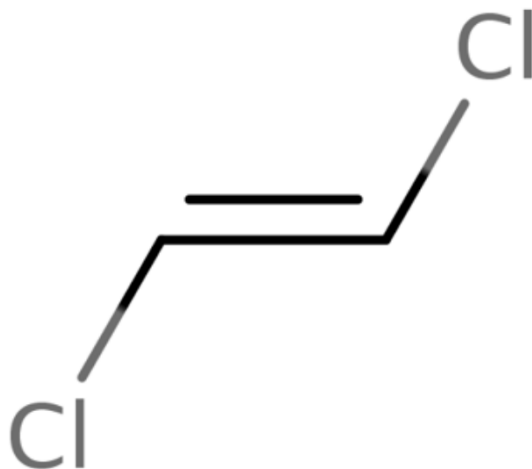

**Draft Data Extraction Information for
General Population, Consumer, and Environmental Exposure for
trans-1,2-Dichloroethylene**

Systematic Review Support Document for the Draft Risk Evaluation

CASRN: 156-60-5



July 2026

This supplemental file contains information regarding the data extraction results for data sources that met the PECO screening criteria for the *Draft Risk Evaluation for trans-1,2-Dichloroethylene (TDCE)* U.S. EPA, 2023, 11151779. EPA performs data extraction as part of the TSCA systematic review process described in the *Draft Systematic Review Protocol Supporting TSCA Risk Evaluations for Chemical Substances* U.S. EPA, 2021, 10415760. The systematic review steps are further described in the *Draft Risk Evaluation for trans-1,2-Dichloroethylene (TDCE) – Systematic Review Protocol* U.S. EPA, 2023, 11151744, referred hereafter as the “TDCE Systematic Review Protocol”

EPA conducted data quality evaluation and extraction based on author-reported descriptions and results; additional analyses (e.g., statistical analyses) potentially conducted by EPA are not contained in this supplemental file. The data extraction results herein are organized by evidence streams and media types. A reference may contain data for multiple evidence streams and/or media types and will be cited in different tables if appropriate. The media type “All Applicable Media” refers to modeled doses or intakes calculated from human biomonitoring data (e.g., urine, blood, etc.) or when the media specific to the modeled route (e.g., inhalation, oral, etc.) are not clearly defined. In the data extraction results, “POINT VALUE(S)” denotes when the author(s) did not report a minimum, maximum, mean, or any other summary statistics, but rather single reported level(s) (e.g., chemical concentration). Summary statistic values that were less than the analytical limit were substituted with “0,” “ND,” “<LOD,” and “<LOQ,” as appropriate. For further details about extraction criteria, review the TDCE Systematic Review Protocol.

Acronyms and abbreviations used within this supplemental file are defined in the table at the end of this file. The two letter country codes defined herein are consistent with those used in the searchable International Standardization Organization (ISO) 3166 standard for country codes. Finally, “NR” preceding a country code indicates that the author(s) did not report the city, state and region. This supplemental file may also be referred to as TDCE Data Extraction Information for General Population, Consumer, and Environmental Exposure.

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Table 1: Data Extraction Tables of Exposure Monitoring Studies for Ambient Air

Citation Information	Site and Data Description	Limit (LOD/LOQ)	Min	Max	Mean	Percentile	Variance
Mart� et al. 2014 HERO ID: 2517712 <i>OQD:</i> Medium	Barcelona, ES Scenario: Ambient air near closed landfill (Scenario RH2 -inhabitants of city of Cerdanyola) (n = 36; DF = NR; Sampling Period: 2014)	LOD: 0.001-10 ng LOQ: Not Reported	NR	NR	0.003 $\mu\text{g}/\text{m}^3$ (AM)	NR	0.002 $\mu\text{g}/\text{m}^3$ (ASD)
Yokouchi et al. 1996 HERO ID: 3248260 <i>OQD:</i> Medium	Alert, CA Scenario: Ambient air from roof of laboratory in remote area (continuous weekly samples) (n = 36; DF = NR; Sampling Period: Jan., 1992 - Jun., 1994)	LOD: Not Reported LOQ: Not Reported	<0.01 ppt	0.19 ppt	0.05 ppt (AM)	50th: 0.03 ppt;	NR
Ras-Mallorqui et al. 2007 HERO ID: 2443817 <i>OQD:</i> High	Tarragona Region, ES Scenario: Ambient air from industrialized area close to a petrol refinery (n = 3; DF = 0; Sampling Period: Dec., 2005 - Jan., 2006)	LOD: 0.04 $\mu\text{g}/\text{m}^3$ LOQ: 0.08 $\mu\text{g}/\text{m}^3$	NR	NR	ND	NR	NR
Ras-Mallorqui et al. 2007 HERO ID: 2443817 <i>OQD:</i> High	Tarragona Region, ES Scenario: Ambient air from industrialized area in the periphery of the South industrial complex (near low traffic road) (n = 3; DF = 0; Sampling Period: Dec., 2005 - Jan., 2006)	LOD: 0.04 $\mu\text{g}/\text{m}^3$ LOQ: 0.08 $\mu\text{g}/\text{m}^3$	NR	NR	ND	NR	NR
Ras-Mallorqui et al. 2007 HERO ID: 2443817 <i>OQD:</i> High	Tarragona Region, ES Scenario: Ambient air from industrialized area inside the South industrial complex (away from roads) (n = 3; DF = 0; Sampling Period: Dec., 2005 - Jan., 2006)	LOD: 0.04 $\mu\text{g}/\text{m}^3$ LOQ: 0.08 $\mu\text{g}/\text{m}^3$	NR	NR	ND	NR	NR
Ras-Mallorqui et al. 2007 HERO ID: 2443817 <i>OQD:</i> High	Tarragona Region, ES Scenario: Ambient air from urban area of Imperial Tarraco Square (high traffic) (n = 6; DF = 0; Sampling Period: Dec., 2005 - Jan., 2006)	LOD: 0.04 $\mu\text{g}/\text{m}^3$ LOQ: 0.08 $\mu\text{g}/\text{m}^3$	NR	NR	ND	NR	NR
Ras-Mallorqui et al. 2007 HERO ID: 2443817 <i>OQD:</i> High	Tarragona Region, ES Scenario: Ambient air from urban area of Pla de la Seu (historical center, closed to traffic) (n = 6; DF = 0; Sampling Period: Dec., 2005 - Jan., 2006)	LOD: 0.04 $\mu\text{g}/\text{m}^3$ LOQ: 0.08 $\mu\text{g}/\text{m}^3$	NR	NR	ND	NR	NR
Ras-Mallorqui et al. 2007 HERO ID: 2443817 <i>OQD:</i> High	Tarragona Region, ES Scenario: Ambient air from urban area of Carros Square (close to port, medium traffic) (n = 6; DF = 0; Sampling Period: Dec., 2005 - Jan., 2006)	LOD: 0.04 $\mu\text{g}/\text{m}^3$ LOQ: 0.08 $\mu\text{g}/\text{m}^3$	NR	NR	ND	NR	NR
Ras-Mallorqui et al. 2007 HERO ID: 2443817 <i>OQD:</i> High	Tarragona Region, ES Scenario: Ambient air from urban area of Rambla Nova (commercial and residential, low traffic) (n = 6; DF = 0; Sampling Period: Dec., 2005 - Jan., 2006)	LOD: 0.04 $\mu\text{g}/\text{m}^3$ LOQ: 0.08 $\mu\text{g}/\text{m}^3$	NR	NR	ND	NR	NR
Scheepers et al. 2019 HERO ID: 5433717 <i>OQD:</i> High	Tilburg, NL Scenario: Outdoor air on rooftop of former dry cleaning shop with historic soil contamination (during warm season) (n = 7; DF = 0; Sampling Period: Jun., 2016)	LOD: 0.05 $\mu\text{g}/\text{m}^3$ LOQ: Not Reported	NR	NR	<LOD	NR	NR

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Monitoring

Drinking Water

Table 2: Data Extraction Tables of Exposure Monitoring Studies for Drinking Water

Citation Information	Site and Data Description	Limit (LOD/LOQ)	Min	Max	Mean	Percentile	Variance
Kingsbury et al. 2008 HERO ID: 3364193 <i>OQD:</i> High	Clackamas River, OR; Truckee River, CA; Cache la Poudre River, CO; Elm Fork Trinity River, TX; Chattahoochee River, GA; White River, IN; Potomac River, VA; Running Gutter Brook, MA; Neuse River, NC, US Scenario: Source drinking water (plant intake) samples at United States CWS - Oct 2002-March 2004 (n = 147; DF = 0; Sampling Period: Oct., 2002 - Mar., 2004)	LOD: 0.032 $\mu\text{g/L}$ LOQ: Not Reported	NR	NR	ND	NR	NR
Hopple et al. 2009 HERO ID: 3975066 <i>OQD:</i> High	Various locations, US Scenario: Finished water from principal aquifers across the United States (n = 71; DF = 0.056; Sampling Period: Jun., 2004 - Sept., 2005)	LOD: Not Reported LOQ: 0.032 $\mu\text{g/L}$	NR	0.15 $\mu\text{g/L}$	NR	NR	NR

Table 3: Data Extraction Tables of Exposure Monitoring Studies for Groundwater

Citation Information	Site and Data Description	Limit (LOD/LOQ)	Min	Max	Mean	Percentile	Variance
Fan et al. 2009 HERO ID: 631540 <i>OQD:</i> Medium	Taiwan, TW Scenario: Groundwater from a well near drinking water treatment plant (W1-10) (n = 60; DF = 0; Sampling Period: Apr., 2005 - Oct., 2005)	LOD: Not Reported LOQ: Not Reported	NR	NR	<LOD	NR	NR
Schrab et al. 1993 HERO ID: 661846 <i>OQD:</i> Low	Eastern, US Scenario: Groundwater (G-3) near municipal solid waste landfill (n = 3; DF = 0; Sampling Period: 1993)	LOD: Not Reported LOQ: Not Reported	NR	NR	Trace μg/L (AM)	NR	NR
Sabel et al. 1984 HERO ID: 724484 <i>OQD:</i> Medium	Minnesota, US Scenario: Groundwater from landfill sites with unknown or good water quality (n = 7; DF = 0.57; Sampling Period: 1984)	LOD: Not Reported LOQ: Not Reported	0.2 μg/L	7.6 μg/L	NR	NR	NR
Sabel et al. 1984 HERO ID: 724484 <i>OQD:</i> Medium	Minnesota, US Scenario: Groundwater from landfill sites with suggested leachate contamination (n = 13; DF = 0.23; Sampling Period: 1984)	LOD: Not Reported LOQ: Not Reported	0.6 μg/L	98 μg/L	NR	NR	NR
Enwright Associates et al. 1985 HERO ID: 1335577 <i>OQD:</i> Medium	Virginia, US Scenario: Groundwater from Allied Corporation, Chesterfield Plant (non-detects excluded) (n = 20; DF = 0.25; Sampling Period: Feb., 1984)	LOD: 0.5 μg/L LOQ: Not Reported	POINT VALUE(S): [5.9 μg/L; 7.9 μg/L; 1.1 μg/L; 1.0 μg/L; 1.3 μg/L; ND; ND; ND; ND; ND; ND; ND; ND; ND; ND; ND; ND; ND; ND; ND; ND]				
Westinghouse Savannah River Company et al. 1997 HERO ID: 1740826 <i>OQD:</i> Medium	South Carolina, US Scenario: Groundwater monitoring wells in a landfill (non-detects excluded) (n = 32; DF = 0.03; Sampling Period: 1995 - 1996)	LOD: 0.05-2 μg/L LOQ: Not Reported	NR	0.1 μg/L	NR	NR	NR
Williams et al. 1984 HERO ID: 5096383 <i>OQD:</i> Medium	Canada, CA Scenario: Groundwater from monitoring wells (A) downgradient municipal and industrial waste landfill sites (n = 7; DF = 0.857; Sampling Period: May, 1982 - Jun., 1982)	LOD: Not Reported LOQ: Not Reported	POINT VALUE(S): [ND; 308 μg/L; 318 μg/L; 314 μg/L; 242 μg/L; 229 μg/L; 13.6 μg/L]				
Roy F. Weston Inc et al. 1986 HERO ID: 5436115 <i>OQD:</i> Medium	Burlington, VT, US Scenario: Groundwater from Fire Department Training Area and old landfill at Burlington Air National Guard Base (n = 8; DF = 0.5; Sampling Period: Sept., 1984)	LOD: 5 μg/L LOQ: Not Reported	POINT VALUE(S): [<LOD; 5 μg/L; 170 μg/L; <LOQ; <LOD; 2700 μg/L; <LOD; <LOD]				
Buzska et al. 1987 HERO ID: 5436763 <i>OQD:</i> Medium	Kinney county, Texas; Uvalde county, Texas; Madina county, Texas; Bexar county, Texas; and Hays county, Texas, USA, US Scenario: Groundwater from irrigated and dry-farmed cropland - subarea 1 (n = 8; DF = 0; Sampling Period: Jan., 1976 - Mar., 1985)	LOD: Not Reported LOQ: Not Reported	NR	NR	<LOD	NR	NR

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Table 3 – continued from previous page

Citation Information	Site and Data Description	Limit (LOD/LOQ)	Min	Max	Mean	Percentile	Variance
Buzska et al. 1987 HERO ID: 5436763 <i>OQD: Medium</i>	Kinney county, Texas; Uvalde county, Texas; Madina county, Texas; Bexar county, Texas; and Hays county, Texas, USA, US Scenario: Groundwater from commercial, residential, and light industrial development associated with San Antonio and suburbs (n = 11; DF = 0.27; Sampling Period: Jan., 1976 - Mar., 1985)	LOD: Not Reported LOQ: Not Reported	NR	7.9 μg/L	NR	50th: 2.1 μg/L; 75th: 2.4 μg/L;	NR
Buzska et al. 1987 HERO ID: 5436763 <i>OQD: Medium</i>	Bexar county, Texas, US Scenario: Groudwater from Austin Group Aquifer wells near abandoned West Avenue Landfill with known contamination (n = 8; DF = 1.0; Sampling Period: 1982 - 1984)	LOD: Not Reported LOQ: Not Reported	5.0 μg/L	110.0 μg/L	NR	25th: 25.0 μg/L; 50th: 28.5 μg/L; 75th: 34.0 μg/L; 90th: 110.0 μg/L;	NR
Buzska et al. 1987 HERO ID: 5436763 <i>OQD: Medium</i>	Kinney county, Texas; Uvalde county, Texas; Madina county, Texas; Bexar county, Texas; and Hays county, Texas, USA, US Scenario: Groundwater from 56 wells and springs that receive direct recharge from land surface except in parts of confined zone with measured tritium (>20 tritium units) (n = 39; DF = 0; Sampling Period: Jan., 1976 - Mar., 1985)	LOD: Not Reported LOQ: Not Reported	NR	NR	<LOD	NR	NR
Buzska et al. 1987 HERO ID: 5436763 <i>OQD: Medium</i>	Kinney county, Texas; Uvalde county, Texas; Madina county, Texas; Bexar county, Texas; and Hays county, Texas, USA, US Scenario: Groundwater from commercial, residential, and light industrial development associated with all other cities and towns - small city, urban subarea 1 (n = 6; DF = 0; Sampling Period: Jan., 1976 - Mar., 1985)	LOD: Not Reported LOQ: Not Reported	NR	NR	<LOD	NR	NR
Buzska et al. 1987 HERO ID: 5436763 <i>OQD: Medium</i>	Kinney county, Texas; Uvalde county, Texas; Madina county, Texas; Bexar county, Texas; and Hays county, Texas, USA, US Scenario: Groundwater from industrial sites including rock quarries, power-generating stations, and cement plants - industrial subarea 1 (n = 5; DF = 0; Sampling Period: Jan., 1976 - Mar., 1985)	LOD: Not Reported LOQ: Not Reported	NR	NR	<LOD	NR	NR
Buzska et al. 1987 HERO ID: 5436763 <i>OQD: Medium</i>	Kinney county, Texas; Uvalde county, Texas; Madina county, Texas; Bexar county, Texas; and Hays county, Texas, USA, US Scenario: Groundwater from commercial, residential, and light industrial development associated with all other cities and towns - large city, urban subarea 1 (n = 16; DF = 0; Sampling Period: Jan., 1976 - Mar., 1985)	LOD: Not Reported LOQ: Not Reported	NR	NR	<LOD	NR	NR

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Monitoring

Groundwater

Table 3 – continued from previous page

Citation Information	Site and Data Description	Limit (LOD/LOQ)	Min	Max	Mean	Percentile	Variance
Buzska et al. 1987 HERO ID: 5436763 <i>OQD: Medium</i>	Kinney county, Texas; Uvalde county, Texas; Madina county, Texas; Bexar county, Texas; and Hays county, Texas, USA, US Scenario: Groundwater from scrub forest and grass-covered ground generally undeveloped or used for livestock grazing - subarea 1 (n = 4; DF = 0; Sampling Period: Jan., 1976 - Mar., 1985)	LOD: Not Reported LOQ: Not Reported	NR	NR	<LOD	NR	NR
Buzska et al. 1987 HERO ID: 5436763 <i>OQD: Medium</i>	Kinney county, Texas; Uvalde county, Texas; Madina county, Texas; Bexar county, Texas; and Hays county, Texas, USA, US Scenario: Groundwater from commercial, residential, and light industrial development associated with all other cities and towns - small city, urban subarea 2 (n = 9; DF = 0; Sampling Period: Jan., 1976 - Mar., 1985)	LOD: Not Reported LOQ: Not Reported	NR	NR	<LOD	NR	NR
Buzska et al. 1987 HERO ID: 5436763 <i>OQD: Medium</i>	Kinney county, Texas; Uvalde county, Texas; Madina county, Texas; Bexar county, Texas; and Hays county, Texas, USA, US Scenario: Groundwater from industrial sites including rock quarries, power-generating stations, and cement plants - industrial subarea 2 (n = 12; DF = 0; Sampling Period: Jan., 1976 - Mar., 1985)	LOD: Not Reported LOQ: Not Reported	NR	NR	<LOD	NR	NR
Buzska et al. 1987 HERO ID: 5436763 <i>OQD: Medium</i>	Kinney county, Texas; Uvalde county, Texas; Madina county, Texas; Bexar county, Texas; and Hays county, Texas, USA, US Scenario: Groundwater from irrigated and dry-farmed cropland - subarea 2 (n = 12; DF = 0; Sampling Period: Jan., 1976 - Mar., 1985)	LOD: Not Reported LOQ: Not Reported	NR	NR	<LOD	NR	NR
Buzska et al. 1987 HERO ID: 5436763 <i>OQD: Medium</i>	Kinney county, Texas; Uvalde county, Texas; Madina county, Texas; Bexar county, Texas; and Hays county, Texas, USA, US Scenario: Groundwater from scrub forest and grass-covered ground generally undeveloped or used for livestock grazing - subarea 2 (n = 4; DF = 0; Sampling Period: Jan., 1976 - Mar., 1985)	LOD: Not Reported LOQ: Not Reported	NR	NR	<LOD	NR	NR
Heck et al. 1992 HERO ID: 5438509 <i>OQD: Medium</i>	Reno County, Kansas, US Scenario: Groundwater from private wells near Reno County Landfill (n = 5; DF = 0; Sampling Period: Aug., 1990)	LOD: Not Reported LOQ: 0.2 µg/L	NR	NR	<LOQ	NR	NR
Heck et al. 1992 HERO ID: 5438509 <i>OQD: Medium</i>	Reno County, Kansas, US Scenario: Groundwater from monitoring wells near Reno County Landfill (n = 8; DF = 0.38; Sampling Period: Aug., 1990)	LOD: Not Reported LOQ: 0.2 µg/L	POINT VALUE(S): [9.7 µg/L; <LOQ; 30 µg/L; <LOQ; <LOQ; 1.8 µg/L; <LOQ; <LOQ]				

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Monitoring

Groundwater

Table 3 – continued from previous page

Citation Information	Site and Data Description	Limit (LOD/LOQ)	Min	Max	Mean	Percentile	Variance
Bigsby et al. 1989 HERO ID: 5449639 <i>OQD:</i> Uninformative	Near Junction City in northeast Kansas (Geary County), US Scenario: Groundwater upgradient of Geary county landfill (n = 1; DF = 0; Sampling Period: Oct., 1988 - Sept., 1988)	LOD: 0.5 µg/L LOQ: Not Reported	POINT VALUE(S): [<LOD]				
Bigsby et al. 1989 HERO ID: 5449639 <i>OQD:</i> Uninformative	Near Junction City in northeast Kansas (Geary County), US Scenario: Groundwater downgradient of Geary county landfill (n = 6; DF = 0.5; Sampling Period: Oct., 1988 - Sept., 1988)	LOD: 0.5 µg/L LOQ: Not Reported	POINT VALUE(S): [<LOD; 5.4 µg/L; <LOD; <LOD; 16.1 µg/L; 1.8 µg/L]				
Hopple et al. 2009 HERO ID: 3975066 <i>OQD:</i> High	Various locations, US Scenario: Groundwater from principal aquifers across the United States (n = 221; DF = 0.018; Sampling Period: Oct., 2002 - Jul., 2005)	LOD: Not Reported LOQ: 0.032 µg/L	NR	0.11 µg/L	NR	NR	NR
Hopple et al. 2009 HERO ID: 3975066 <i>OQD:</i> High	Various locations, US Scenario: Source water (resampled) from principal aquifers across the United States (n = 71; DF = 0.042; Sampling Period: Jun., 2004 - Sept., 2005)	LOD: Not Reported LOQ: 0.032 µg/L	NR	0.18 µg/L	NR	NR	NR

Table 4: Data Extraction Tables of Exposure Monitoring Studies for Human Biomonitoring

Citation Information	Site and Data Description	Limit (LOD/LOQ)	Min	Max	Mean	Percentile	Variance
Scheepers et al. 2019 HERO ID: 5433717 <i>OQD:</i> High	Tilburg, NL Scenario: Person A: Monday pre-shift end-exhaled air of a worker in a building with historic soil contamination from former drycleaning operations (during warm season) (n = 5; DF = 0; Sampling Period: Jun., 2016)	LOD: 0.7 ng/L LOQ: Not Reported	NR	NR	<LOD	NR	NR
Scheepers et al. 2019 HERO ID: 5433717 <i>OQD:</i> High	Tilburg, NL Scenario: Person A: Friday post-shift end-exhaled air of a worker in a building with historic soil contamination from former drycleaning operations (during warm season) (n = 5; DF = 0; Sampling Period: Jun., 2016)	LOD: 0.7 ng/L LOQ: Not Reported	NR	NR	<LOD	NR	NR
Scheepers et al. 2019 HERO ID: 5433717 <i>OQD:</i> High	Tilburg, NL Scenario: Person B: Monday pre-shift end-exhaled air of a worker in a building with historic soil contamination from former drycleaning operations (during warm season) (n = 5; DF = 0; Sampling Period: Jun., 2016)	LOD: 0.7 ng/L LOQ: Not Reported	NR	NR	<LOD	NR	NR
Scheepers et al. 2019 HERO ID: 5433717 <i>OQD:</i> High	Tilburg, NL Scenario: Person A: Monday pre-shift end-exhaled air of a worker in a building with historic soil contamination from former drycleaning operations (during cold season) (n = 5; DF = NR; Sampling Period: Dec., 2017)	LOD: 0.7 ng/L LOQ: Not Reported	NR	NR	2.02 ng/L (AM)	NR	NR
Scheepers et al. 2019 HERO ID: 5433717 <i>OQD:</i> High	Tilburg, NL Scenario: Person A: Friday post-shift end-exhaled air of a worker in a building with historic soil contamination from former drycleaning operations (during cold season) (n = 5; DF = 0; Sampling Period: Dec., 2017)	LOD: 0.7 ng/L LOQ: Not Reported	NR	NR	<LOD	NR	NR
Scheepers et al. 2019 HERO ID: 5433717 <i>OQD:</i> High	Tilburg, NL Scenario: Person B: Monday pre-shift end-exhaled air of a worker in a building with historic soil contamination from former drycleaning operations (during cold season) (n = 5; DF = NR; Sampling Period: Dec., 2017)	LOD: 0.7 ng/L LOQ: Not Reported	NR	NR	1.20 ng/L (AM)	NR	NR
Scheepers et al. 2019 HERO ID: 5433717 <i>OQD:</i> High	Tilburg, NL Scenario: Person B: Friday post-shift end-exhaled air of a worker in a building with historic soil contamination from former drycleaning operations (during cold season) (n = 5; DF = 0; Sampling Period: Dec., 2017)	LOD: 0.7 ng/L LOQ: Not Reported	NR	NR	<LOD	NR	NR
Scheepers et al. 2019 HERO ID: 5433717 <i>OQD:</i> High	Tilburg, NL Scenario: Person B: Friday post-shift end-exhaled air of a worker in a building with historic soil contamination from former drycleaning operations (during warm season) (n = 5; DF = 0; Sampling Period: Jun., 2016)	LOD: 0.7 ng/L LOQ: Not Reported	NR	NR	<LOD	NR	NR

Table 5: Data Extraction Tables of Exposure Monitoring Studies for Indoor Air

Citation Information	Site and Data Description	Limit (LOD/LOQ)	Min	Max	Mean	Percentile	Variance
Scheepers et al. 2019 HERO ID: 5433717 OQD: High	Tilburg, NL Scenario: Indoor air in crawl space of former dry cleaning shop with historic soil contamination (during warm season) (n = 7; DF = 0; Sampling Period: Jun., 2016)	LOD: 0.05 $\mu\text{g}/\text{m}^3$ LOQ: Not Reported	NR	NR	<LOD	NR	NR
Scheepers et al. 2019 HERO ID: 5433717 OQD: High	Tilburg, NL Scenario: Indoor air in crawl space of former dry cleaning shop with historic soil contamination (during cold season) (n = 4; DF = 0; Sampling Period: Dec., 2017)	LOD: 0.05 $\mu\text{g}/\text{m}^3$ LOQ: Not Reported	NR	NR	<LOD	NR	NR
Scheepers et al. 2019 HERO ID: 5433717 OQD: High	Tilburg, NL Scenario: Indoor air in shop front area of former dry cleaning shop with historic soil contamination (during warm season) (n = 7; DF = 0; Sampling Period: Jun., 2016)	LOD: 0.05 $\mu\text{g}/\text{m}^3$ LOQ: Not Reported	NR	NR	<LOD	NR	NR
Scheepers et al. 2019 HERO ID: 5433717 OQD: High	Tilburg, NL Scenario: Indoor air in shop middle area of former dry cleaning shop with historic soil contamination (during warm season) (n = 7; DF = 0; Sampling Period: Jun., 2016)	LOD: 0.05 $\mu\text{g}/\text{m}^3$ LOQ: Not Reported	NR	NR	<LOD	NR	NR
Scheepers et al. 2019 HERO ID: 5433717 OQD: High	Tilburg, NL Scenario: Indoor air in shop middle area of former dry cleaning shop with historic soil contamination (during cold season) (n = 4; DF = 0; Sampling Period: Dec., 2017)	LOD: 0.05 $\mu\text{g}/\text{m}^3$ LOQ: Not Reported	NR	NR	<LOD	NR	NR
Scheepers et al. 2019 HERO ID: 5433717 OQD: High	Tilburg, NL Scenario: Indoor air in shop back area of former dry cleaning shop with historic soil contamination (during warm season) (n = 7; DF = 0; Sampling Period: Jun., 2016)	LOD: 0.05 $\mu\text{g}/\text{m}^3$ LOQ: Not Reported	NR	NR	<LOD	NR	NR
Scheepers et al. 2019 HERO ID: 5433717 OQD: High	Tilburg, NL Scenario: Indoor air in office area of former dry cleaning shop with historic soil contamination (during warm season) (n = 7; DF = 0; Sampling Period: Jun., 2016)	LOD: 0.05 $\mu\text{g}/\text{m}^3$ LOQ: Not Reported	NR	NR	<LOD	NR	NR
Scheepers et al. 2019 HERO ID: 5433717 OQD: High	Tilburg, NL Scenario: Indoor air in office area of former dry cleaning shop with historic soil contamination (during cold season) (n = 4; DF = 0; Sampling Period: Dec., 2017)	LOD: 0.05 $\mu\text{g}/\text{m}^3$ LOQ: Not Reported	NR	NR	<LOD	NR	NR
Scheepers et al. 2019 HERO ID: 5433717 OQD: High	Tilburg, NL Scenario: Indoor air in storage room of former dry cleaning shop with historic soil contamination (during warm season) (n = 7; DF = 0; Sampling Period: Jun., 2016)	LOD: 0.05 $\mu\text{g}/\text{m}^3$ LOQ: Not Reported	NR	NR	<LOD	NR	NR

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Monitoring

Indoor Air

Table 5 – continued from previous page

Citation Information	Site and Data Description	Limit (LOD/LOQ)	Min	Max	Mean	Percentile	Variance
Scheepers et al. 2019 HERO ID: 5433717 <i>OQD:</i> High	Tilburg, NL Scenario: Indoor air in storage room of former dry cleaning shop with historic soil contamination (during cold season) (n = 4; DF = 0; Sampling Period: Dec., 2017)	LOD: 0.05 μg/m ³ LOQ: Not Reported	NR	NR	<LOD	NR	NR

trans-1,2-Dichloroethylene

Monitoring

Other

Table 6: Data Extraction Tables of Exposure Monitoring Studies for Other

Citation Information	Site and Data Description	Limit (LOD/LOQ)	Min	Max	Mean	Percentile	Variance
Schrab et al. 1993 HERO ID: 661846 <i>OQD:</i> Low	Eastern, US Scenario: Leachate (L-2) from municipal solid waste landfill (n = 2; DF = 0; Sampling Period: 1993)	LOD: Not Reported LOQ: Not Reported	NR	NR	Trace μg/L (AM)	NR	NR
Schrab et al. 1993 HERO ID: 661846 <i>OQD:</i> Low	Eastern, US Scenario: Leachate (L-3) from municipal solid waste landfill (n = 3; DF = 0.67; Sampling Period: 1993)	LOD: Not Reported LOQ: Not Reported	0 μg/L	6582 μg/L	4616 μg/L (AM)	NR	NR
Sabel et al. 1984 HERO ID: 724484 <i>OQD:</i> Medium	Minnesota, US Scenario: Leachates from municipal solid waste landfill leachate collection systems (n = 6; DF = 0.5; Sampling Period: 1984)	LOD: Not Reported LOQ: Not Reported	3.8 μg/L	88 μg/L	NR	NR	NR

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Monitoring

Soil

Table 7: Data Extraction Tables of Exposure Monitoring Studies for Soil

Citation Information	Site and Data Description	Limit (LOD/LOQ)	Min	Max	Mean	Percentile	Variance
Mart ^Å et al. 2014 HERO ID: 2517712 <i>OQD:</i> Medium	Barcelona, ES Scenario: Soil gas outside closed landfill (Scenario RH4 & 6 - future residential and industrial/commercial spaces) (n = 4; DF = NR; Sampling Period: Jun., 2012)	LOD: 0.001-10 ng LOQ: Not Reported	NR	NR	0.04 $\mu\text{g}/\text{m}^3$ (AM)	NR	0.01 $\mu\text{g}/\text{m}^3$ (ASD)
Mart ^Å et al. 2014 HERO ID: 2517712 <i>OQD:</i> Medium	Barcelona, ES Scenario: Soil gas outside closed landfill (Scenario RH5 - future kindergarten) (n = 3; DF = NR; Sampling Period: Jun., 2012)	LOD: 0.001-10 ng LOQ: Not Reported	NR	NR	ND	NR	ND ug/m^3 (ASD)

Table 8: Data Extraction Tables of Exposure Monitoring Studies for Surface Water

Citation Information	Site and Data Description	Limit (LOD/LOQ)	Min	Max	Mean	Percentile	Variance
Enwright Associates et al. 1985 HERO ID: 1335577 <i>OQD:</i> Medium	Virginia, US Scenario: Raw intake water supplied to Allied Corporation, Chesterfield Plant (n = 6; DF = 0; Sampling Period: Feb., 1984)	LOD: 0.5 µg/L LOQ: Not Reported	NR	NR	ND	NR	NR
Ellis et al. 2007 HERO ID: 3544475 <i>OQD:</i> Medium	Birmingham, GB Scenario: River Tame surface water downstream the Birmingham Triassic sandstone aquifer effluent (n = 35; DF = 0.147; Sampling Period: 2001)	LOD: 0.1 µg/L LOQ: Not Reported	NR	3.04 µg/L	0.13 µg/L (AM)	NR	NR
Roy F. Weston Inc et al. 1986 HERO ID: 5436115 <i>OQD:</i> Medium	Burlington, VT, US Scenario: Surface water from Fire Department Training Area and old landfill at Burlington Air National Guard Base (n = 3; DF = 0; Sampling Period: Sept., 1984)	LOD: 5.0 µg/L LOQ: Not Reported	NR	NR	<LOD	NR	NR
Roy F. Weston Inc et al. 1986 HERO ID: 5436115 <i>OQD:</i> Medium	Burlington, VT, US Scenario: Surface Water from Construction Landfill at Burlington Air National Guard Base (n = 3; DF = 0; Sampling Period: Sept., 1984)	LOD: 5.0 µg/L LOQ: Not Reported	NR	NR	<LOD	NR	NR
Bigsby et al. 1989 HERO ID: 5449639 <i>OQD:</i> Uninformative	Near Junction City in northeast Kansas (Geary County), US Scenario: Surface water from Smokey Hill River (n = 3; DF = 0; Sampling Period: Sept., 1988)	LOD: 0.5 µg/L LOQ: Not Reported	NR	NR	<LOD	NR	NR
Hunt et al. 2007 HERO ID: 5438705 <i>OQD:</i> High	Sydney, AU Scenario: Surface water from centre of inner estuary (Site 9, pooled) (n = 5; DF = NR; Sampling Period: 2004 - 2005)	LOD: Not Reported LOQ: Not Reported	NR	NR	1.02 µg/L (AM)	NR	NR
Hunt et al. 2007 HERO ID: 5438705 <i>OQD:</i> High	Sydney, AU Scenario: Surface water from outer estuary at new boat ramp on southern shore (Site 8) (n = 13; DF = NR; Sampling Period: 2004 - 2005)	LOD: Not Reported LOQ: Not Reported	NR	NR	0.87 µg/L (AM)	NR	NR
Hunt et al. 2007 HERO ID: 5438705 <i>OQD:</i> High	Sydney, AU Scenario: Surface water from estuary at north shoreline (Site 7) (n = 9; DF = NR; Sampling Period: 2004 - 2005)	LOD: Not Reported LOQ: Not Reported	NR	NR	1.53 µg/L (AM)	NR	NR
Hunt et al. 2007 HERO ID: 5438705 <i>OQD:</i> High	Sydney, AU Scenario: Surface water from inner estuary at old boat ramp (Site 6) (n = 13; DF = NR; Sampling Period: 2004 - 2005)	LOD: Not Reported LOQ: Not Reported	NR	NR	4.13 µg/L (AM)	NR	NR
Hunt et al. 2007 HERO ID: 5438705 <i>OQD:</i> High	Sydney, AU Scenario: Surface water from Penrhyn estuary at discharge point of Floodvale Drain (Site 5) (n = 13; DF = NR; Sampling Period: 2004 - 2005)	LOD: Not Reported LOQ: Not Reported	NR	NR	3.56 µg/L (AM)	NR	NR

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Monitoring

Surface Water

Table 8 – continued from previous page

Citation Information	Site and Data Description	Limit (LOD/LOQ)	Min	Max	Mean	Percentile	Variance
Hunt et al. 2007 HERO ID: 5438705 <i>OQD:</i> High	Sydney, AU Scenario: Surface water from Upper Penrhyn Estuary (Site 4) (n = 13; DF = NR; Sampling Period: 2004 - 2005)	LOD: Not Reported LOQ: Not Reported	NR	NR	9.75 μg/L (AM)	NR	NR
Hunt et al. 2007 HERO ID: 5438705 <i>OQD:</i> High	Sydney, AU Scenario: Surface water from Penrhyn estuary at discharge point of Springvale Drain (Site 3) (n = 9; DF = NR; Sampling Period: 2004 - 2005)	LOD: Not Reported LOQ: Not Reported	NR	NR	19.5 μg/L (AM)	NR	NR
Hunt et al. 2007 HERO ID: 5438705 <i>OQD:</i> High	Sydney, AU Scenario: Surface water from an upstream source area of Floodvale Drain (Site 2) (n = 5; DF = NR; Sampling Period: 2004 - 2005)	LOD: Not Reported LOQ: Not Reported	NR	NR	11.4 μg/L (AM)	NR	NR
Hunt et al. 2007 HERO ID: 5438705 <i>OQD:</i> High	Sydney, AU Scenario: Surface water from an upstream source area of Springvale Drain (Site 1) (n = 13; DF = NR; Sampling Period: 2004 - 2005)	LOD: Not Reported LOQ: Not Reported	NR	NR	23.5 μg/L (AM)	NR	NR

trans-1,2-Dichloroethylene

Monitoring

Wastewater

Table 9: Data Extraction Tables of Exposure Monitoring Studies for Wastewater

Citation Information	Site and Data Description	Limit (LOD/LOQ)	Min	Max	Mean	Percentile	Variance
Bell et al. 1993 HERO ID: 658661 <i>OQD:</i> Medium	Ontario, CA Scenario: Wastewater off-gas from Skyway in Burlington (n = 4; DF = 0; Sampling Period: 1993)	LOD: 1.0 $\mu\text{g}/\text{m}^3$ LOQ: Not Reported	NR	NR	ND	NR	NR
Bell et al. 1993 HERO ID: 658661 <i>OQD:</i> Medium	Ontario, CA Scenario: Wastewater off-gas from Highland Creek in Metropolitan Toronto (n = 4; DF = 0; Sampling Period: 1993)	LOD: 1.0 $\mu\text{g}/\text{m}^3$ LOQ: Not Reported	NR	NR	ND	NR	NR
Enwright Associates et al. 1985 HERO ID: 1335577 <i>OQD:</i> Medium	Virginia, US Scenario: Chemical pond wastewater from Allied Corporation, Chesterfield Plant (n = 38; DF = 0; Sampling Period: Feb., 1984)	LOD: 0.5 $\mu\text{g}/\text{L}$ LOQ: Not Reported	NR	NR	ND	NR	NR

Glossary of Select Terms for Data Extraction Tables

Table 10: Glossary of Select Terms for Data Extraction

Term	Definition
/day	per day
μ-	micro-
AM	Arithmetic Mean
ASD	Arithmetic Standard Deviation
AU	Australia
BDL	Below Detection Limit
BW	Bodyweight
CA	Canada
CA, US	California
CO	Colorado
CV	Coefficient of Variation
CWS	Community Water System
DF	Detection Frequency
DWTP	Drinking Water Treatment Plant
EPA	Environmental Protection Agency
ES	Spain
ft ²	feet squared
g	gram
GA	Georgia
GB	Great Britain
GM	Geometric Mean
h	hour
IN	Indiana
ISO	International Organization for Standardization
k-	kilo-
L	Liter
LOD	Limit of Detection
LOQ	Limit of Quantification
m	meter
m-	milli-
m ²	square meter
m ³	cubic meter
MA	Massachusetts
MDL	Method Detection Limit
mol	mole
MRL	Method Reporting Limit
n	Sample Size
n-	nano-
NC	North Carolina
ND	Non-Detect
NL	Netherlands
NR	Not Reported
OQD	Overall Quality Determination
OR	Oregon
p-	pico-
PDMS	polydimethylsiloxane rubber composite
PM	Particulate Matter
POCIS	polar organic chemical integrative sampler
ppt	Parts per thousand

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trans-1,2-Dichloroethylene

Glossary of Select Terms for Data Extraction Tables

Table 10 ...continued from previous page

Term	Definition
RSD	Relative Standard Deviation
SC	South Carolina
SPMD	semipermeable membrane device
STP	Sewage Treatment Plant
SVOC	Semi-Volatile Organic Compound
TX	Texas
UK	United Kingdom
US or USA	United States of America
VA	Virginia
VT	Vermont