0.350	1.712
∑ PCDD/Fs	1.924	1.262	1.942	0.719	1.592	1.012	0.364	0.999	1.293	1.116	0.601	1.194	0.585	0.799	0.325	0.196	0.299	0.367	0.664	0.635	2.313
∑ TEQ (PCDD/Fs)	0.021	0.024	0.036	0.013	0.021	0.015	0.010	0.022	0.027	0.021	0.010	0.016	0.010	0.015	0.008	0.005	0.007	0.007	0.005	0.011	0.052

Table A59. Atmospheric concentrations of Co-PCBs (pg m<sup>-3</sup>) at NAPS rural sites in 2005

Station Name	Egbert												Point Petre											
Sampling Period	1	2	3	4	5	6	7	8	9	10	11	12	1	2	3	4	5	6	7	8	9	10	11	12
Sampling Date	1/10/05	2/3/05	3/23/05	4/16/05	5/10/05	6/3/05	7/21/05	8/14/05	9/7/05	10/1/05	11/18/05	12/12/05	3/29/05	4/4/05	4/16/05	5/10/05	6/3/05	6/27/05	7/21/05	8/14/05	9/7/05	10/1/05	11/18/05	12/12/05
Sampling Volume (m3)	917	887	804	699	841	822	915	948	853	813	962	926	632	562	467	559	562	606	544	550	577	498	671	762
<b>PCB Congeners</b>																								
PCB-81	0.020	0.042	<0.011	0.043	0.035	0.050	0.014	0.008	0.014	<0.013	<0.005	<0.009	0.041	0.024	<0.038	0.023	0.024	0.030	0.031	<0.015	0.018	0.036	<0.008	<0.007
PCB-77	0.100	0.147	0.099	0.157	0.226	0.697	0.223	0.089	0.116	0.106	0.028	0.037	0.163	0.283	0.234	0.214	0.283	0.276	0.308	0.139	0.187	0.231	0.065	0.055
PCB-123	0.075	0.137	0.052	0.125	0.175	0.215	0.162	0.111	0.188	0.176	0.047	0.044	0.075	0.233	0.172	0.185	0.233	0.408	0.436	0.224	0.329	0.326	0.095	0.057
PCB-118	0.647	1.164	0.487	1.144	1.596	1.994	1.669	0.772	1.297	1.128	0.305	0.344	0.672	1.910	1.512	1.641	1.910	2.541	2.958	1.272	2.133	2.215	0.704	0.425
PCB-114	0.027	0.061	0.019	0.055	0.076	0.096	0.059	0.023	0.042	0.045	0.009	0.010	0.021	0.066	0.072	0.059	0.066	0.132	0.141	0.038	0.071	0.068	0.021	0.016
PCB-105	0.259	0.487	0.200	0.456	0.653	0.912	0.688	0.299	0.471	0.435	0.124	0.145	0.270	0.754	0.585	0.605	0.754	0.943	1.017	0.438	0.709	0.798	0.266	0.167
PCB-126	0.006	0.016	0.004	0.010	0.011	0.015	0.006	0.005	0.007	0.008	0.003	0.004	0.010	0.029	0.019	0.017	0.029	0.027	0.030	0.018	0.025	0.021	0.010	0.008
PCB-167	0.014	0.032	0.012	0.032	0.035	0.034	0.030	0.018	0.027	0.029	0.010	0.011	0.018	0.035	0.043	0.041	0.035	0.057	0.069	0.036	0.059	0.065	0.023	0.015
PCB-156	0.035	0.075	0.027	0.064	0.078	0.088	0.080	0.039	0.063	0.066	0.021	0.023	0.037	0.102	0.082	0.080	0.102	0.104	0.110	0.055	0.098	0.106	0.042	0.029
PCB-157	0.008	0.017	0.005	0.014	0.011	0.010	0.011	0.009	0.012	0.014	0.005	0.005	0.005	0.013	0.022	0.012	0.013	0.017	0.019	0.012	0.017	0.017	0.009	0.007
PCB-169	<0.001	0.005	0.002	0.007	0.004	0.006	0.004	0.002	0.005	0.005	0.001	0.002	0.002	0.007	0.004	0.006	0.007	0.012	0.012	0.004	0.010	0.014	0.003	0.002
PCB-189	0.007	0.012	0.003	0.009	0.006	0.004	0.002	0.004	0.006	0.008	0.003	0.003	0.003	0.016	0.010	0.012	0.016	0.006	0.007	0.007	0.009	0.012	0.004	0.005
<b>Total</b>																								
∑ Co-PCBs	1.198	2.196	0.908	2.114	2.905	4.120	2.948	1.379	2.248	2.019	0.555	0.628	1.316	3.473	2.753	2.895	3.473	4.552	5.138	2.258	3.665	3.908	1.241	0.787
∑ TEQ (Co-PCBs)	0.001	0.002	0.000	0.001	0.002	0.002	0.001	0.001	0.001	0.001	0.000	0.000	0.001	0.003	0.002	0.002	0.003	0.003	0.004	0.002	0.003	0.003	0.001	0.001

Station Name	Burnt Island											Simcoe										
Sampling Period	1	2	3	4	5	6	7	8	9	10	1	2	3	4	5	6	7	8	9	10	11	
Sampling Date	1/10/05	2/3/05	5/10/05	6/27/05	7/21/05	8/14/05	10/1/05	10/18/05	11/18/05	12/12/05	1/10/05	3/23/05	4/16/05	5/10/05	6/3/05	6/27/05	7/21/05	8/14/05	10/1/05	11/18/05	12/12/05	
Sampling Volume (m3)	1228	984	868	800	909	912	566	786	771	844	929	768	817	875	797	808	903	904	925	903	939	
<b>PCB Congeners</b>																						
PCB-81	<0.009	<0.013	0.011	0.027	0.010	<0.006	<0.009	<0.006	<0.006	<0.006	0.020	<0.012	<0.022	<0.010	0.032	0.037	0.015	0.011	<0.011	<0.006	<0.005	
PCB-77	0.040	0.076	0.099	0.171	0.094	0.059	0.070	0.034	0.033	0.048	0.095	0.083	0.125	0.168	0.114	0.256	0.192	0.193	0.091	0.063	0.053	
PCB-123	0.030	0.095	0.104	0.109	0.100	0.073	0.120	0.052	0.057	0.041	0.069	0.104	0.180	0.181	0.114	0.338	0.369	0.467	0.171	0.062	0.054	
PCB-118	0.287	1.004	0.808	0.943	0.810	0.530	0.909	0.445	0.440	0.363	0.681	1.200	1.666	1.792	1.297	3.863	3.174	3.856	1.144	0.466	0.458	
PCB-114	0.013	0.043	0.038	0.039	0.041	0.019	0.026	0.015	0.012	0.014	0.028	0.041	0.066	0.071	0.049	0.123	0.145	0.107	0.049	0.016	0.018	
PCB-105	0.102	0.435	0.313	0.432	0.329	0.208	0.337	0.167	0.162	0.150	0.271	0.453	0.640	0.684	0.545	1.474	1.203	1.363	0.436	0.186	0.200	
PCB-126	0.003	0.003	0.006	0.006	0.004	0.004	0.005	0.003	0.003	0.003	0.008	0.005	0.010	0.010	0.007	0.013	0.013	0.010	0.007	0.005	0.006	
PCB-167	0.006	0.033	0.020	0.022	0.019	0.016	0.023	0.011	0.012	0.010	0.018	0.027	0.034	0.040	0.025	0.074	0.070	0.082	0.036	0.016	0.015	
PCB-156	0.014	0.091	0.036	0.045	0.039	0.031	0.047	0.024	0.025	0.018	0.039	0.072	0.089	0.097	0.069	0.192	0.141	0.173	0.071	0.032	0.032	
PCB-157	0.002	0.009	0.007	0.008	0.008	0.007	0.010	0.006	0.005	0.006	0.007	0.012	0.016	0.013	0.008	0.031	0.026	0.030	0.013	0.010	0.010	
PCB-169	<0.001	0.004	0.002	0.002	0.002	0.001	0.002	0.001	0.001	0.002	0.003	0.002	0.004	0.006	0.002	0.011	0.007	0.008	0.008	0.003	0.002	
PCB-189	0.003	0.018	0.002	0.007	0.002	0.004	0.005	0.003	0.003	0.004	0.007	0.005	0.006	0.009	0.008	0.021	0.009	0.008	0.006	0.006	0.006	
<b>Total</b>																						
∑ Co-PCBs	0.500	1.812	1.444	1.808	1.458	0.952	1.553	0.762	0.753	0.660	1.247	2.003	2.836	3.072	2.270	6.433	5.366	6.307	2.042	0.866	0.854	
∑ TEQ (Co-PCBs)	0.000	0.001	0.001	0.001	0.001	0.001	0.001	0.000	0.000	0.000	0.001	0.001	0.001	0.001	0.001	0.002	0.002	0.002	0.001	0.001	0.001	

Table A60. Atmospheric concentrations of Co-PCBs ( $\mu\text{g m}^{-3}$ ) at NAPS rural sites in 2006

Station Name	Egbert									Point Petre									
Sampling Period	1	2	3	4	5	6	7	8	9	1	2	3	4	5	6	7	10	11	12
Sampling Date	1/5/06	1/29/06	2/22/06	3/18/06	4/11/06	5/5/06	5/29/06	6/22/06	7/16/06	1/5/06	1/29/06	3/18/06	4/11/06	5/5/06	6/22/06	7/16/06	10/2/06	10/20/06	11/13/06
Sampling Volume (m3)	919	856	634	894	636	976	767	829	827	672	639	600	566	543	594	724	757	759	930
<b>PCB Congeners</b>																			
PCB-81	<0.006	0.009	0.011	<0.007	0.009	<0.005	<0.010	<0.006	0.007	0.008	0.009	<0.012	<0.011	<0.008	0.018	0.017	<0.012	<0.007	0.005
PCB-77	0.047	0.085	0.082	0.057	0.087	0.027	0.131	0.086	0.089	0.071	0.084	0.063	0.086	0.108	0.186	0.252	0.102	0.053	0.065
PCB-123	0.067	0.141	0.105	0.041	0.115	0.039	0.183	0.117	0.134	0.104	0.133	0.081	0.154	0.231	0.276	0.418	0.143	0.061	0.086
PCB-118	0.510	1.069	0.803	0.320	0.917	0.335	1.406	0.888	1.033	0.660	0.874	0.597	0.954	1.158	1.748	2.768	0.899	0.414	0.642
PCB-114	0.016	0.034	0.030	0.014	0.035	0.011	0.038	0.027	0.029	0.020	0.028	0.020	0.025	0.034	0.043	0.071	0.021	0.011	0.014
PCB-105	0.185	0.406	0.326	0.176	0.345	0.131	0.547	0.330	0.393	0.237	0.332	0.222	0.343	0.423	0.611	0.937	0.300	0.137	0.266
PCB-126	0.006	0.010	0.012	0.004	0.013	0.003	0.010	0.007	0.006	0.010	0.013	0.008	0.015	0.015	0.021	0.026	0.011	0.008	0.010
PCB-167	0.013	0.033	0.028	0.013	0.029	0.010	0.043	0.026	0.032	0.020	0.028	0.018	0.029	0.035	0.051	0.078	0.021	0.014	0.038
PCB-156	0.026	0.072	0.061	0.036	0.065	0.022	0.082	0.048	0.062	0.031	0.051	0.030	0.053	0.059	0.078	0.129	0.037	0.020	0.090
PCB-157	0.007	0.018	0.017	0.007	0.016	0.006	0.019	0.010	0.011	0.008	0.012	0.008	0.011	0.017	0.018	0.024	0.006	0.005	0.014
PCB-169	0.002	0.003	0.006	0.006	0.006	0.002	0.003	0.002	0.002	0.002	0.004	0.003	0.005	0.003	0.005	0.004	0.002	0.001	0.004
PCB-189	0.005	0.008	0.010	0.009	0.011	0.004	0.008	0.006	0.005	0.005	0.008	0.005	0.008	0.008	0.010	0.014	0.003	0.003	0.015
<b>Total</b>																			
$\Sigma$ Co-PCBs	0.882	1.887	1.489	0.683	1.648	0.589	2.471	1.545	1.803	1.176	1.576	1.055	1.682	2.090	3.063	4.739	1.545	0.727	1.247
$\Sigma$ TEQ (Co-PCBs)	0.001	0.001	0.001	0.001	0.002	0.000	0.001	0.001	0.001	0.001	0.002	0.001	0.002	0.002	0.003	0.003	0.001	0.001	0.001

Station Name	Burnt Island								Simcoe								
Sampling Period	1	2	3	4	5	7	8	1	2	3	4	5	8	9	10	11	12
Sampling Date	1/5/06	1/29/06	3/18/06	4/11/06	5/5/06	9/26/06	10/20/06	1/5/06	3/18/06	4/11/06	6/22/06	7/16/06	9/26/06	10/20/06	11/13/06	12/7/06	12/31/06
Sampling Volume (m3)	756	788	654	641	711	846	887	839	871	739	947	1006	895	1080	1195	1131	1079
<b>PCB Congeners</b>																	
PCB-81	<0.015	<0.008	<0.010	<0.008	<0.007	<0.010	<0.006	0.007	<0.006	0.009	0.007	0.007	<0.007	0.005	0.008	<0.005	0.058
PCB-77	0.045	0.071	0.300	0.071	0.030	0.027	0.039	0.074	0.040	0.104	0.131	0.135	0.043	0.119	0.121	0.030	0.178
PCB-123	0.046	0.066	0.046	0.093	0.045	0.040	0.035	0.091	0.039	0.128	0.201	0.212	0.064	0.095	0.130	0.036	0.088
PCB-118	0.357	0.593	0.395	0.659	0.361	0.356	0.311	0.671	0.308	1.095	1.515	1.631	0.457	0.899	1.160	0.290	0.502
PCB-114	0.014	0.021	0.015	0.024	0.012	0.010	0.011	0.023	0.012	0.037	0.039	0.044	0.014	0.023	0.027	0.009	0.039
PCB-105	0.158	0.238	0.194	0.269	0.144	0.131	0.116	0.271	0.139	0.419	0.585	0.624	0.173	0.287	0.412	0.113	0.226
PCB-126	0.003	0.003	0.002	0.006	0.002	0.002	0.003	0.007	0.003	0.008	0.009	0.010	0.004	0.008	0.010	0.001	0.088
PCB-167	0.010	0.017	0.013	0.020	0.010	0.009	0.010	0.021	0.010	0.028	0.047	0.043	0.012	0.027	0.035	0.012	0.031
PCB-156	0.020	0.033	0.038	0.041	0.023	0.023	0.022	0.042	0.022	0.056	0.083	0.081	0.026	0.048	0.067	0.030	0.077
PCB-157	0.006	0.007	0.007	0.009	0.006	0.004	0.004	0.010	0.005	0.011	0.017	0.015	0.004	0.007	0.013	0.004	0.030
PCB-169	0.002	0.002	0.002	0.002	0.002	0.001	0.001	0.003	0.001	0.002	0.004	0.002	0.002	0.001	0.003	0.002	0.029
PCB-189	0.004	0.003	0.006	0.006	0.004	0.002	0.002	0.006	0.004	0.008	0.007	0.007	0.003	0.002	0.006	0.003	0.033
<b>Total</b>																	
$\Sigma$ Co-PCBs	0.664	1.054	1.019	1.200	0.637	0.606	0.555	1.225	0.582	1.903	2.645	2.810	0.801	1.521	1.992	0.529	1.379
$\Sigma$ TEQ (Co-PCBs)	0.000	0.000	0.000	0.001	0.000	0.000	0.000	0.001	0.000	0.001	0.001	0.001	0.001	0.001	0.001	0.000	0.009

Table A61. Atmospheric concentrations of Co-PCBs (pg m<sup>-3</sup>) at NAPS rural sites in 2007

Station Name	Egbert										Point Petre					
Sampling Period	1	2	3	4	5	1	2	3	4	5	6	7	8	9	10	
Sampling Date	5/24/07	6/17/07	7/11/07	8/4/07	8/28/07	4/30/07	6/17/07	7/11/07	8/4/07	8/28/07	9/21/07	10/15/07	11/8/07	12/2/07	12/26/07	
Sampling Volume (m3)	706	682	750	793	819	709	567	721	711	652	668	759	728	842	836	
<b>PCB Congeners</b>																
PCB-81	0.010	<0.009	<0.006	<0.007	0.007	<0.008	0.017	0.011	0.006	0.011	0.016	0.009	<0.004	0.005	0.004	
PCB-77	0.111	0.051	0.045	0.033	0.107	0.073	0.169	0.182	0.097	0.111	0.148	0.069	0.030	0.049	0.058	
PCB-123	0.185	0.078	0.082	0.044	0.139	0.129	0.258	0.294	0.141	0.164	0.237	0.089	0.062	0.068	0.076	
PCB-118	1.340	0.532	0.623	0.357	1.136	0.695	1.454	1.877	0.800	1.109	1.517	0.542	0.361	0.444	0.549	
PCB-114	0.041	0.013	0.008	0.010	0.013	0.012	0.039	0.032	0.016	0.023	0.039	0.016	0.011	0.013	0.016	
PCB-105	0.545	0.202	0.252	0.156	0.447	0.247	0.500	0.716	0.140	0.265	0.550	0.195	0.142	0.173	0.216	
PCB-126	0.011	0.005	0.003	0.003	0.005	0.008	0.021	0.019	0.015	0.011	0.018	0.010	0.007	0.006	0.008	
PCB-167	0.045	0.016	0.017	0.013	0.026	0.020	0.045	0.055	0.030	0.031	0.039	0.015	0.014	0.013	0.016	
PCB-156	0.102	0.034	0.026	0.028	0.036	0.035	0.079	0.095	0.033	0.048	0.074	0.027	0.028	0.027	0.033	
PCB-157	0.021	0.008	0.008	0.005	0.011	0.008	0.019	0.016	0.009	0.011	0.012	0.004	0.005	0.006	0.005	
PCB-169	0.004	0.003	0.003	0.003	0.006	0.002	0.005	0.006	0.002	0.010	0.016	0.004	0.006	0.006	0.006	
PCB-189	0.009	0.004	0.004	0.004	0.003	0.003	0.011	0.005	0.003	0.004	0.005	0.003	0.004	0.003	0.003	
<b>Total</b>																
∑ Co-PCBs	2.423	0.944	1.071	0.655	1.936	1.229	2.616	3.307	1.291	1.797	2.671	0.981	0.670	0.812	0.991	
∑ TEQ (Co-PCBs)	0.001	0.001	0.000	0.000	0.001	0.001	0.002	0.002	0.002	0.001	0.002	0.001	0.001	0.001	0.001	

Station Name	Burnt Island										Simcoe											
Sampling Period	1	2	3	4	5	6	7	8	9	10	1	2	3	4	5	6	7	8	9	10	11	12
Sampling Date	1/24/07	5/24/07	6/17/07	7/11/07	8/4/07	8/28/07	9/21/07	10/15/07	11/8/07	12/2/07	1/24/07	3/13/07	4/6/07	4/30/07	5/24/07	6/17/07	7/11/07	8/4/07	8/28/07	9/21/07	10/15/07	12/26/07
Sampling Volume (m3)	1001	904	758	765	787	855	845	884	989	871	1054	868	1001	1069	937	749	946	860	804	858	1009	1117
<b>PCB Congeners</b>																						
PCB-81	<0.005	<0.007	<0.009	<0.006	<0.007	0.010	0.004	<0.003	<0.003	<0.003	<0.005	0.010	<0.005	<0.006	0.008	0.026	0.005	0.007	0.043	0.018	0.005	0.004
PCB-77	0.070	0.066	0.045	0.042	0.032	0.092	0.079	0.031	0.034	0.019	0.038	0.106	0.020	0.047	0.116	0.160	0.100	0.127	0.162	0.207	0.062	0.050
PCB-123	0.082	0.123	0.075	0.074	0.046	0.152	0.128	0.038	0.089	0.025	0.053	0.144	0.036	0.061	0.171	0.234	0.151	0.299	0.271	0.336	0.119	0.089
PCB-118	0.816	0.766	0.458	0.423	0.332	0.941	0.828	0.297	0.570	0.187	0.451	1.148	0.328	0.449	1.251	1.676	1.108	2.851	1.895	2.795	0.990	0.738
PCB-114	0.018	0.020	0.010	0.010	0.007	0.015	0.024	0.009	0.013	0.007	0.012	0.030	0.008	0.012	0.029	0.065	0.023	0.034	0.068	0.079	0.026	0.021
PCB-105	0.419	0.304	0.181	0.186	0.150	0.390	0.330	0.115	0.237	0.078	0.185	0.454	0.137	0.180	0.487	0.629	0.462	1.025	0.769	1.074	0.375	0.280
PCB-126	0.011	0.005	0.005	0.004	0.004	0.011	0.004	0.002	0.004	0.002	0.006	0.011	0.002	0.004	0.010	0.031	0.006	0.008	0.047	0.023	0.004	0.006
PCB-167	0.075	0.023	0.010	0.015	0.014	0.028	0.019	0.006	0.020	0.006	0.018	0.035	0.008	0.013	0.036	0.074	0.036	0.061	0.081	0.057	0.019	0.017
PCB-156	0.211	0.045	0.029	0.036	0.028	0.049	0.045	0.016	0.051	0.015	0.044	0.075	0.022	0.028	0.071	0.098	0.066	0.103	0.118	0.144	0.047	0.044
PCB-157	0.032	0.009	0.007	0.006	0.005	0.013	0.007	0.003	0.009	0.003	0.011	0.015	0.004	0.005	0.014	0.039	0.013	0.022	0.057	0.025	0.008	0.008
PCB-169	0.007	0.003	0.002	0.003	0.002	0.017	0.009	0.003	0.006	0.003	0.002	0.003	0.001	0.001	0.004	0.018	0.004	0.004	0.020	0.027	0.006	0.007
PCB-189	0.035	0.005	0.004	0.004	0.003	0.009	0.003	0.002	0.003	0.002	0.004	0.007	0.002	0.003	0.004	0.030	0.004	0.004	0.039	0.011	0.003	0.004
<b>Total</b>																						
∑ Co-PCBs	1.775	1.368	0.826	0.802	0.623	1.726	1.480	0.522	1.036	0.346	0.823	2.039	0.567	0.803	2.200	3.079	1.973	4.543	3.570	4.795	1.663	1.267
∑ TEQ (Co-PCBs)	0.001	0.001	0.001	0.000	0.000	0.001	0.001	0.000	0.001	0.000	0.001	0.001	0.000	0.001	0.001	0.004	0.001	0.001	0.005	0.003	0.001	0.001

Table A62. Atmospheric concentrations of Co-PCBs ( $\mu\text{g m}^{-3}$ ) at NAPS rural sites in 2008

Station Name	Egbert										Burnt Island							
Sampling Period	1	2	3	4	5	6	7	8	9	10	1	2	3	4	5	6	7	8
Sampling Date	1/19/08	4/24/08	5/18/08	6/11/08	7/5/08	7/29/08	8/22/08	9/15/08	11/2/08	11/26/08	3/7/08	3/31/08	6/11/08	7/5/08	8/22/08	9/15/08	11/26/08	12/20/08
Sampling Volume (m3)	747	722	734	740	708	787	814	635	879	608	1057	911	883	772	768	976	745	907
<b>PCB Congeners</b>																		
PCB-81	<0.005	0.018	0.004	0.007	0.006	0.007	0.016	0.005	0.004	0.005	0.003	0.003	0.007	0.013	0.009	0.003	0.007	0.004
PCB-77	0.060	0.094	0.060	0.089	0.087	0.105	0.150	0.057	0.052	0.056	0.025	0.045	0.105	0.226	0.176	0.042	0.127	0.040
PCB-123	0.061	0.095	0.047	0.086	0.067	0.105	0.181	0.052	0.048	0.065	0.024	0.048	0.067	0.114	0.159	0.029	0.051	0.033
PCB-118	0.520	0.640	0.401	0.635	0.548	0.892	1.503	0.445	0.404	0.532	0.197	0.347	0.470	0.802	1.126	0.227	0.415	0.259
PCB-114	0.017	0.033	0.014	0.019	0.019	0.026	0.044	0.013	0.014	0.018	0.006	0.010	0.017	0.031	0.036	0.007	0.014	0.009
PCB-105	0.227	0.275	0.174	0.265	0.251	0.353	0.582	0.195	0.185	0.225	0.081	0.134	0.230	0.390	0.513	0.110	0.194	0.109
PCB-126	0.004	0.017	0.004	0.004	0.004	0.006	0.009	0.003	0.005	0.004	0.003	0.004	0.003	0.005	0.007	0.001	0.002	0.002
PCB-167	0.011	0.030	0.011	0.017	0.012	0.022	0.033	0.012	0.011	0.014	0.008	0.009	0.011	0.015	0.028	0.005	0.009	0.008
PCB-156	0.030	0.083	0.024	0.041	0.029	0.048	0.072	0.029	0.030	0.037	0.020	0.021	0.023	0.031	0.065	0.013	0.021	0.020
PCB-157	0.005	0.021	0.005	0.008	0.006	0.009	0.013	0.005	0.007	0.007	0.004	0.004	0.005	0.007	0.012	0.002	0.004	0.003
PCB-169	0.005	0.005	0.002	<0.001	<0.001	0.001	<0.001	<0.001	0.003	0.003	<0.001	<0.001	<0.001	0.001	<0.001	<0.001	0.001	0.002
PCB-189	0.003	0.016	0.003	0.003	0.003	0.004	0.005	0.002	0.004	0.003	0.003	0.003	0.002	0.001	0.004	0.001	0.002	0.002
<b>Total</b>																		
$\Sigma$ Co-PCBs	0.941	1.327	0.748	1.174	1.031	1.576	2.608	0.818	0.765	0.968	0.372	0.627	0.938	1.636	2.134	0.441	0.847	0.491
$\Sigma$ TEQ (Co-PCBs)	0.001	0.002	0.000	0.001	0.001	0.001	0.001	0.000	0.001	0.000	0.000	0.000	0.000	0.001	0.001	0.000	0.000	0.000

Station Name	Point Petre												Simcoe		
Sampling Period	1	2	3	4	5	6	7	8	9	10	11	12	1	2	3
Sampling Date	1/19/08	3/7/08	3/31/08	4/24/08	5/18/08	6/11/08	7/5/08	8/22/08	9/15/08	10/9/08	11/2/08	12/20/08	1/19/08	3/7/08	10/9/08
Sampling Volume (m3)	978	691	839	769	722	774	679	604	693	747	859	657	1168	972	977
<b>PCB Congeners</b>															
PCB-81	0.004	0.007	0.026	0.227	0.010	0.005	0.010	0.013	0.007	0.007	<0.003	<0.054	<0.002	<0.002	0.006
PCB-77	0.044	0.044	0.105	0.292	0.074	0.123	0.113	0.147	0.072	0.126	0.042	0.073	0.028	0.038	0.071
PCB-123	0.048	0.053	0.144	0.318	0.114	0.183	0.144	0.193	0.099	0.174	0.052	0.124	0.038	0.048	0.115
PCB-118	0.308	0.367	0.935	0.729	0.654	1.042	0.859	1.322	0.579	1.068	0.338	0.981	0.305	0.442	0.792
PCB-114	0.009	0.011	0.037	0.244	0.018	0.029	0.025	0.036	0.016	0.027	0.010	0.035	0.009	0.012	0.023
PCB-105	0.113	0.137	0.431	0.397	0.230	0.390	0.295	0.462	0.215	0.403	0.130	0.388	0.124	0.162	0.318
PCB-126	0.004	0.007	0.027	0.219	0.009	0.012	0.013	0.018	0.012	0.012	0.008	0.019	0.002	0.003	0.005
PCB-167	0.009	0.011	0.063	0.230	0.019	0.026	0.023	0.035	0.018	0.027	0.013	0.043	0.009	0.011	0.021
PCB-156	0.016	0.024	0.162	0.239	0.033	0.047	0.037	0.064	0.028	0.054	0.023	0.106	0.023	0.030	0.045
PCB-157	0.003	0.003	0.033	0.215	0.007	0.009	0.008	0.012	0.006	0.010	0.005	0.019	0.005	0.005	0.008
PCB-169	0.003	0.002	0.004	0.212	0.002	<0.001	0.002	<0.002	<0.001	0.002	0.002	<0.017	0.004	0.004	0.001
PCB-189	0.002	0.002	0.038	0.216	0.004	0.003	0.002	0.005	0.002	0.003	0.002	0.018	0.002	0.002	0.003
<b>Total</b>															
$\Sigma$ Co-PCBs	0.562	0.667	2.006	3.536	1.173	1.871	1.532	2.308	1.054	1.914	0.626	1.804	0.548	0.756	1.407
$\Sigma$ TEQ (Co-PCBs)	0.001	0.001	0.003	0.025	0.001	0.001	0.002	0.002	0.001	0.001	0.001	0.002	0.000	0.000	0.001

Table A63. Atmospheric concentrations of Co-PCBs (pg m<sup>-3</sup>) at NAPS rural sites in 2009

Station Name	Egbert										Burnt Island									
Sampling Period	1	2	3	4	5	6	7	8	9	10	1	2	3	4	5	6	7	8	9	10
Sampling Date	2/6/09	3/2/09	3/26/09	4/19/09	7/24/09	8/17/09	9/10/09	10/4/09	10/28/09	11/21/09	1/13/09	2/6/09	3/2/09	4/19/09	5/13/09	6/6/09	8/17/09	9/10/09	10/28/09	11/21/09
Sampling Volume (m3)	534	606	642	730	481	466	609	718	666	568	877	810	817	1063	762	1049	619	735	451	674
<b>PCB Congeners</b>																				
PCB-81	0.026	0.033	0.022	0.005	0.008	0.022	0.008	0.005	0.010	0.012	<0.003	0.005	<0.004	0.004	0.015	0.008	0.007	<0.004	<0.012	<0.008
PCB-77	0.402	0.556	0.312	0.049	0.113	0.284	0.115	0.083	0.127	0.087	0.034	0.059	0.047	0.043	0.091	0.044	0.150	0.090	0.091	0.066
PCB-123	0.535	0.970	0.394	0.042	0.107	0.249	0.101	0.075	0.088	0.073	0.029	0.048	0.043	0.030	0.104	0.044	0.152	0.101	0.105	0.068
PCB-118	4.714	8.600	3.275	0.344	0.861	1.946	0.829	0.561	0.734	0.606	0.229	0.365	0.468	0.231	0.699	0.280	1.093	0.766	0.854	0.534
PCB-114	0.139	0.227	0.083	0.011	0.026	0.063	0.025	0.017	0.020	0.022	0.008	0.012	0.010	0.009	0.031	0.013	0.029	0.021	0.028	0.018
PCB-105	1.641	3.278	1.159	0.144	0.345	0.783	0.346	0.233	0.317	0.266	0.100	0.158	0.242	0.095	0.275	0.114	0.433	0.310	0.333	0.216
PCB-126	0.013	0.019	0.013	0.006	0.005	0.012	0.004	0.004	0.005	0.009	0.002	0.004	0.004	0.003	0.013	0.006	0.007	0.003	0.010	0.005
PCB-167	0.062	0.138	0.054	0.008	0.019	0.035	0.015	0.011	0.013	0.013	0.008	0.010	0.080	0.006	0.026	0.010	0.021	0.013	0.020	0.011
PCB-156	0.152	0.352	0.129	0.019	0.042	0.085	0.038	0.030	0.045	0.040	0.020	0.024	0.244	0.013	0.051	0.019	0.047	0.033	0.039	0.023
PCB-157	0.027	0.055	0.023	0.005	0.007	0.015	0.006	0.004	0.009	0.008	0.004	0.005	0.016	0.004	0.017	0.008	0.007	0.005	0.010	0.006
PCB-169	0.005	0.008	0.006	0.002	<0.002	<0.003	<0.002	<0.001	<0.002	0.002	<0.001	0.002	0.009	<0.001	0.008	0.003	0.002	<0.001	0.006	<0.003
PCB-189	0.009	0.009	0.009	0.004	0.003	0.005	0.003	0.003	0.004	0.008	0.002	0.003	0.047	0.003	0.016	0.008	0.003	0.002	0.007	0.004
<b>Total</b>																				
∑ Co-PCBs	7.724	14.243	5.478	0.638	1.536	3.499	1.490	1.025	1.371	1.145	0.435	0.693	1.210	0.441	1.348	0.556	1.950	1.345	1.501	0.949
∑ TEQ (Co-PCBs)	0.002	0.004	0.002	0.001	0.001	0.002	0.001	0.000	0.001	0.001	0.000	0.000	0.001	0.000	0.002	0.001	0.001	0.000	0.001	0.001

Station Name	Point Petre										Simcoe									
Sampling Period	1	2	3	4	5	6	7	8	9	10	11	12	1	2	3	4	5	6	7	
Sampling Date	1/13/09	2/6/09	3/2/09	3/26/09	4/19/09	5/13/09	6/6/09	7/24/09	8/17/09	9/10/09	10/28/09	11/21/09	7/24/09	8/17/09	9/10/09	10/4/09	10/28/09	11/21/09	12/15/09	
Sampling Volume (m3)	656	699	748	820	788	778	588	563	671	620	681	556	979	977	750	739	502	676	529	
<b>PCB Congeners</b>																				
PCB-81	0.004	0.006	<0.004	<0.019	<0.004	0.013	0.022	0.016	0.034	<0.006	0.010	0.010	0.007	0.005	0.009	0.007	0.015	0.008	0.006	
PCB-77	0.060	0.068	0.026	0.171	0.045	0.089	0.130	0.168	0.259	0.156	0.086	0.078	0.096	0.069	0.290	0.060	0.139	0.065	0.039	
PCB-123	0.081	0.096	0.026	0.220	0.054	0.107	0.150	0.221	0.398	0.200	0.122	0.103	0.143	0.106	0.597	0.083	0.263	0.083	0.056	
PCB-118	0.575	0.753	0.188	1.521	0.363	0.618	0.868	1.426	2.777	1.554	0.789	0.704	1.176	0.774	5.905	0.711	2.363	0.693	0.437	
PCB-114	0.016	0.022	0.007	0.046	0.012	0.026	0.040	0.035	0.066	0.034	0.023	0.018	0.031	0.019	0.147	0.017	0.064	0.020	0.012	
PCB-105	0.220	0.284	0.080	0.567	0.131	0.224	0.315	0.506	0.966	0.580	0.299	0.266	0.451	0.302	2.083	0.290	0.891	0.286	0.179	
PCB-126	0.007	0.009	0.004	0.023	0.011	0.022	0.031	0.019	0.028	0.022	0.012	0.011	0.006	0.005	0.013	0.005	0.010	0.006	0.006	
PCB-167	0.015	0.022	0.006	0.046	0.014	0.030	0.041	0.033	0.062	0.035	0.020	0.019	0.026	0.018	0.098	0.016	0.048	0.019	0.014	
PCB-156	0.031	0.051	0.013	0.098	0.024	0.044	0.062	0.059	0.112	0.075	0.048	0.047	0.064	0.041	0.238	0.040	0.113	0.047	0.034	
PCB-157	0.006	0.011	0.003	0.021	0.008	0.019	0.028	0.010	0.019	0.011	0.008	0.007	0.009	0.006	0.033	0.007	0.020	0.008	0.006	
PCB-169	0.002	0.003	<0.001	0.008	0.005	0.015	0.023	0.002	0.003	0.003	<0.002	<0.002	0.002	<0.001	0.003	<0.002	0.003	<0.002	<0.002	
PCB-189	0.003	0.005	0.002	0.014	0.007	0.020	0.027	0.005	0.006	0.005	0.004	0.004	0.004	0.003	0.009	0.004	0.006	0.004	0.005	
<b>Total</b>																				
∑ Co-PCBs	1.021	1.331	0.354	2.734	0.673	1.226	1.739	2.499	4.730	2.674	1.421	1.267	2.016	1.347	9.425	1.240	3.935	1.239	0.793	
∑ TEQ (Co-PCBs)	0.001	0.001	0.000	0.003	0.001	0.003	0.004	0.002	0.003	0.003	0.001	0.001	0.001	0.001	0.002	0.001	0.002	0.001	0.001	

Table A64. Atmospheric concentrations of Co-PCBs ( $\text{pg m}^{-3}$ ) at NAPS suburban sites in 2009

Station Name	Montreal
Sampling Period	1
Sampling Date	12/15/09
Sampling Volume (m3)	670
<b>PCB Congeners</b>	
PCB-81	0.006
PCB-77	0.082
PCB-123	0.085
PCB-118	0.615
PCB-114	0.019
PCB-105	0.261
PCB-126	0.008
PCB-167	0.026
PCB-156	0.067
PCB-157	0.012
PCB-169	0.002
PCB-189	0.011
<b>Total</b>	
$\Sigma$ Co-PCBs	1.193
$\Sigma$ TEQ (Co-PCBs)	0.001



Table A65. Atmospheric concentrations of Co-PCBs ( $\mu\text{g m}^{-3}$ ) at NAPS urban sites in 2005

Station Name	Toronto (Judson)		Hamilton (Elgin)											Toronto (Gage Inst.)										
	1	2	1	2	3	4	5	6	7	8	9	10	11	1	2	3	4	5	6	7	8	9	11	12
Sampling Period	1/10/05	2/3/05	1/10/05	3/23/05	4/16/05	5/10/05	6/3/05	6/27/05	7/21/05	8/14/05	10/1/05	11/18/05	12/12/05	1/10/05	2/3/05	3/23/05	4/16/05	5/10/05	6/3/05	6/27/05	8/14/05	9/7/05	11/18/05	12/12/05
Sampling Volume (m3)	807	798	928	745	572	855	843	817	849	859	803	897	893	753	744	750	768	673	700	694	702	570	811	839
<b>PCB Congeners</b>																								
PCB-81	<0.021	<0.056	0.033	0.030	0.047	0.060	0.064	0.149	0.058	0.031	0.020	0.008	0.007	0.056	0.134	0.073	0.027	0.238	0.034	0.168	0.046	0.066	0.016	0.013
PCB-77	0.270	0.314	0.121	0.258	0.791	0.800	0.821	1.911	1.115	0.634	0.419	0.094	0.084	0.211	0.458	0.245	0.375	1.202	0.962	2.263	0.913	1.099	0.227	0.194
PCB-123	0.112	0.308	0.154	0.157	0.869	0.831	0.719	1.727	1.178	1.102	0.778	0.145	0.107	0.275	0.897	0.434	0.689	2.093	1.213	3.192	2.125	2.316	0.317	0.633
PCB-118	1.394	3.190	1.503	2.038	7.321	7.958	6.761	19.782	14.557	9.027	6.993	1.253	0.979	2.605	8.228	4.402	6.587	21.495	14.432	40.446	18.822	21.295	2.913	6.256
PCB-114	0.052	0.124	0.068	0.062	0.363	0.340	0.341	0.659	0.446	0.299	0.260	0.032	0.033	0.111	0.380	0.118	0.272	0.826	0.436	1.169	0.652	0.743	0.085	0.155
PCB-105	0.564	1.357	0.591	1.021	3.210	3.244	3.069	7.934	5.717	3.351	2.558	0.489	0.393	1.082	3.337	1.612	2.334	7.829	5.245	15.079	6.541	7.424	1.100	2.378
PCB-126	0.010	0.059	0.012	0.019	0.044	0.062	0.036	0.096	0.055	0.044	0.032	0.010	0.008	0.015	0.091	0.012	0.024	0.058	0.030	0.148	0.051	0.063	0.014	0.017
PCB-167	0.043	0.119	0.040	0.091	0.259	0.260	0.175	0.499	0.352	0.257	0.215	0.040	0.033	0.084	0.218	0.098	0.155	0.471	0.266	0.818	0.477	0.549	0.089	0.177
PCB-156	0.099	0.206	0.097	0.250	0.645	0.609	0.455	1.094	0.918	0.520	0.452	0.091	0.079	0.194	0.558	0.262	0.336	1.036	0.623	2.255	0.977	1.140	0.216	0.413
PCB-157	0.014	0.041	0.013	0.033	0.074	0.068	0.053	0.156	0.058	0.082	0.066	0.016	0.014	0.027	0.053	0.024	0.042	0.130	0.121	0.251	0.136	0.164	0.030	0.061
PCB-169	0.004	0.019	0.005	0.021	0.036	0.043	0.038	0.063	0.047	0.026	0.020	0.002	0.006	0.012	0.033	0.011	0.023	0.037	0.024	0.089	0.035	0.058	0.005	0.014
PCB-189	0.015	0.035	0.013	0.073	0.050	0.050	0.064	0.149	0.096	0.017	0.023	0.008	0.009	0.027	0.070	0.015	0.016	0.032	0.053	0.161	0.029	0.050	0.023	0.026
<b>Total</b>																								
$\Sigma$ Co-PCBs	2.578	5.772	2.649	4.050	13.709	14.325	12.598	34.220	24.596	15.390	11.836	2.187	1.752	4.698	14.456	7.306	10.880	35.446	23.438	66.040	30.802	34.966	5.035	10.336
$\Sigma$ TEQ (Co-PCBs)	0.001	0.007	0.002	0.003	0.007	0.008	0.006	0.014	0.009	0.007	0.005	0.001	0.001	0.002	0.011	0.002	0.004	0.010	0.006	0.024	0.009	0.011	0.002	0.003

Table A66. Atmospheric concentrations of Co-PCBs ( $\mu\text{g m}^{-3}$ ) at NAPS urban sites in 2006

Station Name	Toronto (Judson)					Windsor (College)		Hamilton (Elgin)											Toronto (Gage Inst.)									
Sampling Period	1	2	3	4	5	1	2	3	4	5	6	7	8	9	10	11	1	2	3	4	5	6	7	8	9	10		
Sampling Date	7/16/06	9/26/06	10/20/06	11/13/06	12/7/06	9/2/06	1/5/06	1/29/06	3/18/06	4/11/06	6/22/06	7/16/06	9/26/06	10/20/06	11/13/06	12/7/06	12/31/06	1/29/06	3/18/06	4/11/06	5/5/06	5/29/06	6/22/06	7/16/06	9/26/06	10/20/06	11/13/06	
Sampling Volume (m <sup>3</sup> )	910	981	1145	1101	1174	866	1050	871	837	751	800	850	770	1013	1131	1211	949	684	626	933	610	589	647	669	770	815	923	
<b>PCB Congeners</b>																												
PCB-81	0.051	0.022	0.014	0.008	0.005	0.023	0.011	0.020	<0.006	0.040	0.034	0.054	0.016	0.011	0.009	0.006	0.011	0.036	0.016	0.025	0.031	0.073	0.048	0.079	0.025	0.022	0.016	
PCB-77	2.241	1.479	0.207	0.221	0.079	0.405	0.159	0.268	0.070	0.653	0.751	1.084	0.274	0.235	0.145	0.077	0.128	0.582	0.258	0.411	0.434	1.332	0.871	1.269	0.428	0.481	0.247	
PCB-123	1.193	0.387	0.168	0.165	0.066	0.779	0.213	0.379	0.123	0.857	1.230	1.752	0.498	0.231	0.191	0.099	0.190	1.090	0.416	0.924	0.873	2.604	1.642	2.361	0.748	0.899	0.412	
PCB-118	10.136	3.117	1.611	1.453	0.590	7.183	1.880	3.236	1.134	7.739	10.899	16.069	4.418	2.231	1.565	0.865	1.561	10.210	4.116	8.790	9.678	22.868	15.267	22.305	6.757	8.114	3.971	
PCB-114	0.280	0.127	0.044	0.035	0.015	0.196	0.058	0.098	0.031	0.246	0.254	0.392	0.109	0.060	0.041	0.030	0.041	0.297	0.113	0.258	0.222	0.660	0.372	0.525	0.203	0.217	0.113	
PCB-105	3.607	1.205	0.593	0.556	0.249	2.551	0.769	1.263	0.416	3.204	4.183	5.959	1.631	0.756	0.625	0.359	0.591	3.819	1.589	3.118	3.462	8.215	5.531	7.904	2.375	2.919	1.425	
PCB-126	0.063	0.024	0.014	0.020	0.008	0.029	0.010	0.028	0.006	0.044	0.056	0.080	0.023	0.015	0.012	0.008	0.013	0.028	0.016	0.023	0.034	0.066	0.054	0.075	0.025	0.031	0.013	
PCB-167	0.245	0.081	0.047	0.047	0.024	0.156	0.072	0.097	0.028	0.323	0.349	0.463	0.145	0.063	0.057	0.028	0.046	0.226	0.139	0.220	0.306	0.523	0.456	0.621	0.144	0.230	0.099	
PCB-156	0.452	0.176	0.100	0.094	0.064	0.317	0.176	0.210	0.064	0.831	0.694	0.900	0.319	0.116	0.129	0.069	0.110	0.490	0.334	0.502	0.709	1.158	0.918	1.272	0.313	0.496	0.221	
PCB-157	0.082	0.028	0.016	0.017	0.010	0.062	0.026	0.038	0.013	0.119	0.117	0.137	0.046	0.021	0.022	0.013	0.020	0.081	0.038	0.079	0.103	0.175	0.122	0.160	0.042	0.063	0.032	
PCB-169	0.006	0.005	0.003	0.007	0.003	0.003	0.012	0.007	0.001	0.023	0.010	0.012	0.007	0.001	0.002	0.003	0.004	0.015	0.013	0.007	0.027	0.026	0.017	0.016	0.009	0.009	0.004	
PCB-189	0.017	0.011	0.006	0.008	0.005	0.013	0.018	0.019	0.006	0.077	0.031	0.037	0.035	0.005	0.011	0.006	0.014	0.021	0.025	0.023	0.056	0.038	0.050	0.053	0.014	0.020	0.012	
<b>Total</b>																												
$\Sigma$ Co-PCBs	18.371	6.661	2.821	2.631	1.116	11.717	3.402	5.663	1.892	14.155	18.608	26.940	7.521	3.745	2.808	1.563	2.729	16.892	7.073	14.378	15.934	37.737	25.347	36.639	11.082	13.501	6.562	
$\Sigma$ TEQ (Co-PCBs)	0.009	0.003	0.002	0.002	0.001	0.004	0.002	0.004	0.001	0.006	0.008	0.011	0.003	0.002	0.002	0.001	0.002	0.005	0.003	0.004	0.006	0.011	0.009	0.012	0.004	0.005	0.002	

Table A67. Atmospheric concentrations of Co-PCBs (pg m<sup>-3</sup>) at NAPS urban sites in 2007

Station Name	Toronto (Judson)														Windsor (College)										
Sampling Period	1	2	3	4	5	6	7	8	9	10	11	12	13	14	1	2	3	4	5	6	7	8	9	10	11
Sampling Date	1/24/07	3/13/07	4/6/07	4/30/07	5/24/07	6/17/07	7/11/07	8/4/07	8/28/07	9/21/07	10/15/07	11/8/07	12/2/07	12/26/07	1/24/07	4/6/07	4/30/07	6/17/07	7/11/07	8/4/07	8/28/07	9/21/07	10/15/07	11/8/07	12/2/07
Sampling Volume (m3)	1048	846	1023	1034	1074	836	670	1063	563	901	927	1078	1006	948	830	931	1074	778	835	989	881	945	1044	996	1023
<b>PCB Congeners</b>																									
PCB-81	<0.006	0.017	<0.005	0.013	0.030	0.022	0.029	0.006	0.024	0.033	0.023	<0.002	0.004	0.009	<0.006	0.006	0.019	0.042	0.024	0.038	0.033	0.034	0.020	0.020	0.013
PCB-77	0.076	0.748	0.067	0.239	2.120	0.799	0.809	0.365	0.541	0.514	0.323	0.303	0.090	0.104	0.213	0.097	0.306	0.771	0.421	0.796	0.526	0.694	0.281	0.173	0.184
PCB-123	0.085	0.374	0.082	0.250	0.881	0.713	0.684	0.395	0.803	0.674	0.367	0.124	0.093	0.103	0.292	0.127	0.436	1.222	0.561	1.393	0.893	0.961	0.386	0.273	0.222
PCB-118	0.762	2.840	0.691	1.847	6.814	5.947	5.657	3.584	6.828	5.717	2.887	0.999	0.729	0.803	2.707	1.089	3.559	10.308	4.680	11.834	7.544	7.479	2.934	2.010	1.629
PCB-114	0.032	0.068	0.020	0.056	0.202	0.121	0.132	0.032	0.112	0.151	0.090	0.031	0.022	0.024	0.068	0.036	0.130	0.175	0.088	0.172	0.157	0.202	0.078	0.057	0.051
PCB-105	0.305	1.105	0.278	0.751	2.648	2.089	2.231	1.398	2.667	2.182	1.190	0.406	0.291	0.330	1.323	0.515	1.367	3.785	1.840	4.651	2.934	2.983	1.160	0.902	0.695
PCB-126	0.012	0.023	0.005	0.013	0.055	0.026	0.027	0.017	0.032	0.027	0.026	0.009	0.007	0.007	0.034	0.007	0.021	0.047	0.028	0.057	0.037	0.044	0.021	0.015	0.015
PCB-167	0.027	0.078	0.023	0.056	0.189	0.155	0.168	0.096	0.157	0.122	0.081	0.027	0.018	0.018	0.202	0.045	0.089	0.263	0.158	0.272	0.170	0.163	0.065	0.077	0.046
PCB-156	0.064	0.176	0.050	0.118	0.403	0.305	0.311	0.162	0.305	0.310	0.221	0.072	0.045	0.042	0.583	0.120	0.192	0.510	0.328	0.499	0.308	0.371	0.146	0.214	0.116
PCB-157	0.014	0.031	0.010	0.022	0.064	0.051	0.052	0.028	0.057	0.051	0.035	0.012	0.008	0.008	0.093	0.025	0.039	0.090	0.056	0.111	0.066	0.067	0.027	0.031	0.022
PCB-169	0.002	0.009	0.001	0.004	0.018	0.010	0.015	0.036	0.010	0.059	0.039	0.012	0.009	0.009	0.019	0.004	0.006	0.009	0.007	0.016	0.010	0.057	0.025	0.029	0.018
PCB-189	0.006	0.011	0.003	0.008	0.023	0.012	0.017	0.006	0.010	0.016	0.023	0.007	0.004	0.003	0.093	0.007	0.010	0.018	0.016	0.018	0.011	0.015	0.008	0.024	0.009
<b>Total</b>																									
∑ Co-PCBs	1.386	5.479	1.227	3.377	13.447	10.248	10.129	6.124	11.547	9.855	5.306	2.002	1.319	1.460	5.625	2.077	6.173	17.240	8.206	19.857	12.688	13.070	5.150	3.824	3.021
∑ TEQ (Co-PCBs)	0.001	0.003	0.001	0.002	0.007	0.004	0.004	0.003	0.005	0.004	0.004	0.001	0.001	0.001	0.004	0.001	0.003	0.007	0.004	0.008	0.005	0.007	0.003	0.002	0.002

Station Name	Hamilton (Elgin)														Toronto (Gage Inst.)												
Sampling Period	1	2	3	4	5	6	7	8	9	10	11	12	13	14	1	2	3	4	5	6	7	8	9	10	11	12	
Sampling Date	1/24/07	3/13/07	4/6/07	4/30/07	5/24/07	6/17/07	7/11/07	8/4/07	8/28/07	9/21/07	10/15/07	11/8/07	12/2/07	12/26/07	1/24/07	3/13/07	4/6/07	4/30/07	5/24/07	6/17/07	8/4/07	9/21/07	10/15/07	11/8/07	12/2/07	12/26/07	
Sampling Volume (m3)	998	851	979	1045	1076	949	803	943	885	898	975	957	952	1024	909	858	839	928	781	611	845	700	833	950	805	832	
<b>PCB Congeners</b>																											
PCB-81	0.014	0.019	<0.005	0.011	0.039	0.292	0.025	0.030	0.032	0.067	0.023	0.051	0.005	0.009	0.013	0.025	0.010	0.024	0.050	0.060	0.030	0.079	0.037	0.020	0.015	0.014	
PCB-77	0.256	0.320	0.044	0.228	0.765	0.792	0.451	0.481	0.735	0.973	0.295	0.288	0.182	0.100	0.145	0.427	0.136	0.503	0.971	1.321	0.818	1.366	0.504	0.225	0.266	0.194	
PCB-123	0.873	0.455	0.067	0.384	1.195	1.092	0.964	0.697	1.243	1.472	0.441	0.259	0.265	0.181	0.275	0.709	0.205	1.285	2.021	2.914	1.869	2.901	0.883	0.359	0.385	0.354	
PCB-118	7.999	3.846	0.568	2.956	9.886	7.171	8.463	6.131	11.838	12.227	3.644	1.918	2.264	1.461	2.761	6.264	1.851	10.919	16.180	26.001	17.665	26.143	8.056	3.288	3.489	3.126	
PCB-114	0.191	0.083	0.010	0.061	0.194	0.402	0.106	0.069	0.174	0.337	0.102	0.079	0.064	0.042	0.074	0.160	0.065	0.217	0.299	0.418	0.389	0.668	0.209	0.089	0.095	0.086	
PCB-105	3.392	1.558	0.222	1.235	3.800	2.994	3.492	1.858	3.651	4.960	1.473	0.777	0.895	0.576	1.004	2.338	0.737	1.193	6.371	11.963	5.882	9.942	3.294	1.198	1.360	1.168	
PCB-126	0.044	0.024	0.003	0.019	0.049	0.271	0.034	0.038	0.049	0.052	0.018	0.060	0.027	0.011	0.009	0.024	0.007	0.050	0.057	0.131	0.061	0.072	0.033	0.010	0.014	0.010	
PCB-167	0.376	0.124	0.017	0.099	0.275	0.500	0.232	0.195	0.323	0.279	0.087	0.054	0.057	0.041	0.082	0.169	0.048	0.469	0.461	1.308	0.694	0.537	0.214	0.059	0.083	0.062	
PCB-156	0.932	0.274	0.042	0.212	0.558	0.717	0.441	0.336	0.550	0.715	0.224	0.142	0.158	0.110	0.199	0.371	0.134	0.733	0.819	2.182	1.054	1.357	0.594	0.153	0.227	0.163	
PCB-157	0.211	0.045	0.007	0.035	0.092	0.320	0.063	0.068	0.103	0.104	0.037	0.030	0.026	0.018	0.024	0.055	0.019	0.098	0.127	0.237	0.130	0.190	0.071	0.024	0.031	0.023	
PCB-169	0.004	0.008	0.002	0.009	0.016	0.304	0.015	0.015	0.032	0.139	0.036	0.019	0.041	0.020	0.004	0.009	0.007	0.027	0.032	0.084	0.099	0.186	0.137	0.019	0.038	0.024	
PCB-189	0.033	0.021	0.003	0.012	0.022	0.289	0.009	0.017	0.019	0.035	0.014	0.012	0.016	0.014	0.010	0.023	0.008	0.041	0.034	0.091	0.050	0.055	0.036	0.007	0.016	0.008	
<b>Total</b>																											
∑ Co-PCBs	14.326	6.777	0.985	5.261	16.890	15.145	14.297	9.934	18.749	21.360	6.390	3.688	4.000	2.582	4.600	10.572	3.226	15.558	27.421	46.707	28.741	43.496	14.065	5.451	6.018	5.230	
∑ TEQ (Co-PCBs)	0.006	0.003	0.000	0.003	0.007	0.032	0.005	0.005	0.007	0.009	0.003	0.007	0.004	0.002	0.002	0.004	0.001	0.007	0.009	0.020	0.010	0.014	0.006	0.002	0.003	0.002	

Table A68. Atmospheric concentrations of Co-PCBs (pg m<sup>-3</sup>) at NAPS urban sites in 2008

Station Name	Toronto (Judson)						Windsor (College)								
Sampling Period	1	2	3	4	5	6	1	2	3	4	5	6	7	8	9
Sampling Date	1/19/08	3/7/08	3/31/08	7/5/08	7/29/08	8/22/08	1/19/08	3/7/08	3/31/08	7/5/08	7/29/08	8/22/08	9/15/08	10/9/08	11/2/08
Sampling Volume (m3)	1030	990	1149	893	906	815	1064	1041	982	1017	1168	1144	924	1006	1071
<b>PCB Congeners</b>															
PCB-81	0.006	0.007	0.005	0.016	0.022	0.021	0.009	0.022	0.015	0.031	0.035	0.034	0.013	0.023	0.010
PCB-77	0.120	0.073	0.125	0.408	0.449	0.431	0.127	0.173	0.231	0.572	0.588	0.526	0.206	0.326	0.159
PCB-123	0.079	0.090	0.147	0.415	0.505	0.648	0.261	0.186	0.285	0.993	0.672	0.557	0.315	0.425	0.241
PCB-118	0.659	0.747	1.220	3.633	4.476	5.805	2.421	1.581	2.287	8.457	5.575	4.271	2.645	3.484	1.962
PCB-114	0.021	0.021	0.031	0.096	0.120	0.148	0.059	0.036	0.065	0.216	0.151	0.118	0.069	0.093	0.052
PCB-105	0.305	0.304	0.453	1.384	1.705	2.206	1.135	0.743	0.939	3.124	2.301	1.797	1.120	1.432	0.777
PCB-126	0.009	0.005	0.009	0.017	0.026	0.027	0.023	0.018	0.019	0.042	0.039	0.031	0.014	0.022	0.014
PCB-167	0.030	0.017	0.026	0.077	0.113	0.140	0.115	0.070	0.063	0.185	0.147	0.116	0.074	0.088	0.048
PCB-156	0.078	0.055	0.072	0.178	0.248	0.307	0.357	0.209	0.131	0.390	0.306	0.235	0.184	0.196	0.109
PCB-157	0.015	0.008	0.009	0.030	0.043	0.051	0.063	0.029	0.024	0.073	0.061	0.045	0.031	0.037	0.021
PCB-169	0.010	<0.002	<0.001	0.002	0.001	0.002	0.063	<0.004	0.002	0.004	0.002	0.002	0.003	0.002	0.006
PCB-189	0.007	0.005	0.005	0.008	0.008	0.015	0.025	0.021	0.009	0.014	0.015	0.013	0.011	0.009	0.007
<b>Total</b>															
∑ Co-PCBs	1.338	1.331	2.102	6.264	7.715	9.799	4.657	3.089	4.070	14.101	9.893	7.744	4.684	6.135	3.405
∑ TEQ (Co-PCBs)	0.001	0.001	0.001	0.002	0.004	0.004	0.004	0.002	0.002	0.006	0.005	0.004	0.002	0.003	0.002

Station Name	Hamilton (Elgin)								Toronto (Gage Inst.)													
Sampling Period	1	2	3	4	5	6	7	8	1	2	3	4	5	6	7	8	9	10	11	12	13	14
Sampling Date	3/7/08	7/5/08	7/29/08	8/22/08	10/9/08	11/2/08	11/26/08	12/20/08	1/19/08	3/7/08	3/31/08	4/24/08	5/18/08	6/11/08	7/5/08	7/29/08	8/22/08	9/15/08	10/9/08	11/2/08	11/26/08	12/20/08
Sampling Volume (m3)	1055	979	1043	634	1056	919	709	609	833	860	875	813	852	758	754	755	855	804	911	864	714	835
<b>PCB Congeners</b>																						
PCB-81	0.005	0.044	0.034	0.055	0.014	0.008	0.006	0.004	0.007	0.015	0.036	0.020	0.017	0.039	0.043	0.054	0.073	0.039	0.021	0.012	0.016	0.006
PCB-77	0.071	0.768	0.541	0.906	0.237	0.107	0.106	0.048	0.119	0.228	0.526	0.414	0.313	0.844	0.851	1.142	1.409	0.685	0.332	0.204	0.231	0.090
PCB-123	0.108	1.012	0.822	1.216	0.387	0.180	0.169	0.065	0.174	0.439	0.922	0.961	0.555	1.538	1.687	2.640	3.125	1.340	0.475	0.440	0.353	0.235
PCB-118	0.944	8.564	7.246	10.435	3.304	1.468	1.459	0.563	1.616	4.257	8.596	9.095	5.065	14.534	15.754	24.148	28.081	12.671	4.409	4.057	3.119	2.148
PCB-114	0.020	0.244	0.195	0.277	0.086	0.041	0.040	0.014	0.045	0.062	0.223	0.227	0.136	0.364	0.412	0.595	0.722	0.331	0.116	0.102	0.086	0.051
PCB-105	0.373	3.459	2.804	4.195	1.389	0.598	0.607	0.236	0.645	1.778	3.314	3.523	2.079	6.584	6.110	9.737	11.219	5.069	1.723	1.550	1.240	0.831
PCB-126	0.007	0.047	0.036	0.065	0.019	0.009	0.008	0.009	0.007	0.017	0.038	0.025	0.019	0.066	0.045	0.082	0.084	0.045	0.018	0.012	0.012	0.008
PCB-167	0.021	0.204	0.191	0.280	0.096	0.040	0.039	0.019	0.045	0.096	0.198	0.215	0.136	0.548	0.357	0.689	0.617	0.318	0.111	0.086	0.074	0.060
PCB-156	0.074	0.467	0.419	0.632	0.227	0.100	0.095	0.056	0.124	0.442	0.476	0.512	0.332	1.246	0.834	1.597	1.424	0.754	0.265	0.222	0.197	0.163
PCB-157	0.009	0.075	0.065	0.104	0.033	0.018	0.016	0.008	0.019	0.035	0.071	0.060	0.041	0.123	0.105	0.184	0.214	0.100	0.040	0.033	0.026	0.023
PCB-169	<0.001	0.005	0.003	0.005	0.002	0.005	0.004	0.006	0.024	<0.001	0.005	0.005	0.008	0.015	0.006	0.020	0.010	0.009	0.005	0.011	0.017	0.008
PCB-189	0.007	0.024	0.019	0.033	0.010	0.006	0.005	0.005	0.008	0.026	0.032	0.021	0.016	0.058	0.033	0.067	0.044	0.042	0.011	0.009	0.014	0.010
<b>Total</b>																						
∑ Co-PCBs	1.638	14.912	12.374	18.202	5.804	2.579	2.552	1.034	2.832	7.394	14.438	15.079	8.715	25.959	26.238	40.954	47.022	21.400	7.525	6.738	5.384	3.631
∑ TEQ (Co-PCBs)	0.001	0.007	0.005	0.009	0.003	0.001	0.001	0.001	0.001	0.003	0.006	0.004	0.003	0.010	0.008	0.013	0.014	0.007	0.003	0.002	0.002	0.001

Table A69. Atmospheric concentrations of Co-PCBs (pg m<sup>-3</sup>) at NAPS urban sites in 2009

Station Name	Edmonton (89th St.)						Windsor (College)						Hamilton (Elgin)											
Sampling Period	1	2	1	2	3	4	1	2	3	4	5	6	7	8	9	10	11	12	13	14				
Sampling Date	3/26/09	4/19/09	1/13/09	2/6/09	3/2/09	3/26/09	1/13/09	3/2/09	3/26/09	4/19/09	5/13/09	6/6/09	6/30/09	7/24/09	8/17/09	9/10/09	10/4/09	10/28/09	11/21/09	12/15/09				
Sampling Volume (m3)	924	826	919	917	994	938	840	821	743	649	722	648	589	645	767	644	715	880	739	691				
<b>PCB Congeners</b>																								
PCB-81	<0.020	<0.024	0.006	0.006	0.009	0.039	0.005	0.004	0.027	0.036	0.042	0.034	0.024	0.043	0.047	0.033	0.009	0.019	0.015	0.015				
PCB-77	0.081	0.088	0.069	0.084	0.128	0.552	0.065	0.046	0.298	0.485	0.777	0.323	0.494	0.767	0.885	0.749	0.217	0.252	0.232	0.133				
PCB-123	0.117	0.117	0.102	0.105	0.197	0.706	0.114	0.068	0.489	0.698	0.790	0.419	0.714	1.130	1.281	0.738	0.313	0.296	0.277	0.159				
PCB-118	1.042	1.047	0.869	0.889	1.733	6.087	1.022	0.510	3.968	6.048	6.714	3.688	6.494	10.008	11.883	7.802	3.151	2.728	2.832	1.378				
PCB-114	0.031	0.034	0.027	0.027	0.047	0.159	0.028	0.015	0.106	0.154	0.179	0.114	0.162	0.259	0.284	0.151	0.067	0.054	0.056	0.039				
PCB-105	0.488	0.391	0.366	0.378	0.715	2.448	0.398	0.228	1.750	2.793	2.876	1.468	2.660	4.263	5.103	2.966	1.245	1.123	1.182	0.559				
PCB-126	0.009	0.008	0.008	0.010	0.010	0.064	0.006	0.004	0.040	0.050	0.041	0.035	0.030	0.050	0.064	0.048	0.014	0.012	0.011	0.011				
PCB-167	0.039	0.022	0.025	0.032	0.053	0.174	0.024	0.020	0.212	0.279	0.191	0.119	0.177	0.330	0.375	0.213	0.081	0.070	0.049	0.033				
PCB-156	0.121	0.056	0.063	0.088	0.141	0.425	0.060	0.052	0.599	0.774	0.520	0.274	0.417	0.800	0.882	0.556	0.182	0.161	0.184	0.086				
PCB-157	0.026	0.010	0.013	0.017	0.026	0.082	0.010	0.011	0.082	0.145	0.071	0.057	0.060	0.134	0.109	0.062	0.023	0.019	0.012	0.014				
PCB-169	0.008	<0.008	0.004	0.003	0.004	0.010	0.002	0.002	0.051	0.023	0.013	0.007	0.009	0.007	0.011	0.006	0.002	0.003	0.005	<0.002				
PCB-189	0.011	0.006	0.005	0.009	0.010	0.031	0.005	0.005	0.102	0.065	0.043	0.032	0.018	0.030	0.034	0.033	0.008	0.009	0.005	0.008				
<b>Total</b>																								
∑ Co-PCBs	1.974	1.778	1.556	1.648	3.072	10.776	1.737	0.964	7.724	11.550	12.256	6.571	11.259	17.820	20.958	13.356	5.313	4.746	4.861	2.434				
∑ TEQ (Co-PCBs)	0.001	0.001	0.001	0.001	0.001	0.008	0.001	0.001	0.006	0.007	0.006	0.004	0.004	0.007	0.009	0.006	0.002	0.002	0.002	0.001				

Station Name	Toronto (Kipling)												Toronto (Gage Inst.)									
Sampling Period	1	2	3	4	5	6	7	8	9	1	2	3	4	5	6	7	8	9	10	11	12	
Sampling Date	5/13/09	6/6/09	7/24/09	8/17/09	9/10/09	10/4/09	10/28/09	11/21/09	12/15/09	1/13/09	2/6/09	3/2/09	3/26/09	4/19/09	6/6/09	7/24/09	8/17/09	10/4/09	10/28/09	11/21/09	12/15/09	
Sampling Volume (m3)	920	672	660	791	696	701	653	824	925	778	841	901	915	905	814	659	779	639	787	659	664	
<b>PCB Congeners</b>																						
PCB-81	0.017	0.063	0.095	0.074	0.016	0.033	0.026	0.018	0.017	0.010	0.012	0.008	0.070	0.036	0.049	0.056	0.082	0.014	0.020	0.021	0.018	
PCB-77	0.544	1.116	1.763	1.284	0.672	0.590	0.455	0.293	0.155	0.144	0.175	0.126	1.034	0.674	0.657	1.043	1.065	0.336	0.430	0.390	0.221	
PCB-123	0.366	0.997	1.663	1.566	0.667	0.558	0.557	0.322	0.228	0.252	0.289	0.262	1.893	1.352	1.319	1.983	2.355	0.495	0.918	0.638	0.374	
PCB-118	3.243	8.412	13.644	13.497	7.728	4.941	4.788	2.779	1.507	2.204	2.461	2.552	17.728	12.729	12.877	18.202	21.283	5.030	9.073	6.301	3.857	
PCB-114	0.087	0.269	0.342	0.324	0.137	0.094	0.121	0.070	0.032	0.061	0.069	0.061	0.465	0.346	0.343	0.441	0.531	0.107	0.202	0.161	0.096	
PCB-105	1.150	2.846	5.175	4.836	2.885	1.844	1.687	1.047	0.591	0.867	0.933	1.094	6.707	4.780	4.969	6.977	7.637	1.928	3.479	2.463	1.561	
PCB-126	0.017	0.064	0.100	0.076	0.044	0.037	0.025	0.018	0.013	0.010	0.011	0.012	0.061	0.043	0.059	0.068	0.058	0.018	0.023	0.020	0.015	
PCB-167	0.065	0.175	0.292	0.287	0.139	0.101	0.102	0.069	0.036	0.053	0.061	0.095	0.361	0.277	0.381	0.464	0.404	0.108	0.240	0.110	0.092	
PCB-156	0.145	0.340	0.604	0.611	0.408	0.223	0.194	0.144	0.096	0.138	0.158	0.243	0.912	0.697	0.860	1.105	0.929	0.264	0.582	0.379	0.319	
PCB-157	0.028	0.078	0.123	0.116	0.024	0.036	0.035	0.025	0.016	0.019	0.025	0.026	0.135	0.116	0.108	0.142	0.142	0.025	0.069	0.040	0.025	
PCB-169	0.001	0.014	0.006	0.008	0.003	0.002	0.002	0.002	0.002	0.005	0.007	0.011	0.027	0.019	0.007	0.020	0.008	0.004	0.005	0.007	0.004	
PCB-189	0.009	0.038	0.016	0.020	0.013	0.009	0.008	0.008	0.009	0.009	0.011	0.018	0.054	0.032	0.052	0.045	0.033	0.012	0.019	0.016	0.020	
<b>Total</b>																						
∑ Co-PCBs	5.672	14.412	23.823	22.698	12.737	8.468	8.001	4.795	2.702	3.771	4.212	4.507	29.446	21.100	21.680	30.547	34.527	8.341	15.059	10.545	6.602	
∑ TEQ (Co-PCBs)	0.002	0.008	0.013	0.010	0.006	0.005	0.003	0.002	0.002	0.001	0.002	0.002	0.010	0.007	0.009	0.011	0.010	0.003	0.004	0.003	0.002	

## 6.2.2 NDAMN

The official database for NDAMN is currently in preparation and will be made public in the near future. Summarized data can be found in Cleverly et al. (2007) and Lorber et al. (2011, 2013a).

## 6.2.3 MDAMN

Data from MDAMN are reported after Cárdenas et al. (in preparation).

Table A70. Atmospheric concentrations of PCDD/Fs ( $\mu\text{g m}^{-3}$ ) at MDAMN remote sites in 2008

Station Name	San Pedro Mártir				Perote			
	1	2	3	4	1	2	3	4
Sampling Period								
Sampling Date	3/5/08	5/28/08	8/20/08	11/19/08	3/7/08	5/28/08	8/20/08	11/19/08
Sampling Volume (m3)	8361	7161	6961	6759	6856	3426	6109	5982
<b>PCDD/F Congeners</b>								
2,3,7,8-TCDD	<0.0167	<0.0912	<0.109	<0.035	0.137	<0.0874	0.123	0.0779
1,2,3,7,8-PeCDD	<0.0598	<0.227	<0.0517	<0.112	0.708	0.23	0.339	0.372
1,2,3,4,7,8-HxCDD	0.0847	0.0767	<0.178	<0.089	QA failure	0.221	0.269	0.432
1,2,3,6,7,8-HxCDD	0.136	0.18	0.145	0.13	QA failure	0.527	0.542	0.687
1,2,3,7,8,9-HxCDD	0.138	<0.0537	0.12	0.111	QA failure	0.385	0.479	0.642
1,2,3,4,6,7,8-HpCDD	1.85	<1.21	<1.36	0.709	10	3.69	<28.3	6.49
OCDD	11	<11.1	<10.6	<2.983	42.5	12.8	<126	21.2
2,3,7,8-TCDF	0.185	0.282	0.283	0.204	2.04	0.741	1	2.05
1,2,3,7,8-PeCDF	0.256	0.396	0.282	0.308	2.07	0.662	1.46	1.61
2,3,4,7,8-PeCDF	0.286	0.462	0.322	0.326	2.91	0.972	1.9	2.43
1,2,3,4,7,8-HxCDF	0.322	0.52	0.37	0.492	2.97	0.883	1.63	2.13
1,2,3,6,7,8-HxCDF	0.336	0.56	0.401	0.465	2.94	0.84	1.83	2.22
2,3,4,6,7,8-HxCDF	0.387	0.66	0.399	0.312	3.71	1.12	2.22	2.19
1,2,3,7,8,9-HxCDF	<0.12	0.0946	<1.1	<0.104	0.453	0.121	0.334	0.243
1,2,3,4,6,7,8-HpCDF	1.41	2.73	1.76	1.22	11.4	3.09	<29	7.86
1,2,3,4,7,8,9-HpCDF	0.198	0.312	0.235	0.211	1.46	0.332	0.822	1.14
OCDF	1.22	2.18	1.87	0.623	7.39	1.5	<13.1	5.76
<b>PCDD/F Homologues</b>								
TCDDs	0.679	0.732	0.421	0.437	0.137	19	17.3	6.61
PeCDDs	0.182	<0.227	0.313	0.671	0.708	16.4	13.9	8.57
HxCDDs	1.9	1.71	1.95	1.3	QA failure	13.2	11.03	12
HpCDDs	3.86	4.64	4.65	1.66	28.9	8.93	<65	15.6
OCDD	11	<11.1	<10.6	<2.983	42.5	12.8	<126	21.2
TCDFs	10.8	19.1	14.8	9.25	26.7	40.1	73.6	69.3
PeCDFs	5.5	11.5	8.55	5.87	45.3	18.7	37.9	38.1
HxCDFs	3.38	6.86	5.39	4.02	31.4	8.63	20.5	23.2
HpCDFs	2.53	5.28	3.53	2.08	18.8	5.13	<50.7	13.4
OCDF	1.22	2.18	1.87	0.623	7.39	1.5	<13.1	5.76
<b>Total</b>								
$\Sigma$ PCDDs	17.621	7.082	7.334	4.068	72.245	70.330	42.230	63.980
$\Sigma$ PCDFs	12.630	25.820	19.340	12.593	102.890	33.960	58.400	80.460
$\Sigma$ PCDD/Fs	30.251	32.902	26.674	16.661	175.135	104.290	100.630	144.440
$\Sigma$ TEQ (PCDD/Fs)	0.379	0.758	0.603	0.467	NA	1.188	2.529	2.45

Table A71. Atmospheric concentrations of PCDD/Fs ( $\mu\text{g m}^{-3}$ ) at MDAMN remote sites in 2009

Station Name	San Pedro Mártir				Perote			
Sampling Period	1	2	3	4	1	2	3	4
Sampling Date	2/18/09	6/10/09	8/12/09		2/11/09	6/10/09	8/12/09	11/24/09
Sampling Volume (m3)	7175	6753	7031		5729	5869	6106	5793
<b>PCDD/F Congeners</b>								
2,3,7,8-TCDD	<0.0298	<0.0187	<0.072		0.0325	<0.197	<0.0409	0.0397
1,2,3,7,8-PeCDD	0.0482	0.074	0.1172		0.298	<0.539	<0.11	0.181
1,2,3,4,7,8-HxCDD	0.0532	0.0601	0.1053		0.351	<0.295	0.0786	0.197
1,2,3,6,7,8-HxCDD	0.0772	0.132	0.181		0.488	<0.307	0.1	0.317
1,2,3,7,8,9-HxCDD	0.092	0.131	0.193		0.574	<0.368	0.12	0.321
1,2,3,4,6,7,8-HpCDD	0.903	1.49	1.59		5.58	QA failure	0.954	3.431
OCDD	3.38	8.22	5.28		29.9	QA failure	2.38	10.9
2,3,7,8-TCDF	0.217	0.309	0.328		1.05	QA failure	0.379	0.89
1,2,3,7,8-PeCDF	0.237	0.318	0.383		1.11	QA failure	0.338	0.822
2,3,4,7,8-PeCDF	0.207	0.398	0.398		1.29	QA failure	0.336	1.09
1,2,3,4,7,8-HxCDF	0.222	0.443	0.493		1.76	QA failure	0.301	1.19
1,2,3,6,7,8-HxCDF	0.227	0.458	0.557		1.52	QA failure	0.272	1.19
2,3,4,6,7,8-HxCDF	0.202	0.393	0.526		1.54	QA failure	0.302	1.17
1,2,3,7,8,9-HpCDF	<0.0976	<0.118	<0.0996		0.176	<0.681	<0.229	0.131
1,2,3,4,6,7,8-HpCDF	0.871	1.81	2		7.35	QA failure	0.752	4.48
1,2,3,4,7,8,9-HpCDF	0.124	0.267	0.357		1.05	<0.213	0.0966	0.643
OCDF	1.9	1.45	1.65		9.82	QA failure	0.55	3.24
<b>PCDD/F Homologues</b>								
TCDDs	0.524	0.778	0.561		3.83	QA failure	2.85	2.01
PeCDDs	0.623	0.91	1.547		5.55	QA failure	2.04	3.6
HxCDDs	1.21	1.67	2.29		7.83	QA failure	2.04	5.59
HpCDDs	2.25	3.59	3.68		13.1	QA failure	2.3	8.32
OCDD	3.38	8.22	5.28		29.9	QA failure	2.38	10.9
TCDFs	9.61	17.7	20.3		46	QA failure	19	40.8
PeCDFs	4.58	10.4	12.1		26.2	QA failure	8.11	20
HxCDFs	2.86	6.63	8.45		17.2	QA failure	3.62	13.3
HpCDFs	1.75	3.61	4.13		12.6	QA failure	1.64	7.66
OCDF	1.9	1.45	1.65		9.82	QA failure	0.55	3.24
<b>Total</b>								
∑ PCDDs	7.987	15.168	13.358		60.210	0.000	11.610	30.420
∑ PCDFs	20.700	39.790	46.630		111.820	0.000	32.920	85.000
∑ PCDD/Fs	28.687	54.958	59.988		172.030	0.000	44.530	115.420
∑ TEQ (PCDD/Fs)	0.287	0.465	0.61		1.648	NA	0.459	1.203



Table A72. Atmospheric concentrations of PCDD/Fs ( $\mu\text{g m}^{-3}$ ) at MDAMN remote sites in 2010

Station Name	San Pedro Mártir				Perote			
Sampling Period	1	2	3	4	1	2	3	4
Sampling Date	3/30/10	5/24/10	8/10/10	11/8/10	3/23/10	5/25/10	8/10/10	11/9/10
Sampling Volume (m3)	7447	7011	6192	6112	6052	4593	5381	6154
<b>PCDD/F Congeners</b>								
2,3,7,8-TCDD	0.0175	<0.0377	0.0329	0.117	0.0816	0.0662	<0.0178	0.0608
1,2,3,7,8-PeCDD	0.0642	<0.102	0.0927	0.193	0.365	0.191	<0.0446	0.242
1,2,3,4,7,8-HxCDD	0.0553	0.0505	0.0804	0.108	0.446	0.195	<0.0219	0.277
1,2,3,6,7,8-HxCDD	0.105	0.12	0.167	0.162	0.56	0.322	0.0855	0.417
1,2,3,7,8,9-HxCDD	0.0932	0.101	0.125	0.229	0.624	0.313	0.0781	0.468
1,2,3,4,6,7,8-HpCDD	1.05	1.15	1.38	1.523	5.5	3.42	0.618	4.87
OCDD	3.76	4.86	5.37	7.86	23	23.2	2.37	19.5
2,3,7,8-TCDF	0.231	0.202	0.421	0.517	1.18	1.11	0.327	1.21
1,2,3,7,8-PeCDF	0.289	0.239	0.513	0.533	1.22	1.06	0.266	1.2
2,3,4,7,8-PeCDF	0.238	0.226	0.486	0.385	1.37	1.2	0.267	1.46
1,2,3,4,7,8-HxCDF	0.36	0.322	0.562	0.353	1.52	1.32	0.243	1.62
1,2,3,6,7,8-HxCDF	0.385	0.351	0.664	0.361	1.58	1.27	0.247	1.71
2,3,4,6,7,8-HxCDF	0.313	0.293	0.622	0.366	1.58	1.11	0.204	1.73
1,2,3,7,8,9-HxCDF	0.0671	<0.0856	0.069	0.056	0.157	0.142	<0.0558	0.231
1,2,3,4,6,7,8-HpCDF	1.71	1.52	2.62	1.052	6.02	5.1	0.605	6.19
1,2,3,4,7,8,9-HpCDF	0.226	0.195	0.365	0.147	0.857	0.753	0.0907	1.04
OCDF	1.31	1.11	1.86	0.796	4.15	5.5	0.293	4.61
<b>PCDD/F Homologues</b>								
TCDDs	0.342	0.397	1.09	1.59	4.07	4.37	1.57	3.73
PeCDDs	0.376	0.124	1.17	1.68	6.49	4.16	0.905	4.28
HxCDDs	1.03	1.53	2.24	2.14	9.9	5.44	1.3	7.43
HpCDDs	2.22	2.82	3.24	3.048	14.4	8.11	1.54	11.8
OCDD	3.76	4.86	5.37	7.86	23	23.2	2.37	19.5
TCDFs	8.22	9.95	22.7	17.35	61.2	59.6	15.8	63.6
PeCDFs	5.47	5.96	16	8.36	31.5	27.3	7.25	35
HxCDFs	4.38	4.9	9.82	3.59	17.9	14.8	2.92	20.7
HpCDFs	3.01	2.83	5.16	1.81	10.5	8.71	1.13	11.4
OCDF	1.31	1.11	1.86	0.796	4.15	5.5	0.293	4.61
<b>Total</b>								
∑ PCDDs	7.728	9.731	13.110	16.318	57.860	45.280	7.685	46.740
∑ PCDFs	22.390	24.750	55.540	31.906	125.250	115.910	27.393	135.310
∑ PCDD/Fs	30.118	34.481	68.650	48.224	183.110	161.190	35.078	182.050
∑ TEQ (PCDD/Fs)	0.354	0.398	0.604	0.687	1.791	1.329	0.291	1.671

Table A73. Atmospheric concentrations of PCDD/Fs ( $\mu\text{g m}^{-3}$ ) at MDAMN remote sites in 2011

Station Name	Perote	
Sampling Period	1	2
Sampling Date	9/9/11	11/8/11
Sampling Volume (m <sup>3</sup> )	5920	6060
<b>PCDD/F Congeners</b>		
2,3,7,8-TCDD	<0.0302	0.06
1,2,3,7,8-PeCDD	<0.0595	0.361
1,2,3,4,7,8-HxCDD	<0.0812	0.425
1,2,3,6,7,8-HxCDD	<0.201	0.982
1,2,3,7,8,9-HxCDD	<0.17	0.865
1,2,3,4,6,7,8-HpCDD	<1.44	8.55
OCDD	<4.09	18.219
2,3,7,8-TCDF	0.364	1.01
1,2,3,7,8-PeCDF	0.22	1.149
2,3,4,7,8-PeCDF	<0.158	1.608
1,2,3,4,7,8-HxCDF	0.154	1.696
1,2,3,6,7,8-HxCDF	<0.255	2.121
2,3,4,6,7,8-HxCDF	<0.443	2.397
1,2,3,7,8,9-HxCDF	<0.0469	0.268
1,2,3,4,6,7,8-HpCDF	<0.659	5.999
1,2,3,4,7,8,9-HpCDF	0.126	1.04
OCDF	0.624	3.995
<b>PCDD/F Homologues</b>		
TCDDs	0.648	3.601
PeCDDs	0.545	5.537
HxCDDs	1.114	13.164
HpCDDs	2.646	19.781
OCDD	<4.09	18.219
TCDFs	17.742	51.186
PeCDFs	5.83	30.929
HxCDFs	3.193	22.191
HpCDFs	1.594	11.278
OCDF	0.624	3.995
<b>Total</b>		
$\Sigma$ PCDDs	4.953	60.302
$\Sigma$ PCDFs	28.983	119.579
$\Sigma$ PCDD/Fs	33.936	179.881
$\Sigma$ TEQ (PCDD/Fs)	0.339	2.077

Table A74. Atmospheric concentrations of PCDD/Fs ( $\mu\text{g m}^{-3}$ ) at MDAMN remote sites in 2012

Station Name	Perote	
Sampling Period	1	2
Sampling Date	2/28/12	5/31/12
Sampling Volume (m3)		
<b>PCDD/F Congeners</b>		
2,3,7,8-TCDD	0.061	<0.026
1,2,3,7,8-PeCDD	0.34	0.092
1,2,3,4,7,8-HxCDD	0.286	0.086
1,2,3,6,7,8-HxCDD	0.49	0.157
1,2,3,7,8,9-HxCDD	0.467	0.149
1,2,3,4,6,7,8-HpCDD	4.785	1.14
OCDD	23.155	4.231
2,3,7,8-TCDF	1.108	0.536
1,2,3,7,8-PeCDF	1.263	0.398
2,3,4,7,8-PeCDF	1.535	0.454
1,2,3,4,7,8-HxCDF	1.704	0.425
1,2,3,6,7,8-HxCDF	1.798	0.482
2,3,4,6,7,8-HxCDF	1.77	0.391
1,2,3,7,8,9-HxCDF	0.239	0.079
1,2,3,4,6,7,8-HpCDF	6.202	1.183
1,2,3,4,7,8,9-HpCDF	1.014	0.178
OCDF	4.072	0.54
<b>PCDD/F Homologues</b>		
TCDDs	5.353	Lost
PeCDDs	4.57	1.899
HxCDDs	7.727	2.602
HpCDDs	11.018	2.876
OCDD	23.155	4.231
TCDFs	62.844	Lost
PeCDFs	30.926	10.362
HxCDFs	21.075	5.3
HpCDFs	11.3	2.359
OCDF	4.072	0.54
<b>Total</b>		
$\Sigma$ PCDDs	51.823	11.608
$\Sigma$ PCDFs	130.217	18.561
$\Sigma$ PCDD/Fs	182.040	30.169
$\Sigma$ TEQ (PCDD/Fs)	1.814	0.523

Table A75. Atmospheric concentrations of PCDD/Fs ( $\mu\text{g m}^{-3}$ ) at MDAMN rural sites in 2008

Station Name	Montes Azules				La Campana				Vaquerias			
Sampling Period	1	2	3	4	1	2	3	4	1	2	3	4
Sampling Date		5/28/08	8/20/08	11/20/08	3/5/08	5/28/08	8/20/08	11/19/08	3/5/08	5/27/08	8/20/08	11/19/08
Sampling Volume (m3)		6234	7694	7298	8076	7602	7059	8113	7262	7662	5292	7478
<b>PCDD/F Congeners</b>												
2,3,7,8-TCDD	<0.075	<0.08	0.0381	<0.0248	0.0568	<0.119	0.12	0.139	<0.0701	<0.0219	0.116	
1,2,3,7,8-PeCDD	0.185	<0.0579	0.139	0.241	0.193	0.107	0.687	0.593	0.276	0.11	0.452	
1,2,3,4,7,8-HxCDD	0.104	<0.144	0.0973	0.27	0.205	0.123	0.835	0.541	0.184	0.146	0.502	
1,2,3,6,7,8-HxCDD	0.219	0.0983	0.209	0.331	0.336	0.239	1.346	1.06	0.325	0.272	0.845	
1,2,3,7,8,9-HxCDD	0.16	<0.0964	0.154	0.353	0.3	0.23	1.267	0.97	0.264	0.229	0.77	
1,2,3,4,6,7,8-HpCDD	<1.32	<1.44	1.09	4.34	3.93	3.99	13.51	10.8	2.7	3.77	7.9	
OCDD	<11.3	<11.4	5.72	20.3	25.8	22.5	39.8	35.2	10.1	18.9	22.7	
2,3,7,8-TCDF	0.689	0.308	0.492	0.52	0.637	0.386	1.281	1.62	1.2	0.655	1.7	
1,2,3,7,8-PeCDF	0.509	0.27	0.409	0.602	0.83	0.501	1.453	1.71	1.22	0.753	1.81	
2,3,4,7,8-PeCDF	0.58	0.263	0.523	0.871	1.21	0.783	2.28	2.76	1.73	0.933	2.63	
1,2,3,4,7,8-HxCDF	0.428	0.244	0.468	1.02	1.3	0.883	2.655	2.97	1.57	1	2.89	
1,2,3,6,7,8-HxCDF	0.382	0.268	0.472	1.01	1.26	0.904	2.492	2.62	1.53	0.943	2.87	
2,3,4,6,7,8-HxCDF	<0.289	0.267	0.439	1.18	1.64	1.17	3.04	3.09	1.46	1.09	3.23	
1,2,3,7,8,9-HxCDF	<0.096	<0.0738	0.0581	0.115	0.187	0.172	0.325	0.476	0.162	0.113	0.342	
1,2,3,4,6,7,8-HpCDF	0.98	0.741	1.49	4.2	5.44	4.37	10.1	11.2	4.03	3.75	11.2	
1,2,3,4,7,8,9-HpCDF	0.116	0.103	0.222	0.58	0.759	0.753	1.581	1.59	0.534	0.54	1.59	
OCDF	0.82	0.615	0.899	3.45	4.13	3.5	7.23	7.75	2.37	2.65	6.98	
<b>PCDD/F Homologues</b>												
TCDDs	3.97	0.807	7.19	2.35	3.44	1.58	10.7	14.6	4.95	2.99	6.22	
PeCDDs	2.78	0.901	6.56	2.26	3.67	2.06	18	16.1	5.13	2.33	9.93	
HxCDDs	3.38	1.19	4.91	6.93	5.34	3.55	27.5	20.3	5.91	3.83	14.2	
HpCDDs	4.46	3.19	2.49	11	8.93	8.4	32.5	27.3	6.39	7.97	18	
OCDD	<11.3	<11.4	5.72	20.3	25.8	22.5	39.8	35.2	10.1	18.9	22.7	
TCDFs	22	10.1	24.1	25.1	27.7	23.4	54.8	83.4	49.4	37.3	70.5	
PeCDFs	10	4.68	9.13	19.1	23.8	15	39.9	48.6	31.6	18.1	41.5	
HxCDFs	3.7	2.57	5.25	11.7	14.7	12.9	30.3	29.1	15.57	13.2	30.3	
HpCDFs	1.9	1.35	2.34	7.78	10	8.69	17.6	19.2	6.97	6.9	18.4	
OCDF	0.82	0.615	0.899	3.45	4.13	3.5	7.23	7.75	2.37	2.65	6.98	
<b>Total</b>												
Σ PCDDs	14.590	6.088	26.870	42.840	47.180	38.090	128.500	113.500	32.480	36.020	71.050	
Σ PCDFs	38.420	19.315	41.719	67.130	80.330	63.490	149.830	188.050	105.910	78.150	167.680	
Σ PCDD/Fs	53.010	25.403	68.589	109.970	127.510	101.580	278.330	301.550	138.390	114.170	238.730	
Σ TEQ (PCDD/Fs)	0.714	0.401	0.615	1.123	1.334	0.986	3.125	3.195	1.648	0.966	2.942	

Table A76. Atmospheric concentrations of PCDD/Fs ( $\mu\text{g m}^{-3}$ ) at MDAMN rural sites in 2009

Station Name	Montes Azules				La Campana				Vaquerias			
Sampling Period	1	2	3	4	1	2	3	4	1	2	3	4
Sampling Date	2/12/09	6/10/09	8/11/09	11/23/09	2/11/09	6/10/09	8/12/09	11/23/09	2/11/09	6/10/09	8/12/09	11/24/09
Sampling Volume (m3)	8299	7607	8498	9418	7350	4272	7014	7237	8078	4435	8139	7520
<b>PCDD/F Congeners</b>												
2,3,7,8-TCDD	0.0101	0.0297	0.0468	0.0183	0.0623	<0.0473	0.0681	0.0788	0.102	0.117	<0.0425	0.115
1,2,3,7,8-PeCDD	0.086	0.0747	0.0946	0.0486	0.415	<0.136	0.117	0.392	0.579	0.35	<0.132	0.41
1,2,3,4,7,8-HxCDD	0.0824	0.0465	0.0402	0.0582	0.507	0.106	0.186	0.492	0.634	0.281	0.105	0.404
1,2,3,6,7,8-HxCDD	0.153	0.111	0.063	0.0909	0.733	0.182	0.281	0.798	1.46	0.598	0.185	0.826
1,2,3,7,8,9-HxCDD	0.137	0.0889	0.0666	0.09	0.888	0.196	0.283	0.846	1.26	0.548	0.163	0.719
1,2,3,4,6,7,8-HpCDD	1.22	0.476	0.359	0.797	8.38	2.02	2.87	9.33	11.3	4.59	1.51	7.06
OCDD	3.37	1.91	1.15	2.77	24.7	11.8	10.5	26.9	61.2	12.6	5.53	18.3
2,3,7,8-TCDF	0.462	0.451	0.653	0.377	0.687	0.352	0.441	1.15	1.33	1.97	0.797	1.96
1,2,3,7,8-PeCDF	0.401	0.324	0.789	0.33	0.909	0.382	0.476	1.15	1.73	1.99	0.762	1.85
2,3,4,7,8-PeCDF	0.458	0.382	0.871	0.336	1.34	0.545	0.697	1.76	2.66	2.6	0.854	2.61
1,2,3,4,7,8-HxCDF	0.499	0.36	0.56	0.421	1.5	0.585	0.777	1.79	3.52	2.49	0.886	2.98
1,2,3,6,7,8-HxCDF	0.464	0.349	0.595	0.443	1.53	0.625	0.823	1.91	3.28	2.5	0.901	2.93
2,3,4,6,7,8-HxCDF	0.502	0.278	0.505	0.415	1.76	0.673	0.972	2.19	4.29	2.43	0.837	3.28
1,2,3,7,8,9-HxCDF	0.0964	<0.092	0.182	0.063	0.264	<0.14	0.12	0.243	0.552	0.321	0.151	0.402
1,2,3,4,6,7,8-HpCDF	1.72	0.867	0.609	1.57	6.1	2.65	3.54	6.77	16.1	7.61	2.71	11.2
1,2,3,4,7,8,9-HpCDF	0.25	0.128	0.184	0.293	1.02	0.397	0.573	1.08	1.84	0.977	0.391	1.71
OCDF	1.28	0.491	0.223	1.33	4.19	2.37	2.54	4.68	9.33	3.99	1.82	7.66
<b>PCDD/F Homologues</b>												
TCDDs	4.13	4.62	3.98	1.83	3.89	2.23	2.53	3.7	14	10.3	3.19	9.39
PeCDDs	2.84	2.99	1.73	1.31	6.69	1.79	2.99	6.24	25.1	11.2	2.76	13
HxCDDs	2.72	2.03	1.35	1.42	14.1	3.07	5	12	31.4	14.1	3.45	15
HpCDDs	2.74	1.26	0.85	1.84	21.3	4.85	7.24	22.3	27.4	10.8	3.62	15.9
OCDD	3.37	1.91	1.15	2.77	24.7	11.8	10.5	26.9	61.2	12.6	5.53	18.3
TCDFs	19	18.8	29.4	18.4	36.1	21.2	25.4	51.2	72.7	99.1	36.8	78.6
PeCDFs	8.02	7.68	13.06	6.81	26	12	15.7	33	45.6	52.4	17.6	45.2
HxCDFs	4.71	3.61	5.54	4.52	19.8	8.28	11.63	23.2	36.2	30.5	9.83	32.7
HpCDFs	2.83	1.43	1.29	2.74	11.3	5.04	6.58	12.8	24.7	12.8	4.63	19.2
OCDF	1.28	0.491	0.223	1.33	4.19	2.37	2.54	4.68	9.33	3.99	1.82	7.66
<b>Total</b>												
∑ PCDDs	15.800	12.810	9.060	9.170	70.680	23.740	28.260	71.140	159.100	59.000	18.550	71.590
∑ PCDFs	35.840	32.011	49.513	33.800	97.390	48.890	61.850	124.880	188.530	198.790	70.680	183.360
∑ PCDD/Fs	51.640	44.821	58.573	42.970	168.070	72.630	90.110	196.020	347.630	257.790	89.230	254.950
∑ TEQ (PCDD/Fs)	0.518	0.422	0.705	0.401	1.857	0.699	0.871	2.156	3.477	2.557	0.904	2.921

Table A77. Atmospheric concentrations of PCDD/Fs ( $\mu\text{g m}^{-3}$ ) at MDAMN rural sites in 2010

Station Name	Montes Azules				La Campana				Vaquerias			
Sampling Period	1	2	3	4	1	2	3	4	1	2	3	4
Sampling Date	4/12/10	5/25/10	8/13/10	11/9/10	3/22/10	5/25/10	8/9/10	11/8/10	3/24/10	6/1/10	8/10/10	11/10/10
Sampling Volume (m3)	7535	6382	9593	8462	7240	7292	7384	7473	7705	5608	5931	5650
<b>PCDD/F Congeners</b>												
2,3,7,8-TCDD	0.101	<0.0179	0.0154	0.259	0.0555	0.0392	0.0309	0.0988	0.082	0.056	0.052	0.129
1,2,3,7,8-PeCDD	0.273	<0.0699	0.0334	0.974	0.207	0.216	0.0899	0.479	0.376	0.225	0.161	0.484
1,2,3,4,7,8-HxCDD	0.32	<0.031	0.024	0.63	0.228	0.485	0.0796	0.551	0.449	0.219	0.138	0.511
1,2,3,6,7,8-HxCDD	0.561	0.0476	0.0436	1.82	0.34	0.82	0.144	0.856	0.965	0.398	0.242	0.886
1,2,3,7,8,9-HxCDD	0.568	<0.0376	0.0413	1.54	0.395	0.891	0.151	0.918	0.917	0.362	0.226	0.867
1,2,3,4,6,7,8-HpCDD	4	0.324	0.556	7.87	3.38	16.4	1.71	9.54	8.323	3.3	1.85	8.69
OCDD	17.9	1.38	2.84	15.5	11.6	38.5	9.18	28.4	17	10.3	5.09	26.5
2,3,7,8-TCDF	1.12	0.346	0.255	0.803	0.641	0.424	0.368	0.971	1.03	1.16	1.08	1.72
1,2,3,7,8-PeCDF	1.13	0.22	0.2	0.687	0.891	0.6	0.433	1.25	1.35	1.36	1.17	2.19
2,3,4,7,8-PeCDF	1.37	0.215	0.189	1.14	1.22	0.779	0.513	1.88	2.33	1.71	1.31	3.05
1,2,3,4,7,8-HxCDF	1.67	0.202	0.165	1	1.29	0.988	0.657	2.06	3.06	1.79	1.48	3.57
1,2,3,6,7,8-HxCDF	1.41	0.198	0.158	0.991	1.42	1.06	0.744	2.18	2.96	1.83	1.57	3.86
2,3,4,6,7,8-HxCDF	1.43	0.145	0.125	1.42	1.6	1.16	0.776	2.37	4.99	1.86	1.39	4.21
1,2,3,7,8,9-HxCDF	0.184	<0.0627	0.0198	0.13	0.192	0.131	0.0934	0.347	0.549	0.225	0.199	0.595
1,2,3,4,6,7,8-HpCDF	4.93	0.472	0.379	4.47	5.37	4.7	2.85	8.12	16.69	6.2	5.07	15.4
1,2,3,4,7,8,9-HpCDF	0.643	0.0899	0.065	0.584	0.914	0.726	0.495	1.41	2.31	0.936	0.729	2.63
OCDF	2.14	0.287	0.187	2.97	3.8	3.52	2.38	6.15	10.6	3.78	3.51	9.78
<b>PCDD/F Homologues</b>												
TCDDs	8.22	1.87	1.35	60.4	4.9	1.96	1.59	2.71	10.1	5.17	4.3	11.1
PeCDDs	8.6	0.948	0.766	99.3	5.33	4.04	1.64	6.65	15.6	5.31	3.7	12.8
HxCDDs	11.4	0.811	0.75	56.9	7.65	16.5	2.5	14	20.5	7.16	3.99	16.9
HpCDDs	10	0.896	1.22	18	8.33	42.1	4.11	22.4	19.9	7.76	4.22	20.8
OCDD	17.9	1.38	2.84	15.5	11.6	38.5	9.18	28.4	17	10.3	5.09	26.5
TCDFs	43.1	13.39	9.25	40.5	36	20.6	20.3	44.3	60.8	53.3	46.9	81.6
PeCDFs	23.7	4.62	4.33	22.7	27	18	19.5	35.2	41.9	30.6	26.2	59.8
HxCDFs	16.1	1.89	1.81	12	18.2	13.7	10.1	26.9	36.5	19.8	14.7	44.2
HpCDFs	7.37	0.843	0.722	7.01	10.1	8.81	5.85	15.2	26.7	10.4	8.22	26.9
OCDF	2.14	0.287	0.187	2.97	3.8	3.52	2.38	6.15	10.6	3.78	3.51	9.78
<b>Total</b>												
$\Sigma$ PCDDs	56.120	5.905	6.926	250.100	37.810	103.100	19.020	74.160	83.100	35.700	21.300	88.100
$\Sigma$ PCDFs	92.410	21.030	16.299	85.180	95.100	64.630	58.130	127.750	176.500	117.880	99.530	222.280
$\Sigma$ PCDD/Fs	148.530	26.935	23.225	335.280	132.910	167.730	77.150	201.910	259.600	153.580	120.830	310.380
$\Sigma$ TEQ (PCDD/Fs)	1.647	0.275	0.206	2.564	1.367	1.334	0.643	2.406	2.971	1.728	1.353	3.494

Table A78. Atmospheric concentrations of PCDD/Fs ( $\mu\text{g m}^{-3}$ ) at MDAMN semirural sites in 2008

Station Name	Celestún				Coquimatlán			
	1	2	3	4	1	2	3	4
Sampling Period								
Sampling Date	3/4/08	5/28/08	8/20/08	11/19/08	3/5/08	5/28/08	8/20/08	11/19/08
Sampling Volume (m <sup>3</sup> )	8373	8724	8400	8623	8038	6955	6491	8812
<b>PCDD/F Congeners</b>								
2,3,7,8-TCDD	1.15	0.817	0.835	0.848	2.75	1.19	1.1	1.34
1,2,3,7,8-PeCDD	1.49	0.953	1.55	2.23	10.4	3.76	3.8	4.98
1,2,3,4,7,8-HxCDD	1.11	0.56	1.07	2.02	10.6	3.54	5.34	5.23
1,2,3,6,7,8-HxCDD	2.41	1.05	2.17	5	17.5	6.19	7.05	10.6
1,2,3,7,8,9-HxCDD	2.03	0.797	1.76	4.19	18.2	6.21	7.4	8.75
1,2,3,4,6,7,8-HpCDD	16.3	8.5	16.3	50.6	198	77.4	101	89.6
OCDD	45.8	27.8	44.3	126	765	281	250	222
2,3,7,8-TCDF	5.9	9.73	9.25	8.88	26.2	12.8	10.2	13.6
1,2,3,7,8-PeCDF	4.25	4.65	5.55	5.02	26.2	11.4	10.4	13.6
2,3,4,7,8-PeCDF	6.61	5.91	7.23	6.49	38.5	16.3	17.2	18.7
1,2,3,4,7,8-HxCDF	5.27	3.42	5.56	6.52	38.8	14.3	17.1	18.2
1,2,3,6,7,8-HxCDF	4.89	3.43	5.44	5.77	36.8	13.5	17.3	18.6
2,3,4,6,7,8-HxCDF	5.75	3.84	6.02	7.11	38	13.8	20.2	23.4
1,2,3,7,8,9-HxCDF	0.533	0.435	0.73	0.674	5	1.66	1.94	2.96
1,2,3,4,6,7,8-HpCDF	16.5	8.67	15.6	23.2	109	52.8	64.1	67.8
1,2,3,4,7,8,9-HpCDF	1.97	1.21	2.14	3.1	15.9	6.56	9.2	9.47
OCDF	8.66	4.18	8.27	15.3	67.6	45	40.3	39.2
<b>PCDD/F Homologues</b>								
TCDDs	136	51.3	68.2	53.5	133	56.2	42.6	54.9
PeCDDs	94.1	40.4	76.7	76.3	231	84	69.1	150
HxCDDs	68.4	31.7	61.7	81.4	357	112	141	216
HpCDDs	38	19.9	37.8	97.5	483	181	293	210
OCDD	45.8	27.8	44.3	126	765	281	250	222
TCDFs	208	174	198	206	688	282	260	383
PeCDFs	109	86.4	115	98.8	469	209	233	246
HxCDFs	47.2	30.4	58.7	61.2	311	117	174	189
HpCDFs	26	13.9	29.5	36.8	183	85.4	112	110
OCDF	8.66	4.18	8.27	15.3	67.6	45	40.3	39.2
<b>Total</b>								
∑ PCDDs	382.300	171.100	288.700	434.700	1969.000	714.200	795.700	852.900
∑ PCDFs	398.860	308.880	409.470	418.100	1718.600	738.400	819.300	967.200
∑ PCDD/Fs	781.160	479.980	698.170	852.800	3687.600	1452.600	1615.000	1820.100
∑ TEQ (PCDD/Fs)	7.904	6.202	8.277	10.003	48.075	18.847	20.855	24.219

Table A79. Atmospheric concentrations of PCDD/Fs ( $\mu\text{g m}^{-3}$ ) at MDAMN semirural sites in 2009

Station Name	Celestún				Coquimatlán			
	1	2	3	4	1	2	3	4
Sampling Period								
Sampling Date	2/11/09	6/10/09	8/12/09		2/11/09	6/10/09	8/12/09	11/24/09
Sampling Volume (m <sup>3</sup> )	8137	8322	8132		8203	8469	9039	8494
<b>PCDD/F Congeners</b>								
2,3,7,8-TCDD	0.852	0.79	0.803		1.09	0.767	0.796	1.76
1,2,3,7,8-PeCDD	1.66	1.15	1.14		4.25	2.21	2.53	5.05
1,2,3,4,7,8-HxCDD	1.842	0.747	0.959		3.85	2.14	2.46	4
1,2,3,6,7,8-HxCDD	2.992	1.48	1.82		6.85	3.52	4.66	6.8
1,2,3,7,8,9-HxCDD	2.84	1.3	1.54		7.17	3.54	4.52	6.51
1,2,3,4,6,7,8-HpCDD	34.1	10.6	11.6		75	35.8	40.5	64.1
OCDD	86.1	30	28.9		262	122	99	175
2,3,7,8-TCDF	9.17	12.1	7.84		12.3	8.13	7.12	17.6
1,2,3,7,8-PeCDF	5.09	5.59	3.56		14.4	7.45	6.04	14.9
2,3,4,7,8-PeCDF	6.59	7.73	4.79		19.1	10	8.8	17.9
1,2,3,4,7,8-HxCDF	5.31	4.85	3.93		19	8.84	8.36	15.7
1,2,3,6,7,8-HxCDF	4.97	4.77	3.87		18.5	9	8.14	16.2
2,3,4,6,7,8-HxCDF	6.28	5.49	4.37		18.5	9.44	9.63	15.8
1,2,3,7,8,9-HxCDF	0.663	0.745	0.625		2.08	1.16	1.14	2.07
1,2,3,4,6,7,8-HpCDF	18.6	12.5	11.3		57.2	26.4	33.3	43.7
1,2,3,4,7,8,9-HpCDF	2.26	1.56	1.26		8.07	4.25	3.99	6.31
OCDF	11	5.82	4.8		39.1	15.2	18.9	23.3
<b>PCDD/F Homologues</b>								
TCDDs	91.4	30.5	58.1		34.1	36.2	43.7	32.2
PeCDDs	60.9	45.7	69.3		75.8	57.7	77.2	85.6
HxCDDs	69	38.3	52.7		110	70.1	97	111
HpCDDs	78.4	24.9	28.1		163	82.9	96.9	146
OCDD	86.1	30	28.9		262	122	99	175
TCDFs	242	236	161		320	221	174	407
PeCDFs	105	108	84.2		229	172	142	241
HxCDFs	55.2	53.2	42.1		161	97.1	87.5	147
HpCDFs	28.2	20.1	17.4		94	47	53.1	71.1
OCDF	11	5.82	4.8		39.1	15.2	18.9	23.3
<b>Total</b>								
∑ PCDDs	385.800	169.400	237.100		644.900	368.900	413.800	549.800
∑ PCDFs	441.400	423.120	309.500		843.100	552.300	475.500	889.400
∑ PCDD/Fs	827.200	592.520	546.600		1488.000	921.200	889.300	1439.200
∑ TEQ (PCDD/Fs)	8.627	7.832	6.234		21.82	11.483	11.563	22.296



Table A80. Atmospheric concentrations of PCDD/Fs ( $\mu\text{g m}^{-3}$ ) at MDAMN semirural sites in 2010

Station Name	Celestún				Coquimatlán			
	1	2	3	4	1	2	3	4
Sampling Period								
Sampling Date	3/23/10	5/25/10	8/10/10	11/17/10	3/25/10	5/24/10	8/9/10	11/9/10
Sampling Volume (m <sup>3</sup> )	7777	8047	9345	8807	6582	7327	6403	7368
<b>PCDD/F Congeners</b>								
2,3,7,8-TCDD	0.924	1.99	1.91	0.67	1.67	2.43	0.672	1.85
1,2,3,7,8-PeCDD	1.25	4.5	7.99	1.6	2.96	8.02	1.73	5.86
1,2,3,4,7,8-HxCDD	0.87	2.67	7.83	1.4	2.81	8.71	1.46	5.45
1,2,3,6,7,8-HxCDD	1.74	6.22	21.5	3.11	4.47	13.1	2.34	9.8
1,2,3,7,8,9-HxCDD	1.61	5.31	17	2.66	5.24	15	2.45	9.34
1,2,3,4,6,7,8-HpCDD	12.4	30	118	21.3	51.3	137	23.4	93.2
OCDD	48	53.1	168	58.1	153	388	63.2	256
2,3,7,8-TCDF	8.47	21.2	11.3	6.99	15.4	19.1	6.3	16.7
1,2,3,7,8-PeCDF	4.72	12.9	19	5.91	15.1	20	6.04	19.1
2,3,4,7,8-PeCDF	6.15	21.3	33.6	8.52	20.6	24.9	7.89	23.5
1,2,3,4,7,8-HxCDF	4.1	12.7	44	9.52	20.7	20.7	6.39	28
1,2,3,6,7,8-HxCDF	4.01	12.6	38.1	8.55	17.4	22.3	6.51	26.2
2,3,4,6,7,8-HxCDF	4.28	19.6	53.4	13	17	19.3	6.68	26.1
1,2,3,7,8,9-HxCDF	0.434	1.75	6.41	1.7	1.77	2.16	0.929	3.07
1,2,3,4,6,7,8-HpCDF	10.1	32.9	183	46.9	52.1	47.1	17.9	84.3
1,2,3,4,7,8,9-HpCDF	1.28	4.18	23.8	6.34	8.43	8.29	3.2	15.2
OCDF	4.38	9.52	85.2	45.6	29.7	25.7	10.2	72.7
<b>PCDD/F Homologues</b>								
TCDDs	55.8	150	243	48.5	38.2	65.6	27.3	43
PeCDDs	71.3	326	599	86	64.3	153	36.6	112
HxCDDs	53.3	181	517	80.1	81.5	268	41.7	159
HpCDDs	32.6	77.4	278	49.7	116	348	52.4	221
OCDD	48	53.1	168	58.1	153	388	63.2	256
TCDFs	204	590	981	219	323	393	184	458
PeCDFs	91.7	374	545	135	222	326	145	349
HxCDFs	42.4	173	457	102	151	195	72.9	255
HpCDFs	16.1	52	292	73	84.3	86	33	145
OCDF	4.38	9.52	85.2	45.6	29.7	25.7	10.2	72.7
<b>Total</b>								
∑ PCDDs	261.000	787.500	1805.000	322.400	453.000	1222.600	221.200	791.000
∑ PCDFs	358.580	1198.520	2360.200	574.600	810.000	1025.700	445.100	1279.700
∑ PCDD/Fs	619.580	1986.020	4165.200	897.000	1263.000	2248.300	666.300	2070.700
∑ TEQ (PCDD/Fs)	6.966	22.162	43.828	10.473	20.915	32.605	8.723	29.825

Table A81. Atmospheric concentrations of PCDD/Fs ( $\mu\text{g m}^{-3}$ ) at MDAMN semirural sites in 2011

Station Name	Celestún	
	1	2
Sampling Period	8/2/11	11/8/11
Sampling Date	8/2/11	11/8/11
Sampling Volume (m3)	7520	6596
<b>PCDD/F Congeners</b>		
2,3,7,8-TCDD	0.745	0.63
1,2,3,7,8-PeCDD	1.492	1.197
1,2,3,4,7,8-HxCDD	1.095	0.932
1,2,3,6,7,8-HxCDD	2.286	1.933
1,2,3,7,8,9-HxCDD	1.898	1.702
1,2,3,4,6,7,8-HpCDD	14.662	17.077
OCDD	42.33	51.228
2,3,7,8-TCDF	6.715	5.594
1,2,3,7,8-PeCDF	4.974	4.489
2,3,4,7,8-PeCDF	7.625	5.824
1,2,3,4,7,8-HxCDF	5.997	5.051
1,2,3,6,7,8-HxCDF	6.179	5.036
2,3,4,6,7,8-HxCDF	7.488	6.003
1,2,3,7,8,9-HxCDF	0.885	0.875
1,2,3,4,6,7,8-HpCDF	17.163	16.346
1,2,3,4,7,8,9-HpCDF	3.849	2.57
OCDF	10.272	9.31
<b>PCDD/F Homologues</b>		
TCDDs	119.197	82.033
PeCDDs	98.612	61.847
HxCDDs	70.194	57.812
HpCDDs	37.635	43.008
OCDD	42.33	51.228
TCDFs	194.759	184.991
PeCDFs	137.392	94.468
HxCDFs	78.451	54.883
HpCDFs	34.838	27.844
OCDF	10.272	9.31
<b>Total</b>		
$\Sigma$ PCDDs	367.968	295.928
$\Sigma$ PCDFs	455.712	371.496
$\Sigma$ PCDD/Fs	823.680	667.424
$\Sigma$ TEQ (PCDD/Fs)	8.301	6.8

Table A82. Atmospheric concentrations of PCDD/Fs ( $\mu\text{g m}^{-3}$ ) at MDAMN semirural sites in 2012

Station Name	Celestún	
	1	2
Sampling Period	1	2
Sampling Date	2/21/12	5/15/12
Sampling Volume (m3)		
<b>PCDD/F Congeners</b>		
2,3,7,8-TCDD	2.517	0.724
1,2,3,7,8-PeCDD	7.507	1.045
1,2,3,4,7,8-HxCDD	8.084	0.72
1,2,3,6,7,8-HxCDD	14.25	1.43
1,2,3,7,8,9-HxCDD	11.905	1.284
1,2,3,4,6,7,8-HpCDD	69.443	10.967
OCDD	83.332	33.199
2,3,7,8-TCDF	10.193	6.116
1,2,3,7,8-PeCDF	8.81	3.706
2,3,4,7,8-PeCDF	17.92	4.705
1,2,3,4,7,8-HxCDF	13.777	3.09
1,2,3,6,7,8-HxCDF	13.288	3.189
2,3,4,6,7,8-HxCDF	23.582	3.981
1,2,3,7,8,9-HxCDF	2.304	0.526
1,2,3,4,6,7,8-HpCDF	45.456	9.686
1,2,3,4,7,8,9-HpCDF	4.491	1.402
OCDF	17.578	5.892
<b>PCDD/F Homologues</b>		
TCDDs	548.344	59.392
PeCDDs	662.744	34.692
HxCDDs	649.201	33.349
HpCDDs	176.776	25.545
OCDD	83.332	33.199
TCDFs	422.904	159.538
PeCDFs	300.951	66.635
HxCDFs	190.759	34.362
HpCDFs	67.389	16.057
OCDF	17.578	5.892
<b>Total</b>		
$\Sigma$ PCDDs	2120.397	186.177
$\Sigma$ PCDFs	999.581	282.484
$\Sigma$ PCDD/Fs	3119.978	468.661
$\Sigma$ TEQ (PCDD/Fs)	26.627	5.558

Table A83. Atmospheric concentrations of PCDD/Fs ( $\mu\text{g m}^{-3}$ ) at MDAMN urban sites in 2008

Station Name	Mexico City				Monterrey			
	1	2	3	4	1	2	3	4
Sampling Period								
Sampling Date	3/5/08	5/28/08	8/20/08	11/19/08				11/26/08
Sampling Volume (m3)	7682	8570	8048	7608				8045
<b>PCDD/F Congeners</b>								
2,3,7,8-TCDD	3.69	4.5	2.2	3.78				18.2
1,2,3,7,8-PeCDD	17.6	20	9.18	19.9				82.4
1,2,3,4,7,8-HxCDD	18.5	19.8	9.01	19.91				51.5
1,2,3,6,7,8-HxCDD	30.8	36.3	17.4	39.6				111
1,2,3,7,8,9-HxCDD	27.5	32.6	15.1	29.5				70.1
1,2,3,4,6,7,8-HpCDD	220	273	137	308				483
OCDD	488	622	312	703				885
2,3,7,8-TCDF	89.5	104	48.5	152				385
1,2,3,7,8-PeCDF	76.3	102	56.2	107				275
2,3,4,7,8-PeCDF	163	206	94.5	223				435
1,2,3,4,7,8-HxCDF	150	181	93.2	160				196
1,2,3,6,7,8-HxCDF	150	180	99.9	167				215
2,3,4,6,7,8-HxCDF	182	228	116	202				235
1,2,3,7,8,9-HxCDF	20.7	25.5	15.7	23.6				25.5
1,2,3,4,6,7,8-HpCDF	517	639	339	554				393
1,2,3,4,7,8,9-HpCDF	86	108	69	91.9				54.7
OCDF	359	414	257	373				189
<b>PCDD/F Homologues</b>								
TCDDs	297	189	108	120				555
PeCDDs	453	514	219	488				1940
HxCDDs	509	613	268	685				1460
HpCDDs	469	595	289	692				1060
OCDD	488	622	312	703				885
TCDFs	2930	4060	2190	3462				13800
PeCDFs	2370	3560	1730	2520				5100
HxCDFs	1640	2180	1300	1994				2040
HpCDFs	933	1200	681	1000				651
OCDF	359	414	257	373				189
<b>Total</b>								
$\Sigma$ PCDDs	2216.000	2533.000	1196.000	2688.000				5900.000
$\Sigma$ PCDFs	8232.000	11414.000	6158.000	9349.000				21780.000
$\Sigma$ PCDD/Fs	10448.000	13947.000	7354.000	12037.000				27680.000
$\Sigma$ TEQ (PCDD/Fs)	147.863	180.591	88.518	183.013				377.889

Table A84. Atmospheric concentrations of PCDD/Fs ( $\mu\text{g m}^{-3}$ ) at MDAMN urban sites in 2009

Station Name	Mexico City				Monterrey			
	1	2	3	4	1	2	3	4
Sampling Period								
Sampling Date	2/11/09	6/10/09	8/12/09	11/24/09	2/11/09	6/10/09	8/12/09	11/22/09
Sampling Volume (m3)	6159	6661	6938	6633	8113	7601	7941	7852
<b>PCDD/F Congeners</b>								
2,3,7,8-TCDD	4.5	3.02	3.04	6.15	11	11.6	11.1	21.7
1,2,3,7,8-PeCDD	21.5	10.7	9.71	24.1	50.1	29.4	34.7	75.2
1,2,3,4,7,8-HxCDD	22.5	10.4	8.64	25.2	32.7	14	17.8	46.7
1,2,3,6,7,8-HxCDD	48.2	21.9	17.2	52.8	73	27.4	37.4	94.9
1,2,3,7,8,9-HxCDD	44.1	19.4	15.1	42	57.3	20.1	29.6	74.6
1,2,3,4,6,7,8-HpCDD	351	155	133	402	288	115	176	589
OCDD	723	353	305	874	577	293	384	148
2,3,7,8-TCDF	96.1	83.7	54.6	101	164	242	246	544
1,2,3,7,8-PeCDF	97.8	86.1	50.7	128	103	147	169	327
2,3,4,7,8-PeCDF	179	148	92.7	207	178	200	228	452
1,2,3,4,7,8-HxCDF	164	129	76.9	228	94	82.4	111	201
1,2,3,6,7,8-HxCDF	169	141	80.9	229	100	92.5	118	222
2,3,4,6,7,8-HxCDF	227	168	99.7	272	125	90.9	113	237
1,2,3,7,8,9-HxCDF	22.6	21.6	16	29.5	11.4	8.38	13.6	15.4
1,2,3,4,6,7,8-HpCDF	617	476	268	793	248	163	313	460
1,2,3,4,7,8,9-HpCDF	99.1	97	51.3	146	30.5	19.2	26.9	56.8
OCDF	404	344	189	540	147	75.8	130	248
<b>PCDD/F Homologues</b>								
TCDDs	287	155	129	422	1460	939	775	1250
PeCDDs	778	315	242	822	1840	925	887	1850
HxCDDs	969	360	281	924	1340	478	567	1430
HpCDDs	826	339	282	894	657	258	382	1230
OCDD	723	353	305	874	577	293	384	148
TCDFs	3770	3680	2650	4780	6860	8170	7010	21700
PeCDFs	3200	3440	1910	3770	2720	3300	3810	6600
HxCDFs	2270	2060	1190	3020	1100	1010	1400	2260
HpCDFs	1110	962	531	1500	406	272	564	799
OCDF	404	344	189	540	147	75.8	130	248
<b>Total</b>								
$\Sigma$ PCDDs	3583.000	1522.000	1239.000		5874.000	2893.000	2995.000	5908.000
$\Sigma$ PCDFs	10754.000	10486.000	6470.000		11233.000	12827.800	12914.000	31607.000
$\Sigma$ PCDD/Fs	14337.000	12008.000	7709.000		17107.000	15720.800	15909.000	37515.000
$\Sigma$ TEQ (PCDD/Fs)	172.993	127.692	83.656	207.974	189.212	166.261	193.223	397.047

Table A85. Atmospheric concentrations of PCDD/Fs ( $\mu\text{g m}^{-3}$ ) at MDAMN urban sites in 2010

Station Name	Mexico City				Monterrey			
	1	2	3	4	1	2	3	4
Sampling Period								
Sampling Date	3/22/10	5/25/10	8/11/10	11/12/10	3/22/10	5/25/10	8/10/10	11/8/10
Sampling Volume (m3)	6557	7115	6285	5873	8011	7945	5773	5193
<b>PCDD/F Congeners</b>								
2,3,7,8-TCDD	4.59	2.61	2.09	8.3	50.9	29.1	27.8	21.9
1,2,3,7,8-PeCDD	15.6	8.93	7.66	34.1	177	87.7	88.3	79.7
1,2,3,4,7,8-HxCDD	15.3	8.27	7.6	35.6	107	52.3	51.2	57.9
1,2,3,6,7,8-HxCDD	29.5	17.4	17	80.7	195	101	100	108
1,2,3,7,8,9-HxCDD	27.3	15.9	16	67.4	158	83.2	80.7	92.9
1,2,3,4,6,7,8-HpCDD	224	139	150	609	559	350	334	620
OCDD	526	321	405	1340	517	447	419	1470
2,3,7,8-TCDF	83.9	38.5	31.8	157	1020	678	542	511
1,2,3,7,8-PeCDF	125	45.4	37.8	223	745	502	397	412
2,3,4,7,8-PeCDF	203	75.1	59.1	336	1090	679	533	609
1,2,3,4,7,8-HxCDF	201	76.5	59.4	405	503	286	256	341
1,2,3,6,7,8-HxCDF	228	82	61	371	563	333	292	382
2,3,4,6,7,8-HxCDF	271	97	76.2	457	509	315	275	379
1,2,3,7,8,9-HxCDF	35.3	10.5	9.89	72	46.8	29	30.1	39.6
1,2,3,4,6,7,8-HpCDF	781	289	227	1460	828	598	566	744
1,2,3,4,7,8,9-HpCDF	177	56.3	44.1	327	92.6	60.1	76.3	122
OCDF	576	199	176	1330	188	165	225	414
<b>PCDD/F Homologues</b>								
TCDDs	281	154	131	482	3220	1790	1960	1380
PeCDDs	456	246	206	1440	3770	2040	1960	1790
HxCDDs	560	314	268	1720	2630	1450	1370	1700
HpCDDs	506	299	308	1430	1110	704	666	1320
OCDD	526	321	405	1340	517	447	419	1470
TCDFs	4380	1690	1550	6940	32800	17400	15900	20300
PeCDFs	4540	1610	1300	7190	14500	9180	7700	10300
HxCDFs	3310	1060	829	5420	5020	3220	2940	4050
HpCDFs	1650	562	440	2910	1330	996	977	1360
OCDF	576	199	176	1330	188	165	225	414
<b>Total</b>								
$\Sigma$ PCDDs	2329.000	1334.000	1318.000	6412.000	11247.000	6431.000	6375.000	7660.000
$\Sigma$ PCDFs	14456.000	5121.000	4295.000	23790.000	53838.000	30961.000	27742.000	36424.000
$\Sigma$ PCDD/Fs	16785.000	6455.000	5613.000	30202.000	65085.000	37392.000	34117.000	44084.000
$\Sigma$ TEQ (PCDD/Fs)	186.121	75.038	60.888	339.221	902.438	533.575	460.566	503.225

Table A86. Atmospheric concentrations of Co-PCBs ( $\mu\text{g m}^{-3}$ ) at MDAMN remote sites in 2008

Station Name	San Pedro Mártir				Perote			
Sampling Period	1	2	3	4	1	2	3	4
Sampling Date	3/5/08	5/28/08	8/20/08	11/19/08	3/7/08	5/28/08	8/20/08	11/19/08
Sampling Volume (m3)	8361	7161	6961	6759	6856	3426	6109	5982
<b>PCB Congeners</b>								
PCB-81	0.576	1.48	1.25	0.284	3.4	1.8	<16.5	3.15
PCB-77	<8.49	29	41.9	12.4	34.4	17.8	<172	35
PCB-123	<1.87	5.41	4.27	<1.05	5.38	2.32	<28.6	5.38
PCB-118	<84.3	203	177	<42.4	275	125	<982	212
PCB-114	<3.06	7.11	6.07	<1.31	8.98	4.07	<42.6	6.76
PCB-105	<43.4	88	66.9	<11.6	111	49.9	<500	67.7
PCB-126	0.504	1.46	1.24	0.319	5.25	2.44	3.06	5.48
PCB-167	<2.1	7.24	5.29	<1.3	22.4	11.4	<67.8	31.1
PCB-156	<5.39	15.4	<3.94	<2.73	46.4	23.5	<150	56.8
PCB-157	<1.04	2.72	<0.802	<0.36	7.6	3.64	<24.8	7.36
PCB-169	0.0885	0.0615	0.117	0.0598	0.9	0.368	0.469	0.798
PCB-189	0.505	1.15	0.916	<0.34	4.65	1.4	<9.68	9.55
<b>Total</b>								
$\Sigma$ Co-PCBs	1.6735	362.0315	304.953	13.0628	525.36	243.638	3.529	441.078
$\Sigma$ TEQ (Co-PCBs)	0.058	0.161	0.14	0.037	0.571	0.264	0.396	0.588

Table A87. Atmospheric concentrations of Co-PCBs ( $\mu\text{g m}^{-3}$ ) at MDAMN remote sites in 2009

Station Name	San Pedro Mártir				Perote			
Sampling Period	1	2	3	4	1	2	3	4
Sampling Date	2/18/09	6/10/09	8/12/09		2/11/09	6/10/09	8/12/09	11/24/09
Sampling Volume (m3)	7175	6753	7031		5729	5869	6106	5793
<b>PCB Congeners</b>								
PCB-81	2.75	0.898	0.789		1.27	1.35	0.735	1.86
PCB-77	53.5	21.3	26.5		<24.5	13.9	8.07	18.4
PCB-123	5.65	2.2	2.21		<5.4	2.54	1.11	<3.91
PCB-118	139	70.3	90.9		<193	78.5	45.6	<164
PCB-114	7.32	2.96	3.07		<8.44	3.44	1.85	<6.21
PCB-105	64.9	28.2	35.8		<112	30.5	18.7	<78.2
PCB-126	0.437	0.61	0.774		2.89	1.68	0.863	1.7
PCB-167	<3.92	<2.36	2.69		12	6.1	3.17	5.12
PCB-156	<10.7	<5.49	5.3		18.4	12.2	6.33	<11.9
PCB-157	<1.73	<0.743	1.06		2.68	2.15	1.12	<1.88
PCB-169	0.063	0.093	0.099		0.478	0.244	0.125	0.273
PCB-189	<0.708	<0.584	0.529		2.93	1.19	0.733	1.85
<b>Total</b>								
$\Sigma$ Co-PCBs	273.62	126.561	169.721		40.648	153.794	88.406	29.203
$\Sigma$ TEQ (Co-PCBs)	0.059	0.07	0.088		0.317	0.181	0.093	0.189

Table A88. Atmospheric concentrations of Co-PCBs ( $\mu\text{g m}^{-3}$ ) at MDAMN remote sites in 2010

Station Name	San Pedro Mártir				Perote			
Sampling Period	1	2	3	4	1	2	3	4
Sampling Date	3/30/10	5/24/10	8/10/10	11/8/10	3/23/10	5/25/10	8/10/10	11/9/10
Sampling Volume (m3)	7447	7011	6192	6112	6052	4593	5381	6154
<b>PCB Congeners</b>								
PCB-81	<0.714	0.813	<1.61	<0.871	2.94	1.43	<1.86	3.1
PCB-77	<14.3	25.7	29.9	<12.6	39.4	18	<25.4	31.3
PCB-123	<5.82	<2.54	<6.49	QA failure	<7.17	<3.88	<7.47	7.71
PCB-118	<276	<100	<263	QA failure	<341	<153	<303	246
PCB-114	<8.79	<3.38	<9.2	QA failure	<10.8	<5.15	<10.6	10.4
PCB-105	<143	<45.2	<123	QA failure	<176	<69	<142	115
PCB-126	<0.542	0.721	0.963	<0.421	3.53	2.1	<0.812	2.79
PCB-167	<9.5	<3.7	<9.61	<6.31	<11.7	<5.65	<11.1	11.3
PCB-156	<28.4	<9.62	<24.9	<15.4	<34.9	<14.7	<28.7	24
PCB-157	<5.49	<1.57	<3.94	<2.16	<6.76	<2.4	<4.53	4.53
PCB-169	0.0505	0.0853	0.108	0.0978	0.44	0.32	0.0795	0.356
PCB-189	<0.508	<0.557	<1.33	<1.52	2.42	1.6	<1.53	1.83
<b>Total</b>								
$\Sigma$ Co-PCBs	0.0505	27.3193	30.971	0.0978	48.73	23.45	0.0795	458.316
$\Sigma$ TEQ (Co-PCBs)	0.072	0.082	0.116	NA	0.389	0.229	0.102	0.306



Table A89. Atmospheric concentrations of Co-PCBs ( $\mu\text{g m}^{-3}$ ) at MDAMN remote sites in 2011

Station Name	Perote	
Sampling Period	1	2
Sampling Date	9/9/11	11/8/11
Sampling Volume (m3)	5920	6060
<b>PCB Congeners</b>		
PCB-81	<2.63	2.322
PCB-77	<75.5	58.7
PCB-123	4.218	14.432
PCB-118	201.785	683.502
PCB-114	<6	21.431
PCB-105	<85.6	207.699
PCB-126	0.913	2.203
PCB-167	4.193	10.034
PCB-156	<9.61	20.88
PCB-157	1.781	4.167
PCB-169	0.086	0.258
PCB-189	<0.848	1.344
<b>Total</b>		
$\Sigma$ Co-PCBs	212.976	1026.972
$\Sigma$ TEQ (Co-PCBs)	0.112	0.264

Table A90. Atmospheric concentrations of Co-PCBs ( $\mu\text{g m}^{-3}$ ) at MDAMN remote sites in 2012

Station Name	Perote	
Sampling Period	1	2
Sampling Date	2/28/12	5/31/12
Sampling Volume (m3)		
<b>PCB Congeners</b>		
PCB-81	2.835	2.606
PCB-77	40.502	41.747
PCB-123	18.864	25.967
PCB-118	1025.138	1377.844
PCB-114	29.958	39.718
PCB-105	292.603	395.436
PCB-126	3.411	2.103
PCB-167	13.779	15.5
PCB-156	27.213	32.094
PCB-157	5.478	6.031
PCB-169	0.433	0.165
PCB-189	1.852	1.565
<b>Total</b>		
$\Sigma$ Co-PCBs	1462.066	1940.776
$\Sigma$ TEQ (Co-PCBs)	0.401	0.277

Table A91. Atmospheric concentrations of Co-PCBs ( $\mu\text{g m}^{-3}$ ) at MDAMN rural sites in 2008

Station Name	Montes Azules				La Campana				Vaquerias			
Sampling Period	1	2	3	4	1	2	3	4	1	2	3	4
Sampling Date		5/28/08	8/20/08	11/20/08	3/5/08	5/28/08	8/20/08	11/19/08	3/5/08	5/27/08	8/20/08	11/19/08
Sampling Volume (m3)		6234	7694	7298	8076	7602	7059	8113	7262	7662	5292	7478
<b>PCB Congeners</b>												
PCB-81		0.889	0.67	1.11	0.584	0.86	1.09	1.17	2.18	2	<2.12	1.82
PCB-77		17.7	<8.01	8.5	<8.79	15.6	17	5.27	24.2	35.3	<41.8	13.4
PCB-123		2.51	2.97	1.25	<1.96	2.4	<1.14	1.24	4.96	3.9	16.1	5.24
PCB-118		113	<69.3	44.9	<87.3	104	<44.1	34.6	380	183	680	232
PCB-114		4.06	<2.65	1.86	<3.17	3.62	<1.6	1.97	9.21	6.36	24	7.95
PCB-105		57.8	<31.5	18	<44.9	46.4	<19.1	15.3	127	81.2	282	87.9
PCB-126		1.67	0.746	0.74	0.763	1.35	0.891	1.3	3.65	2.74	2.21	2.3
PCB-167		7.23	3.12	1.72	4.01	4.33	<1.19	1.74	33.1	13.6	16.7	7.74
PCB-156		14.9	<4.57	3.37	9.68	9.92	<3.22	4.81	69.4	31.4	39.5	17.8
PCB-157		2.36	<0.928	0.654	1.9	1.91	<0.644	1	9.24	5.11	7.21	3.4
PCB-169		0.232	0.103	0.0787	0.174	0.22	0.119	0.353	0.6	0.4	0.249	0.467
PCB-189		1.72	0.558	0.384	1.02	1.02	0.623	0.969	2.79	2.78	1.96	1.97
<b>Total</b>												
$\Sigma$ Co-PCBs		224.071	8.167	82.5667	18.131	191.63	19.723	69.722	666.33	367.79	1069.929	381.987
$\Sigma$ TEQ (Co-PCBs)		0.182	0.082	0.08	0.087	0.149	0.097	0.143	0.405	0.3	0.265	0.257

Table A92. Atmospheric concentrations of Co-PCBs (pg m<sup>-3</sup>) at MDAMN rural sites in 2009

Station Name	Montes Azules				La Campana				Vaquerias			
Sampling Period	1	2	3	4	1	2	3	4	1	2	3	4
Sampling Date	2/12/09	6/10/09	8/11/09	11/23/09	2/11/09	6/10/09	8/12/09	11/23/09	2/11/09	6/10/09	8/12/09	11/24/09
Sampling Volume (m3)	8299	7607	8498	9418	7350	4272	7014	7237	8078	4435	8139	7520
<b>PCB Congeners</b>												
PCB-81	<0.776	0.385	0.608	<0.704	<0.876	0.944	0.821	0.933	2.2	2.49	1.32	2.54
PCB-77	<16.9	<5.19	6.19	<11.1	<19.1	16.3	9.72	<14.5	<17.4	28.8	14.6	<13.9
PCB-123	<3.73	<1.31	0.919	<2.4	<4.21	3.68	1.87	<3.13	<3.83	7.29	2.88	<3.01
PCB-118	<133	<52.8	28.7	<101	<150	118	79.5	<131	111	322	120	<126
PCB-114	<5.83	<1.89	1.38	<3.82	<6.58	5.86	2.67	<4.97	<5.99	10.3	4.15	<4.79
PCB-105	<77.5	<21.6	12.5	<48.1	<87.5	61.5	25.8	<62.6	<79.6	122	45.5	<60.3
PCB-126	0.295	0.857	0.602	0.39	0.47	0.792	0.881	0.607	3.12	3.69	1.24	1.89
PCB-167	<3.39	<2.09	<1.14	<2.85	<3.83	<3.72	2.231	<3.71	6.38	11.9	3.45	<3.58
PCB-156	<9.21	<4.88	<2.75	<7.31	<10.4	<8.68	4.28	<9.51	12.1	26.8	7.45	<9.15
PCB-157	<1.5	<0.659	0.393	<1.16	<1.69	<1.17	0.932	<1.51	3.11	5.71	1.52	<1.45
PCB-169	0.107	0.143	0.0642	0.065	0.184	0.112	0.15	0.188	0.945	0.675	0.197	0.475
PCB-189	<0.612	<0.518	<0.322	<0.417	<0.691	<0.923	0.471	<0.542	2.71	2.43	0.774	1.16
<b>Total</b>												
Σ Co-PCBs	0.402	1.385	51.3562	0.455	0.654	207.188	129.326	1.728	141.565	544.085	203.081	6.065
Σ TEQ (Co-PCBs)	0.042	0.093	0.064	0.047	0.063	0.091	0.097	0.075	0.349	0.408	0.137	0.212

Table A93. Atmospheric concentrations of Co-PCBs (pg m<sup>-3</sup>) at MDAMN rural sites in 2010

Station Name	Montes Azules				La Campana				Vaquerias			
Sampling Period	1	2	3	4	1	2	3	4	1	2	3	4
Sampling Date	4/12/10	5/25/10	8/13/10	11/9/10	3/22/10	5/25/10	8/9/10	11/8/10	3/24/10	6/1/10	8/10/10	11/10/10
Sampling Volume (m3)	7535	6382	9593	8462	7240	7292	7384	7473	7705	5608	5931	5650
<b>PCB Congeners</b>												
PCB-81	2.77	<0.764	<1.04	1.61	1.18	<0.669	<1.35	0.869	2.14	1.55	1.86	3
PCB-77	24.2	<13.1	<14.2	13.8	<14.7	<11.5	<18.5	<10.3	<13.8	<14.9	<23	<13.6
PCB-123	<5.76	<2.79	<4.19	<2.32	<5.99	<2.44	<5.45	<2.62	<5.63	<3.18	<6.78	<3.47
PCB-118	<273	<110	<170	<93.2	<285	<96.1	<221	<106	<267	<125	<275	<140
PCB-114	<8.69	<3.71	<5.94	<3.4	<9.05	<3.23	<7.71	<3.85	<8.5	<4.22	<9.6	<5.09
PCB-105	<141	<49.6	<79.4	<40.7	<147	<45.4	<103	<46.1	<138	<56.5	<128	<61
PCB-126	2.33	0.59	<0.456	1.86	0.897	0.936	0.6	1.03	2.83	1.74	1.43	2.16
PCB-167	<9.39	<4.07	<6.2	<4.56	<9.77	<3.56	<8.06	<5.16	<9.18	<4.63	<10	<6.83
PCB-156	<28.1	<10.6	<16.1	<11.1	<29.2	9.36	<20.9	<12.6	<27.4	<12	<26	<16.7
PCB-157	<5.43	<1.73	<2.54	<1.56	<5.65	2.1	<3.3	<1.76	<5.31	<1.97	<4.11	<2.33
PCB-169	0.444	0.105	0.0515	0.346	0.204	0.16	0.0924	0.236	0.837	0.348	0.278	0.492
PCB-189	1.17	<0.612	<0.857	<1.1	0.572	0.714	<1.11	<1.24	1.52	1.03	<1.39	<1.64
<b>Total</b>												
Σ Co-PCBs	30.914	0.695	0.0515	17.616	2.853	13.27	0.6924	2.135	7.327	4.668	3.568	5.652
Σ TEQ (Co-PCBs)	0.264	0.069	0.057	0.203	0.112	0.105	0.076	0.117	0.324	0.193	0.168	0.24

Table A94. Atmospheric concentrations of Co-PCBs ( $\mu\text{g m}^{-3}$ ) at MDAMN semirural sites in 2008

Station Name	Celestún				Coquimatlán			
	1	2	3	4	1	2	3	4
Sampling Period								
Sampling Date	3/4/08	5/28/08	8/20/08	11/19/08	3/5/08	5/28/08	8/20/08	11/19/08
Sampling Volume (m3)	8373	8724	8400	8623	8038	6955	6491	8812
<b>PCB Congeners</b>								
PCB-81	7.7	2.57	4.37	6.29	12.1	5.68	5.24	8.76
PCB-77	56.7	53	57	53.3	68	67.3	81.7	64.8
PCB-123	5.39	4.44	<1.69	6.82	6.71	7.07	7.6	5.84
PCB-118	201	167	<66.4	207	174	213	268	171
PCB-114	7.91	7.18	<2.56	9.71	10.1	11.1	12.4	9.5
PCB-105	84.5	79.1	<26.7	81	81.6	118	146	79.3
PCB-126	6.92	5	7.83	6.56	14.3	9.72	9.88	10.4
PCB-167	9.02	6.95	<1.12	4.86	8.52	10.5	9.87	9.02
PCB-156	18.7	13.3	<2.93	11.25	18.8	22.4	21.4	18.7
PCB-157	4.34	3.46	<0.531	3.23	5.89	5.74	5.5	4.68
PCB-169	1.23	0.751	1.23	1.29	3.66	2.03	1.97	2.64
PCB-189	3.1	1.82	2.54	2.72	6.14	3.58	3.17	5.24
<b>Total</b>								
$\Sigma$ Co-PCBs	406.51	344.571	72.97	394.03	409.82	476.12	572.73	389.88
$\Sigma$ TEQ (Co-PCBs)	0.747	0.537	0.83	0.712	1.56	1.053	1.071	1.137

Table A95. Atmospheric concentrations of Co-PCBs ( $\mu\text{g m}^{-3}$ ) at MDAMN semirural sites in 2009

Station Name	Celestún				Coquimatlán			
	1	2	3	4	1	2	3	4
Sampling Period								
Sampling Date	2/11/09	6/10/09	8/12/09		2/11/09	6/10/09	8/12/09	11/24/09
Sampling Volume (m3)	8137	8322	8132	0	8203	8469	9039	8494
<b>PCB Congeners</b>								
PCB-81	5.191	2.43	3.26		10.3	3.6	4.78	7.27
PCB-77	46.2	38	42.2		71.5	53.7	49.8	61
PCB-123	5.97	3.56	3.82		6.5	4.05	4.73	QA failure
PCB-118	175	124	151		QA failure	130	142	QA failure
PCB-114	8.59	5.15	6.91		QA failure	6.29	8.82	QA failure
PCB-105	72.3	58	79.7		QA failure	72.9	78.4	7.88
PCB-126	6	5.84	5.89		10.4	6	6.84	9.23
PCB-167	5.26	5.22	5.5		7.16	5.66	6.88	16.5
PCB-156	10.69	15.6	11.6		13.2	11.4	14.1	5.32
PCB-157	3.14	3.72	3.36		4.3	3.21	4	1.91
PCB-169	1.245	1.02	1.06		2.41	1.24	1.8	4.05
PCB-189	2.24	3.36	2.16		5.04	2.26	4.08	4.05
<b>Total</b>								
$\Sigma$ Co-PCBs	341.826	265.9	316.46		130.81	300.31	326.23	117.21
$\Sigma$ TEQ (Co-PCBs)	0.652	0.626	0.634		NA	0.651	0.752	NA

Table A96. Atmospheric concentrations of Co-PCBs ( $\mu\text{g m}^{-3}$ ) at MDAMN semirural sites in 2010

Station Name	Celestún				Coquimatlán			
	1	2	3	4	1	2	3	4
Sampling Period								
Sampling Date	3/23/10	5/25/10	8/10/10	11/17/10	3/25/10	5/24/10	8/9/10	11/9/10
Sampling Volume (m3)	7777	8047	9345	8807	6582	7327	6403	7368
<b>PCB Congeners</b>								
PCB-81	3.5	6.78	47	5.62	0.397	5.6	5.17	9.21
PCB-77	42.8	89	113	49.9	2.85	106	61.7	78.3
PCB-123	<5.59	7.34	7.93	2.58	<6.59	10.8	<6.28	QA failure
PCB-118	<265	209	<174	<89.5	<313	415	<255	QA failure
PCB-114	<8.43	13	25.3	5.77	2.93	16.5	<8.89	QA failure
PCB-105	<137	97.6	<81.5	<39.1	<162	247	<119	99.2
PCB-126	5.59	17.4	48.7	6.7	0.427	11.9	4.94	12.5
PCB-167	<9.11	4.63	8.94	<4.38	<10.7	13.2	<9.29	13.9
PCB-156	<27.2	14.1	34.7	<10.7	<32.1	28.7	<24.1	20.3
PCB-157	<5.27	5.62	12.6	2.96	<6.21	7.64	<3.81	6.19
PCB-169	1	2.82	12.9	1.82	0.104	2.15	0.834	2.99
PCB-189	1.74	5.2	22.2	3.91	0.236	3.78	1.96	6.68
<b>Total</b>								
$\Sigma$ Co-PCBs	54.63	472.49	333.27	79.26	6.944	868.27	74.604	249.27
$\Sigma$ TEQ (Co-PCBs)	0.608	1.846	5.293	0.736	0.062	1.289	0.54	NA

Table A97. Atmospheric concentrations of Co-PCBs ( $\mu\text{g m}^{-3}$ ) at MDAMN semirural sites in 2011

Station Name	Celestún	
	1	2
Sampling Period		
Sampling Date	8/2/11	11/8/11
Sampling Volume (m3)	7520	6596
<b>PCB Congeners</b>		
PCB-81	4.197	3.867
PCB-77	79.324	<55.3
PCB-123	3.877	3.798
PCB-118	<102	<117
PCB-114	5.883	4.775
PCB-105	55.327	<62.7
PCB-126	5.783	4.595
PCB-167	5.495	3.649
PCB-156	11.689	7.889
PCB-157	3.362	2.389
PCB-169	1.129	0.974
PCB-189	2.314	1.811
<b>Total</b>		
$\Sigma$ Co-PCBs	178.38	33.747
$\Sigma$ TEQ (Co-PCBs)	0.627	0.502

Table A98. Atmospheric concentrations of Co-PCBs ( $\mu\text{g m}^{-3}$ ) at MDAMN semirural sites in 2012

Station Name	Celestún	
Sampling Period	1	2
Sampling Date	2/21/12	5/15/12
Sampling Volume (m <sup>3</sup> )		
<b>PCB Congeners</b>		
PCB-81	9.21	3.316
PCB-77	55.458	35.913
PCB-123	4.436	21.5
PCB-118	<113	918
PCB-114	8.794	33.8
PCB-105	<45.5	371
PCB-126	17.561	4.117
PCB-167	6.599	33.9
PCB-156	16.748	76.9
PCB-157	7.631	1.918
PCB-169	4.601	0.683
PCB-189	7.646	9
<b>Total</b>		
∑ Co-PCBs	138.684	1510.047
∑ TEQ (Co-PCBs)	1.909	0.481

Table A99. Atmospheric concentrations of Co-PCBs ( $\mu\text{g m}^{-3}$ ) at MDAMN urban sites in 2008

Station Name	Mexico City				Monterrey			
Sampling Period	1	2	3	4	1	2	3	4
Sampling Date	3/5/08	5/28/08	8/20/08	11/19/08				11/26/08
Sampling Volume (m <sup>3</sup> )	7682	8570	8048	7608				8045
<b>PCB Congeners</b>								
PCB-81	47.9	115	103	155				310
PCB-77	543	1700	147	1970				1130
PCB-123	67.8	205	143	226				99.1
PCB-118	4070	9540	4670	9920				1150
PCB-114	96.3	312	219	297				97.4
PCB-105	1050	3120	1990	3160				745
PCB-126	116	190	87.2	239				340
PCB-167	677	841	350	1560				84.4
PCB-156	1420	1600	632	3250				195
PCB-157	171	222	90.8	381				76.4
PCB-169	25.9	33.6	12.9	45				57.7
PCB-189	294	276	115	768				59.5
<b>Total</b>								
∑ Co-PCBs	8578.9	18154.6	8559.9	21971				4344.5
∑ TEQ (Co-PCBs)	12.681	20.696	9.399	26.08				36.012

Table A100. Atmospheric concentrations of Co-PCBs ( $\mu\text{g m}^{-3}$ ) at MDAMN urban sites in 2009

Station Name	Mexico City				Monterrey			
Sampling Period	1	2	3	4	1	2	3	4
Sampling Date	2/11/09	6/10/09	8/12/09	11/24/09	2/11/09	6/10/09	8/12/09	11/22/09
Sampling Volume (m3)	6159	6661	6938	6633	8113	7601	7941	7852
<b>PCB Congeners</b>								
PCB-81	119	142	154	131	188	76.9	57.9	350
PCB-77	1580	1950	2250	1670	730	537	551	1350
PCB-123	130	191	206	144	64	46.3	48.6	117
PCB-118	6740	7410	7550	5560	1080	1420	1640	1880
PCB-114	204	277	311	218	70.4	67	69.8	111
PCB-105	2060	2820	3130	2130	520	957	846	879
PCB-126	195	142	129	149	187	176	158	355
PCB-167	946	557	513	413	66.4	95.5	80.5	100
PCB-156	1810	1020	934	789	152	209	171	239
PCB-157	227	139	139	127	59.4	66.5	56.6	94.6
PCB-169	42	20.4	17.5	34.5	35.5	25.3	22	51.8
PCB-189	410	179	156	178	44.3	35.5	31	64.4
<b>Total</b>								
$\Sigma$ Co-PCBs	14463	14847.4	15489.5	11543.5	3197	3712	3732.4	5591.8
$\Sigma$ TEQ (Co-PCBs)	21.33	15.427	14.084	16.428	19.956	18.523	16.621	37.399

Table A101. Atmospheric concentrations of Co-PCBs ( $\mu\text{g m}^{-3}$ ) at MDAMN urban sites in 2010

Station Name	Mexico City				Monterrey			
Sampling Period	1	2	3	4	1	2	3	4
Sampling Date	3/22/10	5/25/10	8/11/10	11/12/10	3/22/10	5/25/10	8/10/10	11/8/10
Sampling Volume (m3)	6557	7115	6285	5873	8011	7945	5773	5193
<b>PCB Congeners</b>								
PCB-81	95.3	77	88.8	134	458	160	248	409
PCB-77	1460	1301	1130	1520	2120	1060	1140	1440
PCB-123	147	139	112	358	159	76.9	79.4	119
PCB-118	5280	5116	4360	13000	1910	1620	1680	1870
PCB-114	204	205	169	611	152	90.1	95.1	120
PCB-105	1980	2021	1730	5850	1050	1140	878	870
PCB-126	135	106	83.5	205	728	502	358	364
PCB-167	378	314	257	610	133	126	103	109
PCB-156	642	545	457	1540	280	269	220	256
PCB-157	115	93	80.1	352	129	106	81.1	92.5
PCB-169	23.2	15.9	12.5	48.9	106	67.2	49	59.6
PCB-189	125	96	78.4	220	86.1	61	51.9	67.6
<b>Total</b>								
$\Sigma$ Co-PCBs	10584.5	10028.9	8558.3	24448.9	7311.1	5278.2	4983.5	5776.7
$\Sigma$ TEQ (Co-PCBs)	14.637	11.486	9.082	22.835	76.446	52.475	37.554	38.56